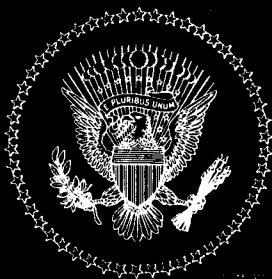


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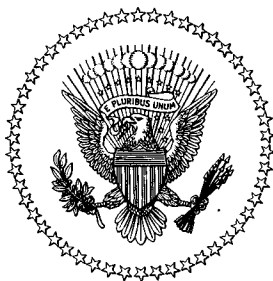
ECONOMIC REPORT OF THE PRESIDENT



Transmitted to the Congress
January 1964

Together With
THE ANNUAL REPORT
of the
COUNCIL OF ECONOMIC ADVISERS

Economic Report of the President



Transmitted to the Congress
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UNITED STATES GOVERNMENT PRINTING OFFICE
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LETTER OF TRANSMITTAL

THE WHITE HOUSE
Washington, D.C., January 20, 1964

The Honorable the PRESIDENT PRO TEMPORE OF THE SENATE,
The Honorable the SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SIRS:

As required by the Employment Act of 1946, I am sending to the Congress my annual Economic Report.

I am also sending the Annual Report of the Council of Economic Advisers.

Sincerely,

A handwritten signature in black ink, which appears to be "Lyndon B. Johnson". The signature is written in a cursive style with a long horizontal stroke at the end.

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ECONOMIC REPORT OF THE PRESIDENT

ECONOMIC REPORT OF THE PRESIDENT

To the Congress of the United States:

This is my first report to you under the Employment Act of 1946.

As a member of the Congress at that time, I was proud to vote for this historic Act.

As your President today, I am proud to respond to its challenge—to its mandate “to promote maximum employment, production, and purchasing power” within the framework of “free competitive enterprise.”

Nothing less than the maximum will meet our needs.

Our gross national product (GNP) for the fourth quarter of 1963 rose to a \$600 billion annual rate.

But an unemployment rate of 5½ percent continues to

- cast a long shadow over our pride in this achievement;
- remind us that far too much of our precious human potential still lies idle.

As I stated in outlining my political philosophy six years ago:

I regard achievement of the full potential of our resources—physical, human, and otherwise—to be the highest purpose of governmental policies next to the protection of those rights we regard as inalienable.

The road to that full potential is still a long one. But we have moved steadily and impressively forward in the past three years.

And the tax cut will speed our climb toward our goals of full employment, faster growth, equal opportunity, balance in our external payments, and price stability.

As the Employment Act requires, I shall in this report

- assess our progress toward our economic goals,
- review the current and foreseeable trends in the U.S. economy in relation to its potential, and
- set forth my policy and program for achieving our national economic potential.

THE \$100 BILLION EXPANSION

As we face the tasks ahead, we have much to build on.

Economic Milestones

Our record \$100 billion expansion since early 1961 has carried us past important milestones in the march toward a better life. In 1963, for the first time in history:

- GNP passed the \$600 billion mark, by year-end.
- Average earnings in manufacturing exceeded \$100 a week, by year-end.
- Personal income (before taxes) reached an average rate of some \$2,500 per capita, by year-end.
- After-tax income of individuals exceeded \$400 billion, for the year.
- Corporate profits exceeded \$50 billion before taxes and \$25 billion after taxes, for the year.
- Residential construction passed \$25 billion, for the year.
- Civilian employment exceeded 70 million, during the year.

Extent of the Advance

These striking statistics tell us where we are. But they do not tell us how far and how fast we have come.

In the nearly three years of unbroken expansion since early 1961:

- GNP is up 16 percent, measured in constant dollars.
- Industrial production is up 23 percent.
- Civilian nonfarm jobs are up $2\frac{3}{4}$ million.
- Personal income is up \$70 billion, or 17 percent.
- Corporate profits before taxes are up \$17 billion, or 44 percent.
- Net income per farm for 1963 is up almost \$375, or 12 percent.
- Total after-tax income of the American people is up \$56 billion, or 16 percent.
- Real disposable income per family is up more than \$600, or 8 percent.

Comparative Gains

It is fair to ask how the 1961–63 expansion in output and incomes compares with earlier upswings in the American economy. Here is the answer:

1. The \$100 billion rise in output in $2\frac{3}{4}$ years knows no parallel in our peacetime economic annals.
2. The advance of \$51 billion in labor income is also unparalleled. Average real income of nonfarm workers has risen by \$345 a year, a gain not exceeded in any previous comparable period.

3. The rise in corporate profits from a rate of \$38½ billion in early 1961 to roughly \$55 billion at the end of 1963 is notable for three reasons:
 - a. The 14-percent annual rate of advance is high by previous standards.
 - b. The rise is not only large, but prolonged—at this stage in past expansions, profits had already declined from their peaks.
 - c. The rise has occurred even as the liberalized depreciation guidelines of 1962 were transferring \$2½ billion of business receipts out of taxable profits into nontaxable depreciation.

Most heartening to me is that these gains to American labor and American business were not at the expense of

- the American consumer—whose income is no longer being eroded by inflation, as prices have held steadier in the United States than in any other major industrial country;
- the competitive position of U.S. exports—which has benefitted from several years of stable domestic wholesale prices, our best record since the war and better than that of any other major industrial country.

Contributions of Business, Labor, and Government

An expansion as long, strong, and free of excesses as the one we are now experiencing does not “just happen.”

- Business* has generally held prices in check, kept inventories on an even keel, and avoided excesses in capital financing.
- Labor* has been constructive in its collective bargaining and in its contributions to rising productivity. Average wage rate increases over the period 1961–63 have been the most modest since World War II, thereby helping to stabilize unit labor costs and improve our ability to compete with Europe and Japan.
- Government* has steadily pursued fiscal and monetary policies designed to promote recovery, accelerate expansion, and encourage business and consumer confidence:

in 1961, when the Administration’s quick anti-recession program got recovery off to a flying start;

in 1962, when, in sharp contrast to 1960 and 1957, rising Federal purchases, new tax incentives to investment, and continued credit ease lent a steadying hand to an economy whose advance was faltering;

in 1963, when prospects of a timely tax cut buoyed a reassured and resurgent economy.

Federal Purchases and Tax Cuts

Rising Federal purchases have played an important role in sustaining the 1961–63 expansion. They accounted directly for 11 percent of the growth in GNP, quite apart from their substantial indirect effects in increasing business and consumer outlays.

Our fiscal program for 1964–65 will shift emphasis sharply from expanding Federal expenditure to boosting private consumer demand and business investment.

The \$11 billion tax cut will challenge American businessmen, investors, and consumers to put their enlarged incomes to work in the private economy to expand output, investment, and jobs.

I am confident that our private decision makers will rise to this challenge.

I am confident of their growing agreement

- that “new records” in output and employment are not enough;
- that four million unemployed and 13 percent idle factory capacity are intolerable;
- that the acid test of economic policy is whether we can make full use of our growing labor force and our rising productivity—our full potential.

THE JOB AHEAD OF US

We have not yet met this test. New high ground is not the summit. That still lies ahead.

Our 1961–63 advance—though impressive, sustained, and noninflationary—has not gone far enough and fast enough

- to create the jobs needed by our unemployed,
- to get our factories humming to desired capacity,
- to lift our GNP to its reasonable potential,
- to restore the growth rate of our productive potential to the pace we took for granted in the early postwar period,
- to raise the incomes of farm families to a level more comparable to those of nonfarm families,
- to expand investment and profits to levels that will hold more of our capital funds at home and thereby shrink our external payments deficit.

The size of the job that lies ahead of us is measured by—

1. *Unemployment*—5½ percent of our labor force is still idle, even after a year-to-year advance of \$30 billion in our GNP. Taking into account the added workers who seek employment as jobs become more plentiful, we would need at least two million more jobs today just to get rid of stubborn excess unemployment.

2. *Productivity advance*—we need about two million new jobs each year to offset the labor-saving effects of rising output per worker.
3. *Labor force growth*—more than a million added jobseekers enter the labor market each year—indeed we will soon need 75 million jobs.
4. *Unused capacity*—operating rates in manufacturing still average only 87 percent of capacity, against the 92-percent rate preferred by business managers.
5. *Wasting potential*—men, machines, and materials that lie idle today could readily add about \$30 billion more to our \$600 billion GNP.
6. *The balance-of-payments deficit*—although sharply reduced by the determined steps announced in July, the deficit is still with us. And gold outflows—though only half as large in 1963 as in 1962, and less than half as large in the three years 1961–63 as in 1958–60—have not been eliminated.

EARLY TAX REDUCTION

If we are to master these problems, we must above all enact the tax bill (H.R. 8363)

- not in one or two or three months, but now;
- not in diluted, but in strengthened form, with an immediate drop from an 18-percent to a 14-percent withholding rate.

Far too long, our economy has labored under the handicap of Federal income tax rates born of war and inflation:

- Those rates were designed to curb demand in an economy bursting at the seams.
- But now, when demand and incentives are not strong enough to make full use of our manpower and machines, the tax brake is set far too tight.
- We need to release that brake quickly to put billions of dollars of new consuming and investing funds into the hands of the private economy.

Greatest Fiscal Stimulus

Speedy passage of the tax cut, at the 14-percent withholding rate

- will cut individual income tax collections by \$8.8 billion in 1964, over \$2 billion of which will come from lowering the withholding rate to 14 percent instead of 15 percent;
- will cut corporate tax liabilities by \$1½ billion in 1964;
- will provide a net fiscal stimulus, taking both expenditures and tax cut into account, that will be *three times as great* in 1964 as in any of the years 1961, 1962, and 1963;

—will, in fact, provide a greater net stimulus to the economy in 1964—to jobs, production, income, and profits—*than in any other peacetime year in history.*

The economics of efficiency is in no way inconsistent with the economics of expansion. By combining efficiency with expansion, frugality with compassion:

- we shall hold the fiscal 1965 budget below the fiscal 1964 budget, and cut the deficit in half;
- we shall get a dollar's value for a dollar spent, while not fearing to spend a dollar when and where the Nation will reap a full dollar or more in benefit;
- we shall strengthen our programs to meet pressing human needs; fully satisfy our defense requirements; and respond to the demands of economic progress;
- and we shall, at the same time, provide an unparalleled fiscal stimulus to the economy.

Sustained Expansion

The tax cut will give a sustained lift, year-in and year-out, to the American economy.

When fully effective in 1965, it will send well over \$11 billion annually coursing through the arteries of the private economy.

The resulting stream of purchases by willing consumers and of investment by responsive businessmen will, at full strength, expand the tax cut's initial impact several-fold.

The Nation will then, year-after-year, reap this benefit in the form of

- \$35 to \$45 billion more GNP,
- \$25 to \$30 billion more consumption,
- \$5 to \$7 billion more profits,

than we would attain without the tax cut.

These gains, growing steadily, will at long last lead to a balanced budget in a balanced economy at full potential.

Safeguard Against Recession

For the near term, the tax cut will give us the vital fiscal safeguard we need against recession. It will convert what is already a long and strong advance into *the longest and strongest expansion in our peacetime history:*

- By April, it will have outdistanced all but the long and incomplete climb out of the Great Depression from 1933 to 1937.
- By mid-1965, it will have outlasted even that expansion.

I do not say that we can, at one stroke, wipe out recession or legislate the business cycle out of existence. But vigilant, bold, and flexible

policy can prevent some recessions and nip others in the bud. And we have a great stake in doing so.

The American economy suffered two recessions in quick succession in 1957–58 and 1960–61. If a recession of the same average force were to hit us in 1964 or 1965, it would cost us

- a loss of \$25 billion or more of output;
- a rise of two million in unemployment;
- a drop of nearly 12 percent in industrial production;
- a sag of more than \$5 billion in after-tax profits.

Clearly, by enabling us to avoid a recession, the tax cut will pay us a handsome quick bonus quite apart from its basic long-run benefits.

THE 1964 ECONOMIC OUTLOOK

We enter 1964 with optimism

- riding the strong mount of an expansion that has already crossed the \$600 billion mark, and
- responding to the expected spur of a quickly enacted \$11 billion tax cut.

With the tax cut, promptly enacted, our *gross national product* for 1964 should rise from \$585 billion for 1963 to a projected \$623 billion (understood as the midpoint of a \$10 billion range). But, without the tax cut, our sights would have to be set \$10 to \$15 billion lower—and dashed expectations could turn expansion into recession.

With the tax cut, the *state of business confidence* is strong: business forecasters today foresee a 5- to 6-percent, or even greater, rise in GNP from 1963 to 1964. In contrast, a year ago they foresaw only a 3- to 4-percent rise. Today's business optimism is one of our strongest economic assets in 1964.

With the tax cut, *unemployment* will decline significantly in 1964.

With the tax cut, *profits* will continue to rise, avoiding the decline that usually sets in after the first year or two of a business expansion.

With the tax cut, our *balance of payments* will benefit from basic improvements

- in our ability to compete in world markets as costs are cut directly through lower taxes and indirectly through modernization;
- and in our ability to retain and attract capital as returns on domestic investment rise with higher volume and lower unit costs.

With the tax cut, *consumer spending*—fueled by the extra \$8.8 billion of take-home pay—will propel the economy forward in 1964.

With the tax cut, *business fixed investment* should rise more in 1964 than in 1963, and *housing* and *automobile* demand should remain strong.

With the tax cut, in short, 1964 will be a year of strong, sustained economic advance.

But all this will not come about automatically. It requires, and I confidently expect:

- that *the Congress* will act swiftly;
- that *taxpayers* will respond by putting the released funds to work in the private economy;
- that *business* will resist the temptation to exploit stronger markets by unneeded price boosts;
- that *labor* will resist the temptation to exploit stronger job opportunities by excessive wage demands;
- that *Government* will follow a balanced policy to maintain a favorable monetary climate, while meeting the requirements of our balance-of-payments situation;
- that both *public and private action* will be taken as needed to overcome those pockets of excessive unemployment that remain even in the face of the job-creating stimulus of the tax cut.

PRICE-WAGE POLICY IN 1964

Prospects are favorable for continuing in 1964 our good record of price stability and stable unit labor costs:

First, the price and wage record from which we start is excellent:

- a. The wholesale price index is still below the level of 3 years ago.
- b. The consumer price index has risen only 1.2 percent a year, mostly in services.
- c. Average wage increases have stayed generally within the bounds of productivity increases.

Second, because of wage moderation and rising productivity, labor costs per unit of output have held steady, while volume has risen.

Third, the tax cut will further reduce costs, increase take-home pay, and keep sales and profits rising.

Fourth, with ample supplies of labor and industrial capacity, the force of expanding demand touched off by the tax cut can express itself in more output, income, jobs, and profits rather than inflationary price or wage increases.

Nevertheless, a series of specific price increases in recent months—especially in manufactured goods—gives me some cause for concern.

I do not anticipate a renewal of the price-wage spiral—a spiral that would weaken our expansion and worsen our balance-of-payments position.

I count on the sense of responsibility of the Nation's industrialists and labor leaders

- to extend the excellent price and cost records of recent years
- to maintain price and wage policies that accord with the non-inflationary guideposts that I have asked the Council of Economic Advisers to reaffirm in its attached Report.

In the face of a 44 percent increase in corporate profits in less than three years and the prospect of further increases to come with the tax cut, I see no warrant for inflationary price rises.

On the heels of solid increases in real wages, plus the rise in take-home pay under the tax cut, I see no warrant for inflationary wage increases.

Accordingly:

- I shall keep a close watch on price and wage developments, with the aid of an early warning system which is being set up in the appropriate agencies.
- I shall not hesitate to draw public attention to major actions by either business or labor that flout the public interest in non-inflationary price and wage standards.
- And I shall translate into action the view
 - a. that antitrust policy must remain keenly alert to illegal price-fixing and other practices that impair competition;
 - b. that we must resist new steps to legalize price-fixing where competition should prevail.

OTHER POLICIES FOR 1964

Monetary Policy and Balance-of-Payments Measures

A strong upswing in the economy after the tax cut need not bring tight money or high interest rates, especially when

- our balance of payments is improving so sharply in response to measures begun in 1961 and reinforced last July;
- the budget for fiscal year 1965 will cut the Federal deficit in half and ease pressures on interest rates from Treasury borrowing.

It would be self-defeating to cancel the stimulus of tax reduction by tightening money. Monetary and debt policy should be directed toward maintaining interest rates and credit conditions that encourage private investment.

But monetary policy must remain flexible, so that:

- It can quickly shift to the defense if, unexpectedly, inflation threatens or the balance of payments worsens.
- When monetary measures are not needed as defensive shock troops, they can reinforce fiscal policy in promoting domestic expansion.

Our balance of payments will continue to benefit from the special program launched last July. This requires

- early enactment of the *interest equalization tax*, designed to raise the costs of foreign borrowing in our capital market without forcing up domestic interest rates,
- further economies in dollar outflows* from Government programs, without compromising our efforts to maintain the strength of the free world,
- continued price stability and export promotion* to maintain or improve the competitive position of our exports.

Trade Expansion and Development Assistance

1. *The Kennedy Round.* The United States' 30-year campaign to reduce barriers to world trade—and the intensified pursuit of that goal signalled by the passage of the Trade Expansion Act of 1962—will reach a climax in 1964.

U.S. industry and agriculture are in excellent condition to seize the new opportunities offered by trade liberalization and to weather the adjustments that may be required.

Our goal is a more prosperous America in a more prosperous world.

2. *The developing countries.* Reduced trade barriers will expand exports and help an increasing number of developing countries to become self-supporting.

But for most poorer countries full self-support is still some distance off. We must help them find a path to development through freedom—and freedom through development.

Our development assistance effort must and will be more sharply focused and rigorously administered. We shall encourage others to share more of its burden and seek a larger role for private investment. But a strong development assistance program continues to be vital to our pursuit of peace and stability in the free world.

Agriculture

The contribution to our Nation's economic growth made by rising agricultural productivity is too often overlooked.

We need only look at the restraints placed on national growth in Soviet Bloc countries to understand what a failure in the growth of agricultural productivity can mean to a nation and its people.

Looking forward in 1964, we face a number of challenges in agriculture:

- While net income per farm has grown 12 percent in 1961–63, chronic problems of overproduction remain.
- We need improved *commodity legislation* this year for many of our major commodities.

- The highly successful *Food For Peace* program requires new legislative authority this year.
- We must also provide the *research and development* support necessary to the continued strength, adaptability and growth of American agriculture.

Labor and Manpower Policies

No matter how mechanized it becomes, our economy is still an organization of *people*—working with tools. In 1964 we must redouble our efforts to meet these problems of our working people:

1. *Automation.* Technological change is a prime mover of our economic growth—but it can lead to painful job displacement.

- A special high-level commission should be established to determine how we can best gain the benefits of automation while minimizing its human costs.

- As a starting point, I commend to it the analysis of this problem which the Council of Economic Advisers has made in Chapter 3 of its accompanying report.

2. *More efficient labor markets.*

- Displaced workers must be retrained and helped by improved Federal-State placement and counseling services to find their way back to fully productive lives.

- And we must strengthen our education and training facilities at every level to give our youth the background and skills demanded by our rapidly developing economy. The Youth Employment Act remains high on our agenda.

3. *Unemployment insurance.* The burden of displacement on the individual must be eased by extending the coverage and increasing the benefits of our unemployment insurance programs.

4. *The Fair Labor Standards Act.* Coverage should be extended to over 2½ million workers who lack overtime coverage or are not protected at all—among them, 650,000 hotel, motel, restaurant, laundry, dry-cleaning, and farm-processing workers.

5. *Working hours.* We should and will solve our present unemployment problem by expanding demand, not by forcing the standard work week down to 35 hours. This would only redistribute work, not expand it.

At the same time, the regular use of heavy overtime may be unreasonably curtailing job opportunities in some industries.

Accordingly I shall ask for legislation authorizing *higher overtime penalty* rates on an industry-by-industry basis where tripartite industry committees determine that such rates could create more jobs without unduly raising costs.

Transportation and Technology

Our expanding economy and growing population place ever-rising demands on the Nation's transportation system. It is particularly urgent that the Congress now enact legislation before it

- to assist our cities in modernizing their mass transportation facilities;
- to revise and strengthen our national transportation policy and place more reliance on the creative force of competition.

The Federal Government provides major support for the research and development which underlie our striking technological advances. In the past much of our research and development has been connected with national defense. Now, as military outlays level off, we face

- a challenge to apply the Nation's growing scientific and engineering resources to new socially profitable uses;
- an opportunity to accelerate the technological progress of our civilian industries.

The Federal Government should join with private business and our universities in speeding the development and spread of new technology. I have directed the Department of Commerce to explore new ways to accomplish this.

Housing and Community Development

Americans generally are better housed than the citizens of any other nation. Much of this could not have been accomplished without the encouragement and help Government has given to our private financial institutions.

Authorizations expire this year for several of our major programs. They need to be renewed and extended

- to *renew the decaying areas* of our cities, while minimizing the burden of dislocation on families and small businesses;
- to allow cities to acquire land for *open-space urban use* and to facilitate better *urban planning*;
- to strengthen our program of *low-rent public housing*;
- to provide for construction of more *specialized housing for the elderly*.

THE WAR ON POVERTY

In the State of the Union Message, I announced that this Administration was declaring unconditional war on poverty in America. I shall present the details of the attack, including legislative proposals, in a later special message to the Congress.

Americans today enjoy the highest standard of living in the history of mankind. But for nearly a fifth of our fellow citizens, this is a hollow achievement. They often live without hope, below minimum standards of decency.

The per capita money income of these 35 million men, women, and children was only \$590 in 1962—against \$1,900 per capita for the Nation as a whole.

We cannot and need not wait for the gradual growth of the economy to lift this forgotten fifth of our Nation above the poverty line.

We know what must be done, and this Nation of abundance can surely afford to do it.

The Role of Prosperity and Faster Growth

Today, as in the past, higher employment and speedier economic growth are the cornerstones of a concerted attack on poverty:

- In the Great Depression mass unemployment made poverty all too common an experience.
- Since 1947, prosperity and progress have reduced the incidence of substandard incomes from one-third to one-fifth of the Nation.
- But the erosion of poverty slowed measurably after 1957.
- The tax cut will once again generate jobs and income at a pace that will provide an escape from poverty for many of our least fortunate families.

But general prosperity and growth leave untouched many of the roots of human poverty. In the decade ahead, the forgotten fifth must be given new opportunities for a better life.

There are two major prongs to our specific attack on poverty in America:

First, to enable every individual to build his earning power to full capacity

Second, to assure all citizens of decent living standards regardless of economic reverses or the vicissitudes of human life and health.

Building Individual Earning Power

The first approach is the more fundamental.

Let us deny no one the chance to develop and use his native talents to the full.

Let us, above all, open wide the exits from poverty to the children of the poor.

These are the keys to earning power:

1. *Education.* Poverty and ignorance go hand in hand:

- Of families headed by a person with only a grade school education, 37 percent are poor. Of those headed by high school graduates, only 8 percent are poor.
- We must upgrade the education of all our youth, both to advance human well-being and to speed the Nation's economic growth.

—But, most vitally, and with Federal support, we must upgrade the education of the children of the poor, so that they need not follow their parents in poverty.

2. *Health.* The poor, and the children of the poor, are handicapped by illness and disability that could be avoided:

—Largely as a result of the ill health that grows out of poverty, we rank below many other countries in the conquest of infant and maternal mortality, in average life expectancy and nutrition.

—We must speed and intensify our efforts to make good health more accessible to the poor.

3. *Skills and jobs.* We need to help both young adults and older workers acquire marketable skills by the programs already indicated.

4. *Community and area rehabilitation.* Concerted community action, with new Federal assistance, can break the dismal and vicious cycle found in too many of our rural and urban areas:

—The cycle of poverty: inadequate schools, drop-outs, poor health, unemployment—creating delinquency, slums, crime, disease, and broken families—thereby breeding more poverty.

—The cycle of chronic depression: regions needing new economic uses for their idle or underutilized human and physical resources, but too poor to provide them alone—and therefore unable to break out of their depression.

The Area Redevelopment Act must be renewed and improved, and rural communities must be helped to find new economic strength.

Furthermore, in a forthcoming special message, I shall propose a new program to deal with our Nation's most distressed major region, Appalachia.

5. *Equal opportunity.* Forty-four percent of nonwhite families are poor. Deficiencies of education and health and continuing job discrimination depress the earnings of Negroes, and other nonwhites, throughout their lives.

—Only 40 percent of nonwhites—compared to 70 percent of whites—complete high school.

—Infant mortality is nearly twice as high, maternal mortality four times as high, for nonwhites.

—The life expectancy of a nonwhite man at age 20 is nearly 5 years shorter than for his white contemporary, and shorter than the average life expectancy reported in some 40 foreign countries.

—Unemployment rates for nonwhites are generally double those of whites.

Even beyond civil rights legislation, the fight to end discrimination requires constructive action by all governments and citizens to make sure—in practice as well as in principle—that all Americans have equal opportunities for education, for good health, for jobs, and for decent housing.

Providing a Decent Living

The second prong of the attack on poverty is to protect individuals and their families from poverty when their own earnings are insufficient because of age, disability, unemployment, or other family circumstances.

1. Too many of the *poor and disabled* today fail to receive aid under the eligibility requirements of our Federal, State, and local network of programs of insurance and assistance.
2. For the *aged*, enactment of the proposed program for hospital insurance under social security is the first order of business.
3. For the *unemployed*, permanent legislation to strengthen unemployment insurance is urgently needed, as indicated above.

A Versatile Attack

The tactics of our attack on this ancient enemy must be versatile and adaptable. For the sources of poverty vary from family to family, city to city, region to region:

- A solution will not be found in any single new program, directed from Washington and applied indiscriminately everywhere.
- Instead, we urgently need to bring together the many existing programs—Federal, State, local, and private—and focus them more effectively in a frontal assault on the sources of poverty.
- Most important, we shall encourage and assist communities and regions to develop their own plans of action; to mobilize their own resources as well as those available under Federal programs.

Only in this way can we assure that the Federal funds devoted to the war on poverty—over \$1 billion of new funds in the first year—will be invested wisely and well.

AMERICA'S ECONOMIC CHALLENGE

In 1964 and beyond we seek a free and growing economy which

- offers *productive employment to all* who are willing and able to work;
- operates at the *full potential* of our human and material resources;
- encourages free enterprise*, innovation, and competition by citizens in all walks of life;
- avoids setbacks from recession or inflation*;
- generates *steady and rapid growth in productivity*—the ultimate source of higher living standards—while providing the new skills and jobs needed for displaced workers;
- meets ever more fully the needs and preferences of our citizens*,

- as freely expressed in the market place and in the halls of governments;
- provides increasing leisure*, and satisfying ways to use the time, to those who wish it;
 - safeguards the security of the Nation and the free world* by assisting efficiently the economic development and political independence of the less developed countries;
 - promotes mutually advantageous trade* with other countries, and progressively reduces barriers to international competition;
 - earns enough in free international transactions to balance our external payments* and yet meet our world responsibilities;
 - distributes fairly* the fruits of economic growth among consumers and producers, workers and employers;
 - moves steadily toward the American dream of equality of opportunity* for all citizens—regardless of race, religion, sex, or residence, regardless of social and economic status at birth;
 - permits every American to produce and to earn to the full measure of his basic capacities*;
 - eliminates*, with the compassion and foresight of which a free and abundant economy is capable, *avoidable suffering and insecurity* from the lives of our citizens.

These aspirations are not easy to fulfill—but neither are they beyond our powers.

The policies—public and private—we must pursue are not waiting to be discovered. They are at hand and we must use them.

Our main reliance is on private ingenuity, initiative, and industry. But it is the obligation of government

- to support the vibrant, steady growth of the economy;
- to expand the opportunities of free enterprise;
- to guard against its excesses;
- and to serve the economic interests of all the people.

The Federal Government,

- working closely with labor, business, and agriculture, yet respecting the economic and political freedoms of individuals;
- working closely with State and local governments, yet careful not to trespass on their domain

faces the economic challenges of 1964 with confidence.

Strengthened by the programs I have outlined in this Report, the Nation will move steadily toward the realization of its full potential.



**THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS**

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., January 13, 1964.

THE PRESIDENT:

SIR: The Council of Economic Advisers herewith submits its Annual Report, January 1964, in accordance with Section 4(c) (2) of the Employment Act of 1946.

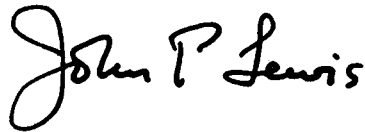
Respectfully,

A handwritten signature in black ink, appearing to read "Walter W. Heller". The signature is fluid and cursive, with the first name "Walter" being more prominent.

WALTER W. HELLER,
Chairman.

A handwritten signature in black ink, appearing to read "Gardner Ackley". The signature is cursive and elegant, with the last name "Ackley" being more prominent.

GARDNER ACKLEY

A handwritten signature in black ink, appearing to read "John P. Lewis". The signature is cursive and bold, with the first name "John" being more prominent.

JOHN P. LEWIS

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INTRODUCTION

The Nation's economic gains in 3 years of expansion reached the \$100 billion mark in the last quarter of 1963. In early 1961 the country was in its third recession since the end of the Korean conflict. Gross national product was barely at the \$500 billion rate of a year earlier, and many feared that it would go lower. Yet less than 3 years later, sustained economic expansion had carried GNP to an annual rate of \$600 billion for the fourth quarter of 1963. This unprecedented gain in gross national product was accompanied by a record of price stability unsurpassed in any expansionary period since World War II.

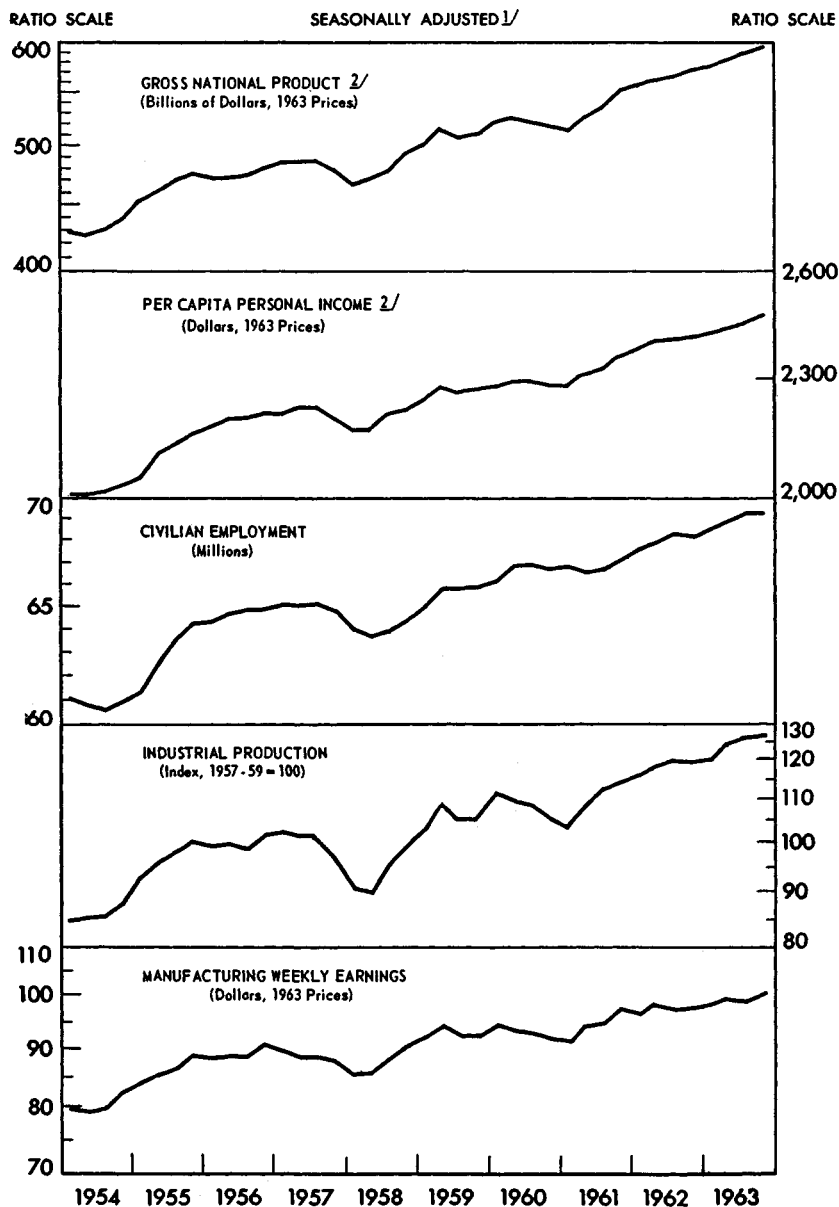
As Chart 1 shows, the economy has made a strong and sustained advance beyond the records of earlier years. The expansion has demonstrated the vitality of the private economy in an environment of progressive Federal policy. But the Nation's performance must be measured against its potential levels of output and employment, not simply against past records. Compared with the past, there is much to be proud of. Compared with the Nation's potential, there is much yet to do. This Report is in large part addressed to the goals that lie ahead and to the policies needed for advancing toward them.

By all odds, the country's number one economic problem is persistent unemployment. Indeed, this would stand near the top of any list of ills afflicting our society. The unemployment problem has many dimensions, and so it must be attacked on many fronts. It is clear, however, that more rapid growth in domestic and international markets for the Nation's output is the central prerequisite for full employment. Tax reduction is urgently needed as the prime mover toward this target. Programs of education and retraining, aid to depressed areas and disadvantaged groups, and measures to improve labor mobility are also essential in this endeavor, but they can have their full effects only if there is adequate over-all demand for the products of labor. Chapter 1 of this Report appraises the gains of the past 3 years and the prospects for 1964 and discusses the role of Federal fiscal and monetary policy in generating enough demand to use the economy's full potential.

Solution of the unemployment problem and its associated waste of potential output is essential to a successful attack on many of our social evils. But we cannot expect a reduction in unemployment alone to eliminate the poverty that afflicts 20 percent of American families. This degrading and self-perpetuating condition can be fully overcome only by programs that attack directly the many sources of impoverishment in our society. Chapter

Chart 1

Indicators of Production and Income



^{1/} ALL DATA SEASONALLY ADJUSTED, EXCEPT MANUFACTURING WEEKLY EARNINGS

^{2/} ANNUAL RATE

SOURCES: DEPARTMENT OF COMMERCE, DEPARTMENT OF LABOR, FEDERAL RESERVE BOARD, SECURITIES AND EXCHANGE COMMISSION, AND COUNCIL OF ECONOMIC ADVISERS

2 of this Report contains an analysis of the roots of poverty in America and the broad outlines of a program to attack it.

In the long run the growth of economic abundance in any society depends heavily on improvements in its technology. The current stage of technological development promises a continued growth in productivity and a reduction in toil. But technological progress always creates problems of adjustment, and many fear that today's problems may be more severe than those of earlier periods. Chapter 3 examines the process of innovation in production, ways of speeding it up, and ways of easing the painful human problems it creates.

The return to full employment will put to a test the ability of the American economy to make full use of its productive potential without a renewal of the price-wage spiral. Chapter 4 evaluates the economy's capacities for avoiding inflation in 1964 and beyond and emphasizes the need for responsible private price and wage making.

The importance of maintaining price stability is heightened by the need to eliminate the deficit in the United States' balance of international payments, which remains a problem in spite of substantial inroads that have been made in the past year. After reviewing recent developments in this area, Chapter 5 turns to a question that will inevitably be raised by the reduction in this country's payments deficits—namely, the effectiveness of the free world's present international monetary system.

Since the end of World War II, the United States has become increasingly aware that its own interests are closely interwoven with those of the developing nations. Chapter 6 re-examines this interplay of interests and explores its implications for American development assistance policies.

On October 28, 1963, the Council of Economic Advisers testified before the Subcommittee on Employment and Manpower of the Senate Committee on Labor and Public Welfare. The testimony dealt with the unemployment problem, its relationship to changing production methods, and the role of the pending tax legislation in attacking the problem. Because the testimony relates to matters discussed in Chapters 1 and 3, it is reproduced in this Report as Appendix A.

Chapter 1

Economic Expansion and Federal Policy

THE AMERICAN ECONOMY has recorded nearly 3 years of solid expansion since early 1961. But it urgently needs the tax cuts now pending to complete the climb back toward full employment and full production that began 3 years ago. After reviewing the impressive record of these years and examining the role of Federal fiscal and monetary policy in achieving this record, this chapter discusses the economic situation at the end of 1963; the prospects for 1964; and the broad outlines of policy that can complete the return to full employment.

REVIEW OF THE EXPANSION

By April of this year, the present expansion will have become the second longest peacetime expansion of this century—exceeded only by the prolonged climb out of the depths of the Great Depression. As Chart 2 shows, the \$100 billion expansion since early 1961 has eclipsed the brief 1958–60 expansion in both extent and duration, and has achieved in its first 11 quarters a greater increase in total *real* output—16 percent—than was achieved in the 13 quarters of the 1954–57 expansion. With early enactment of the pending tax bill it has every prospect of continuing throughout 1964 at an accelerated pace.

EXPANSION OF DEMAND

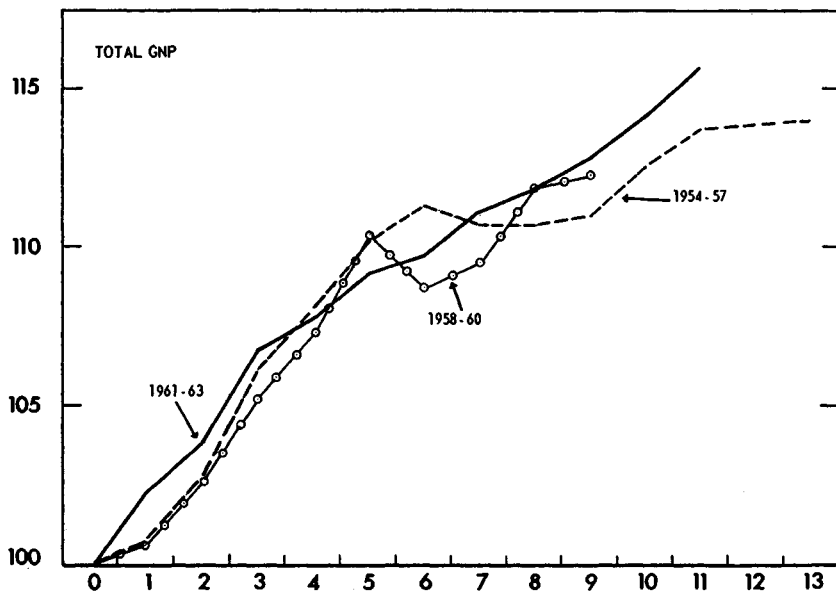
While all major components of demand have contributed to the expansion of the past 3 years, much of the advance has come from rising Federal, State, and local purchases of goods and services. Federal purchases in constant dollars rose by 16 percent from the first quarter of 1961 to the fourth quarter of 1963 and accounted for 11 percent of the total increase in demand. As Table 1 indicates, this contrasts sharply with the two previous expansions, when declining real Federal purchases detracted from the increase in gross national product. State and local purchases rose by 13 percent in constant dollars over the recent period, accounting for 9 percent of the total demand increase.

A second major source of demand strength in the present expansion has been private nonfarm residential construction. In contrast to the experience of the two previous expansions, housing expenditure has risen fairly steadily since the beginning of 1961. From the first quarter of that

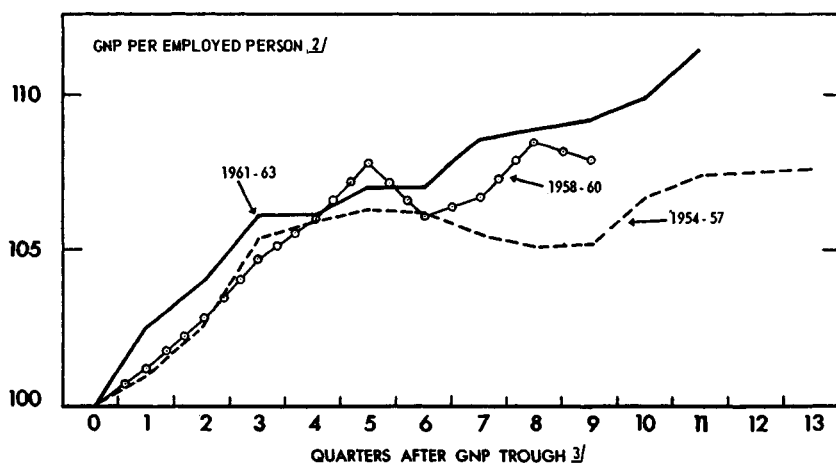
Chart 2

Real Gross National Product in Three Postwar Expansions

GNP TROUGH = 100 ^{1/}



GNP TROUGH = 100 ^{1/}



^{1/} BASED ON SEASONALLY ADJUSTED DATA, 1963 PRICES.

^{2/} EMPLOYED PERSONS INCLUDE ARMED FORCES.

^{3/} TROUGH QUARTERS FOR GNP WERE 1954 II, 1958 I, AND 1961 I

SOURCES: DEPARTMENT OF COMMERCE AND COUNCIL OF ECONOMIC ADVISERS.

year to the fourth quarter of 1963, it rose 33 percent in constant dollars, accounting for 8 percent of the total increase in GNP.

The unusually vigorous expansion in government expenditures and residential construction has been supplemented by a sustained increase of business investment in producers' durable equipment and nonresidential construction. Measured in constant dollars, it rose by 20 percent from the first quarter of 1961 to the fourth quarter of 1963. Although this percentage rise is larger than that in total GNP, it is disappointing by past standards. Business investment typically has risen faster than GNP in expansions, just as it has fallen faster in recessions. During the 1947-57 period, the rate of business fixed investment consistently exceeded 10 percent of GNP in constant (1963) dollars; in the current expansion, the ratio has remained close to its recession low of 9 percent.

The pace of inventory accumulation has been moderate by comparison with some periods in the past and has been unusually steady since mid-1962. After jumping from a \$4.3 billion annual rate of liquidation at the recession trough to an \$8.1 billion rate of accumulation in the first quarter of 1962, inventory investment has fluctuated moderately around an average value of \$4.4 billion for the last half of 1962 and the whole of 1963.

Despite the notable strength of the demand for automobiles (discussed below), total personal consumption outlays have remained between 92 and 94 percent of after-tax personal income, as they have in every year since 1950. The rise in consumption outlays from the first quarter of 1961 to the fourth quarter of 1963 amounted to 12 percent in constant dollars, and accounted for about half the over-all increase in GNP.

TABLE 1.—*Changes in real gross national product in three postwar expansions*

Component	Annual rate of change ¹ (Percent)			Distribution of total change ¹ (Percent)		
	1954 II to 1957 III	1958 I to 1960 II	1961 I to 1963 IV ²	1954 II to 1957 III	1958 I to 1960 II	1961 I to 1963 IV ²
Total gross national product.....	4.1	5.3	5.4	100.0	100.0	100.0
Federal Government purchases.....	-3.3	-6	5.6	-10.9	-1.2	11.4
State and local government purchases.....	4.9	4.5	4.7	10.6	8.4	8.8
Residential construction.....	.9	7.8	11.0	.8	6.0	8.2
Business fixed investment ³	5.3	4.1	6.8	13.3	7.4	11.1
Business inventory change.....	(⁴)	(⁴)	(⁴)	10.1	17.2	12.0
Personal consumption expenditures.....	4.6	4.9	4.1	70.5	60.5	48.9
Net exports.....	(⁵)	(⁵)	(⁵)	5.7	1.9	-5

¹ Based on data in 1963 prices.

² Preliminary estimates by Council of Economic Advisers for latest quarter in current expansion.

³ Includes producers' durable equipment and nonresidential construction.

⁴ Inapplicable because inventory changes were negative in the trough quarters.

⁵ Not shown because of small numbers on which changes would be based.

NOTE.—Detail will not necessarily add to totals because of rounding.

Source: Department of Commerce (except as noted).

MODERATION IN PRICE INCREASES

This strong, sustained advance in real output in the past 3 years has been accompanied by an unusual degree of price stability. As in nearly all periods of expansion, there has been some upward drift in the prices of final purchases. But the price rise of the past 3 years has been well below that in other periods of comparable output gains. Of the 20 percent increase in current-dollar GNP from the first quarter of 1961 to the fourth quarter of 1963, 16 percent consisted of a rise in constant-dollar output, and only 4 percent of a rise in prices. Only in the short expansion of 1958-60 was the price rise comparably small.

The average annual rate of increase in the consumer price index over the first 34 months of the current expansion amounted to a very moderate 1.2 percent. Considering the availability of new products and quality changes not fully reflected in the index, there has been little, if any, real erosion of the purchasing power of the consumer's dollar. The wholesale price index, which is a better measure of the international competitiveness of American products, has not risen since the recession trough in early 1961.

EXPANSION IN INCOMES

In this environment of sustained increases in output and comparative price stability, gains in real income have been significant and widely diffused. The moderation of money wage increases has served the Nation's balance of payments well without serving labor ill. Money wages have not had to push ahead rapidly in order to keep pace with consumer prices. Employee compensation per nonfarm worker, adjusted for the mild rise in consumer prices, increased by 7 percent from the recession trough to the last quarter of 1963.

The farming sector of the economy has also shared in the advance. Net income per farm, adjusted for changes in prices paid by farmers for cost-of-living items, rose by 9 percent from early 1961 to 1963.

The rise in disposable personal income adjusted for price increases—the best measure of the after-tax economic gains of individuals—amounted to 13 percent from the recession trough to the fourth quarter of 1963. On a per capita basis, the rise was 8 percent.

In previous business expansions corporate profits characteristically have risen rapidly in the early quarters of recovery and then levelled off or declined because of a sharp diminution in the rate of gain in productivity. In the current expansion, the rate of increase in GNP per worker has been better maintained than in the past (Chart 2). As a consequence, profits after taxes increased \$10 billion, or 52 percent, from the recession trough to the fourth quarter of 1963. Because of the advantageous shift of corporate earnings from profits to depreciation allowances permitted by the 1962 liberalization of the Internal Revenue Service's depreciation guidelines, the sum of corporate profits after taxes and capital consumption allowances

provides a more useful comparison over time for most companies. This total rose \$17 billion during the expansion, as Chart 3 indicates.

These continued gains in both labor and profit incomes could not have been consistent with price stability without the excellent productivity record during the past 3 years. A high rate of productivity increase is the surest means of reconciling the aspirations of all for higher incomes with the maintenance of a stable price level and improvement in the balance of payments.

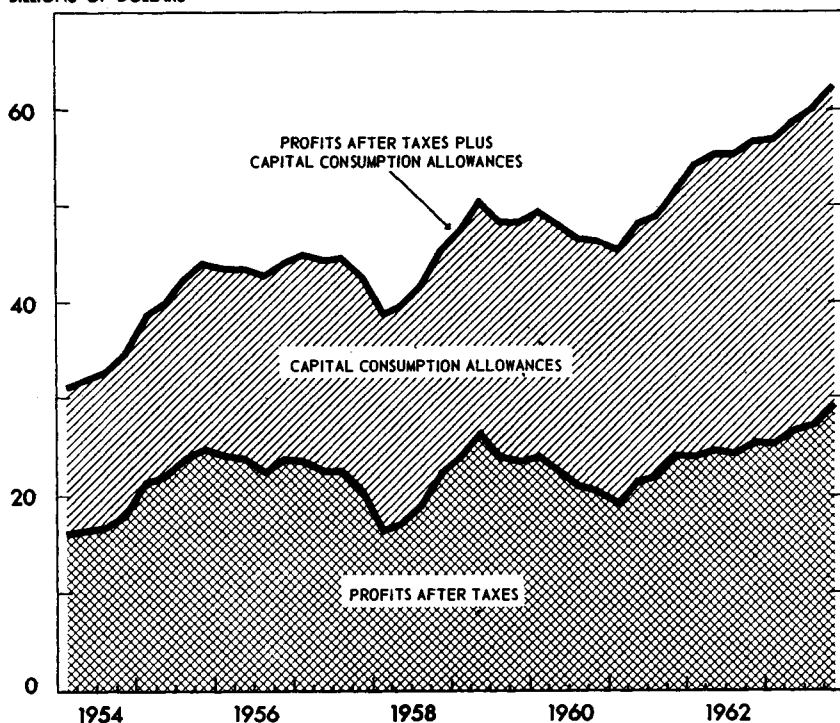
UNEMPLOYMENT AND UNUSED POTENTIAL OUTPUT

Although the expansion brought rising levels of economic welfare to most Americans during the past 3 years, it was marred by continuing excessive unemployment. The 16-percent increase in demand from the first quarter of 1961 to the fourth quarter of 1963 brought about a 4-percent increase

Chart 3

Corporate Profits After Taxes and Capital Consumption Allowances

BILLIONS OF DOLLARS ^{1/}



^{1/} SEASONALLY ADJUSTED ANNUAL RATES.

NOTE: BEGINNING 1962, DATA REFLECT NEW DEPRECIATION GUIDELINES AND INVESTMENT TAX CREDIT

SOURCES: DEPARTMENT OF COMMERCE AND COUNCIL OF ECONOMIC ADVISERS

in civilian employment; but even so, in the last quarter of the year 5.6 percent of the civilian labor force was unemployed. Moreover, lack of job opportunities kept many potential workers out of the labor force, while others held jobs well below their capabilities.

In the first year of recovery substantial progress was made in cutting unemployment. The over-all seasonally adjusted rate dropped from 6.7 percent in 1961 to 5.6 percent in 1962. Reductions were largest among those workers most affected by the 1960-61 recession; the unemployment rate fell 1.5 percentage points for nonwhites, 2.1 points for semiskilled and unskilled workers, and 1.9 points for manufacturing workers. However, during 1963, no further progress was made. The monthly unemployment rate varied within narrow limits about an average of 5.7 percent.

Excessive unemployment is the most obvious symptom and one of the worst consequences of a level of demand that falls short of the Nation's potential output. During 1963 the Council of Economic Advisers carefully re-examined its measure of potential GNP. This concept, fully discussed in the Council's January 1962 Report, defines "potential" as the output that would be produced if unemployment were at the interim-target level of 4 percent. For the period to date, the earlier conclusion still holds: the level of constant-dollar GNP needed to maintain the unemployment rate at 4 percent has been growing at an average rate of about $3\frac{1}{2}$ percent a year since mid-1955, when the unemployment rate was close to 4 percent.

As Chart 4 shows, the cumulative effect of actual output growth at a rate less than $3\frac{1}{2}$ percent after mid-1955 had produced a gap of \$50 billion (1963 prices) between actual and potential output by the first quarter of 1961. The rapid recovery in the first year of expansion lowered this gap to \$30 billion by the first quarter of 1962, but since that time expansion in output has just about kept pace with the growth in potential. As a consequence, unemployment has failed to decline to a tolerable level, and a gap close to \$30 billion between actual and potential output remained in the fourth quarter of 1963.

Merely avoiding recession or even maintaining a rate of expansion comparable to that of the last 8 quarters will not close the gap or eliminate excessive unemployment. Only a significant acceleration of expansion can enable the Nation to make full use of its growing labor force and productive potential. The choice of appropriate fiscal and monetary policies to achieve this goal is one of the problems challenging the Federal Government in 1964.

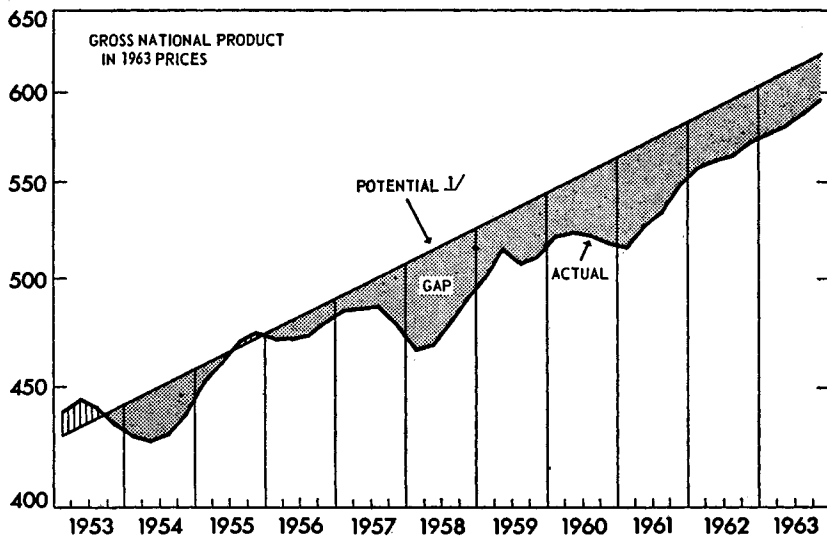
MAINTENANCE OF THE EXPANSION

Two years ago, many observers who noted that postwar expansions had become successively shorter wondered if this trend would continue. Although that anxiety has long since been allayed, there is some fear now that, simply because of its duration, the current expansion must be approaching its end. If this were true, we would face much higher un-

Chart 4

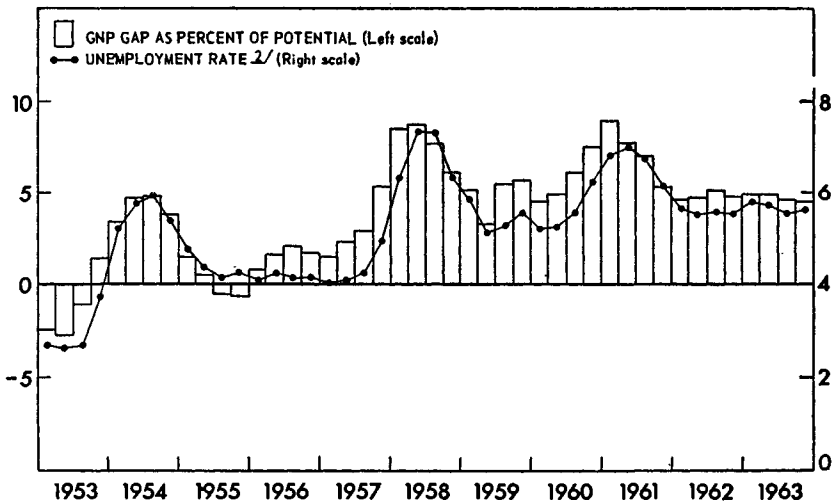
Gross National Product, Actual and Potential, and Unemployment Rate

BILLIONS OF DOLLARS* (RATIO SCALE)



PERCENT

PERCENT



* SEASONALLY ADJUSTED ANNUAL RATES.

1/ 3% TREND LINE THROUGH MIDDLE OF 1955.

2/ UNEMPLOYMENT AS PERCENT OF CIVILIAN LABOR FORCE; SEASONALLY ADJUSTED.

SOURCES: DEPARTMENT OF COMMERCE, DEPARTMENT OF LABOR, AND COUNCIL OF ECONOMIC ADVISERS.

employment and greater wasted potential instead of a return to fuller use of our available resources.

The fact is that over-all business fluctuations have no fixed rhythms, and recessions are not in any scientific sense inevitable. There are, it is true, certain systematic features of the economic process leading to the onset of recession. During periods of prosperity, a larger part of the Nation's output is used to increase productive capacity through investment in plant, equipment, and business inventories. If over-all demand rises rapidly enough to justify the added capacity, incentives for further growth of capital are maintained, and the expansion of economic activity continues. But when the growth of demand does not keep pace, business firms curtail further additions to capacity by trimming their investment outlays. The reduction in investment, in turn, reduces employment and income, thus converting the initial slowdown in the growth of demand into an actual decline in general economic activity—a recession.

While individual recessions have their own features and their own proximate causes, reversals from expansion can typically be traced to a failure of demand to keep pace with the expansion of capital facilities. There have been many occasions in the past when timely Federal policy actions could have maintained the balance between demand and capacity and thereby changed our economic history. It is vital that such opportunities be seized in the future.

FEDERAL POLICY AND FULL EMPLOYMENT

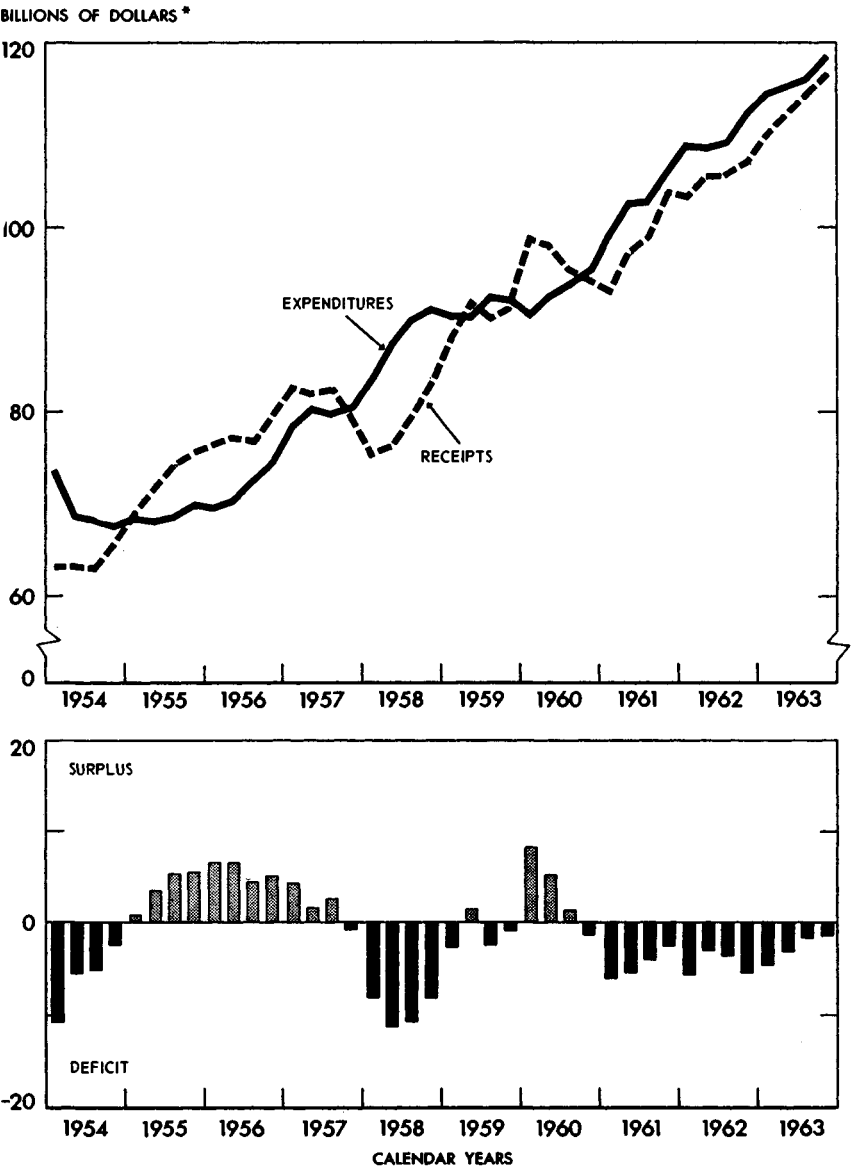
To comply with the mandate of the Employment Act of 1946 "to promote maximum employment, production, and purchasing power," the Federal Government must adjust its programs to complement private demand. Given the magnitude of its expenditure commitments, its revenue collections, its public debt management obligations, and its money and credit responsibilities, the Government inevitably exerts a powerful impact on demand. It is, therefore, a first principle of responsible Federal economic policy to try, insofar as possible, to adjust this impact in a way that promotes expansion and price stability.

The instruments of fiscal policy—Federal taxes, transfer payments, subsidies, grants-in-aid, and purchases of goods and services—are the Government's most powerful tools for promoting expansion. Federal purchases of goods and services are themselves a component of demand, and indirectly they affect the other components. Through their impact on employment and income, they influence the level of consumption. By increasing sales and profits, they encourage investment expenditures. Similarly, taxes, transfers, and subsidies affect consumption and investment through their obvious effects on disposable incomes, after-tax profits, and incentives. Federal grants-in-aid finance many State and local expenditure programs.

These fiscal policy tools, while powerful, can at present be used by the Executive with only limited flexibility. Major expenditure programs must be related to a variety of domestic and international objectives as well as to

Chart 5

Federal Budget
NATIONAL INCOME ACCOUNTS BASIS



* SEASONALLY ADJUSTED ANNUAL RATES.
SOURCES: DEPARTMENT OF COMMERCE, BUREAU OF THE BUDGET, AND COUNCIL OF ECONOMIC ADVISERS

the requirements of economic efficiency. They are therefore sometimes difficult to reconcile with income and employment goals in the annual budgetary process. Moreover, under our constitutional system, legislation needed to implement fiscal policies is the prerogative of the Congress. The Congress has demonstrated its ability to enact tax and expenditure legislation quickly in time of emergency, and the Executive Branch does have some flexibility in the timing of expenditures. This limited flexibility was used to good advantage in 1961. But without legislation to establish in advance specific rules designed to facilitate flexible fiscal policy—such as those requested by President Kennedy in 1962—tax and expenditure policies cannot be adjusted with sufficient speed to cope with the swift changes in private demand that bring recession or inflation. Greater flexibility would be desirable. However, the main function of fiscal policy must continue to be the provision of a good supporting framework for expansion.

THE FULL-EMPLOYMENT BUDGET

The Federal budget on a national income and product accounts basis gives the most comprehensive picture available of the revenue and expenditure activities of the Government as these affect private demands and the level of economic activity. This budget includes the receipts and expenditures of the Federal trust fund accounts, as well as those in the administrative budget, but excludes credit transactions. Unlike the administrative budget, it records corporate tax liabilities at the time they accrue rather than when collections are made. These and other differences between the administrative budget and the national income and product accounts budget are outlined in the January 1962 Report of the Council of Economic Advisers.

Federal policy decisions determine budgeted expenditures and a set of laws governing tax rates and transfer payments. The actual surplus or deficit position of the budget depends partly on the planned levels of expenditure and the rates incorporated in the tax structure, and partly on the general strength of private income and demand. Since both receipts and expenditures are affected by the level of private demand, the budget serves as an automatic stabilizer, moving into deficit in a recession and toward a surplus in recovery. This pattern is evident in Chart 5.

The economic impact of a given budget program is best measured by its surplus or deficit at full-employment income levels. The surplus in the full-employment budget is too large when the Government demand contained in the budget, and private investment and consumption demands forthcoming from after-tax incomes, are insufficient to bring total output to the full-employment level. The actual budget will then show a smaller surplus or larger deficit than the full-employment budget.

If the fiscal structure is biased in this direction, it can be corrected either by expanding Government purchases to employ idle resources in satisfying public needs; or by expanding private business and personal after-tax incomes through reduced tax rates or increased transfer payments to employ

idle resources in satisfying the demands of the private sector. When the budget is too expansionary, the combination of public and private demands will eventually exceed productive capacity, and excessive upward pressure on prices will develop. In this event, sound fiscal policy calls for lowering expenditures or raising tax rates, or both.

The appropriate size of the surplus or deficit in the full-employment budget depends on the strength of private demand and its responsiveness to fiscal policy. The budget must counterbalance private demand. The weaker the underlying determinants of private demand, the more expansionary the budget should be; the stronger these determinants, the more restraining the budget should be.

Whether a given budget is too expansionary or restrictive depends also on other Government policies affecting private spending, of which monetary policy is the most important. Other things being equal, a strongly expansionary monetary policy permits a larger surplus by strengthening business investment, residential construction, and other expenditures that are sensitive to the cost and availability of credit.

FISCAL POLICY IN A GROWING ECONOMY

In a growing economy, periodic budget adjustments are required to maintain adequate expansion of total demand. The volume of tax revenues rises as incomes grow if tax rates remain unchanged. At present tax rates, the revenues that the Federal Government would collect at full employment increase by more than \$6 billion a year. If program needs do not require expenditures to grow at the same rate, tax rates must be reduced, or a growing full-employment surplus will result, with increasingly restrictive effects on the economy.

In the past this very process has been a major factor in slowing expansions and precipitating downturns. Thus the consequences of excessive potential surpluses have been large actual deficits, unemployment, and inability to achieve steady growth.

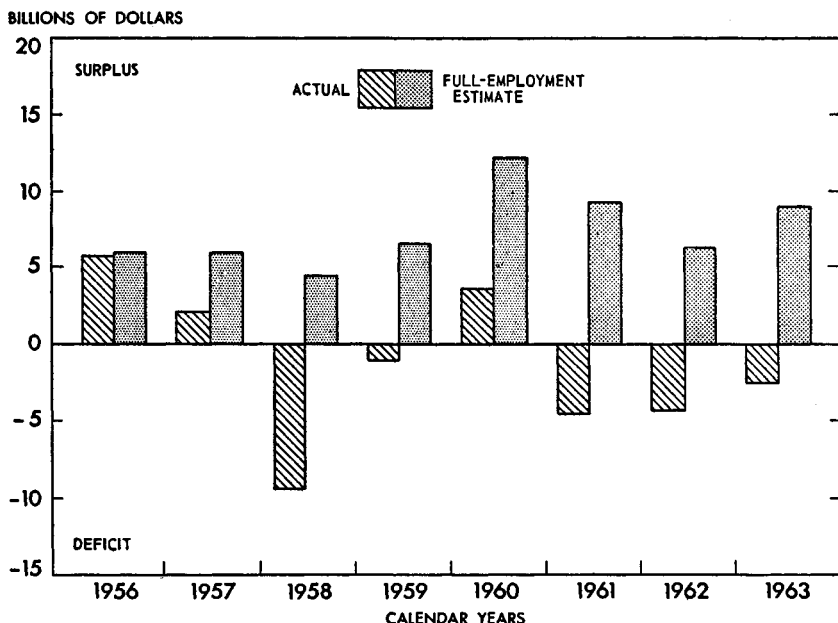
To avoid these consequences, an appropriate expansion-promoting fiscal program would call for tax and expenditure policies that prevent a constrictive rise in the full-employment surplus. As Chart 6 suggests, the experience of the past 10 years has illustrated the tendency of the full-employment surplus to build up to expansion-retarding levels as the economy grows. The tax reductions of 1964 will be a giant step to remove a burdensome fiscal restraint *before* the economy levels off or goes into a recession, and to provide a framework for continued vigorous growth.

THE ROLE OF MONETARY POLICY

Establishing a suitable fiscal framework is not the only step the Government can take to promote full employment. The ability of the economy to maintain expansion in both its actual and its potential output is significantly affected by the monetary and debt management policies of the Federal Reserve System and the Treasury Department. Expenditures on

Federal Surplus or Deficit: Actual and Full-Employment Estimates

NATIONAL INCOME ACCOUNTS BASIS



SOURCES: DEPARTMENT OF COMMERCE, BUREAU OF THE BUDGET, AND COUNCIL OF ECONOMIC ADVISERS.

long-lived assets, such as residential and commercial buildings, business plant and equipment, and to a lesser extent consumer durables, are particularly sensitive to cost and availability of credit, which are heavily influenced by monetary and debt management policies.

The choice of monetary policies must be related to the character of private demand, to the type of fiscal policy being pursued, and to goals with respect to the balance of payments. In the light of these considerations, various combinations of fiscal and monetary policies are appropriate to different conditions in the economy.

When aggregate demand is generally deficient and investment and consumption are expanding too slowly to provide jobs for all those seeking employment, expansionary monetary policy normally can and should accompany expansionary fiscal policy. Likewise, when excessive aggregate demand threatens to cause inflation, a tight monetary policy may be called for in conjunction with a fiscal program that permits full-employment Federal revenues to rise relative to expenditures.

Under some circumstances, however, it may be appropriate to operate monetary policy at seeming cross purposes to fiscal policy in order to restrict

or expand the share of output devoted to investment. In general, an easier monetary policy will permit a higher sustainable rate of investment and capacity growth. Together with a slightly restrictive full-employment budget, such a policy mix may raise the growth rate of potential output while keeping total demand within noninflationary bounds. Alternatively, if investment is so large relative to consumption and Government purchases as to threaten a rapid buildup of excess capacity or serious bottlenecks in capital-goods industries, the need may be for monetary restraints on investment and stimulus to consumption through a tax reduction.

A partially offsetting mix of fiscal and monetary policies also becomes appropriate when, as now, the Nation's balance-of-payments deficit is excessive at the same time that domestic expansion needs to be stimulated. In this case, however, it is useful to differentiate among types of monetary policies. Efforts can be made—as they have been in the current expansion—to use the various tools of monetary and debt-management policy to keep the cost and availability of long-term credit favorable to domestic expansion, while maintaining short-term interest rates at a level necessary to restrain short-term capital outflows. Meanwhile, other more direct measures to deal with the balance-of-payments problem need to be pushed vigorously to correct the basic causes of the deficit and in the process provide more scope for monetary policy in promoting domestic expansion.

Against the background of these general considerations, an understanding of the problems and possibilities of Federal policy in the maintenance of expansion can best be gained by examining the experience of the past three expansions.

FEDERAL POLICY IN THE EXPANSIONS OF 1954-57 AND 1958-60

The recovery from the 1954 recession was aided by a substantial tax cut and by the fact that materials shortages and controls during the Korean conflict had limited the buildup of capacity to produce civilian goods. The result was a period of rapid expansion in late 1954 and early 1955, centering first in inventories, automobiles, and housing. This was followed by a remarkable boom in fixed investment from the third quarter of 1955 through the third quarter of 1957.

The absence of price-wage restraint in the 1955-57 period contributed to a widespread inflation despite the lack of any general excess of demand over capacity output. Excess demand was confined to the durable goods manufacturing industry, where orders strained capacity in many lines. But sharp price and wage increases in this sector were imitated in other industries that did not share similar demand pressures.

Indeed, the lack of real output increases in early 1956 prompted predictions of recession. Despite the capital goods boom, total output levelled off at that time as automobiles, residential construction, and Federal purchases all declined. But defense outlays increased sharply from mid-1956 to mid-1957, and capital goods purchases remained strong. By the time the

investment boom had run its course, total demand had not grown sufficiently to use fully the added capacity that had been created. Federal outlays levelled off early in 1957 and then declined, just at a time when expansionary policy was needed to avoid a downturn. And the Federal Reserve, which had been tightening money and credit conditions throughout most of the expansion, raised the discount rate in August 1957, just as the downturn in production was beginning.

The entire expansion of 1958-60 was characterized by price stability, ample productive capacity, and excessive unemployment. Wholesale prices were virtually steady throughout the expansion. The capacity utilization rate in manufacturing had dropped to 73 percent in the 1958 recession, nearly 20 points below its peak level in the fourth quarter of 1955. Except for brief periods of rapid inventory accumulation before and after the lengthy steel strike of 1959, the utilization rate never regained much more than half this loss. Consequently the recovery of investment expenditure was weak. The unemployment rate fell only to 5.0 percent, and that for only 1 month. The average unemployment rate from January 1959 to May 1960 (when the peak of the recovery was reached) was 5.4 percent.

Yet Federal policy was restrictive and wholly inappropriate to a period of insufficient demand. The full-employment surplus was allowed to rise drastically from a \$4½ billion level in 1958 to more than \$12 billion in 1960. The expenditure line was held firmly while the only tax-rate changes made were increases in social insurance and excise tax rates. The turnaround from actual deficit to actual surplus was even more striking. Between the third quarter of 1958 and the first quarter of 1960, there was a swing of nearly \$20 billion (annual rate) from a \$10.7 billion deficit to an \$8.2 billion surplus. At a time when private investment demand was depressed by excess capacity, this fiscal restraint was clearly inconsistent with continued expansion. If it had not been for a slow rise throughout the period in the share of disposable income consumed, it is doubtful that this shortest of all recent recoveries would have lasted even as long as it did.

The restrictive fiscal policy of 1958-60 was accompanied early in the expansion by a shift toward monetary restraint that became progressively more severe and by late 1959 resulted in the tightest monetary and credit conditions of the postwar period. Treasury bill yields rose by 3½ percentage points from mid-1958 to the end of 1959. Long-term Government bond yields increased by a full percentage point during the same period. The sector most adversely affected by this monetary tightness was housing. Private housing starts, which had risen strongly during the period of monetary ease immediately following the 1958 recession, fell by one-fourth from the beginning of 1959 to the middle of 1960. This reduced the demand for building materials and, through its effect on incomes earned in the construction industry, the demand for consumer goods. The combination of fiscal and monetary tightness contributed to a halt in the expansion of business investment expenditures and led to a downturn after only 25 months of expansion.

FISCAL POLICY IN THE PRESENT EXPANSION

When the new Administration came to office in early 1961, the 1960–61 recession was near its trough. The unemployment rate was close to 7 percent, and the rate of capacity utilization in manufacturing had fallen to 77 percent. The economic task of first priority was to end the unnecessary waste of resources.

The fiscal program adopted by Congress and the Administration lowered the \$12 billion full employment surplus of 1960 to \$6 billion by 1962. This reduction was accomplished through both tax reductions and expenditure increases.

The expenditure increases of the 1961–62 period, undertaken to bolster our defense and space programs and to provide for unmet civilian needs, were highly stimulating to the economy. Total Federal expenditures increased by \$10 billion (annual rate) between the first quarter of 1961 and the first quarter of 1962, making a major contribution to the 8.8 percent rise in GNP during the first recovery year. Increases in Federal expenditures continued beyond the initial recovery year. From the first quarter of 1961 to the fourth quarter of 1963, Federal purchases of goods and services in current prices increased by \$11½ billion at annual rates, or 21 percent. Total Federal expenditures, which include transfer payments, subsidies, interest, and grants-in-aid as well as purchases of goods and services, increased by \$19½ billion, or 20 percent, over the same period.

Two tax reduction measures—the new depreciation guidelines announced by the Treasury in July 1962 and the investment tax credit enacted by the Congress in the Revenue Act of 1962—were adopted to stimulate lagging private investment. Their details are discussed in Appendix A of the January 1963 Report of the Council of Economic Advisers. Their net effect was to raise the annual cash flow to corporations by \$2.5 billion in 1963 and to increase the after-tax rate of return on new investment projects. These measures contributed to the rapid rise in plant and equipment outlays that occurred after the first quarter of 1963. Since there are substantial lags in the investment decision-making and spending process, their full effects have not yet been realized.

In early 1963 the Administration proposed a program of tax reduction and revision designed to move the country toward full employment. Failure to enact this key part of the fiscal program by mid-1963 led to a rise in the full-employment surplus when a reduction was needed. By the fourth quarter of 1963, with output still about \$30 billion short of potential and an unemployment rate of 5.6 percent, the full-employment surplus was \$9 billion, and the actual budget deficit, on a national income and product basis, fell close to zero. However, early enactment of the tax bill and enactment of the President's budget for fiscal 1965 will bring a sharp and needed reduction in the full-employment surplus. The tax and expenditure program will give a bigger fiscal stimulus in calendar 1964 than in any of the past 3 years and will provide a strong, fresh impetus to the expansion.

MONETARY POLICY IN THE PRESENT EXPANSION

The fiscal policy of the 1961–63 years was complemented by a monetary policy designed to encourage an expanding economy while also defending the balance of payments. Actions were taken to raise short-term interest rates and to maintain them at levels that would reduce outflows of funds to money markets abroad. Within the limits established by this policy, the Federal Reserve provided money and bank credit to support the expansion and generally avoided placing upward pressure on long-term rates.

In attempting to pursue both its domestic and its balance-of-payments objectives, the Federal Reserve used its policy instruments flexibly. In February 1961 it began to supply a portion of new bank reserves through the purchase of longer-term securities. Meanwhile the Treasury concentrated its new offerings of securities largely in short maturities to exert upward pressure on short-term interest rates. In the autumn of 1962 the Federal Reserve reduced reserve requirements on time and savings deposits, thereby releasing reserves for seasonal growth in money and credit without purchasing short-term securities in the open market.

A particularly important factor that exerted upward pressure on short-term rates but held long-term rates down was the two-step change in Regulation Q in January 1962 and July 1963, which permitted banks to pay higher interest rates on time and savings deposits. These steps accelerated the flow of savings into commercial banks, which in turn invested heavily in mortgages and State and local securities, thereby putting downward pressure on mortgage and other long-term yields. At the same time commercial banks began to issue negotiable time certificates of deposit in substantial quantities, which in effect added to the supply of short-term securities and helped to push up short-term interest rates.

In July 1963 the Federal Reserve increased the discount rate from 3 to 3½ percent, largely to reinforce efforts to raise short-term interest rates for balance-of-payments reasons.

Analysis of the results of Federal Reserve actions on the growth of deposits and bank credit is especially difficult for this expansion period because of the changes in Regulation Q. The recorded growth in money supply—at an average rate of 2.8 percent a year during the expansion—understates the degree to which monetary policy provided a stimulus to the economy, since many business firms and individuals were induced to shift idle balances from demand to time deposits in order to take advantage of the higher interest rates.

On the other hand, the increase in time deposits—at an average rate of 15.2 percent a year—exaggerates the expansionary stimulus from monetary policy. The interest-rate increases on commercial bank time deposits raised their attractiveness relative to direct holdings of securities or deposits at other financial intermediaries. Thus, while bank credit expansion was particularly rapid, part of it reflected lending that otherwise would have

occurred through nonbank financial institutions or directly through the securities markets.

THE CURRENT SITUATION AND OUTLOOK

THE ECONOMY IN 1963

The economic expansion in 1963 substantially outdistanced most expectations and even exceeded the forecast by the Council of Economic Advisers in its January 1963 Report, which was one of the more optimistic of the period. That forecast projected a range from \$573 billion to \$583 billion. Preliminary estimates indicate an actual figure of \$585 billion.

Much of the strength in 1963 centered in residential construction and automobile buying. If the strength of those expenditures represented an unsustainable buildup of stocks or an excessive resort to credit, it would amount to borrowing from the future. If, however, it reflected long-term forces, it would be cause of optimism.

RESIDENTIAL CONSTRUCTION

Among the major demand components, the most surprising performer in 1963 was housing. Many observers expected that private nonfarm residential construction expenditures would no more than hold their 1962 level. Instead, because of the boom in construction of multifamily units, such expenditures increased by \$1½ billion for the year as a whole, and the fourth-quarter-to-fourth-quarter advance was even larger.

The increase in housing activity is attributable partly to the success of monetary policy and Federal housing credit policies in maintaining an adequate supply of mortgage funds at favorable interest rates. Mortgage yields continued to decline during the first half of 1963 and then levelled off. The average term to maturity of conventional mortgages extended on new home purchases increased from 23.3 years in December 1962 to 24.6 years in October 1963, and the average ratio of loan to value on such mortgages increased from 72.1 percent to 73.4 percent over the same period. Terms on FHA mortgages were also liberalized.

Liberalization of mortgage credit makes more potential home buyers eligible to enter the market. But it also reduces the equity protection of those homeowners who borrow up to the limit, increasing their vulnerability to personal misfortune or general economic reversals. It is difficult to evaluate recent developments because of the lack of consensus on criteria of soundness in mortgages and because the safety of the credit structure depends basically on the general health of the economy. During the past year, the Federal Home Loan Bank Board has issued or proposed a series of regulations that will help preserve sound credit practices of savings and loan associations, the major source of home mortgage credit.

The future of residential building depends heavily on the sustainability of construction of multifamily units. Multifamily housing starts have risen to 36 percent of total starts in 1963, compared to an average of 13 percent during the 1950's. Rental vacancy rates have been rising in the last year, and in some metropolitan areas are quite high. But in the aggregate they are still below the levels that prevailed in 1961 at the beginning of the current housing boom. While an attitude of caution and concern about rental housing in 1964 is certainly justified, there are several favorable factors in the outlook. Part of the great expansion of multifamily housing in the past few years has come in response to demographic changes. The increased relative importance of households at the two extreme ends of the adult age spectrum has raised the demand for apartment units. This demand has not yet been fully met in many communities, and builders of multifamily units can look forward to its acceleration in 2 or 3 years as the early post-war babies enter the housing market. Moreover, there continue to be unmet needs for housing among lower-income and minority groups. The proposed tax cut will provide some support to multifamily construction by increasing the number of those able to afford better rental apartments.

However, given the large volume of multifamily construction already in the pipeline, there is little probability of a further sizable expansion in 1964. Housing demand could decline in the coming year if the availability and terms of mortgage credit are not maintained in the face of rising business demands for credit.

AUTOMOBILES

While the share of their incomes that consumers devoted to auto purchases during 1963 was not far above the average for the past 10 years (as Table 2 shows), the stock of automobiles in use has, nonetheless, grown considerably, both in quantity and in quality. In a static economy, this would suggest a sizable decline in purchases in the following year. However, two considerations are reassuring.

First, the economy will not be static in 1964. The rate of change of after-tax income next year will be extraordinarily large, both because of the cut in taxes and because of a substantial increase in before-tax incomes. Moreover, the number of licensed drivers should continue to grow by at least 2½ million a year.

Second, the buildup of car stocks during 1963 offers significant contrasts with that in 1955, which was the one clear case of substantial borrowing of demand from the future. Both real disposable income and the number of licensed drivers are about 30 percent greater now than they were in 1955, while the number of domestic and imported cars sold in 1963 was not appreciably greater than in the earlier year. Moreover, a rising scrappage rate restrained the growth of the stock of cars. Hence, relative to population and income, the increase in automobile ownership in 1963 was not nearly so great as it was in 1955.

TABLE 2.—*Share of disposable personal income used for consumer durable expenditures, 1954–63*

[Percent]

Year	Consumer durable expenditures as percent of disposable personal income					
	Current prices			Constant prices ¹		
	Total	Automobiles and parts	Other	Total	Automobiles and parts	Other
1954–63 average.....	12.8	5.3	7.4	12.3	5.2	7.1
1954.....	12.6	5.2	7.4	11.8	5.2	6.6
1955.....	14.4	6.7	7.8	13.6	6.5	7.1
1956.....	13.1	5.4	7.8	12.4	5.2	7.2
1957.....	13.1	5.5	7.5	12.3	5.2	7.0
1958.....	11.7	4.4	7.4	11.2	4.2	7.0
1959.....	12.9	5.4	7.6	12.3	5.1	7.2
1960.....	12.8	5.4	7.5	12.4	5.2	7.2
1961.....	12.0	4.7	7.3	11.8	4.6	7.2
1962.....	12.5	5.3	7.2	12.4	5.2	7.1
1963 ²	12.8	5.5	7.3	12.8	5.4	7.3

¹ Based on data in 1963 prices.

² Preliminary estimates by Council of Economic Advisers.

Source: Department of Commerce (except as noted).

The strength of consumer durables sales in 1962 and especially in 1963 was stimulated by ready availability of credit. Maximum credit terms on new automobiles were not generally liberalized, but more automobile buyers took advantage of these maximum terms. The ratio of outstanding installment credit to disposable income (at an annual rate), which was 11.7 percent at the end of 1961, increased to 13.1 percent by the end of 1963.

The proportion of disposable personal income committed to monthly payments has continued its upward drift and now approaches 14 percent. But there is no reason to think that this ratio is unsustainable. It has risen recently partly because the proportion of spending units using consumer credit has been rising. According to the Survey Research Center's 1963 Survey of Consumer Finances, this percentage rose from 46 in 1962 to 50 in early 1963. As the general level of per capita income rises, more households become good credit risks. A rise in the ratio of aggregate consumer debt to income is far more sustainable when it comes from wider-spread use of debt than when it reflects only heavier indebtedness on the part of existing credit users.

The crucial factor in determining whether indebtedness imposes an excessive burden is the rate of expansion of disposable income. The rise in disposable income from the proposed 1964 tax cut will reduce appreciably the ratio of beginning-of-year debt to income. If a decline in consumer incomes were in the offing in 1964, the current level of consumer indebtedness might be a cause for concern. It poses no serious threat when income is expected to grow rapidly.

THE OUTLOOK FOR GNP IN 1964

The demands for automobiles and housing should continue at high levels in 1964, but they cannot be expected to provide fresh impetus to expansion. Nor is a substantial independent thrust likely to come from business investment or government purchases. Thus a favorable outlook for 1964 is heavily dependent upon the passage and timing of the proposed tax reductions.

The process by which tax reduction will stimulate consumption and investment demand is outlined in Appendix A of this Report. If the tax cuts were not forthcoming, business and consumers not only would have to do without their direct effect but would have to adjust to sharp disappointment. With the tax cuts, and taking into account the projected budget expenditures, the economy will receive a powerful stimulus. Indeed, it will be operating with little if any full-employment surplus for the first time since the Korean conflict. The elimination of the estimated \$9 billion full-employment surplus of calendar 1963 will mark an unprecedented use of fiscal policy for the maintenance and acceleration of expansion. It must be recognized that, while the expansive effects of the projected tax cuts will be very sizable, the month-to-month timing of their impacts upon expenditures is not precisely predictable. For this reason, it is especially appropriate this year to attach a range of plus or minus \$5 billion to the forecast of the GNP for 1964.

Administration forecasts are always in some degree projections because they rest on assumptions about the enactment of the President's program. The dependence of this year's forecast on assumptions made about the nature and timing of the tax cuts is particularly heavy. The date of enactment and the initial withholding rate applied to wages and salaries are both critical.

The assumptions underlying the present projection are—

First, that reduction of tax liabilities as recommended in the President's Budget Message will be enacted by February 1;

Second, that the withholding rate will be reduced from 18 percent to 14 percent by this legislation, to take effect as soon as possible thereafter.

Under these assumptions, it is estimated that GNP for calendar 1964 will fall within a \$10 billion range centering on \$623 billion. If events depart from the above assumptions, prospects for the year will be significantly altered. For example, if passage of the tax bill were delayed by 1 month, the projected GNP range would center on \$621 billion.

Prospects for the major components of demand appear to be the following:

Government expenditures. State and local purchases of goods and services are expected to rise by at least \$4 billion, the trend rate for the last few years. Although the President's Budget will call for a decline in Adminis-

trative Budget expenditures from fiscal 1964 to fiscal 1965, Federal purchases of goods and services are projected to increase by \$2½ billion, from calendar 1963 to calendar 1964. This will be a smaller increase than those of the past few years.

Residential construction. Outlays for residential construction are not likely to rise from their level at the end of 1963, but a small year-to-year increase seems probable.

Business fixed investment. The basic determinants of expenditures on fixed investment—both real and financial—are favorable to further expansion. According to the business plant and equipment survey made by the Department of Commerce and the Securities and Exchange Commission, the annual rate of such expenditures (which account for over three-fourths of business fixed investment) will be about \$1 billion higher in the first half of 1964 than in the latter half of 1963. The demand and profit stimulus provided by the tax cut should be sufficient to accelerate the rate of increase in the second half of 1964, giving a somewhat higher year-to-year increase than in 1963.

Inventory investment. With inventory-sales ratios quite favorable, inventory investment should respond fairly promptly to a step-up in the rate of increase in final demand and proceed at a rate well above the 1963 level, particularly toward the end of the year.

Consumption. Under the stimulus of a cut of nearly \$9 billion in personal tax collections, consumption expenditures will be a substantial force in economic expansion in 1964, providing more than two-thirds of the total demand increase. Substantial year-to-year gains should be realized in all major expenditure categories. While the dollar volume of automobile outlays should rise with a tax cut, their share of disposable personal income may fall slightly. A rise in the income share spent on other durables is quite probable.

In summary, the outlook this year calls for a significant acceleration in the growth of output. At the midpoint of the forecast range, current-dollar GNP for 1964 is estimated to increase 6½ percent above the level of 1963, and the real GNP, about 5 percent. Because last year's gains in the labor force and productivity somewhat exceeded past trends, the 1963 growth of 3.8 percent in real output was not sufficient to reduce the unemployment rate. It seems likely that potential will continue in the year ahead to grow slightly faster than its 3½ percent average annual rate since 1955. Nevertheless, the more rapid expansion of production in 1964 should lower the unemployment rate. By the end of the year, it is expected to fall to approximately 5 percent. Thus the year promises progress in reducing unemployment, but attainment of the interim goal of 4 percent lies beyond 1964.

Demand will continue to benefit in the years ahead from the powerful stimulus of the current tax-reduction program. Prospects for 1964 are enormously improved by the impending tax legislation, but even so, the full effect will not be felt this year. It will take some time for consumer outlays to adjust fully to the rise in household incomes; somewhat longer delays are likely in the response of capital expenditures. As these adjust to higher operating rates and higher after-tax profits, the underlying strength of business demand for new capital should become evident for the first time in nearly a decade.

Private demand will get support from fiscal policy throughout the 1965 fiscal year. On January 1, 1965, a second instalment of tax reduction will take effect. As a result, the gradual leveling off of Federal outlays, desired for—and permitted by—increasing efficiency in the government, can be consistent with a continued movement toward full employment.

A return to full employment will yield many benefits, as succeeding chapters make clear. It will reinforce programs to aid the disadvantaged and to promote smooth adjustment to technological change. It will increase the mobility of labor and capital. It will improve our productivity performance, so important to the international competitiveness of our products. Once demand matches our productive potential, efforts to accelerate the growth of potential will become more effective and merit a higher priority. In combination, full employment and accelerated growth can produce a sharp improvement in U.S. economic performance for the rest of the 1960's.

On November 17, 1961, the United States joined with the other 19 member nations of the Organization for Economic Cooperation and Development in setting as a target the attainment of a 50 percent (4.1 percent a year) increase in their combined real gross national products during the decade from 1960 to 1970. The average year-to-year rate of increase of this Nation's GNP in the first 3 years of the decade, 3.9 percent, did not match the target rate for the OECD countries as a whole. For the United States to raise its output by one-half during the decade, it will need to grow at an average annual rate of 4.2 percent in the next 7 years. That rate is within our grasp.

Any lessening in international tensions that permits significant arms reductions consistent with national security will increase our ability to raise our rate of economic growth. Resources no longer used in arms production can be used to upgrade the skills and equipment of the labor force, as well as to raise the levels of private and public consumption. An economic policy ensuring that these resources are used for such purposes rather than left idle can raise the growth rate of potential output.

If we are to achieve the full benefits of our rising productive potential and to avoid excessive unemployment, aggregate demand will have to con-

tinue to expand more rapidly than it has in the past. With the major relaxation in fiscal restraint in 1964, we will get a new and more accurate assessment of the strength of private demand as we move toward full employment. This information will help to guide the monetary and budgetary programs for the years ahead. But the principles to guide policy are clear. They were stated in the Employment Act; they have been dramatized by the experience of recent years. If this Nation is to achieve and maintain "maximum employment, production and purchasing power," it will be the continuing task of fiscal and monetary policy to support a strong, sustainable pace in the expansion of aggregate demand.

Chapter 2

The Problem of Poverty in America

IN HIS MESSAGE on the State of the Union, President Johnson declared all-out war on poverty in America. This chapter is designed to provide some understanding of the enemy and to outline the main features of a strategy of attack.

ELIMINATING POVERTY—A NATIONAL GOAL

There will always be some Americans who are better off than others. But it need not follow that “the poor are always with us.” In the United States today we can see on the horizon a society of abundance, free of much of the misery and degradation that have been the age-old fate of man. Steadily rising productivity, together with an improving network of private and social insurance and assistance, has been eroding mass poverty in America. But the process is far too slow. It is high time to redouble and to concentrate our efforts to eliminate poverty.

Poverty is costly not only to the poor but to the whole society. Its ugly by-products include ignorance, disease, delinquency, crime, irresponsibility, immorality, indifference. None of these social evils and hazards will, of course, wholly disappear with the elimination of poverty. But their severity will be markedly reduced. Poverty is no purely private or local concern. It is a social and national problem.

But the overriding objective is to improve the quality of life of individual human beings. For poverty deprives the individual not only of material comforts but of human dignity and fulfillment. Poverty is rarely a builder of character.

The poor inhabit a world scarcely recognizable, and rarely recognized, by the majority of their fellow Americans. It is a world apart, whose inhabitants are isolated from the mainstream of American life and alienated from its values. It is a world where Americans are literally concerned with day-to-day survival—a roof over their heads, where the next meal is coming from. It is a world where a minor illness is a major tragedy, where pride and privacy must be sacrificed to get help, where honesty can become a luxury and ambition a myth. Worst of all, the poverty of the fathers is visited upon the children.

Equality of opportunity is the American dream, and universal education our noblest pledge to realize it. But, for the children of the poor, education is a handicap race; many are too ill prepared and ill motivated at home to learn at school. And many communities lengthen the handicap by providing the worst schooling for those who need the best.

Although poverty remains a bitter reality for too many Americans, its incidence has been steadily shrinking. The fruits of general economic growth have been widely shared; individuals and families have responded to incentives and opportunities for improvement; government and private programs have raised the educational attainments, housing standards, health, and productivity of the population; private and social insurance has increasingly protected families against loss of earnings due to death, disability, illness, old age, and unemployment. Future headway against poverty will likewise require attacks on many fronts: the active promotion of a full-employment, rapid-growth economy; a continuing assault on discrimination; and a wide range of other measures to strike at specific roots of low income. As in the past, progress will require the combined efforts of all levels of government and of private individuals and groups.

All Americans will benefit from this progress. Our Nation's most precious resource is its people. We pay twice for poverty: once in the production lost in wasted human potential, again in the resources diverted to coping with poverty's social by-products. Humanity compels our action, but it is sound economics as well.

This chapter considers, first, the changing numbers and composition of America's poor. Second, it presents a brief report on the factors that contribute to the continuation of poverty amidst plenty. Although the analysis is statistical, the major concern is with the human problems that the numbers reflect. The concluding part concerns strategy against poverty in the 1960's and beyond. Supplementary tables at the end of the chapter provide further data on the dimensions of poverty in America.

The sections below will chart the topography of poverty. A few significant features of this bleak landscape deserve emphasis in advance. Poverty occurs in many places and is endured by people in many situations; but its occurrence is nonetheless highly concentrated among those with certain characteristics. The scars of discrimination, lack of education, and broken families show up clearly from almost any viewpoint. Here are some landmarks:

- One-fifth of our families and nearly one-fifth of our total population are poor.
- Of the poor, 22 percent are nonwhite; and nearly one-half of all non-whites live in poverty.
- The heads of over 60 percent of all poor families have only grade school educations.
- Even for those denied opportunity by discrimination, education significantly raises the chance to escape from poverty. Of all non-

- white families headed by a person with 8 years or less of schooling, 57 percent are poor. This percentage falls to 30 for high school graduates and to 18 percent for those with some college education.
- But education does not remove the effects of discrimination: when nonwhites are compared with whites at the same level of education, the nonwhites are poor about twice as often.
- One-third of all poor families are headed by a person over 65, and almost one-half of families headed by such a person are poor.
- Of the poor, 54 percent live in cities, 16 percent on farms, 30 percent as rural nonfarm residents.
- Over 40 percent of all farm families are poor. More than 80 percent of nonwhite farmers live in poverty.
- Less than half of the poor are in the South; yet a southerner's chance of being poor is roughly twice that of a person living in the rest of the country.
- One-quarter of poor families are headed by a woman; but nearly one-half of all families headed by a woman are poor.
- When a family and its head have several characteristics frequently associated with poverty, the chances of being poor are particularly high: a family headed by a young woman who is nonwhite and has less than an eighth grade education is poor in 94 out of 100 cases. Even if she is white, the chances are 85 out of 100 that she and her children will be poor.

THE NATURE AND EXTENT OF POVERTY

Measurement of poverty is not simple, either conceptually or in practice. By the poor we mean those who are not now maintaining a decent standard of living—those whose basic needs exceed their means to satisfy them. A family's needs depend on many factors, including the size of the family, the ages of its members, the condition of their health, and their place of residence. The ability to fulfill these needs depends on current income from whatever source, past savings, ownership of a home or other assets, and ability to borrow.

NEEDS AND RESOURCES

There is no precise way to measure the number of families who do not have the resources to provide minimum satisfaction of their *own* particular needs. Since needs differ from family to family, an attempt to quantify the problem must begin with some concept of average need for an average or representative family. Even for such a family, society does not have a clear and unvarying concept of an acceptable minimum. By the standards of contemporary American society most of the population of the world is poor; and most Americans were poor a century ago. But for our society today a consensus on an approximate standard can be found. One such standard is suggested by a recent study, described in a publication of the

Social Security Administration, which defines a "low-cost" budget for a nonfarm family of four and finds its cost in 1962 to have been \$3,955. The cost of what the study defined as an "economy-plan" budget was \$3,165. Other studies have used different market baskets, many of them costing more. On balance, they provide support for using as a boundary, a family whose annual money income from all sources was \$3,000 (before taxes and expressed in 1962 prices). This is a weekly income of less than \$60.

These budgets contemplate expenditures of one-third of the total on food, i.e., for a \$3,000 annual budget for a 4-person family about \$5 per person per week. Of the remaining \$2,000, a conservative estimate for housing (rent or mortgage payments, utilities, and heat) would be another \$800. This would leave only \$1,200—less than \$25 a week—for clothing, transportation, school supplies and books, home furnishings and supplies, medical care, personal care, recreation, insurance, and everything else. Obviously it does not exaggerate the problem of poverty to regard \$3,000 as the boundary.

A family's ability to meet its needs depends not only on its money income but also on its income in kind, its savings, its property, and its ability to borrow. But the detailed data (of the Bureau of the Census) available for pinpointing the origins of current poverty in the United States refer to money income. Refined analysis would vary the income cut-off by family size, age, location, and other indicators of needs and costs. This has not been possible. However, a variable income cut-off was used in the sample study of poverty in 1959 conducted at the University of Michigan Survey Research Center. This study also estimates the over-all incidence of poverty at 20 percent; and its findings concerning the sources of poverty correspond closely with the results based on an analysis of Census data.

A case could be made, of course, for setting the over-all income limit either higher or lower than \$3,000, thereby changing the statistical measure of the size of the problem. But the analysis of the sources of poverty, and of the programs needed to cope with it, would remain substantially unchanged.

No measure of poverty as simple as the one used here, would be suitable for determining eligibility for particular benefits or participation in particular programs. Nevertheless, it provides a valid benchmark for assessing the dimensions of the task of eliminating poverty, setting the broad goals of policy, and measuring our past and future progress toward their achievement.

If it were possible to obtain estimates of total incomes—including non-money elements—for various types of families, those data would be preferable for the analysis which follows. The Department of Commerce does estimate total nonmoney incomes in the entire economy in such forms as the rental value of owner-occupied dwellings and food raised and consumed on farms, and allocates them to families with incomes of different size.

Because of statistical difficulties, these allocations are necessarily somewhat arbitrary, and are particularly subject to error for the lower income groups. No attempt is made to allocate them by other characteristics that are meaningful for an analysis of poverty. Of course, the total of money plus nonmoney income that would correspond to the limit used here would be somewhat higher than \$3,000.

THE CHANGING EXTENT OF POVERTY

There were 47 million families in the United States in 1962. Fully 9.3 million, or one-fifth of these families—comprising more than 30 million persons—had total money incomes below \$3,000. Over 11 million of these family members were children, one-sixth of our youth. More than 1.1 million families are now raising 4 or more children on such an income. Moreover, 5.4 million families, containing more than 17 million persons, had total incomes below \$2,000. More than a million children were being raised in very large families (6 or more children) with incomes of less than \$2,000.

Serious poverty also exists among persons living alone or living in non-family units such as boarding houses. In 1962, 45 percent of such “unrelated individuals”—5 million persons—had incomes below \$1,500, and 29 percent—or more than 3 million persons—had incomes below \$1,000 (Supplementary Table 9). Thus, by the measures used here, 33 to 35 million Americans were living at or below the boundaries of poverty in 1962—nearly one-fifth of our Nation.

The substantial progress made since World War II in eliminating poverty is shown in Chart 7 and Table 3. In the decade 1947–56, when incomes

TABLE 3.—*Money income of families, 1947 and 1950–62*

Year	Median money income of all families (1962 prices)		Percent of families with money income	
	Dollars	Index, 1947=100	Less than \$3,000 (1962 prices)	Less than \$2,000 (1962 prices)
1947.....	4,117	100	32	18
1950.....	4,188	102	32	19
1951.....	4,328	105	29	17
1952.....	4,442	108	28	17
1953.....	4,809	117	26	16
1954.....	4,705	114	28	17
1955.....	5,004	122	25	15
1956.....	5,337	130	23	14
1957.....	5,333	130	23	14
1958.....	5,329	129	23	14
1959.....	5,631	137	22	13
1960.....	5,759	140	21	13
1961.....	5,820	141	21	13
1962.....	5,956	145	20	12

Sources: Department of Commerce and Council of Economic Advisers.

were growing relatively rapidly, and unemployment was generally low, the number of poor families (with incomes below \$3,000 in terms of 1962 prices) declined from 11.9 million to 9.9 million, or from 32 percent to

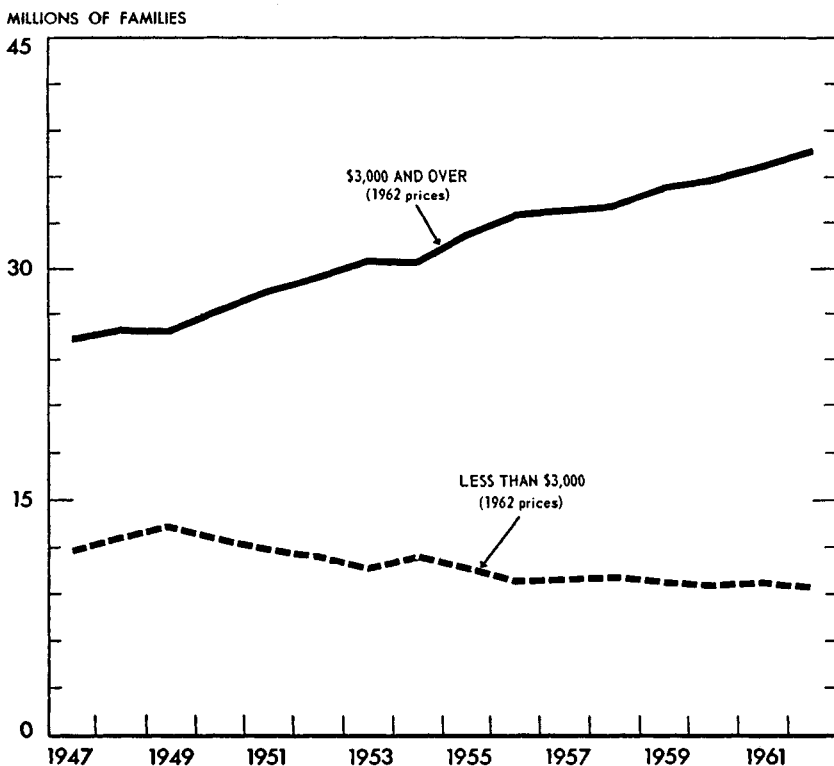
23 percent of all families. But in the period from 1957 through 1962, when total growth was slower and unemployment substantially higher, the number of families living in poverty fell less rapidly, to 9.3 million, or 20 percent of all families.

The progress made since World War II has not involved any major change in the distribution of incomes. The one-fifth of families with the highest incomes received an estimated 43 percent of total income in 1947 and 42 percent in 1962. The one-fifth of families with the lowest incomes received 5 percent of the total in 1947 and 5 percent in 1963.

Even if poverty should hereafter decline at the relatively more rapid rate of the 1947-56 period, there would still be 10 percent of the Nation's families in poverty in 1980. And, if the decline in poverty proceeded at the slower rate achieved from 1957 on, 13 percent of our families would still have incomes under \$3,000 in 1980. We cannot leave the further wearing away of poverty solely to the general progress of the economy. A faster

Chart 7

Number of Families by Family Income



SOURCE: DEPARTMENT OF COMMERCE.

reduction of poverty will require that the lowest fifth of our families be able to earn a larger share of national output.

THE COMPOSITION OF TODAY'S POOR

To mount an attack on poverty we must know how to select our targets. Are the poor concentrated in any single geographical area? Are they confined to a few easily identifiable groups in society? Conclusions drawn from personal observation are likely to be misleading. Some believe that most of the poor are found in the slums of the central city, while

TABLE 4.—*Selected characteristics of all families and of poor families, 1962*

Selected characteristic	Number of families (millions)		Percent of total	
	All families	Poor families	All families	Poor families
Total.....	47.0	9.3	100	100
Age of head:				
14-24 years.....	2.5	.8	5	8
25-54 years.....	30.4	3.9	65	42
55-64 years.....	7.3	1.4	16	15
65 years and over.....	6.8	3.2	14	34
Education of head: ¹				
8 years or less.....	16.3	6.0	35	61
9-11 years.....	8.6	1.7	19	17
12 years.....	12.2	1.5	26	15
More than 12 years.....	9.3	.7	20	7
Sex of head:				
Male.....	42.3	7.0	90	75
Female.....	4.7	2.3	10	25
Labor force status of head: ²				
Not in civilian labor force.....	8.4	4.1	18	44
Employed.....	36.9	4.6	78	49
Unemployed.....	1.7	.6	4	6
Color of family:				
White.....	42.4	7.3	90	78
Nonwhite.....	4.6	2.0	10	22
Children under 18 years of age in family:				
None.....	18.8	4.9	40	52
One to three.....	22.7	3.3	48	36
Four or more.....	5.5	1.1	12	11
Earners in family:				
None.....	3.8	2.8	8	30
One.....	21.1	4.3	45	46
Two or more.....	22.1	2.2	47	23
Regional location of family: ^{3 4}				
Northeast.....	11.5	1.6	25	17
North Central.....	13.1	2.3	29	25
South.....	13.5	4.3	30	47
West.....	7.0	1.0	16	11
Residence of family: ^{4 5}				
Rural farm.....	3.3	1.5	7	16
Rural nonfarm.....	9.9	2.7	22	30
Urban.....	31.9	5.0	71	54

¹ Based on 1961 income (1962 prices).

² Labor force status relates to survey week of March 1963.

³ Based on 1960 residence and 1959 income (1962 prices).

⁴ Data are from 1960 Census and are therefore not strictly comparable with the other data shown in this table, which are derived from *Current Population Reports*.

⁵ Based on 1959 residence and 1959 income (1962 prices).

NOTE.—Data relate to families and exclude unrelated individuals. Poor families are defined as all families with total money income of less than \$3,000.

Sources: Department of Commerce and Council of Economic Advisers.

others believe that they are concentrated in areas of rural blight. Some have been impressed by poverty among the elderly, while others are convinced that it is primarily a problem of minority racial and ethnic groups. But objective evidence indicates that poverty is pervasive. To be sure, the inadequately educated, the aged, and the nonwhite make up substantial portions of the poor population. But as Table 4 shows, the poor are found among all major groups in the population and in all parts of the country. Further data on the composition of the poor population are found in Supplementary Tables 10 and 11.

Using the income measure of poverty described above, we find that 78 percent of poor families are white. Although one-third of the poor families are headed by a person 65 years old and over, two-fifths are headed by persons in the 25 to 54 year range. Although it is true that a great deal of poverty is associated with lack of education, almost 4 million poor families (39 percent) are headed by a person with at least some education beyond grade school. The data show that less than half the poor live in the South. And the urban poor are somewhat more numerous than the rural poor. In Chart 8 the poor and the non-poor are compared in terms of these and other characteristics.

Yet there are substantial concentrations of poverty among certain groups. For example, families headed by persons 65 years of age and older represent 34 percent of poor families. Moreover, they appear among the poor $2\frac{1}{2}$ times as frequently as they appear among all families. The last 2 columns of Table 4 show 5 additional major categories of families that appear more than twice as often among the poor as among the total population: non-white families, families headed by women, families headed by individuals not in the civilian labor force, families with no wage earners, and rural farm families. Of course, some of these groups overlap considerably; but the data help to identify prospective targets for an antipoverty attack. The next section pinpoints these targets further.

THE ROOTS OF POVERTY

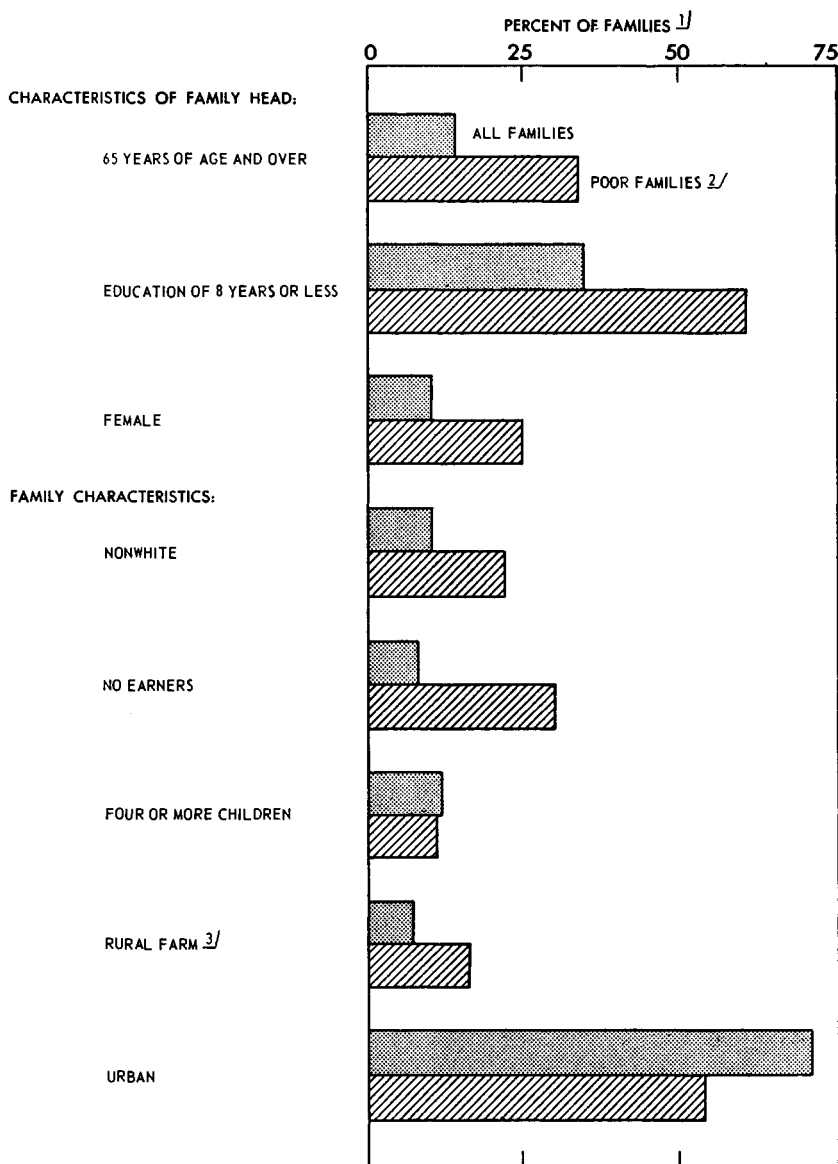
Poverty is the inability to satisfy minimum needs. The poor are those whose resources—their income from all sources, together with their asset holdings—are inadequate. This section considers why those in poverty lack the earned income, property income and savings, and transfer payments to meet their minimum needs.

EARNED INCOME

Why do some families have low earned incomes? Some are unemployed or partially unemployed. High over-all employment is a remedy of first importance. It would provide earned income for those unemployed who are able to accept jobs and greater earnings for many presently working part-time. Yet it is clear that this is only a partial answer. Even for those able and willing to work, earnings are all too frequently inadequate, and a

Chart 8

Characteristics of Poor Families COMPARED WITH ALL FAMILIES



^{1/} BASED ON 1962 DATA (EXCEPT AS NOTED).

^{2/} FAMILIES WITH INCOME OF \$3,000 OR LESS.

^{3/} BASED ON 1959 DATA.

SOURCE: DEPARTMENT OF COMMERCE.

large number of the poor are unable to work. An analysis of the incidence of poverty helps one understand the reasons for low earnings.

The incidence of poverty for any specified group of families is the percentage of that group with incomes below \$3,000. For all families, the incidence in 1962 was 20 percent. An incidence for a particular group higher than 20 percent, or higher than the rates for other similar groups, suggests that some characteristics of that group are causally related to poverty. The basic cause may not be the particular characteristic used to classify the group. But an examination of groups with high incidence should throw light on the roots of poverty. Incidence of poverty in 1947 and 1962 is shown for several major types of families in Chart 9.

Table 5 shows that the incidence of poverty is 76 percent for families with no earners. From other data, it appears that the incidence rate is 49 percent for families headed by persons who work part-time. A family may be in either of these situations as a result of age, disability, premature death

TABLE 5.—Incidence of poverty, by characteristics relating to labor force participation, 1962

Selected characteristic	Incidence of poverty (percent)
All families.....	20
Earners in family:	
None.....	76
One.....	20
Two.....	10
Three or more.....	8
Labor force status of head: ¹	
Not in civilian labor force.....	50
Employed.....	12
Unemployed.....	34
Age of head:	
14-24 years.....	31
25-54 years.....	13
55-64 years.....	19
65 years and over.....	47
Sex of head:	
Male.....	17
Wife in labor force.....	9
Female.....	48

¹ Status relates to survey week of March 1963.

NOTE.—Data relate to families and exclude unrelated individuals. Poverty is defined to include all families with total money income of less than \$3,000; these are also referred to as poor families. Incidence of poverty is measured by the percent that poor families with a given characteristic are of all families having the same characteristic.

Sources: Department of Commerce and Council of Economic Advisers.

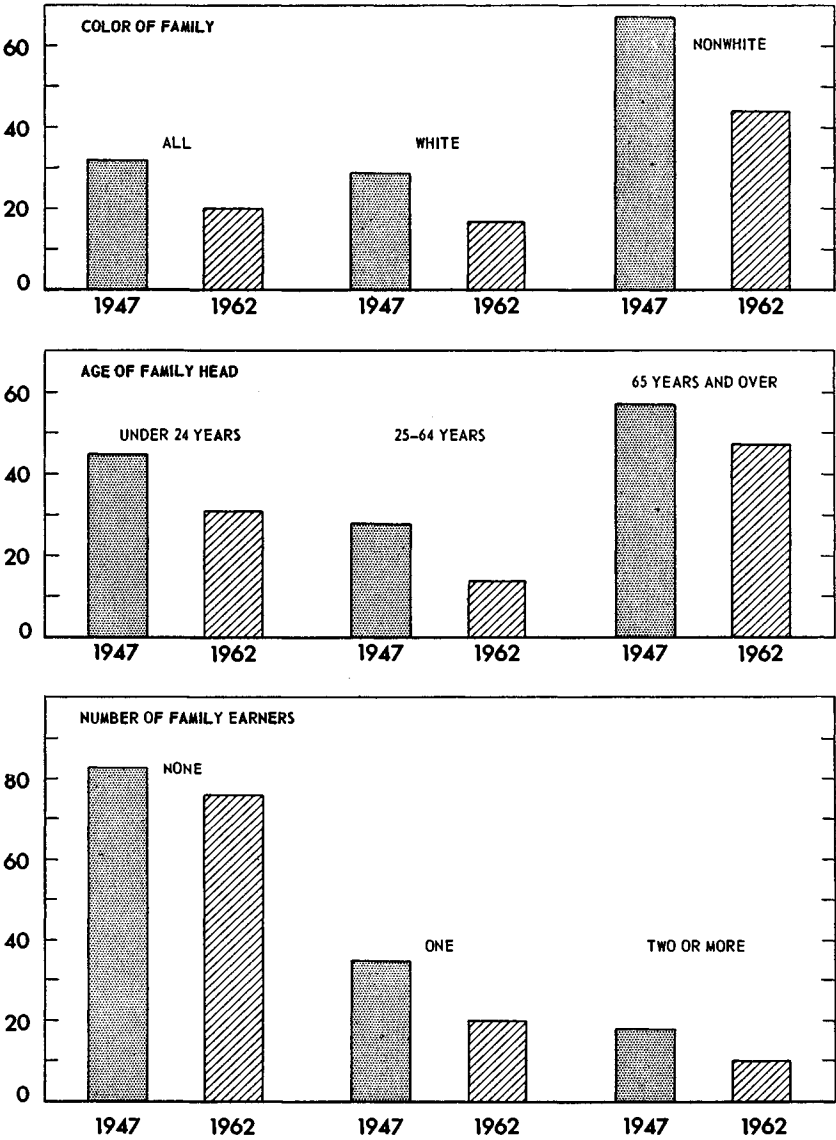
of the principal earner, need to care for children or disabled family members, lack of any saleable skill, lack of motivation, or simply heavy unemployment in the area.

The problem of another group of families is the low rates of pay found most commonly in certain occupations. For example, the incidence of poverty among families headed by employed persons is 45 percent for farmers, and 74 percent for domestic service workers (Supplementary Table 12).

Chart 9

Incidence of Poverty

PERCENT 1/



1/PERCENT OF FAMILIES WITH GIVEN CHARACTERISTIC THAT ARE POOR. POOR FAMILIES ARE DEFINED AS ALL FAMILIES WITH TOTAL MONEY INCOME OF LESS THAN \$3,000 (1962 PRICES)

SOURCES: DEPARTMENT OF COMMERCE AND COUNCIL OF ECONOMIC ADVISERS.

The chief reason for low rates of pay is low productivity, which in turn can reflect lack of education or training, physical or mental disability, or poor motivation. Other reasons include discrimination, low bargaining power, exclusion from minimum wage coverage, or lack of mobility resulting from inadequate knowledge of other opportunities, or unwillingness or inability to move away from familiar surroundings.

The importance of education as a factor in poverty is suggested by the fact that families headed by persons with no more than 8 years of education have an incidence rate of 37 percent (Table 6). Nonwhite and rural families show an even higher incidence of poverty (Table 6 and Supplementary Table 13). The heads of these families are typically less well educated than average. For example, nonwhite family heads have completed a median of

TABLE 6.—*Incidence of poverty by education, color, and residence, 1962*

Selected characteristic	Incidence of poverty (percent)
All families.....	20
Education of head: ¹	
8 years or less.....	37
9-11 years.....	20
12 years.....	12
More than 12 years.....	8
Color of family:	
White.....	17
Nonwhite.....	44
Residence of family:	
Farm.....	43
Nonwhite.....	84
Nonfarm.....	18

¹ Data relate to 1961, and money income in 1962 prices.

NOTE.—Data relate to families and exclude unrelated individuals. Poverty is defined to include all families with total money income of less than \$3,000; these are also referred to as poor families. The incidence of poverty is measured by the percent that poor families with a given characteristic are of all families having the same characteristic.

Sources: Department of Commerce and Council of Economic Advisers.

8.7 years of school, compared to 11.8 for whites. In 1959 the median education of all males over 25 with incomes below \$1,000 and living on a farm was slightly above 7 years in school; those with incomes above \$5,000 had completed over 10 years in school.

Supplementary Table 14 presents additional detail from the 1960 census on the incidence of poverty among families classified by educational attainment, color, age, and family type. The severely handicapping influence of lack of education is clear. The incidence of poverty drops as educational attainments rise for nonwhite as well as white families at all ages. The high frequency of poverty for nonwhites is not, however, fully explained by their educational deficit. As Supplementary Table 14 shows, the incidence of poverty among nonwhites is almost invariably higher than among whites regardless of age, family type, or level of educational attainment. Supplementary Table 15 shows that nonwhites earn less than whites with the same education even when they practice the same occupation.

Some families are forced into poverty by society's own standards. Their potential earners, otherwise able to hold a job, cannot free themselves from the family responsibilities which they must fulfill. Such is the case, for example, with families headed by women with small children.

Customary or mandatory retirement at a specified age also limits earnings by some healthy, able-bodied persons. However, retirement is often associated with deteriorating health, and poverty among the aged is greatest at ages over 70 or 75 and for aged widows—persons for whom employment is not a realistic alternative.

PROPERTY INCOME AND USE OF SAVINGS

Some families with inadequate current earnings from work can avoid poverty thanks to past savings—which provide an income and, if necessary, can be used to support consumption. Savings are particularly important for the elderly. More than half of those over 65 have money incomes above \$3,000, and many also own homes. Others, although their money incomes are below \$3,000, have adequate savings that can be drawn upon to support a decent standard of consumption.

But most families with low earnings are not so fortunate. If avoiding poverty required an income supplement of \$1,500 a year for a retired man and his wife, they would need a capital sum at age 65 of about \$19,000 to provide such an annuity. Few families have that sum. The median net worth for all spending units (roughly equivalent to the total of families and unrelated individuals) was only \$4,700 in 1962. For all spending units whose head was 65 years or more, the median net worth was \$8,000. Meeting contingencies caused by illnesses is often a crucial problem for older people. About half of the aged, and about three-fourths of the aged poor, have no hospital insurance, although their medical care costs are 2½ times as high as those of younger persons. Their resources are typically inadequate to cover the costs of a serious illness.

The median net worth of the fifth of all spending units having the lowest incomes was only \$1,000. Much of what property they have is in the form of dwellings. (About 40 percent of all poor families have some equity in a house.) Although this means that their housing costs are reduced, property in this form does not provide money income that can be used for other current expenses.

Most families—including the aged—whose incomes are low in any one year lack significant savings or property because their incomes have always been at poverty levels. This is clear in the results of the Michigan study already cited. Among the reporting families classified in that study as poor in 1959, 60 percent had never earned disposable income as high as \$3,000, and nearly 40 percent had never reached \$2,000. The comparable figures for all families were 17 percent and 10 percent, respectively. Among the aged poor reporting, 79 percent had never reached \$3,000, and fully one-half had never earned \$2,000. While nearly 60 percent of *all* families have

enjoyed peak incomes above \$5,000, among all poor families only 14 percent had ever reached that level; and a mere 5 percent of the aged poor had ever exceeded \$5,000.

The persistence of poverty is reflected in the large number who have been unable to accumulate savings. The Survey Research Center study found that more than one-half of the aged poor in 1959 had less than \$500 in liquid savings (bank deposits and readily marketable securities), and they had not had savings above that figure during the previous 5 years. Less than one-fifth of all poor families reported accumulated savings in excess of \$500. The mean amount of savings used by poor families in 1959 was \$120; and only 23 percent of the poor drew on savings at all.

It is clear that for most families property income and savings do not provide a buffer against poverty. Some 1962 data on liquid savings are contained in Supplementary Table 16.

TRANSFER PAYMENTS AND PRIVATE PENSIONS

Poverty would be more prevalent and more serious if many families and individuals did not receive transfer payments. In 1960, these payments (those which are not received in exchange for current services) constituted only 7 percent of total family income, but they comprised 43 percent of the total income of low-income spending units. At the same time, however, only about half of the present poor receive any transfer payments at all. And, of course, many persons who receive transfers through social insurance programs are not poor—often as a result of these benefits.

Transfer programs may be either public or private in nature and may or may not have involved past contributions by the recipient. Public transfer programs include social insurance—such as Unemployment Compensation, Workmen's Compensation, and Old-Age, Survivors', and Disability Insurance (OASDI); veterans' benefits; and public assistance programs, such as Old Age Assistance (OAA) and Aid to Families with Dependent Children (AFDC).

Private transfer programs include organized systems such as private pension plans and supplementary unemployment benefits, organized private charities, and private transfers within and among families.

It is important to distinguish between insurance-type programs and assistance programs, whether public or private. Assistance programs are ordinarily aimed specifically at the poor or the handicapped. Eligibility for their benefits may or may not be based upon current income; but neither eligibility nor the size of benefits typically bears any direct relationship to past income. Eligibility for insurance-type programs, on the other hand, is based on past employment, and benefits on past earnings.

The Federal-State unemployment insurance system covers only about 77 percent of all paid employment and is intended to protect workers with a regular attachment to the labor force against temporary loss of income. Benefits, of course, are related to previous earnings.

While the largest transfer-payment program, OASDI, now covers approximately 90 percent of all paid employment, there are still several million aged persons who retired or whose husbands retired or died before acquiring coverage. Benefits are related to previous earnings, and the average benefit for a retired worker under this program at the end of 1963 was only \$77 a month, or \$924 a year. The average benefit for a retired worker and his wife if she is eligible for a wife's benefit is \$1,565 a year.

Public insurance-type transfer programs have made notable contributions to sustaining the incomes of those whose past earnings have been adequate, and to avoiding their slipping into poverty as their earnings are interrupted or terminated. These programs are of least help to those whose earnings have never been adequate.

Public assistance programs are also an important support to low-income and handicapped persons. Money payments under OAA average about \$62 a month for the country as a whole, with State averages ranging from \$37 to about \$95 a month. In the AFDC program the national average payment per family (typically of 4 persons) is about \$129 a month, including services rendered directly. State averages range from \$38 a month to about \$197 a month.

Private transfers within and between families are included in the total money income figures used in this chapter only to the extent that they are regular in nature, e.g., alimony or family support payments, and are excluded when they take the form of casual or irregular gifts or bequests. While data are lacking on the value of such gifts, they are clearly not a major source of income for the poor.

Private pensions, providing an annuity, are additional resources for some persons and families. In 1961 the beneficiaries of such plans numbered about 2 million (as against about 12 million receiving OASDI benefits), and total benefits paid were about \$2 billion. While the combination of OASDI and private pensions serves to protect some from poverty, most persons receiving OASDI receive no private pension supplement. In any case, benefits under private pension plans range widely, and since they are typically related to the individual's previous earnings, they are low when earnings have been low.

Thus, although many families do indeed receive supplements to earnings in the form of pensions, social insurance benefits, and incomes from past saving, those families with a history of low earnings are also likely to have little of such supplementary income. And since most poor families have small amounts of property, they cannot long meet even minimum needs by depleting their assets.

THE VICIOUS CIRCLE

Poverty breeds poverty. A poor individual or family has a high probability of staying poor. Low incomes carry with them high risks of illness; limitations on mobility; limited access to education, information, and train-

ing. Poor parents cannot give their children the opportunities for better health and education needed to improve their lot. Lack of motivation, hope, and incentive is a more subtle but no less powerful barrier than lack of financial means. Thus the cruel legacy of poverty is passed from parents to children.

Escape from poverty is not easy for American children raised in families accustomed to living on relief. A recent sample study of AFDC recipients found that more than 40 percent of the parents were themselves raised in homes where public assistance had been received. It is difficult for children to find and follow avenues leading out of poverty in environments where education is deprecated and hope is smothered. This is particularly true when discrimination appears as an insurmountable barrier. Education may be seen as a waste of time if even the well-trained are forced to accept menial labor because of their color or nationality.

The Michigan study shows how inadequate education is perpetuated from generation to generation. Of the families identified as poor in that study, 64 percent were headed by a person who had had less than an eighth grade education. Of these, in turn, 67 percent had fathers who had also gone no further than eighth grade in school. Among the children of these poor families who had finished school, 34 percent had not gone beyond the eighth grade; this figure compares with 14 percent for all families. Fewer than 1 in 2 children of poor families had graduated from high school, compared to almost 2 out of 3 for all families.

Of 2 million high school seniors in October 1959 covered by a Census study, 12 percent did not graduate in 1960. Of these drop-outs 54 percent had IQ's above 90, and 6 percent were above 110. Most of them had the intellectual capabilities necessary to graduate. The drop-out rate for non-white male students, and likewise for children from households with a nonworking head, was *twice* the over-all rate. And it was twice as high for children of families with incomes below \$4,000 as for children of families with incomes above \$6,000. Moreover, many of the children of the poor had dropped out before reaching the senior year.

A study of drop-outs in New Haven, Connecticut, showed that 48 percent of children from lower-class neighborhoods do not complete high school. The comparable figure for better neighborhoods was 22 percent.

Other studies indicate that unemployment rates are almost twice as high for drop-outs as for high school graduates aged 16-24. Moreover, average incomes of male high school graduates are 25 percent higher than those of high school drop-outs, and nearly 150 percent higher than those of men who completed less than 8 years of schooling.

There is a well-established association between school status and juvenile delinquency. For example, in the New Haven study cited above, 48 percent of the drop-outs, but only 18 percent of the high school graduates, had one or more arrests or referrals to juvenile court.

Low-income families lose more time from work, school, and other activities than their more fortunate fellow citizens. Persons in families with incomes under \$2,000 lost an average of 8 days of work in the year 1960-61, compared to 5.4 for all employed persons. They were restricted in activity for an average of 30 days (compared to 16.5 for the whole population) and badly disabled for 10.4 days (compared to 5.8 for the whole population).

TABLE 7.—*Number of families and incidence of poverty, by selected family characteristics, 1947 and 1962*

Selected characteristic	Number of families			Incidence of poverty (percent) ¹		Percentage change in number of poor families, 1947 to 1962
	1947	1962	Percentage change, 1947 to 1962	1947	1962	
	Millions					
All families.....	37.3	47.0	26	32	20	-22
Earners in family:						
None.....	2.2	3.8	68	83	76	54
One.....	21.9	21.1	-4	35	20	-45
Two.....	9.9	17.0	73	20	10	-13
Three or more.....	3.3	5.1	56	10	8	29
Labor force status of head: ²						
Not in civilian labor force.....	5.5	8.4	52	61	50	23
Unemployed.....	1.2	1.7	49	49	34	2
Employed.....	31.9	36.9	16	28	12	-48
Age of head:						
14-24 years.....	1.8	2.5	39	45	31	-6
25-54 years.....	26.0	30.4	22	27	13	-41
55-64 years.....	6.1	7.3	19	32	19	-28
65 years and over.....	4.4	6.8	54	57	47	27
Sex of head:						
Male.....	33.5	42.3	26	30	17	-30
Female.....	3.8	4.7	26	51	48	19
Color of family:						
White.....	34.2	42.4	24	29	17	-27
Nonwhite.....	3.1	4.6	46	67	44	-3
Children under 18 years of age in family:						
None.....	16.2	18.8	16	36	26	-16
One.....	8.9	8.7	-2	30	17	-46
Two.....	6.4	8.6	33	27	13	-33
Three or more.....	5.7	10.9	92	32	17	2
Regional location of family: ³						
Northeast.....	10.1	11.5	14	26	14	-42
North Central.....	11.5	13.1	14	30	18	-3
South.....	11.5	13.5	17	49	32	-24
West.....	5.1	7.0	37	28	15	-26
Residence of family:						
Farm ⁴	6.5	3.2	-51	56	43	-62
Nonfarm ⁵	30.8	43.8	42	27	18	-5

¹ The incidence of poverty is measured by the percent that poor families with a given characteristic are of all families having the same characteristic.

² Labor force status is for April survey week of 1949 and March survey week of 1963. Income data (1962 prices) are for 1948 and 1962.

³ Income data for 1949 and 1959. Since regional location data are from 1950 and 1960 Censuses, they are not strictly comparable with other data shown in this table, which are derived from *Current Population Reports*.

⁴ The 1960 Census change in definition of a farm resulted in a decline of slightly over 1 million in the total number of farm families. Therefore, the incidence figures for 1947 and 1962 may not be strictly comparable.

⁵ Since 1959, nonfarm data are not available separately for rural nonfarm and urban.

NOTE.—Data relate to families and exclude unrelated individuals. Poverty is defined to include all families with total money income of less than \$3,000 (1962 prices); these are also referred to as poor families.

Sources: Department of Commerce and Council of Economic Advisers.

RECENT CHANGES IN THE PATTERN OF POVERTY

In spite of tendencies for poverty to breed poverty, a smaller proportion of our adult population has been poor—and a smaller fraction of American children exposed to poverty—in each succeeding generation. But, at least since World War II, the speed of progress has not been equal for all types of families, as is shown in Table 7.

The incidence of poverty has declined substantially for most categories shown in the table. But there are some notable exceptions—families (1) with no earner, (2) with head not in the civilian labor force, (3) with head 65 years of age or older, (4) headed by a woman, and (5) on farms. It is also striking that in these classes poverty is high as well as stubborn. Poverty continues high also among nonwhites, although there has been a large and welcome decline in this incidence.

With the sole exception of the farm group, the total number of *all* families in each of these categories has remained roughly the same or has increased. Hence the high-incidence groups, including the nonwhites, have come to constitute a larger *proportion* of the poor (Table 8).

TABLE 8.—*Selected characteristics of poor families, 1947 and 1962*

Selected characteristic	Percent of poor families with characteristic	
	1947	1962
Family head:		
65 years of age and over.....	20	34
Female.....	16	25
Nonwhite families.....	18	22
Rural farm families.....	30	¹ 20
No earners in family.....	16	30

¹ Data are from *Current Population Reports* and are for 1959, based on income in 1962 prices. See Table 7, footnote 4, for comparability problem.

NOTE.—Data relate to families and exclude unrelated individuals. Poor families are defined as all families with total money income of less than \$3,000 (1962 prices).

Sources: Department of Commerce and Council of Economic Advisers.

This tabulation shows that certain handicapping characteristics, notably old age, or absence of an earner or of a male family head, have become increasingly prominent in the poor population. This is both a measure of past success in reducing poverty and of the tenacity of the poverty still existing. Rising productivity and earnings, improved education, and the structure of social security have permitted many families or their children to escape; but they have left behind many families who have one or more special handicaps. These facts suggest that in the future economic growth alone will provide relatively fewer escapes from poverty. Policy will have to be more sharply focused on the handicaps that deny the poor fair access to the expanding incomes of a growing economy.

But the significance of these shifts in composition should not be exaggerated. About half of the poor families are still headed neither by an aged person nor by a woman, and 70 percent include at least one earner. High employment and vigorous economic growth are still of major importance for this group. And it is essential to remember that one-third of the present poor are children. For them, improvements in the availability and quality of education offer the greatest single hope of escaping poverty as adults.

STRATEGY AGAINST POVERTY

Public concern for the poor is not new. Measures to prevent, and particularly to relieve, poverty have an ancient origin in every civilization. Each generation in America has forged new weapons in the public and private fight against this perennial enemy. Until recent decades the focus was primarily on the alleviation of distress, rather than on prevention or rehabilitation. Yet all the while, the sources of poverty have been eroded as a by-product of a general advance in economic well-being and of measures designed to achieve other social goals. Universal education has been perhaps the greatest single force, contributing both to social mobility and to general economic growth.

The social legislation of the New Deal, strengthened and expanded in every subsequent national administration, marked a turning point by recognizing a *national* interest in the economic well-being and security of individuals and families. The social insurance programs established in the 1930's were designed principally to alleviate poverty in old age and to shield families from the loss of all income during periods of unemployment. The tasks for our generation are to focus and coordinate our older programs and some new ones into a comprehensive long-range attack on the poverty that remains. A new federally led effort is needed, with special emphasis on prevention and rehabilitation.

A forthcoming special Presidential message will describe the new attack and propose specific programs. The purpose of this section is not to present those measures, but rather to outline some leading elements of an over-all attack on poverty, recognizing the wide array of existing antipoverty programs, pointing to ways in which they might be reinforced and focused in the years ahead, and taking account of programs proposed in the past three years and awaiting consideration.

MAINTAINING HIGH EMPLOYMENT

The maintenance of high employment—a labor market in which the demand for workers is strong relative to the supply—is a powerful force for the reduction of poverty. In a strong labor market there are new and better opportunities for the unemployed, the partially employed, and the low paid. Employers have greater incentive to seek and to train workers when their own markets are large and growing. For these reasons, tax reduction is the first requisite in 1964 of a concerted attack on poverty. To

fight poverty in a slack economy with excess unemployment is to tie one hand behind our backs. We need not do so.

Accelerating economic growth. In the longer run the advance of standards of living depends on the rate of growth of productivity per capita, and this in turn depends on science and technology, capital accumulation, and investments in human resources, as Chapter 3 has indicated. Growth also expands the resources available to governments and private organizations to finance specific programs against poverty.

Fighting discrimination. A program to end racial discrimination in America will open additional exits from poverty, and for a group with an incidence of poverty at least twice that for the Nation as a whole. Discrimination against Negroes, Indians, Spanish-Americans, Puerto Ricans and other minorities reduces their employment opportunities, wastes their talents, inhibits their motivation, limits their educational achievement and restricts their choice of residence and neighborhood. Almost half of nonwhite Americans are poor. For nonwhites infant mortality is twice as high as for whites; maternal deaths are four times as frequent; expectation of life for males at age 20 is almost five years less.

Discriminatory barriers have been erected and maintained by many groups. Business and labor, other private organizations and individuals, and all levels of government must share in their removal.

The economic costs of discrimination to the total society are also large. By discrimination in employment, the Nation denies itself the output of which the talents and training of the nonwhite population are already capable. By discrimination in education and environment, the Nation denies itself the potential talents of one-ninth of its citizens. But the basic case against discrimination is not economic. It is that discrimination affronts human dignity.

The Executive Branch is vigorously pursuing nondiscriminatory policies and practices. It has proposed comprehensive Civil Rights legislation that would help make it possible for all Americans to develop and use their capabilities. But it will have its full effect only when all Americans join in dedicating themselves to the justice of this cause.

Improving regional economies. In a dynamic economy, whole regions lose their economic base when their natural resources are depleted or changes in taste and technology pass them by. Appalachia and the cutover areas of the Northern Lakes States are contemporary examples. State and regional programs, assisted by the Federal Government through the Area Redevelopment Administration, seek to restore in such regions a viable economic base suitable to their physical and human resources.

Rehabilitating urban and rural communities. Overcrowded, unsanitary, and unsafe neighborhoods are a drag on the economic progress of a whole city. Eradication of slums can provide improved opportunities for their residents and enable them to contribute more to the community. Improved relocation programs are essential to avoid pushing the poor from an old

slum to a new one. Improved community facilities and services, including day care centers for children of working mothers, are needed in low-income urban areas. (Nine million children under 12 have mothers who work outside the home. Of these fully 400,000 are now expected to care for themselves while their mothers work full time.) Among facilities that are critically needed for slum families are adequate housing, hospitals, parks, libraries, schools, and community centers. Improvement of the physical environment, however, is not enough. Especially when newcomers to urban areas are involved, there need to be programs to facilitate adaptation to the new environments. The Administration's proposed National Service Corps could aid and supplement local efforts to provide these and other urgently needed services.

Parallel programs for rehabilitation are needed in depressed rural areas. In some rural communities, even in whole counties, almost every family is at the poverty level. In such situations local resources cannot possibly provide adequate schools, libraries, and health and community centers. A healthy farm economy is basic to the strength of farm communities; and the Rural Area Development program and the ARA are also of assistance in improving income and employment opportunities on and off the farm. Particular attention must be paid to the special problems of depressed nonfarm rural areas—such as the Ozarks or the larger part of rural Appalachia; of Indians on reservations; and of migrant workers.

Improving labor markets. Improved employment information can help potential workers learn about and take advantage of new job opportunities, sometimes in different industries, occupations, and locations. A strengthened Federal-State Employment Service, better guidance and counseling services, development of a system for early warning of labor displacement resulting from technological change, assistance in worker relocation (as provided by the Trade Expansion Act and in the recent amendments to the Manpower Development and Training Act), increased amounts and duration of unemployment insurance benefits and extension of its coverage—all these will enable more persons to maintain or increase their earnings.

Expanding educational opportunities. If children of poor families can be given skills and motivation, they will not become poor adults. Too many young people are today condemned to grossly inadequate schools and instruction. Many communities lack resources for developing adequate schools or attracting teachers of high quality. Other communities concentrate their resources in the higher income areas, providing inadequate educational opportunities to those at the bottom of the economic ladder. Effective education for children of poor families must be tailored to their special needs; and such education is more costly and surely more difficult than for children from homes that are economically and socially more secure. The school must play a larger role in the development of poor youngsters if they are to have, in fact, "equal opportunity." This often means that

schooling must start on a pre-school basis and include a broad range of more intensive services. The President's program against poverty will propose project grants to strengthen educational services to children of the poor.

Where such special efforts have been made, it has become clear that few children are unable to benefit from good education. Only a small percentage of those born each year are incapable of acquiring the skills, motivation, and attitudes necessary for productive lives. The idea that the bulk of the poor are condemned to that condition because of innate deficiencies of character or intelligence has not withstood intensive analysis.

Enlarging job opportunities for youth. Recent legislation for Vocational Education will help to improve the preparation of teen-agers for productive employment. Improved counseling and employment services are needed for those leaving school. The Administration's proposed Youth Employment Act will strengthen on-the-job training and public service employment programs, and will establish a Youth Conservation Corps.

Improving the Nation's health. The poor receive inadequate medical care, from before birth to old age. And poverty is perpetuated by poor health, malnutrition, and chronic disabilities. New and expanded school health and school lunch programs will improve both health and education. The recent Report of the President's Task Force on Manpower Conservation, based on a survey of Selective Service rejectees, lends particular emphasis to the importance of improving our health programs, especially those aimed at children and young people. That Report also underlines the need to cope with educational deficiencies by expanded vocational and literacy training and improved counseling.

Legislation has recently been enacted to increase the supply of physicians and dentists, and to expand mental health services. The poor have a special stake in our ongoing programs of medical research. Many aged persons are confronted by medical needs beyond their financial means. Passage of the program to provide hospital insurance for the aged under the social security system is an urgent immediate step.

Promoting adult education and training. In an economy characterized by continual technological advance, many adults will not be able to earn incomes above the poverty line without new skills and training. The Manpower Training and Development Act and the training programs under the Area Redevelopment Act represent public recognition of this need. These and other programs to train and retrain workers must be expanded and strengthened, placing more emphasis on those with the greatest educational deficiencies. In particular, our relatively modest efforts to provide basic literacy have proved the value of such training. Many who have been regarded (and have often regarded themselves) as uneducable can and do learn the basic skills, and these in turn equip them for training programs supplying the specific skills sought by employers. Such basic education is now being made available to many more adults.

Assisting the aged and disabled. Continued long-run improvement of social insurance benefits, along with expanded programs to cover hospital-

related costs for the aged, and augmented construction of housing to meet the particular needs of the aged, are necessary steps in a continuing campaign against poverty.

ORGANIZING THE ATTACK ON POVERTY

In this latest phase of the Nation's effort to conquer poverty, we must marshal already developed resources, focus already expressed concerns, and back them with the full strength of an aroused public conscience.

Poverty, as has been shown, has many faces. It is found in the North and in the South; in the East and in the West; on the farm and in the city. It is found among the young and among the old, among the employed and the unemployed. Its roots are many and its causes complex. To defeat it requires a coordinated and comprehensive attack. No single program can embrace all who are poor, and no single program can strike at all the sources of today's and tomorrow's poverty.

Diverse attacks are needed, but we must not lose sight of their common target—poverty. Many programs are directed against social problems which the poor share with the non-poor—insecurity of income, depressed regional economies, inefficient and unattractive rural and urban environments, disabilities of health and age, inadequate educational opportunities, racial discrimination. These are all to the good. But we must not let poor individuals and families get lost between these programs. Programs must be sufficiently coordinated that, whatever else they individually accomplish, they act together to lift the economic and social status of America's poor. And soon. For war has now been declared on poverty as such.

This coordinated attack must be adapted to local circumstances. The needs of the poor are not the same in East Kentucky and in West Harlem. Coordinated programs of community action will play a critical role in the assault on poverty. Communities will be encouraged and helped to develop individual programs aimed at the special problems of their own poor families. Individual communities thus can participate in a nationwide action, research, and demonstration program, backed by the interest and resources of State and local governments and private organizations, and the coordinated efforts of Federal agencies working in such fields as education, health, housing, welfare, and agriculture.

Conquest of poverty is well within our power. About \$11 billion a year would bring all poor families up to the \$3,000 income level we have taken to be the minimum for a decent life. The majority of the Nation could simply tax themselves enough to provide the necessary income supplements to their less fortunate citizens. The burden—one-fifth of the annual defense budget, less than 2 percent of GNP—would certainly not be intolerable. But this "solution" would leave untouched most of the roots of poverty. Americans want to *earn* the American standard of living by their own efforts and contributions. It will be far better, even if more difficult, to equip and to permit the poor of the Nation to produce and to earn the additional \$11 billion, and more. We can surely afford greater generosity in relief of distress. But the major thrust of our campaign must

be against causes rather than symptoms. We can afford the cost of that campaign too.

The Nation's attack on poverty must be based on a change in national attitude. We must open our eyes and minds to the poverty in our midst. Poverty is not the inevitable fate of any man. The condition can be eradicated; and since it can be, it must be. It is time to renew our faith in the worth and capacity of all human beings; to recognize that, whatever their past history or present condition, all kinds of Americans can contribute to their country; and to allow Government to assume its responsibility for action and leadership in promoting the general welfare.

Supplementary Tables Relating to Poverty

TABLE 9.—*Number and money income of unrelated individuals, by selected characteristics, 1962*

Selected characteristic	Number (millions)	Percent with income	
		Less than \$1,500 (1962 prices)	Less than \$1,000 (1962 prices)
All individuals.....	11.0	45	29
Age:			
14-24 years.....	1.1	51	40
25-54 years.....	3.5	27	19
55-64 years.....	2.3	37	25
65 years and over.....	4.2	64	37
Sex:			
Male.....	4.3	35	21
Female.....	6.8	51	34
Color:			
White.....	9.5	43	27
Nonwhite.....	1.5	59	41
Residence:			
Farm.....	.4	67	50
Nonfarm.....	10.6	44	28
Nonearners.....	4.3	75	49

NOTE.—Unrelated individuals are persons (other than inmates of institutions) who are not living with any relatives.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE 10.—*Number and distribution of poor families, by education and other selected characteristics, 1959*

Selected characteristic	Number of poor families (thousands)	Percent of poor families with characteristic				
		Total	Years of school completed			
			8 years or less	9 to 11 years	12 years	More than 12 years
All families ¹	9, 651	100	64	16	13	6
White families.....	7, 615	79	49	13	11	6
Head under 25 years of age.....	597	6	1	2	2	1
Husband-wife families.....	496	5	1	1	2	1
Female head.....	86	1	(²)	(²)	(²)	(²)
Head 25 to 64 years of age.....	4, 419	46	27	8	7	4
Husband-wife families.....	3, 288	34	21	6	5	3
Female head.....	981	10	5	2	2	1
Head 65 years old or older.....	2, 599	27	21	3	2	1
Husband-wife families.....	2, 120	22	17	2	1	1
Female head.....	359	4	3	(²)	(²)	(²)
Nonwhite families.....	2, 036	21	15	3	2	1
Head under 25 years of age.....	154	2	1	1	(²)	(²)
Husband-wife families.....	101	1	(²)	(²)	(²)	(²)
Female head.....	49	1	(²)	(²)	(²)	(²)
Head 25 to 64 years of age.....	1, 533	16	11	3	1	(²)
Husband-wife families.....	962	10	8	1	1	(²)
Female head.....	511	5	3	1	1	(²)
Head 65 years old or older.....	349	4	3	(²)	(²)	(²)
Husband-wife families.....	235	2	2	(²)	(²)	(²)
Female head.....	94	1	1	(²)	(²)	(²)

¹ Include "husband-wife" families, "female head" families, and "other male head" families. Husband-wife families are those in which both spouses are present. Female head families are those with no male spouse present. Other male head families are those with no female spouse present; this family type is excluded from the detail of table but is included in the totals for color and age.

² Less than 0.5 percent.

NOTE.—Data relate to families and exclude unrelated individuals. Poor families are defined as all families with total money income of less than \$3,000 in 1959. Since the data in this table relate to income in 1959 prices, they are not strictly comparable with data in other poverty tables in this Report, which are based on income in 1962 prices.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE 11.—*Number of families and distribution of poor families, by residence and other selected characteristics, 1959*

Selected characteristic	Total families	Urban families	Rural nonfarm families	Rural farm families
Millions				
Number of families:				
All.....	45.1	31.9	9.9	3.3
Poor.....	9.2	5.0	2.7	1.5
Percent				
Percent of poor families with selected characteristic:				
Head:				
65 years of age and over.....	31	17	10	4
Female.....	22	16	5	1
Nonwhite.....	21	13	6	2
No earners.....	31	19	9	3

NOTE.—Data relate to families and exclude unrelated individuals. Poor families are defined as all families with total money income of less than \$3,000 (1962 prices).

Data are from 1960 Census and relate to residence in 1959, the latest year for which rural families can be identified as farm or nonfarm.

Since percentage distributions are computed from 1960 Census data, they are not strictly comparable with distributions of poor families shown in Tables 4 and 8, which are derived from *Current Population Reports*.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE 12.—*Incidence of poverty, by occupation of family head, 1962*

Occupation of head ¹	Incidence of poverty (percent)
Total civilian workers.....	12
Professional and technical workers.....	3
Farmers or farm managers.....	45
Clerical workers.....	7
Sales workers.....	9
Craftsmen.....	5
Operative workers.....	11
Domestic workers.....	74
Service workers other than domestic.....	22
Farm laborers or foremen.....	56
Laborers, except farm and mine.....	23

¹ Occupation in March 1963.

NOTE.—Data relate to families and exclude unrelated individuals. Poverty is defined to include all families with total money income of less than \$3,000; these are also referred to as poor families. Incidence of poverty is measured by the percent that poor families with a given characteristic are of all families having the same characteristic.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE 13.—*Number of families and incidence of poverty, by residence and other selected characteristics, 1959*

Selected characteristic	Total families	Urban families	Rural nonfarm families	Rural farm families
Millions				
Number of families:				
All.....	45.1	31.9	9.9	3.3
Poor.....	9.2	5.0	2.7	1.5
Percent				
Incidence of poverty by selected family characteristic:				
Head:				
65 years of age and over.....	47	39	62	61
Female.....	48	44	63	63
Nonwhite.....	46	38	68	82
No earners.....	81	77	87	91

NOTE.—Data relate to families and exclude unrelated individuals. Poor families are defined as all families with total money income of less than \$3,000 (1962 prices). Incidence of poverty is measured by the percent that poor families with a given combination of characteristics are of all families with the same combination of characteristics.

Data are from 1960 Census and relate to residence in 1959, the latest year for which rural families can be identified as farm or nonfarm.

Since incidence figures are computed from 1960 Census data, they are not strictly comparable with incidence figures in Tables 5, 6, and 7, which are derived from *Current Population Reports*.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE 14.—*Number of families and incidence of poverty, by education and other selected characteristics, 1959*

Selected characteristic	Number of families (thousands)	Incidence of poverty (percent)				
		Total	Years of school completed			
			8 years or less	9 to 11 years	12 years	More than 12 years
All families ¹	45,150	21	35	18	12	8
White families.....	40,887	19	31	15	11	7
Head under 25 years of age.....	2,114	28	45	33	22	22
Husband-wife families.....	1,964	25	42	28	20	20
Female head.....	112	77	85	86	68	60
Head 25 to 64 years of age.....	33,164	13	23	12	8	5
Husband-wife families.....	30,067	11	21	9	6	4
Female head.....	2,344	42	51	46	36	23
Head 65 years old or older.....	5,609	46	53	39	33	24
Husband-wife families.....	4,434	48	55	39	34	23
Female head.....	849	42	46	40	33	28
Nonwhite families.....	4,263	48	57	42	30	18
Head under 25 years of age.....	242	64	76	66	51	40
Husband-wife families.....	178	57	71	56	45	42
Female head.....	55	89	94	92	83	50
Head 25 to 64 years of age.....	3,527	43	53	38	27	15
Husband-wife families.....	2,680	36	47	26	18	11
Female head.....	713	72	77	73	62	39
Head 65 years old or older.....	494	71	74	52	50	41
Husband-wife families.....	335	70	73	53	45	42
Female head.....	123	76	79	63	75	50

¹ Include "husband-wife" families, "female head" families, and "other male head" families. Husband-wife families are those in which both spouses are present. Female head families are those with no male spouse present. Other male head families are those with no female spouse present; this family type is excluded from the detail of table but is included in the totals for color and age.

NOTE.—Data relate to families and exclude unrelated individuals. Poor families are defined as all families with total money income of less than \$3,000 in 1959. Since the data in this table relate to income in 1959 prices, they are not strictly comparable with data in other poverty tables in this Report, which are based on income in 1962 prices. Incidence of poverty is measured by the percent that poor families with a given combination of characteristics are of all families with the same combination of characteristics.

Sources: Department of Commerce and Council of Economic Adviser

TABLE 15.—*Earnings of elementary school graduates, by color and occupation, 1959*

Occupation	Average earnings of elementary school graduates		Earnings of nonwhites as percent of earnings of whites
	White	Nonwhite	
Craftsmen, foremen, and kindred workers ¹	\$5,300	\$3,800	72
Machinists.....	5,500	4,300	79
Painters and construction and maintenance workers.....	4,200	3,100	73
Plumbers and pipefitters.....	5,600	4,000	71
Operatives and kindred workers ¹	4,800	3,600	75
Truck and tractor drivers.....	4,900	3,300	68
Other operatives and kindred workers.....	4,800	3,800	80
Service workers (including private household workers) ¹	3,900	2,900	75
Farm laborers and foremen.....	2,400	1,500	62

¹ Over-all average for group includes some occupations not shown separately.

NOTE.—Elementary school graduates are persons who completed 8 grades of school but not more.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE 16.—*Distribution of spending units with income under \$3,000, by age of head and amount of liquid assets, 1962*

Amount of liquid assets	Percent of spending units with income of less than \$3,000, by age of head			
	Under 35 years	35 to 44 years	45 to 64 years	65 years and over
Total.....	100.0	100.0	100.0	100.0
None.....	68.5	70.6	57.5	39.7
\$1-\$499.....	25.8	19.6	22.3	9.6
\$500-\$999.....	2.8	1.7	5.7	7.5
\$1,000-\$4,999.....	2.9	7.0	9.2	25.5
\$5,000-\$9,999.....	(1)	1.1	3.1	10.6
\$10,000 and over.....	(1)	(1)	2.2	7.1
Percent of total units in age group with income under \$3,000.....	21.3	12.9	23.9	68.7

¹ Less than 0.05 percent.

Source: 1962 *Survey of Consumer Finances*, Survey Research Center, University of Michigan.

Chapter 3

The Promise and Problems of Technological Change

ONE LESSON of man's history is unmistakable: the crucial element in the rise in our material well-being has been the progressive utilization of our ever-growing store of knowledge of the world in which we live. From the wheel to the electronic computer, new discoveries have been put to work for man's benefit—benefit that has taken the form of shorter hours of work, the elimination of backbreaking toil, a continuing stream of new goods and services, and a total output per capita that has risen 5-fold in the United States since the Civil War.

While technological change is as old as man, its character and pace, and therefore its impact, have changed in recent centuries. The modern economic history of the industrial nations constitutes a decisive break with all of prior history. For thousands of years, a man followed the path of his father and grandfather before him, doing the same things in essentially the same way. Major technological changes came infrequently, and their adoption was spread over many centuries. The whole structure of modern society, however, is geared to innovations—those who initiate or adapt to change are rewarded, those who do not or cannot are penalized. The businessman who refuses to adopt new technology will not merely see his profits stand still; they will surely dwindle and turn into losses as his more adventuresome competitor adopts newer and more efficient production techniques.

Moreover, in a modern society, technological change is self-reinforcing and almost self-generating. Major new breakthroughs in technology soon pave the way for a multitude of other changes. The production of cheap electricity for example, not only replaced gaslights, but made possible the assembly line, modern communications, and the computer.

Even if we wished to, we could not eliminate pervasive and continuous technological and economic change without remaking—on a much inferior basis—the whole fabric of our social and economic institutions. And we would not wish to. Its benefits are essential for continued economic growth, higher standards of living, and the elimination of poverty. Our objective should be to foster and encourage it.

But recognition of the many benefits of technological change must not obscure the human toll often exacted in this process of job transition—the un-

employed coal miners of West Virginia, the rural migrants who crowd urban slums, the older workers forced into unwanted retirement, and the middle-aged workers whose earnings power and entitlement to fringe benefits have been eroded by the obsolescence of their skills and the loss of their seniority. We can and should reduce that toll by appropriate public and private policies.

This chapter will explore some issues and policies related to technological change in this country's economy. Some of these issues have recently been the subject of considerable public attention. There has been dispute whether the newest and most dramatic form of technical change, "automation," is a monster that threatens to destroy our whole economic order or an economic and social boon. Others debate whether automation must share the blame for the persistence for six years of an unacceptably high rate of unemployment. President Kennedy proposed—and President Johnson has repeated the proposal—that a high-level Commission on Automation be created to explore carefully these and other questions.

This chapter first points to the benefits of technological change, both those easily measurable and others less so but perhaps equally important. It then turns to a brief review of the sources of such change. It analyzes the extent to which rapid technological change may threaten the maintenance of high over-all employment and the way in which our system adjusts to the unequal impacts of technological change on regions, industries, and skills. Finally, it reviews the policies that Government can use to foster rapid technological change while at the same time helping workers to adapt to the resulting dislocations.

THE FRUITS OF ADVANCING TECHNOLOGY

The state of technological knowledge determines what man can do with his labor, his capital, and the natural resources he finds—what can be produced and how it can be produced. Increases in our standard of living—"economic progress"—come about in considerable part from the application of new technical knowledge to production.

THE NATURE OF TECHNOLOGICAL CHANGE

By technological change we mean the introduction of new arrangements in the process of production and distribution which enable us either to produce new products, or to produce existing products more efficiently and cheaply, employing fewer real resources. The basic characteristic of technological change is that it permits us to use a given set of resources in a way that better satisfies human wants. It includes not only narrowly technical changes but also the application of new organizational and managerial concepts.

It is useful, if imprecise, to distinguish between technological changes that reduce the cost of turning out already existing private and public consumption goods, and those that create completely new or substantially improved products which enlarge the menu of final goods. Television, penicillin, nylon, and the airplane are examples of technological change that produced goods not previously available. Color television, the electric typewriter, and the automobile with automatic transmission represent substantial quality improvements. The Bessemer process for making steel, the catalytic refining of oil, the mechanical picking of cotton, and the automation of bookkeeping are examples of advances enabling industries to produce more cheaply goods or services that were already produced. Yet each of the examples of *new* products might also be said to be merely better or cheaper ways of producing already existing services—television as a substitute for the radio or motion picture in communication, penicillin for sulfa drugs and hospital care in the treatment of pneumonia, nylon for cotton in tires or for silk in blouses, the airplane for the automobile or the ship in transporting persons or goods.

Technological change is only one of several major elements that contribute to economic growth. Others include:

1. Increases in the available quantity of the basic resources used in production—growth of the labor force and accumulation of capital.
2. Improvements in the quality of labor as a result of the better health, education, training, or motivation of members of the labor force.
3. Reductions in cost resulting from expansion in the size of markets—described by economists as economies of scale.

An increased stock of physical capital, embodied in buildings, machinery and equipment, land improvements, mines, stocks in trade, and so on, is one of the more important of these sources. And, since the stock of capital has increased considerably faster than the number of workers, each worker now commands a larger complement of inanimate productive resources. But it has been possible to employ this rising amount of capital per worker primarily through the progress of technology. Equipping a worker with a sturdier or larger shovel does not necessarily raise his output very much. But the invention of a ditch-digging machine or bulldozer allows each worker to use a great deal more capital and thereby to increase his output enormously. Because the added output is the joint product of technological change and an added use of capital, it is impossible fully to separate their contributions.

The same close interrelationship with technological change exists in connection with other sources of expanded output. The improved education and skill of workers often require technical rearrangements of production to make them effective. The availability of a larger supply of trained mathematicians will not significantly improve the productivity of an accounting department based on pencil and paper technology. But a mathematician, developing programs for a computer, may cut the cost of

accounting in half. Many of the economies of mass production associated with wider markets have been possible only because technological innovations—for example, the assembly line—opened up new possibilities for organizing the production process on a larger scale.

A fixed quantity of available land, together with a continually depleted stock of fuel and mineral resources might well have inhibited economic growth and rising living standards for an exploding population. Yet in the West, at least, technological change has fully overcome “diminishing returns,” as proved by the fact that prices of food and minerals are, in general, no higher relative to other prices today than they were 100 years ago.

THE GROWTH OF OUTPUT AND INCOMES

The most inclusive measure of the gains from technological improvement is the enlargement of total incomes. Technological advance is a major source of higher output; and in the broadest sense higher output and higher incomes are synonymous.

Since the turn of the century, the Nation’s real total output—measured as GNP in 1963 prices—has risen by 760 percent, from \$68 billion in 1900 to \$585 billion in 1963. This represents an annual growth rate averaging $3\frac{1}{2}$ percent for the whole period. With the population rising from 76.1 million to 189.3 million over this period, real output per person climbed from \$890 at the start of the century to \$3,091 last year. Although many benefits are not captured in GNP measurements, this is perhaps the single best summary index of the increased material well-being of the American people.

An alternative measure of our gains is private consumption per capita, which reflects rising living standards. But it is an incomplete measure, even of living standards, because it omits the growing public services provided by all levels of government. Since 1929, the earliest date for which this measure is available, real private consumption per capita has risen by 66 percent, while total output per capita has risen by 76 percent.

Rising total output, as noted earlier, is the joint product of: a rising input of *labor*; a larger input of physical *capital*; and the increased *productive efficiency* of these inputs—as a combined result of improvements in the quality of labor, advances in technology, and economies of scale. A simpler approach divides the total output gain into two parts: a rising input of labor, measured in total man-hours worked; and an increased average output per hour of work—which reflects both the rise in capital input and the increase in productive efficiency. Output in the private economy in 1963 was 720 percent of 1900. This is the product of: (1) total man-hours worked in 1963 equal to 180 percent of 1900; times (2) an output per man-hour in 1963 equal to 400 percent of 1900.

EFFECTS ON LABOR INCOME

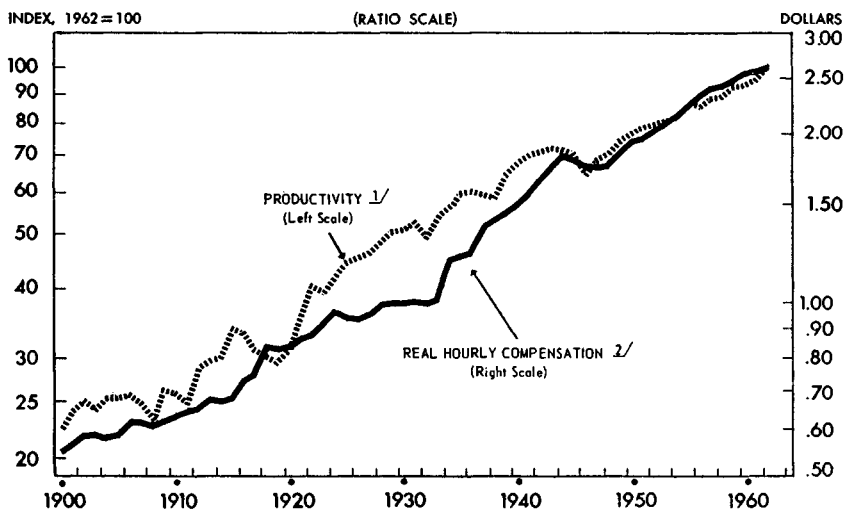
Every technological advance is an opportunity to raise the average standard of living of the whole community. But we are not concerned with the average standard of living alone. Rather, we are interested as well in how the fruits of technological progress are shared by the various sectors of the economy. In particular it is sometimes feared that technological progress may benefit property incomes proportionately more than the incomes of labor.

It is a matter of arithmetic that labor's share in total income will remain unchanged if total hourly labor compensation rises in the same proportion as labor productivity when prices are constant. Although there is no immutable law either of economics or of equity that requires this result, historically the rise in the real earnings of workers has been closely linked with the advance in labor productivity.

Since 1900 real hourly compensation of production workers in manufacturing (average hourly earnings plus fringe benefits deflated by the change in consumer prices) has risen at approximately the same average rate as the average hourly productivity of manufacturing labor, as Chart 10 clearly demonstrates. Despite year-to-year variations, and certain limited periods of apparently nonproportional growth, both productivity and earnings have

Chart 10

Real Hourly Compensation and Productivity in Manufacturing



1/OUTPUT PER MAN-HOUR FOR ALL EMPLOYEES.

2/HOURLY COMPENSATION FOR PRODUCTION WORKERS DEFLATED BY THE CONSUMER PRICE INDEX, 1962 = 100.

SOURCE: COUNCIL OF ECONOMIC ADVISERS (BASED ON DATA FROM VARIOUS PUBLIC AND PRIVATE SOURCES).

risen strongly and consistently, and their movement has been essentially parallel.

THE OPPORTUNITY FOR LEISURE

One of the most important choices that technological improvement permits is that between increased output, incomes, and consumption, on the one hand, and increased leisure on the other. The growth in output per capita cited earlier underestimates the improvement in the well-being of the population to the extent that workers have voluntarily chosen to take some of the potential rise in their incomes in the form of shorter hours, longer vacations, or later entry into, or earlier retirement from, the labor force. When workers voluntarily choose to reduce their working time—preferring an extra hour of leisure to its equivalent in income—these extra hours of leisure might properly be given a monetary value equal to the incomes foregone.

It is estimated that average annual hours per employee were reduced by about 25 percent between 1909 and 1963. In manufacturing, where measures are best, the average workweek of production workers fell from 51 hours in 1909 to 40.4 hours last year. Moreover, the average number of days worked in a year has declined substantially, through longer vacations and more frequent holidays. Between 1900 and 1960 male life expectancy at birth rose by 19 years. But the expected number of male working years rose by only 9, primarily because of typically earlier retirement from, and later entry into, the work force.

Not only average annual hours *per worker*, but also average annual hours worked *per member of the total population* have declined appreciably since 1900. As a result output per capita rose by 250 percent, a considerably smaller increase than the 350 percent rise in output per man-hour.

On the whole, the discipline of modern production permits neither the individual worker nor, except very crudely, workers as a group to weigh and to choose freely the precise combination of income and leisure that best suits their preferences. Nevertheless, we may expect that over the longer run, some further reduction is likely to occur in hours worked and that this will, in a general way, reflect an increasing preference for leisure over income as further increases in potential income occur at the existing level of hours.

SOME NONMEASURABLE GAINS

Even if we adjust for potential gains taken in the form of leisure, the increase in measured output per capita fails to account for a wide range of real, but unmeasurable benefits of technical progress. We have no satisfactory way of measuring the additional output value incorporated in completely new products, and our methods of measurement probably often undervalue the contribution to real incomes of improvements in the quality of existing products.

For example, can anyone measure how much better off people are as a

result of telephone communication? The benefit is surely not measured by comparing the cost of messages delivered by mail and messages spoken along a wire. Nylon is not only cheaper than silk, it is more durable, easier to care for, more resistant to stains. The benefit of transoceanic air travel is not measured solely by the reduction of cost relative to sea travel—the saving of travel time permits many persons to visit Europe or the Far East who would never otherwise be able to do so. Examples abound in the area of medical care. How do we measure the benefit of a vaccine that practically eliminates smallpox or polio—a medicine that conquers tuberculosis or pneumonia—scientific discoveries that permit us to attack mental retardation?

Technological change has permitted everyone to share experiences previously, by their very nature, limited to a few—to attend a World Series game, a class taught by a great teacher, a recital by Pablo Casals.

Moreover, no measure of gross national product attempts to take account of the reduced human costs of producing it. A job on an assembly line may be dull; but it is a vast improvement over the backbreaking drudgery of many jobs a century earlier. And if one complains that our output measures fail to take account of the pollution of urban air and water, it must be noted that they also fail to take account of the fact that inexpensive automobile transportation permits city dwellers to escape to the ocean beaches, the mountains, the areas of forest wilderness.

Thus technological advance and the rising productivity associated with it have many human payoffs: higher incomes and consumption, longer life, reduced suffering and illness, reduced drudgery, greater leisure, and an improved quality of life that cannot be measured in income statistics. Philosophers may debate whether all this contributes to human happiness or the edification of the soul. Ordinary men—those who have not yet enjoyed the fruits of technological advance, those who have tasted them, and those grown accustomed to the diet—all pursue them with fervor undiminished by the philosophers' doubts.

AMERICA'S ROLE IN THE WORLD

America's position of free world leadership carries heavy responsibilities—for our own defense and that of our allies, and for assistance to the newly awakened nations of Latin America, Africa, and Asia. These burdens are not easy. But continued rapid technological advance can permit them to be borne with minimum strain.

The burden of maintaining our defense and aid programs is not only that of producing the value of output that we wish to devote to these purposes. In a world of fixed exchange rates and free convertibility of currencies into each other and of the dollar into gold, it is also a problem of our balance of payments.

Continued rapid technological advance can help in three ways. First, by contributing to a rise in productivity, it can permit us to hold our price level steady in the face of rising wage rates. Combined with some tendency

for prices to rise in other industrial countries, this will permit us to compete more effectively in world trade. Second, the higher rates of profit that arise from investments exploiting new technological advances will reduce the outflow of capital and attract it from abroad. Third, and perhaps most important, the continued development of new products is one of the surest roads to export expansion. Within a few years after the introduction of almost any new product in today's world, a dozen nations will be able to compete with us in its production. To maintain or expand our share of world exports we must continually be in the vanguard of product development. This requires continuous innovation, increasing technological development, and the most rapid possible exploitation of the new opportunities that emerge from scientific advance.

Thus, rapid technological change needs to be fostered not alone for its effects on the growth of our internal comfort and well-being. It is also an urgent necessity for the solution of our international economic problems. It is the answer to those who say that America must choose between two sets of irreconcilable objectives—domestic prosperity and international payments equilibrium. Combined with the responsible price and wage making discussed in Chapter 4 of this Report, rapid technological gains can permit us to reconcile policies for high employment and growing incomes domestically with our objective of achieving equilibrium in our international payments. It is truly the “great reconciler.”

SOURCES OF TECHNOLOGICAL PROGRESS

Technical change occurs in several ways. In its most distinctive and easily identified form, it is a process that begins with an advance in basic scientific knowledge. Such an advance may then lead—often after years or even decades—to the application of the new scientific knowledge to a “practical” problem: the “invention” of a way to produce an existing good or service in a more efficient (i.e., less costly) way or the production of a new good or service.

INVENTION AND INNOVATION

Today the process of invention has been increasingly organized and systematized, and we now identify “R&D” (research and development) as a major activity in our economy. Nonetheless, it must be recognized that significant inventions are often still the product of the individual working alone, sometimes with little formal scientific training. And some of the principal breakthroughs in pure science—particularly, the development of new theoretical concepts—are often still the product of individual scholars.

The final step in the process of technological advance comes after the application has been proved technically feasible and seems to promise economic gain—when it is actually introduced and used. It is at this

point that technological change really occurs, a step identified as “innovation.” It is important to emphasize that new knowledge and even its application in a *technically* successful way has, by itself, no direct economic significance. Innovation is the key element in the process of technical change from the standpoint of economic progress. The innovator, whether the inventor himself, a small entrepreneur, the manager of a giant firm, or a government official, must make the decision to take the risks of introducing a new and untried process, good, or service. The costs of using a new process or the acceptability of a new product are uncertain until tested on the production line or in the market place. And as cost and demand conditions change, inventions that previously had no chance of successful application may become economically feasible.

Technological change can also come about without any conscious decision to “innovate,” but through the many minor changes that occur from day to day as existing processes are used. It may also come about with little or no change in the physical circumstances of production. For example, the discovery that a furnace performs more effectively at a higher or lower temperature than previously supposed may be applied through only the adjustment of a valve.

INVESTMENT AND TECHNOLOGICAL CHANGE

But much technological change requires an alteration of the physical apparatus of production. And where the innovation is of any significance, such an alteration will ordinarily require an act of investment—the modification of existing apparatus, the installation of new machines or equipment, even the construction of new buildings. This fact has several important consequences.

One such consequence is that the rate at which technological progress can be incorporated in production is closely tied to the rate of gross investment. Stepping up the rate of growth of the stock of plant and equipment accelerates the improvement in its quality and productivity.

A second consequence of the tie between technology and physical investment is that normally new technology is not introduced all at once. Particularly where the change represents a new process for accomplishing some productive task, it will often pay business firms to introduce it only as their existing facilities become less efficient with age, thus permitting the differential efficiency of the new equipment to compensate for its additional capital cost. But even if the new equipment is so superior in its productivity that it would pay to scrap the previous equipment immediately, production of new equipment takes time. It would have been impossible to convert all railroads from steam to diesel in one year, simply because the makers of diesel engines could not economically expand their production fast enough.

The physical investment lag—and a perhaps equally important information lag—mean that it often takes years, sometimes decades, for new technology to spread throughout an industry or an economy. The in-

roduction of automation is a case in point. In many applications, automated facilities—which control productive processes through servo-mechanical (“feed-back”) devices—accomplish dramatic savings in direct labor. As with previous major technological changes, one can expect this innovation to be applied to an increasing number of activities. But merely because automation is technically feasible in many applications, it is not necessarily economically feasible, even though it may greatly reduce direct labor costs. Higher capital costs, lack of flexibility, and the necessity for large runs make automation noneconomic in thousands of applications where it is technically feasible. Moreover, even where it is economically advantageous eventually to substitute automated for nonautomated equipment, its introduction may well be delayed until the relative cost of operating the older equipment increases substantially. In a previous generation, electric power did not displace the steam engine overnight, nor did the steam engine in its time take over from the waterwheel overnight. Only a small fraction of the ultimate benefits of automation have yet been realized.

TECHNOLOGICAL CHANGE AND AGGREGATE DEMAND

Like all previous technological change, automation creates the necessity for many workers to change jobs during their lifetimes and for sons to find different work from that of their fathers. The problem created by these labor market adjustments is discussed in a later part of this chapter, together with the policies that can lubricate such adjustments and ease their human toll.

THE EXPANSION OF DEMAND

Quite apart from these adjustment problems many are convinced that recent and current technological change is somehow different in its employment effects from all previous changes. This conviction rests upon one or both of the following propositions: (1) that our productive powers are now outstripping our wants and needs and ability to buy our own output, and thus our economy’s ability to create new jobs; and (2) that technological change is now destroying jobs at a much faster rate than ever before.

If the Nation’s ability and eagerness to buy output can and does keep pace with its ability to produce, a speeded-up pace of technological advance means that standards of living and economic security can rise more rapidly than ever. In this case, faster progress of productivity is to be sought and welcomed. Only if demand cannot keep pace (or if the required adjustments cannot readily be accommodated) is there a basis for fearing more rapid technological change.

Historically, there is surely no evidence of any inability of demand to rise along with productive capacity, or of any permanent inadequacy of total job opportunities. Rather, our technologically progressive economy has brought higher output and incomes, and more and better consumption

and investment, along with the voluntary decision to take some of the fruits of progress in the form of leisure. Since 1929, for instance, output per worker has almost doubled. If total demand had not grown since 1929, and if we were still producing the 1929 level of output, using present methods of production and the present shorter workweek, it would take just 26 million workers to do it. This would leave two-thirds of our present labor force unemployed. Instead, the demand for output is almost three times as high, and employment is 50 percent higher than in 1929. If total demand had grown since 1929 only as fast as population, 46 percent of our labor force would now be unemployed as a result of the higher productivity.

Clearly, the increase in total demand for our potential output is the factor that has reconciled advancing technology with rising employment.

And it should continue to do so far into the future. Despite dramatic increases in average family income, American consumers have continued to spend a remarkably constant proportion of their disposable income on consumer goods and services. And a very large proportion of our families still earn very modest incomes. Millions of families live in actual poverty, as the preceding chapter has shown, and half of American families in 1963 had incomes below \$6,200. If median family income increased at the same rate in the next 17 years as it has since 1947, half of American families in 1980 would still have incomes below \$9,300 in today's prices. Today, even families at twice that level have no trouble finding ways to spend extra income. There is surely no reason to believe that any plausible rate of technical progress could lead to consumer satiation in the lifetimes of persons now on earth.

Technological change permits any given level of output to be produced with less labor and, in that sense, destroys jobs. But it also provides a significant spur to investment and consumption and thus creates jobs. Technological change makes existing capital equipment obsolete. New processes and products increase the profitability of investment and stimulate business demand for new machines, new equipment, and new buildings. Technological change both generates high levels of investment and gives consumers new purchasing incentives. Historically periods of rapid technological change have generally been periods of high and rising employment.

There is, of course, no automatic mechanism which guarantees that actual demand will grow each year at exactly the same rate as potential full-employment output. An economy characterized by technological change and growth always faces the challenge of maintaining a growth in demand sufficient for full employment, but not so high as to lead to inflation. Fortunately, growing sophistication in the uses of economic policy, particularly fiscal and monetary policy, make this goal more nearly attainable than ever before.

These tools of economic policy are capable of righting the balance whenever the job-destroying effects of technological progress outweigh its job-creating effects. They will succeed in this task, however, only if

they are adjusted to take account of changes in the rate of productivity gains, whether from an altered pace of technological advance or from other sources.

THE TREND OF LABOR PRODUCTIVITY

Some recent developments have been cited frequently to support the belief that technological change is accelerating. In certain instances, automation has greatly lifted output per man-hour and has revolutionized the productive process. These instances are highly dramatic, but they are insufficient for evaluating the over-all impact of technological progress. Such an evaluation must be based on a study of the trend in over-all productivity—output per man-hour—for the private economy.

The main difficulty in assessing the trend of productivity is that current output per man-hour is also affected by numerous transitory factors, most significantly by fluctuations in output and changes in the average age of the machinery in use. For example, during recessions employment falls proportionately less than output as a result of lags in employer reaction, uncertainty about the future, the need to retain the same supervisory and maintenance personnel over wide ranges of output, and hiring and firing costs. Employed manpower is not fully utilized, and the level of output per man-hour is depressed. This is usually followed by rapid rates of increase in labor productivity during the early phases of cyclical expansions (Chart 2).

Moreover, our statistical measures of productivity are far from exact. Productivity is a ratio of recorded output to recorded labor input, and relatively small errors in measuring either the numerator or denominator can distort the pattern of change in productivity. Particularly in measuring productivity for *individual sectors* of the economy, there are statistical problems associated with the measurement of output change; and measures of labor input are also a source of difficulty. (Currently there are two separate official series on employment and man-hours—one based primarily on payroll data reported by business establishments and the other based on a monthly survey of households.) The Department of Commerce is now engaged in major revisions of output data, and the Bureau of Labor Statistics is planning to publish revised productivity indexes during 1964, based on the revised output data. Recorded changes in productivity for individual years and sectors must be viewed as a broad gauge—rather than a precise reading—of economic performance.

With these qualifications, productivity measurements for recent years are presented in Table 17, accompanied by some comparisons with longer-run trends. Labor input data are based on information collected primarily from establishments. The table shows that productivity gains have been healthy but not unprecedentedly large during the past 3 years. While improvement has varied among sectors, the average gain in each case has been greater during the past 3 years than in the preceding decade, but less than the average of 1947–50.

TABLE 17.—*Changes in output per man-hour in the private economy, 1919–63*

Period	Percentage change per year				
	Total private	Agriculture	Nonagriculture		
			Total	Manufacturing ¹	Nonmanufacturing ¹
1919 to 1947.....	2.2	1.4	2.0	2.0	(²) 2.5
1947 to 1963.....	3.2	6.1	2.6	2.7	
1947 to 1950.....	4.5	8.8	3.7	4.3	3.4
1950 to 1960.....	2.7	5.4	2.1	2.0	2.2
1960 to 1963.....	3.5	5.5	3.2	3.7	2.9
1960 to 1961.....	3.3	5.9	2.9	2.6	3.1
1961 to 1962.....	3.9	3.4	3.8	5.4	2.9
1962 to 1963.....	3.5	7.4	3.0	3.1	2.8

¹ Department of Labor estimates for 1960–63 are in the course of revision and are not available (see note to Table C-32). Therefore estimates for all years beginning with 1947 have been made by the Council of Economic Advisers on a consistent basis using Department of Commerce net output estimates.

² Based on data from private sources.

³ Not available.

NOTE.—Man-hours are based primarily on establishment data.

Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

To determine whether these relatively larger gains of the past 3 years exceed past trends, it is necessary to sort out the cyclical and transitory factors affecting productivity. For this purpose, several alternative statistical analyses were undertaken on the nonfarm productivity gains of 1949–60 to determine the separate influences on productivity of the average age of equipment stocks, variations in the growth of output, and changes in the degree of capacity utilization. These findings were then used to estimate the productivity gains that might have been expected in the years 1961 through 1963 if the past relationships and trends still held.

Depending on which statistical analysis is used (and there is no clear basis for preferring one to another), the recent gains are either about in line with the expectation or exceed it by amounts ranging up to 1 percentage point. These differences are sufficiently tentative that further experience is needed to confirm a positive conclusion.

Recent large gains could reflect no more than a possibly unusually cautious hiring policy on the part of business in the current expansion. Experience with the slack labor market of recent years may have deterred the anticipatory hiring of overhead and skilled personnel, which appears typically to take place during a business expansion as insurance against the possibility of future labor shortages. If so, the recent higher rates of productivity increase may prove to be transitory. Yet optimism may still be warranted. If objective analysis does not support a firm conclusion that the trend of productivity has accelerated, neither can that possibility be dismissed. Technological progress may indeed have accelerated, but its impact on productivity may be only gradually becoming visible because of the time that must elapse before innovations become embodied in new capital equipment and expressed in new organizational forms.

ADJUSTMENT TO TECHNOLOGICAL CHANGE

The benefits to society from technological change are not costless. For some individual workers, businesses, and communities technological change brings new opportunity: better jobs, higher profits, greater prosperity. For others it imposes burdens and even hardships. For technical change may reduce the value of—or even make obsolete—particular labor skills, plant and equipment, or natural resources.

By and large our enterprise system works well in producing the shifts of capital and managerial resources from one activity to another that changed circumstances—including technical progress—dictate. But unless the individual worker who is displaced from his job by technological change finds other employment soon, both he and society lose.

Even when over-all employment opportunities are adequate, job security for the individual worker is never certain. Technological change has perhaps been the most perennially disruptive influence on job security; but changes in consumer tastes and business organization, increased competition, and decisions of public policy also frequently and unpredictably disrupt existing job patterns. And even in a strong labor market, it almost always takes time for displaced workers to find new jobs.

The development of new processes directly alters the labor requirements of particular firms and industries and of the whole economy. More indirectly, by raising real incomes and changing relative prices, technological advance induces shifts in the industrial composition of output and employment. A faster-than-average pace of technological change reduces costs of production in the industry where it occurs and is ordinarily reflected either in a decline in the relative price, or in an improvement in the relative quality, of the products of that industry.

Sometimes the technologically induced lowering of price or raising of quality leads to enough expansion of demand actually to increase employment in the industry where the change occurs. Where technological change gives birth to an entire new industry, this is, of course, true. Automobiles in the 1920's and, more recently, airlines, office machinery, and electronic and communications equipment are clear cases of this sort. In other activities, of which farming and coal mining are good examples, spectacular productivity advances have not led to equivalent increases in sales, and employment has declined sharply.

If rates of technological advance were not too unequal among industries and over-all growth is rapid, employment might still expand in some industries without requiring layoffs in others. Normally, however, transitional problems arise, as the number of jobs in specific firms, industries, occupations, or geographic areas declines more rapidly than the number of workers seeking to fill them, even after account is taken of retirements and voluntary job changes.

THE CHANGING DISTRIBUTION OF JOB REQUIREMENTS

In the past decade, jobs have been destroyed and created at very unequal rates in various regions, occupations, and industries.

Changing *regional requirements* are illustrated by the fact that nonagricultural employment actually declined between 1953 and 1963 in Rhode Island, Pennsylvania, Michigan, and West Virginia, remained essentially unchanged in Maine and Ohio, and rose by 1.5 million (almost 40 percent) in California, 65 percent in Florida, 80 percent in Arizona, and 97 percent in Nevada. Even more striking disparities can be found among metropolitan areas.

Shifts in the *occupational distribution* of jobs have been equally dramatic. The number of farmers and farm workers declined by 2.8 million, or 40 percent, between 1950 and 1960. In more narrowly defined occupations, there were employment declines of 25 percent among locomotive engineers and firemen, 38 percent among textile weavers and spinners, 42 percent among telegraph operators, and 50 percent among fishermen. During this same period, employment rose by 45 percent among professional nurses, 49 percent among teachers, and 60 percent among engineers and draftsmen.

Changes in the *industrial composition* of jobs were highlighted by the continued decline in the importance of goods-producing industries as sources of employment. Total employment in manufacturing, mining, and construction declined by 2 percent between 1953 and 1963. In contrast, employment increased by 65 percent in State and local government, 41 percent in services, 33 percent in finance, and 16 percent in trade.

Automation is often regarded as having a qualitatively different effect on worker displacement than did earlier forms of technological change. Specifically, it is suggested that automation requires a higher average level of education or skills than did earlier forms of technology, and that this complicates the adjustment process for displaced blue-collar workers whose old skills have been rendered obsolete while lack of adequate educational background disqualifies them from filling the new jobs created by automation.

However, the current changes in skill requirements appear to continue a long evolutionary process. Professional and technical workers and craftsmen, for instance, accounted for about 15 percent of the work force in 1900, 23 percent in 1950, and 26 percent in 1960. In contrast, unskilled farm and nonfarm workers accounted for 30 percent of the labor force in 1900, 11 percent in 1950, and only 8 percent in 1960. It is not clear whether automation has caused any acceleration in these trends. Further studies are needed, to which the proposed Commission on Automation should contribute.

Whatever the exact pace and cause, it is clear that the proportion of jobs calling for the exercise of considerable responsibility and for a substantial educational background is rising.

THE ADJUSTMENT PROCESS

With the dramatic changes we have experienced in recent decades in the distribution of available job openings and in the nature of job requirements, it is remarkable that labor market adjustment takes place as efficiently as it does. But American workers are highly mobile.

Although many workers, particularly older ones, are reluctant to sever local ties, even when they become unemployed, there is nevertheless an impressive degree of *geographical mobility*. On the average, during each year of the past decade over 6 percent of the civilian population moved its residence across county lines, and 3 percent across State lines. During prosperous periods, the rates of mobility out of labor surplus areas are considerably higher. Today only 55 percent of all persons aged 25 and over still live in the State of their birth. Rapidly growing areas have managed to attract large numbers of workers from sections of the country where the natural population increase has exceeded the expansion of job opportunities. The net in-migration rate between 1950 and 1960 was over 50 percent in Florida and Nevada, and between 20 and 45 percent in Arizona, Alaska, California, and Delaware. In contrast, the net out-migration rate was 20 percent or higher from such States as Arkansas, West Virginia, and Mississippi.

During 1961 some 8.1 million workers changed jobs, including about 2.6 million who changed voluntarily in order to improve their economic status. Mobility declines rapidly with age; still, almost 6 percent of men 45-64 years old changed jobs in 1961. Fifty-six percent of all job changes involved a shift between major industry groups, and 47 percent between major occupation groups.

The extensive training and retraining programs conducted by many, though not by enough, private employers contribute significantly to the occupational flexibility of the work force. In 1962, establishments accounting for almost 50 percent of private nonfarm employment had some type of training program and were providing training for 15 percent of their employees. The natural turnover in the labor force also contributes to this flexibility. An average of 1,275,000 older persons will die or retire during each year of the current decade, while an average of 425,000 women will leave for family reasons. At the same time an average of 2.6 million young persons will enter the labor market each year, so that by 1970, 30 percent of the labor force will consist of persons who were not in the job market in 1960. This substantial inflow of new workers can provide a supply of relatively well educated and mobile labor for expanding activities.

Indeed, improved education has been the primary factor permitting the rapid adjustment of the labor supply to the demands of changing technology. The average educational attainment of new workers currently entering the labor force is about 40 percent higher than that of those currently retiring. Just since the beginning of World War II the median

level of education among the entire adult male labor force aged 18-64 has risen by more than 50 percent. The proportion of the labor force with an 8th grade education or less declined from 36 percent in 1952 to 26 percent in 1962. In contrast, the proportion who were college graduates rose from 8 to 11 percent. And this educational upgrading will certainly continue. More than 1 million persons are expected to graduate from college in 1964 and 1965, and an additional 220,000 persons will receive advanced degrees. The total number of degree recipients will be 70 percent greater than a decade earlier. Unsatisfied as we are, and rightfully so, with our educational accomplishments, it is clear that rising levels of education have been the major force permitting the rapid—and on the whole successful—adjustment of the work force to changing occupational requirements.

DEFECTS OF THE ADJUSTMENT PROCESS

Displaced workers rarely find new jobs instantaneously. Time is required for the flow of job information and for matching the location, education, skill, wage, working conditions, and other preferences of job hunters with the requirements of employers. Personal contacts, employment services, and help-wanted advertisements provide important channels of communication between employers hunting for workers, and workers hunting for jobs. Nonetheless, the flow of labor market information is unnecessarily slow and circumscribed. Because of insufficient staff and, in some instances, because of the failure of employers to provide information, local offices of the Federal-State Employment Service cannot provide complete information on local job opportunities, to say nothing of a full exchange of information among different localities. In the absence of adequate vocational guidance, many young workers are not properly prepared for the activities in which employment is expanding most rapidly. Geographic movement is often restrained by lack of information and by the inability of workers to finance transportation, job search, and change of residence. Occupational mobility is often inhibited by the absence of adequate educational background and the inability to acquire needed skills.

The average displaced worker spends far too long between jobs, even in periods of adequate demand. The average duration of unemployment was 11.6 weeks during the period 1955-57, when the over-all unemployment rate averaged 4.3 percent. And, during the boom years of 1951-53, when the unemployment rate averaged 3.1 percent and the number of unfilled jobs very probably exceeded the number of unemployed workers, the average duration of unemployment was still 8.7 weeks. These statistics do not refer specifically to the average period of joblessness for workers displaced by technological change, but they do indicate the time-consuming nature of the job-hunting process. They also suggest that reduction of the human cost of technological change will require policies—both private and public—for improving and speeding the matching of available jobs and workers.

Such policies can never be completely adequate. The burdens of transitional unemployment may be harsh, but they sometimes represent only part

of the cost of change to the displaced worker. The worker made permanently unemployable by technological change is relatively rare, but it is frequent for a displaced worker to find himself required to accept a less challenging and lower paying job. The specialized skill, experience, and seniority which contributed to earning power in the original job frequently do not have transferable market value.

Moreover, the burden of technological displacement often falls most heavily on those least able to bear it. As noted already, the general drift of technological change has tended to be toward increased rather than reduced skill and education requirements and thus in favor of groups already higher up on the income ladder. To be sure, some of the elite of the labor force have suffered—printers and flight engineers, to take two recent examples. But overwhelmingly, the groups displaced have been the less-skilled, less-educated, and therefore poorer members of the labor force. But even if the incidence of technological change were entirely random, the wealthier community, the more prosperous business, the more highly trained and better paid workers have greater adaptability, and greater resources to help them through the period of adaptation.

When technological change displaces considerable numbers of workers in a particular region or occupation, and these workers lack the skills or mobility necessary to find other jobs quickly, their continuing unemployment can well be called “structural.” Pockets of such structural unemployment are never absent, and the problems they present for public policy are intensified (and partly concealed) in a generally slack economy with excessive over-all unemployment.

In its testimony before the Senate Subcommittee on Employment and Manpower on October 28, 1963, the Council considered at some length the interrelationships between slack labor markets resulting from insufficient total demand for goods and services and problems of structural unemployment. It dealt in particular with the question whether recent technological change may have increased the incidence of structural unemployment in the American economy and the possible relevance of this for policies to raise demand. The Council explained in detail its reasons for doubting that structural unemployment has increased, but emphasized that such unemployment is both an economic and a human problem of serious proportions and that Government has a responsibility for taking appropriate measures to reduce it. The bulk of this testimony is reprinted as Appendix A to this Report.

PRIVATE POLICIES FACILITATING ADJUSTMENT

Recognition of the human toll that can result from technological change and labor displacement has led to a wide range of private efforts to reduce transitional costs. Human adjustment problems are minimized when needed work force reductions can be accomplished by normal attrition and reassignment. This goal—toward which firms with enlightened personnel policies strive—is often made economically feasible by the limited scope

of many innovations or by a sufficiently high rate of voluntary employee turnover. But it requires careful planning. The Bureau of Labor Statistics recently surveyed the work history of 2,800 persons employed in 18 offices doing data processing work which was to be transferred to electronic computers. The firms tried to ensure employment security for their current work force by advance planning and curtailment of hiring. Twelve months after the new installation, more than half of the workers were still in their original positions, and more than 30 percent had been transferred to other positions in the firm. Thirteen percent had quit or retired, and less than 1 percent were laid off.

Collective bargaining agreements have been concerned increasingly with problems of accommodating change while protecting worker security. In recent agreements, increasing stress has been placed on interplant seniority pools, relocation allowances, early retirement provisions, and severance pay plans that provide a lump sum payment or its equivalent as reimbursement for the income losses associated with displacement. The recent Kaiser Steel-United Steelworkers and West Coast Longshoremens' agreements provided employment guarantees or income assurances for workers displaced by technological change. The Railroad Arbitration Board decreed the eventual elimination of 90 percent of diesel locomotive firemen's jobs in freight and yard service, but it provided income guarantees for those with 2 to 10 years of seniority, and lifetime employment protection for those with greater seniority.

Private programs to minimize displacement or to reimburse displaced workers are desirable because the burden of adjustment is prevented from falling exclusively on the displaced worker. Such programs serve a doubly useful purpose when they facilitate the rapid introduction and economical use of new processes. However, they can often be only partial remedies. In many instances of *major* technological change, private programs either are impracticable (for example, if the displacement occurs in industry A as a result of technological change in industry B), or else cannot provide complete worker protection without unduly slowing the pace of technical advance, and preventing the flexible and efficient utilization of the labor force.

PUBLIC POLICY AND TECHNOLOGICAL CHANGE

Two central points emerge from the preceding discussion. First, technological advance is a key element in economic progress; achieving the goals of rapid growth and higher living standards and better international balance depends on maintaining and even increasing its pace. Second, technological change—like other kinds of change—demands adaptations on the part of labor, business, and the community at large; and these adaptations impose real burdens on adversely affected individuals.

Each of these points has significant implications for public policy. They suggest that Government should stimulate and facilitate rapid technological

change in order to enlarge its benefits, at the same time attempting to strengthen processes of adaptation and to lighten the burdens of change on affected individuals.

The single most important support the Government can provide for accomplishing each of these purposes is to help the economy achieve and sustain high employment. Without strong markets for their products, businessmen will have inadequate incentives to undertake the risks inherent in innovation. Likewise, the economy's adaptation to technical change—and particularly its ability to transfer the resources released by technical change to other industries and activities—become immeasurably weakened in the absence of strong demand.

TAX STIMULUS FOR INVESTMENT

Enactment of the pending tax bill is thus crucial to the achievement of our dual objectives. First, it helps insure the increase in demand necessary to provide markets for our growing productive potential. But the tax program of the Administration carries a further impact of great importance for the encouragement of rapid technological innovation. This is the specific emphasis on encouraging investment. The investment tax credit and the revised depreciation guidelines of 1962 were designed particularly to reward firms which raised their rate of investment in new plant and equipment. And the pending bill carries this emphasis further, with a large reduction in corporate taxes, a cutback of risk-inhibiting top bracket individual tax rates, and a further broadening of the investment credit.

The stimulus that tax reduction will give to investment both through its effects on markets generally and through its specific improvement in investment incentives is one of the most powerful ways available to encourage the rapid introduction of new and better technology.

GOVERNMENT SUPPORT OF TECHNOLOGICAL ADVANCE

A healthy rate of innovation is encouraged by preserving freedom of entry into markets by new competitors, and by a patent system which provides positive incentives to both invention and innovation.

The Government has also provided more direct encouragement of technological advance, and it can and should do more. Federal support is clearly warranted and appropriate when it encourages innovations that will be used directly to improve performance of a service recognized as a direct responsibility of the Federal Government. National defense is the most important current example of such an activity. But there are many other activities in which government—Federal, State, or local—plays a major role: providing public highways, airways, inland waterways, weather services, and postal services; maintaining an atmosphere free from dangerous pollution and an adequate supply of pure water; and a long list covering such diverse fields as criminology, recreation, and education. In such activities Government has a special responsibility to undertake, or to support, research

and development which promise improvements in public services—better quality, greater safety and reliability, and lower cost. In none of these fields can private incentives be expected to provide an adequate research effort.

But there are other situations that justify Federal support of invention and innovation, even in areas that are and should remain the province of private enterprise. This is surely true where the benefits to the community extend far beyond the gains to the individual buyers of the new product or service. The benefits to these buyers may be quite insufficient to cover the private costs and risks of developing the new good or service; yet the benefits to society at large may pay a handsome return to the innovational activity.

Medical research is clearly an example of this kind of activity. Improvements in medical technology are certainly in the public interest; yet the costs of many such improvements could not—and perhaps should not—be borne by the immediate beneficiaries of the new knowledge. Through a political process society has determined that a larger effort should be made, and Government funds primarily support it.

REASONS FOR UNDERINVESTMENT IN RESEARCH AND INNOVATION

Aside from medicine, the other principal field in which significant Federal support has been given to technological change in an essentially private, civilian industry is agriculture. This type of support has a long history, going back at least to 1887, when the Hatch Act established the national system of agricultural experiment stations, and to 1914, when the Agricultural Extension Service was founded. The basic justification for supporting agricultural research differs from that applicable to national defense or medicine. And it is a justification which would seem to extend to other industries as well. In a number of industries the amount of organized private research undertaken is insignificant, and the technology of many of these low-research industries has notably failed to keep pace with advances elsewhere in the economy.

Several factors can be identified to account for the underinvestment in research and development on the part of private firms in such industries. The primary one is an inability of the individual firm to recover the costs of research in its prices, even though the additional value to the direct consumers of the product would greatly exceed those costs. Particularly in the case of basic research, the “product” is new knowledge; but scientific knowledge cannot be appropriated by an individual firm. Other firms and even other industries—which have not incurred the research costs—share the benefits. As a new development moves further along the research and development spectrum toward actual production, an individual firm may be able, through the patent system, to appropriate to itself rewards sufficient to justify the costs and risks of developing and introducing the new process or new product. The clearest case for public support thus applies to the more basic forms of research. This case is reinforced by greater riskiness at this

early end of the R&D spectrum. Ordinarily, at least, uncertainty decreases as a new process or product approaches specific economic application. Indeed, the research cycle can usefully be viewed as a process of progressive reduction of uncertainty as more knowledge is acquired.

Another reason for the virtual absence of organized research in many industries is the high cost of research in the relevant technologies in relation to the typical size of firms in those industries. Research plant and equipment costs are very high in nuclear physics, for example. In other cases, effective research may require large staffs of scientists and engineers since advances may depend on contributions from many scientific specialties. Furthermore, the small establishment is unable to take advantage of the spreading of risks among a number of R&D projects under way at the same time. The larger firm, able to support a number of projects, can safely take the risk of many "failures" (i.e., projects that do not produce economically applicable results), since a few successes will ordinarily more than compensate for the entire investment. The large firm has the additional advantage of being in a better position to market successfully the new products of its research laboratory because of its broader market coverage. For example, in the chemicals industry—which is relatively active in research—many firms typically participate in a broad range of product markets. In this field, at least, where new R&D results are often profitably applicable in more than one market, the large firm is better able to recognize and take advantage of possible payoffs in several applications.

However, some industries characterized by large firms undertake relatively little R&D. Part of the explanation seems to lie in the age of the industry. Industries which were already mature before sophisticated scientific and engineering techniques began to be applied to industry lack a research tradition. Many important newer industries, such as electronics, grew directly out of modern organized research and development, and their managements find it natural and profitable to continue this emphasis on R&D as they mature.

The fact that some industries spend little on research does not in itself prove that there would be high payoffs to additional research. It may be that research effort is slight because it is clear that it would not pay. Nor does it automatically follow that productivity gains in these fields are low. They may, and often do, show rapid gains based on innovations by the capital goods industries which supply their equipment.

Nevertheless, the above analysis has suggested some reasons, quite unrelated to the potential gains from accelerated R&D, that account for an underinvestment in research in many fields—particularly where firms are small. The data at the bottom of Table 18 clearly show that manufacturing firms with R&D programs, and with 5,000 or more employees, did—on the average—more than twice as much research as a percentage of sales as did smaller firms.

TABLE 18.—*Research and development performed by industry, 1967*

Industry and size	Millions of dollars		Percent of sales ¹	
	Total	Company financed	Total	Company financed
<i>By industry:</i>				
Total.....	10,872	4,631	4.4	1.9
Aircraft and missiles.....	3,957	392	24.2	2.4
Electrical equipment and communication.....	2,404	871	10.4	3.8
Chemicals and allied products.....	1,073	877	4.6	3.6
Machinery.....	896	610	4.4	3.0
Motor vehicles and other transportation equipment....	802	628	2.9	2.3
Professional and scientific instruments.....	384	212	7.3	4.0
Petroleum refining and extraction.....	294	286	1.0	1.0
Primary metals.....	160	151	.8	.8
Rubber products.....	126	88	2.2	1.5
Fabricated metal products.....	118	90	1.3	1.0
Food and kindred products.....	105	106	.3	.3
Stone, clay, and glass products.....	103	95	1.8	1.7
Paper and allied products.....	60	63	.7	.8
Textiles and apparel.....	33	(2)	.6	(1)
Lumber, wood products, and furniture.....	9	(2)	.5	(2)
Other industries.....	* 348	* 127	1.4	.5
<i>By size of company:</i>				
Less than 1,000 employees.....	596	(2)	2.0	(2)
1,000 to 4,999 employees.....	935	501	2.2	1.5
5,000 employees or more.....	9,341	3,728	5.2	2.0

¹ Data for manufacturing companies with R&D programs.² Not separately available but included in total.³ Includes dollar amounts for other manufacturing and nonmanufacturing companies not elsewhere classified.

NOTE.—Detail will not necessarily add to totals because of rounding.

Source: National Science Foundation.

THE EXTENT AND DISTRIBUTION OF R&D

Table 18 shows the heavy concentration of R&D performance in 3 industry groups: aircraft and missiles, electrical equipment and communications, and chemicals and allied products. These 3 fields account for 68 percent of the total. Together with machinery and motor vehicles and other transportation equipment, they account for 84 percent. Professional and scientific instruments is a smaller industry in which research and development expenditures are high relative to sales. Federal support for research is important in several of these cases. Yet it is striking that these 6 high-research industries all show an important volume of *company-financed* R&D.

The data in Table 19 show that the Federal Government is already a heavy contributor to research and development in America, although its support is now heavily concentrated in areas related to defense and space exploration. Its contribution grew from \$2.7 billion in 1953–54 to an estimated \$11.0 billion in 1962–63 and expanded from a little over half of the total R&D spending in 1953–54 to more than two-thirds in 1962–63. What is now at issue is whether a relatively small fraction of that support

should be directed in the future to civilian fields in which technological development has been lagging.

TABLE 19.—*Research and development expenditures, 1953-54 to 1962-63*

[Billions of dollars]

Year ¹	Total expenditures	By sources of funds ²			By performance		
		Federal Government	Industry	Universities and other nonprofit institutions	Federal Government	Industry ³	Universities and other nonprofit institutions ³
1953-54.....	5.15	2.74	2.24	0.17	0.97	3.63	0.55
1954-55.....	5.62	3.07	2.37	.18	.95	4.07	.60
1955-56.....	6.39	3.67	2.51	.21	1.09	4.64	.66
1956-57.....	8.67	5.10	3.32	.25	1.28	6.60	.79
1957-58.....	10.10	6.39	3.45	.26	1.44	7.73	.93
1958-59.....	11.13	7.17	3.68	.28	1.73	8.36	1.04
1959-60.....	12.68	8.32	4.06	.30	1.83	9.61	1.24
1960-61.....	13.89	9.01	4.55	.33	1.90	10.51	1.48
1961-62.....	14.74	9.65	4.71	.38	2.09	10.87	1.78
1962-63 ⁴	16.42	11.00	5.00	.43	2.71	11.56	2.15

¹ Federal Government performance on fiscal year basis; data for industry are calendar year basis and other data are primarily on fiscal year basis. Fiscal years are as indicated; calendar years refer to year beginning with half of indicated fiscal year.

² Based on reports by performers.

³ Includes research centers administered by organizations in this sector under contract with Federal agencies.

⁴ Preliminary.

Note.—Detail will not necessarily add to totals because of rounding.

Source: National Science Foundation.

A FEDERAL CIVILIAN TECHNOLOGY PROGRAM

Primary responsibility for Federal programs fostering industrial technology is assigned to the Department of Commerce, which has embarked on several broad programs to stimulate technological advance in all sectors of the economy. The fundamental role of government is to help industry help itself by catalyzing and supporting the efforts of firms and communities to promote economic progress through technical change.

In order to disseminate the results of federally sponsored research and development more efficiently, the Departments of Commerce and Defense have agreed to assign to the Office of Technical Services in Commerce the handling of all unclassified and unlimited Department of Defense documents.

The National Bureau of Standards is administering contracts for research useful to the textile industry, under a new Civilian Technology program approved by Congress in 1963. The objective of this program is to sponsor technical investigations of problems faced by the industry at large—problems that no single firm could afford to solve on its own behalf, but that are especially suited to combined investigation.

Industry associations can be an important vehicle for undertaking research of broad significance to an entire industry. The Commerce Department is accordingly considering a legislative proposal authorizing government assistance to such groups in order to stimulate their sponsorship of non-proprietary technical investigations.

A further legislative proposal is under consideration to provide for Federal cooperation with States, universities, and industry groups to aid in the development and dissemination of new technological information. The purpose of this program would be to bring the reservoir of technical information available at scientific centers to bear on the problems of firms that are not able to support large research organizations. Such a technical service program should be tailored to the needs of the local area and conducted under local direction.

FEDERAL SUPPORT FOR BASIC RESEARCH

“Basic research” has sometimes been defined as research undertaken with no specific practical goal in mind—beyond a general conviction that extending man’s knowledge of his environment and of himself is bound to serve the purposes of human life and human society. Most basic research is conducted in universities, sometimes supported by the Federal Government. A relatively small number of large business organizations support basic research in areas of their general interests.

Merely to agree that basic research is a “good thing” does not necessarily justify Federal support for it and, in particular, gives no basis for determining how much support should be provided for what kinds of basic research.

It is inevitable that primary support should be given to those fields of natural science where potential payoffs in national security, health, and economic growth are obviously high even if uncertain in location and character. The fact that many of our most dramatically “practical” technological achievements have grown quite directly—and often quite promptly—from new discoveries in these fields builds a solid case for their support.

Recognizing this relationship between basic research in the natural sciences and practical achievements benefiting society in many diverse ways, the Congress has provided generous support for research in the natural sciences, particularly through the Department of Defense, the Atomic Energy Commission, the National Aeronautics and Space Administration, the Department of Health, Education, and Welfare, and the National Science Foundation. The breadth of Federal support of basic research is reflected in the work of the NSF, which supports and encourages research over a spectrum including atmospheric sciences, high energy physics, oceanography, and metabolic biology—in each of which research costs are often high and the potential payoff to society may be very great.

Yet basic research in other fields may also have “practical” payoffs even if not in industrial technology or national security. Thus Federal support is given to investigations in psychology, where potential payoffs in more efficient organizations or better mental health can be large. The social sciences, where expanding knowledge of economic and social relationships may im-

prove the efficiency and effectiveness of government and private organizations, also merit support even on "practical" grounds, and some modest beginnings in these fields are now being undertaken.

A strong system of university and technical education must underlie progress in basic research. Institutions of higher education not only conduct much of our national research effort, but they also train most of the scientific research workers on whom future progress depends. The National Science Foundation's program simultaneously supports both university research and higher education, reflecting their close interrelationship. Higher education is also supported through programs under the National Defense Education Act and the new Higher Education Facilities Act.

GOVERNMENT'S ROLE IN AIDING ADJUSTMENT

Federal responsibility for fostering more rapid technical advance clearly could not be successfully—or even appropriately—undertaken in an economy in which total demand perennially failed to rise enough to reemploy the workers initially displaced as well as new additions to the labor force. But maintaining high demand and satisfactory over-all employment is not enough. There are other important policies which the Federal Government must pursue if adjustments to change are to be successful, and if the effects on labor, business, and local communities are to be acceptable. Many of the programs needed for this purpose also form one cornerstone of the attack on poverty.

The labor market programs of the Federal Government have made striking progress in recent years, and this progress must continue. Since 1961 the Federal-State Employment Service has increased its nonfarm job placements by almost 25 percent. But its guidance and placement facilities must be further strengthened in order to improve the matching of workers and jobs. The vocational retraining program of the Department of Labor and the Area Redevelopment Administration has reduced transition costs and improved future earning potential for a significant number of displaced workers. Some 148,000 workers will be in training or retraining during fiscal year 1964 in skills as diverse as drafting, stenography, nursing, auto repairing, and metalworking; and the program will be expanded to provide training and retraining for 288,000 workers in fiscal year 1965. The recent broadening of the Manpower, Development and Training Act will increase its effectiveness in coping with unemployment among low-skilled workers and youths. An important element included as part of this program will be the provision of adult education courses in fiscal year 1965 for 60,000 persons who are unable to acquire industrial skills because of a lack of basic literacy, and vocational training will be provided for 85,000 unemployed youths.

In this connection the recent passage by the Congress of a broad new program of aid to vocational education is of great significance. It should lead not only to a large expansion of existing programs but also to a considerable broadening and redirection, including new emphasis on busi-

ness and office occupations. The work-study program and provision in the new legislation for residential vocational schools will greatly improve opportunities for young people previously unable to acquire vocational training. In addition, passage of the Youth Employment Act will provide work and training through conservation work camps and work projects in local communities for 60,000 youths during 1964 and over 100,000 the following year. The prevalence of discriminatory hiring practices has been significantly reduced by the vigorous efforts of the President's Committee on Equal Employment Opportunities.

The unemployment insurance system—first line of defense against the costs of unemployment—must be modernized in order to deal better with the unemployment that results from shifts of jobs from one occupation, industry, or area to another. The additional labor market programs that are being recommended will be discussed at greater length in the forthcoming Manpower Report of the President.

In our concern with the problems of today's unemployed, it should not be forgotten that a strengthened system of basic education will be the best guarantee against significant problems of displacement and dislocation in tomorrow's full-employment economy.

Technical education and vocational guidance programs can be kept more current by the creation of any early warning system on new technological advances. But the possibility of accurately predicting occupational requirements even 10 years into the future is highly limited. And the average male's working life now extends over 45 years. We can best prepare for the occupational requirements of the labor market of 1970 through an educational system that produces well-educated and technically versatile graduates, able rapidly to acquire new skills. Such versatility will accelerate the process of matching jobs and workers and greatly reduce the loss of potential earning power resulting from the obsolescence of specific skills.

CONCLUSION

Fears of technological advance are understandable on the part of those who feel its threat to their livelihoods. In the absence of wise and effective private and public action such fears are justified. But any comprehensive appraisal can lead only to the conclusion that the benefits of technical change—in the future as in the past—are such that public policy should foster rather than shun it. To yield to apprehension that the machine will become our master, that we are unable to absorb and adjust to rapid change, that we must deny ourselves the continued rise in material well-being that ever-growing knowledge and understanding place within our grasp and the increased freedom it brings to pursue higher goals—such a defeatist view is both unworthy of our heritage and unjustified. For as scientific and technical knowledge has grown over the years, so, too, has understanding of our social and economic system and institutions—including the proper role of government in a free society. Applying this knowledge, all citizens can enjoy the fruits of rapid change.

Chapter 4

Price and Wage Policy for High Employment

INFLATION need be no more of a threat in 1964 than it was in 1963 or 1962 or 1961—and the threat was well contained in each of those years. But the good record of price stability in the expansion to date provides no basis for relaxing our vigilance in 1964 and beyond. At stake are not only important domestic economic objectives but also our long-term balance-of-payments position.

The decisions that can make or break this country's price stability record rest in private hands, and they should remain there. Yet it is the responsibility—and the determined purpose—of the Administration to do all it properly can to promote the right outcome.

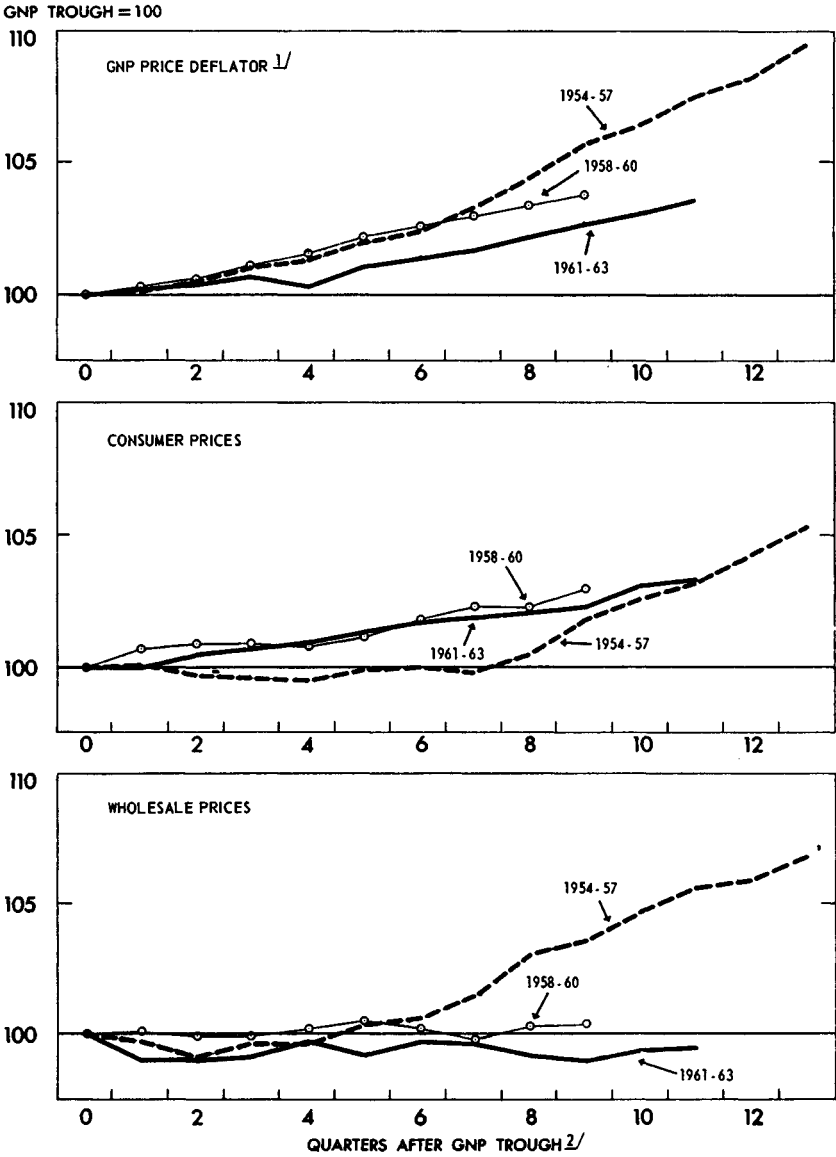
THE PRICE-WAGE SITUATION AND THE PROSPECTS

The impressive noninflationary record of this expansion thus far—the stability of wholesale prices and the slow upward movement of over-all consumer prices—has been reviewed in Chapter 1 and is portrayed in Chart 11. At the same time, as Tables 20 and 21 show, the price stability has not been “paid for” either by a failure of wages to keep up with the trend change in productivity in the economy as a whole or by a corporate profits squeeze. (In the tables, “trend change in productivity” for any given year is defined as the 5-year moving average of the annual percentage changes in the Bureau of Labor Statistics index of output per man-hour in the total private economy. These estimates use labor input data collected primarily by establishments.) While money wages have not risen as fast as in some earlier expansions, the gain in purchasing power has been eroded very little by price increases. And while over-all profits have continued to rise, this has been achieved without substantial price increases. In terms of the balance among wages, prices, and profits, the economy is in a good position, as it enters 1964, to avoid inflationary price and wage decisions.

The price stability of 1961–63 has resulted in part from persistent slack in the economy. But another major factor has been the responsible action of most union and business leaders in making noninflationary wage and price decisions. Although shifting patterns of demand and supply are the major factors ruling prices, wages, and output in our market economy, there

Chart 11

Prices in Three Postwar Expansions



^{1/} BASED ON SEASONALLY ADJUSTED DATA, 1963 PRICES.
^{2/} TROUGH QUARTERS FOR GNP WERE 1954 II, 1958 I, AND 1961 I
SOURCES: DEPARTMENT OF COMMERCE, DEPARTMENT OF LABOR, AND COUNCIL OF ECONOMIC ADVISERS.

TABLE 20.—*Prices, wages, profits, and productivity in the private economy, 1948–63*

Year	Productivity ¹	Trend productivity ²	Total compensation per employee man-hour	Prices ³	Corporate profits after taxes ⁴	Capital consumption allowances ⁵	Profits plus capital consumption allowances ⁶
	Percentage change ⁷			Percent of corporate sales			
1948	3.5		8.6	6.8	5.1	2.0	7.0
1949	2.9		2.5	— .8	4.1	2.3	6.4
1950	7.2		5.7	1.2	5.0	2.2	7.2
1951	2.5		9.3	7.8	3.8	2.3	6.0
1952	2.2	3.6	5.9	1.7	3.2	2.5	5.7
1953	4.1	3.8	5.8	.6	3.2	2.7	5.9
1954	1.8	3.5	3.3	.8	3.0	3.1	6.0
1955	4.5	3.0	2.9	.9	3.6	3.1	6.6
1956	.1	2.5	6.1	3.1	3.4	3.2	6.6
1957	3.5	2.8	5.9	3.5	3.0	3.2	6.3
1958	2.5	2.5	3.6	1.7	2.6	3.4	6.0
1959	3.6	2.8	4.6	1.5	3.1	3.3	6.4
1960	1.9	2.3	3.6	1.1	2.6	3.4	6.0
1961	3.3	3.0	3.4	1.0	2.5	3.4	6.0
1962	3.9	3.0	3.9	.8	⁸ 2.6	⁸ 3.7	⁸ 6.3
1963	3.5	3.2	3.1	1.2	⁸ 2.7	⁸ 3.6	⁸ 6.3

¹ Output per man-hour for all persons; labor input based primarily on establishment data.² Annual average percentage change in output per man-hour during latest 5 years.³ GNP deflator for private economy.⁴ Excludes profits for "rest of world."⁵ Includes depreciation, capital outlays charged to current accounts, and accidental damages.⁶ Corporate profits after taxes plus corporate capital consumption allowances.⁷ Percentage change from previous year except for trend productivity. (See footnote 2.)⁸ Data beginning 1962 have been adjusted for the effects of the new depreciation guidelines. The effect of the guidelines was to shift the proportion between profits and capital consumption allowances in favor of the latter.

NOTE.—Detail will not necessarily add to totals because of rounding.

Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

is considerable room for discretionary decision making in most major industries. In the past, wage and other cost increases, together with price decisions based on fixed markups or target-profit policies, have combined to push up prices. And price increases often have led to wage increases.

The postwar record, shown in Tables 20 and 21, indicates how the complex interaction of wage increases to catch up with prices, and price increases to preserve profit ratios, worked in ratchet fashion. The net result has been that prices have risen roughly in proportion to the difference between increases in labor compensation per man-hour and national trend productivity gains. In particular, the experience of the years 1956–58 shows that sharp price advances can occur in periods of increasing unused capacity and rising unemployment. The data do not establish causality. But clearly the collective bargaining power of unions and the market power of large firms can interact to inject an inflationary bias into our price-wage performance.

It is encouraging that there has been so little inflationary exercise of such power in the past 3 years. In that period, increases in compensation to labor have been close to economy-wide productivity gains, and prices, on the whole, have not been raised to widen profit margins. The ability of private decision makers to extend this record through 1964 will be powerfully reinforced by the effects of tax reduction. It is true that the tax cuts, by stimulating demand and expanding output and employment, will

TABLE 21.—*Productivity in the private economy and prices, wages, and profits in manufacturing, 1948–63*

Year	Trend productivity in private economy ¹	Manufacturing				
		Total compensation per man-hour	Prices ²	Corporate profits after taxes ³	Capital consumption allowances ⁴	Profits plus capital consumption allowances ⁵
		Percentage change ⁶		Percent of corporate sales		
1948.....		9.5	6.1	5.7	1.9	7.6
1949.....		4.3	1.6	4.6	2.2	6.8
1950.....		4.9	2.3	5.9	2.0	7.9
1951.....		10.3	8.0	4.2	2.1	6.3
1952.....	3.6	6.2	1.3	3.4	2.3	5.8
1953.....	3.8	5.6	2.1	3.5	2.5	6.0
1954.....	3.5	4.1	1.3	3.4	3.0	6.5
1955.....	3.0	3.7	1.7	4.3	3.0	7.4
1956.....	2.5	6.2	4.1	4.1	3.2	7.3
1957.....	2.8	6.1	3.5	3.7	3.2	6.9
1958.....	2.5	3.8	.5	2.9	3.4	6.3
1959.....	2.8	4.1	2.1	3.7	3.2	6.9
1960.....	2.3	3.9	1.8	3.1	3.3	6.4
1961.....	3.0	2.9	.4	3.0	3.4	6.4
1962.....	3.0	3.5	— .3	3.1	3.7	6.8
1963.....	3.2	3.6	.6	3.2	3.8	7.0

¹ Annual average percentage change in output per man-hour during latest 5 years. See Table 20.

² GNP deflator for manufacturing, except 1963 which is based on goods output deflator.

³ Excludes profits for "rest of world."

⁴ Includes depreciation, capital outlays charged to current accounts, and accidental damages.

⁵ Corporate profits after taxes plus corporate capital consumption allowances.

⁶ Percentage change from previous year except for trend productivity.

⁷ Data beginning 1962 have been adjusted for the effects of the new depreciation guidelines. The effect of the guidelines was to shift the proportion between profits and capital consumption allowances in favor of the latter.

NOTE.—Detail will not necessarily add to totals because of rounding.

Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

increase the opportunity and the temptation to raise prices and wages contrary to the public interest. But they also will reduce management's and labor's need to pursue such a course. The tax cuts will add to workers' take-home pay. They will add directly to aftertax profit margins. And by stimulating a larger volume of sales, they will tend to reduce firms' unit costs by raising their operating rates, which now typically are well below desired levels.

The view that 1964 need not be marked by renewed inflationary pressures is further reinforced by the prospect that, even with the strong expansion forecast in Chapter 1, the economy will be operating throughout the year with sizable balances of unused capacity and idle manpower.

However, some recent omens are disquieting. A widely scattered minority of the larger industrial corporations in recent months has been testing the market's readiness to accept price increases. And more and more firms that do not face strong competition may try to improve their short-run profit positions by raising prices as the expansion continues.

Such action could trigger intensified worker demands for much steeper wage increases. Many workers are restive, especially in industries that have been making above-average gains in productivity and profits. Thus, despite the present strong foundation for continued price stability, either

management or labor, by unrestrained pursuit of its own near-term advantage, could reactivate the price-wage spiral that has remained quiescent for several years.

ANTI-INFLATIONARY POLICIES FOR HIGH EMPLOYMENT

It is the business of responsible government to try to achieve the best possible balance among such major economic objectives as full employment, economic growth, reasonable price stability, and the promotion of economic freedom and opportunity. The importance of price stability as compared with the other goals is sometimes minimized. But there are compelling reasons why we can ill afford to neglect prices.

THE NEED FOR STABILITY

First, inflation redistributes real incomes and wealth arbitrarily. When prices rise, those groups that are able to expand profits and wages most rapidly improve their situation at the expense of those whose incomes respond slowly. Inflation erodes the real value of public assistance and makes it difficult for local governments to maintain adequate standards of education and other essential services. It also reduces the purchasing power of retirement pensions and other fixed incomes—in effect, subjecting them to a discriminatory tax. Fixed-income assets lose value, while the prices of equity securities and other properties rise.

A second cost of inflation that we cannot afford is its adverse impact on our balance of trade and on our balance of payments. During most of the 1950's the pricing of American industrial products caused some loss of competitive ground to the products of other industrial countries. From 1953 to 1958, the over-all wholesale price index rose only moderately more than the comparable indexes in most Western European countries and Japan. But the prices of certain goods important among U.S. exports rose substantially faster in the United States than in most of the countries with which we compete. Table 22 indicates the deterioration of our rela-

TABLE 22.—*Changes in wholesale prices in selected industrialized countries, 1953 to 1958*

	Percentage change in wholesale prices		
	Total	Steel	Machinery and equipment ¹
United States.....	8.3	24.0	20.2
France ²	9.8	5.2	5.1
Italy.....	.9	(³)	2.6
Japan ⁴	-1.3	⁴ 18.5	⁵ 6.8
United Kingdom.....	11.4	1.8	18.2
West Germany.....	3.0	9.1	6.0

¹ Implicit deflator for machinery and equipment component of gross national product used for all countries except Japan.

² Adjusted for change in exchange rate in 1958.

³ Not available.

⁴ Change from 1954 to 1958.

⁵ Iron and steel.

⁶ Machinery.

Sources: Organization for Economic Cooperation and Development, Japanese Economic Planning Agency, and Council of Economic Advisers.

tive price position particularly in the crucial areas of steel and machinery and equipment during the period 1953 to 1958.

Since 1958 the relative movement of over-all prices has begun to be reversed, partly because our unit labor costs have declined in comparison with those in most European countries (Chart 12, Chapter 5). The competitive price position of American producers has improved both in their home markets and overseas. It would be foolishly complacent, however, to believe that these recent gains can be extended, or even retained, without special effort. The European countries have been striving to establish rigorous "incomes policies" to restrain wages and prices. Despite recent setbacks, they will continue to press these efforts. In doing so, some European nations are willing to accept substantial interventions into private decision making. The United States is not. If we would compete with them successfully over the long pull, we shall need to achieve a high degree of price stability by means that are consistent with our traditions and values.

A third cost of inflation that we can ill afford is the compromise it could impose on our pursuit of full production and full employment. If cost and price pressures should arise through the exercise of market power while the economy is still climbing toward high output and employment levels, we would be forced once more into the dreary calculus of the appropriate trade-off between "acceptable" additional unemployment and "acceptable" inflation. This could result in a serious setback to attainment of our national goals.

The choice for key private decision makers is clear. It is a particularly critical choice as the economy, after 6 years of excessive slack and unemployment, progresses toward full employment after enactment of the tax cut. For several years now many observers, including many leaders of the business and labor communities, have been saying that we have solved the cost-push inflation problem that appeared in the mid-fifties to have become endemic. This hopeful appraisal could not be demonstrated conclusively in a period when unemployment averaged 6 percent. But, given a combination of private and public efforts, we will have the opportunity to prove it in 1964 and later years.

GOVERNMENT ACTIONS

For its part, the Government will be striving energetically to reinforce one of the most significant comparative advantages that the American economy has over nearly all other industrialized nations—namely, a tradition and an institutional structure that nurture vigorous internal competition.

In the period ahead the Administration plans actively to enforce the Nation's antitrust laws, in part choosing its cases and concentrating its enforcement energies so as to curb price-fixing and those proposed mergers and other business practices and structures that tend to make for anticompetitive enhancement of prices. Likewise, it will resist proposals—such as the revival of resale price maintenance now before the Congress in the so-called Quality

Stabilization Bill—that would inhibit price competition and reduce the competitive vitality of our marketing system. In its efforts to promote freer international trade the Government typically is not unmindful of the effects that import competition has on domestic American pricing practices. And it will continue to promote and encourage vigorous price competition by United States exporters.

At the same time, existing, expanding, and new labor market programs, already enacted by the Congress or proposed by the Administration, will help firms meet their labor needs without raising costs and prices. These programs will increase labor mobility, provide opportunities for training and retraining, and improve education at all levels.

The Government also will be making a determined and continuing effort, as was pointed out in Chapter 3, to promote what are by all odds the best anti-inflationary measures of all—large and sustainable productivity improvements, which allow both wages and profits to increase with stable prices. The pending tax bill will have a major effect of this kind through its lasting stimulus to investment.

Finally, as the economy's single largest buyer of goods and services, the Federal Government will redouble its efforts in 1964 to get full value for each dollar it spends.

PRIVATE DECISIONS AND THE PRICE-WAGE GUIDEPOSTS

Government policies can only provide an environment conducive to responsible private price and wage decision making. By choice, our Government can advise, inform, and bring to bear the pressure of public opinion—but it cannot direct.

With so much at stake, however, the Government's opportunity to advise and inform the public is one it must seize. In the Kennedy Administration, general advice as to the pattern of private price-wage decision making that would take account of the public's interest in avoiding market-power inflation was first formally set forth in the Economic Report of January 1962. The "guideposts" therein described—and repeated in the 1963 Report—offered standards by which union and business leaders themselves—along with the general public—could appraise particular wage and price decisions. They are restated here.

The guideposts contain two key propositions. The first—the general guidepost for wages—says that, in a particular firm or industry, the appropriate noninflationary standard for annual percentage increases in total employee compensation per man-hour (not just in straight-time hourly rates) is the annual increase in *national trend* output per man-hour. The standard is not the productivity trend in the particular firm or industry in question. Nor is it the particular year's productivity change, which can be influenced by short-run transitory factors.

The general guidepost for prices specifies that when an industry's trend productivity is growing less rapidly than the national trend, prices

can appropriately rise enough to accommodate the labor cost increases indicated by the general wage guidepost. Similarly, in an industry whose trend productivity is growing more rapidly than the national average, product prices should be lowered enough to distribute to the industry's customers the labor-cost savings it would make under the general wage guidepost.

It should be emphasized that the general price guidepost does not counsel against price changes per se in a particular firm or industry. On the contrary, it contemplates changes in specific prices—downward in industries with high rates of productivity gain, as well as upward in industries with lower-than-average productivity gains.

Adherence to these general guideposts not only would make for over-all price stability but would be generally consistent with the tendencies of competitive labor and product markets. The principles established by the guideposts do not imply that the entire gains from productivity improvement should go either to labor or to capital. Rather, they suggest a proportionate sharing of average national productivity gains among labor, capital, and the other related factors of production throughout the economy.

The general guideposts can cover the vast majority of wage and price decisions, but cannot provide for all of the adjustments the economy requires, especially over an extended period. Hence, the guideposts, as originally expounded in 1962, appropriately included a set of exceptions that reflected certain considerations of equity and resource allocation.

On the wage side, it was suggested that exceptions might be made to adjust for labor supply conditions and for wages that are exceptionally high or low compared with the average for comparable work. Price exceptions took into consideration capital requirements, nonlabor costs, and profits based on excessive market power.

The original formulation of the guideposts in the January 1962 Report of the Council of Economic Advisers also noted that “. . . Although output per man-hour rises mainly in response to improvements in the quantity and quality of capital goods with which employees are equipped, employees are often able to improve their performance by means within their own control. It is obviously in the public interest that incentives be preserved which would reward employees for such efforts.”

These modifications of the general guideposts still apply, but it must be emphasized that they are intended to apply to only a relatively few cases. Particularly at a time when our national capabilities for responsible price and wage making may undergo a more serious test than in recent years, the most constructive private policy in the great majority of situations would be to arrive at price decisions and wage bargains consistent with the general guideposts.

Two other comments on the guideposts seem appropriate this year. First, it is not the purpose of these advisory policies permanently to freeze the labor and nonlabor shares of total industrial income, as would a rigorous, unrelieved application of the general guideposts. The 1962 Report noted

that "The proportions in which labor and nonlabor income shares the product of industry have not been immutable throughout history . . ." It went on to point out that bargaining over the shares is consistent with the guideposts if it is conducted "within the bounds of noninflationary price behavior." Specifically, this means that it is consistent with the guideposts for wage and profit shares to be bid up or down in a particular industry *so long as price behavior in that industry remains consistent with the general price guidepost indicated above.*

Second, it is appropriate to focus special attention this year on *price reductions*. The guideposts call for reductions in those industries whose trend productivity gains exceed the national trend. It is fair to say that large industrial enterprises thus far have not widely heeded this advice. And yet, as noted earlier, there will be ample room for such price reductions in 1964. If they are not forthcoming, over-all price stability will be rendered more difficult, since price increases are likely in industries that are progressing at a less-than-average rate. Moreover, in industries whose trend of productivity rises faster than the national average, if wages conform more nearly to national than to industry productivity trends (as the guideposts would have them do), failure to follow the general price guide will cause profits to pile up. Such profits become highly visible to the public and constitute a lure for strongly intensified wage demands.

Such circumstances pose a most unattractive dilemma from the viewpoint of the public interest. On the one hand, extra increases in wages or fringe benefits might tend to spread to other industries, creating a general cost-push from the wage side. On the other hand, there is no justification, on either economic or equity grounds, for distributing above-average gains in productivity exclusively through the profits channel. The real way out of this dilemma is for the firms involved to remove its cause by reducing prices.

CONCLUSION

In 1964, a year of still ample unused resources and a year in which both after-tax profits and labor incomes promise to rise substantially, there is no occasion for actions that result in substantial price increases. The public, quite properly, will be intolerant of any major businesses or unions whose short-sighted actions tend to set inflation in motion. To discharge its own responsibility, the Administration is taking steps to follow emerging price and wage developments with great care and to assemble data that will illuminate the price- and wage-making situations in particular industries. It will not hesitate to call public attention to major private decisions—by either business or labor—that seriously overstep noninflationary price and wage standards.

Certainly it is reasonable to hope, however, that such instances will be rare and that 1964 will be recorded as another year when American private price and wage makers demonstrated their capacity for responsible action.

Chapter 5

The Balance of Payments and the International Monetary System

THE UNITED STATES occupies a unique position in the world economy. It provides the largest national source of exports, the largest market for imports, and the largest source of savings for investment abroad. It undertakes substantial military expenditures abroad and has a large foreign aid program. Its currency, the dollar, is widely used as a means of exchange—in transactions among foreign countries as well as with the United States—and as a store of value in foreign private balances and official monetary reserves. As a consequence, U.S. economic policy, at home and abroad, has special importance to the rest of the world.

The diverse international transactions of the United States—as trader, as investor, and as banker—are summarized in the U.S. balance-of-payments accounts. In recent years, the U.S. accounts have shown an undesirably large deficit, while other countries—especially in Continental Western Europe—have had undesirably large surpluses. The first part of this chapter reviews recent developments in the U.S. balance of payments and discusses the policies—notably those included in President Kennedy's July message—that have been adopted and have begun to improve our international financial position.

A declining U.S. payments deficit will affect the functioning of the international monetary system, since this deficit has been a major source of growth in world monetary reserves. Moreover, the large volume of outstanding short-term liabilities to foreigners, if combined with continued large U.S. deficits, could raise questions about the effective working and continued stability of the system. To examine this and related long-term questions, the leading industrial countries have undertaken a study of the international monetary system. The problems with which that study is concerned are discussed in the second part of this chapter.

THE BALANCE OF PAYMENTS: DEVELOPMENTS, POLICIES, AND OUTLOOK

Between 1950 and 1957, the United States sold \$2½ billion of gold and incurred \$8½ billion in liquid liabilities to foreigners. These transfers of gold and dollars, through payments deficits averaging \$1.3 billion a year, made a welcome contribution to replenishing the international monetary reserves of other countries. Since 1957, however, the annual deficits, before taking into account special governmental transactions, have been in the range of \$3 to \$4 billion, and the additions to the dollar reserves of some surplus countries in Western Europe have tended to exceed the amounts that those countries regard as necessary or desirable. In the 6 years since 1957, U.S. gold sales have amounted to about \$7½ billion—of which \$5 billion occurred during the 3 years, 1958–60—and liquid dollar liabilities to foreigners have increased about \$8½ billion.

In these circumstances the United States has adopted policies designed to bring its external accounts into equilibrium, to minimize its loss of gold, and to protect the dollar from possible speculative attack. At the same time domestic policies designed to achieve high employment and more rapid economic growth have been framed with a view to reinforcing the specific balance-of-payments measures.

THE NATURE OF THE BALANCE-OF-PAYMENTS PROBLEM

The U.S. balance-of-payments problem does not reflect any over-all tendency for the United States to “live beyond its means.” Americans collectively do not spend more than their real incomes permit and therefore do not absorb goods and services, on balance, from the rest of the world. On the contrary, the United States earns a large surplus on commercial account—that is, its exports of goods and services exceed its imports. The deficit in its external accounts arises from the fact that the United States transfers abroad—through military expenditures, foreign assistance, and private capital movements—a sum of dollars larger than the surplus on goods and services. This excess of dollar payments measures the “deficit on regular transactions.” In recent years, as discussed below, the transfer of gold and liquid dollar balances abroad has been less than the deficit on regular transactions, as the result of a number of special transactions undertaken in cooperation with European surplus countries.

The United States deficit does not reflect a reduction in net worth in relation to the rest of the world. In fact, U.S. assets abroad—in the form of private equity investment, short- and long-term credits, and government loans—have in general been increasing faster than U.S. liabilities. The U.S. deficit does reflect a loss of liquidity in the form of a reduction in gold reserves and a build-up of liquid liabilities to foreigners. This way of characterizing the imbalance in the U.S. payments position does not lessen the urgency of correcting it.

As it takes steps to restore equilibrium in its external accounts, the United States must perforce be conscious of these major considerations:

1. Its actions to correct the balance-of-payments problem need to be consistent with its domestic objectives; a healthy domestic economy is important not only to Americans but also to the rest of the world.

2. The United States carries heavy responsibilities for the military security and the economic development of the countries of the free world. These responsibilities should not be compromised by measures taken to improve our payments position.

3. In adopting measures to cope with the balance of payments, the United States should avoid any lapse in the effort, in which other free world countries join, to reduce barriers to international transactions.

4. Finally, in formulating policies it must recognize that the several components of its balance of payments are interrelated. For example, a reduction in capital outflows or foreign aid would reduce the deficit only to the extent that it did not also cause a fall in exports. Similarly, a reduction (or slower increase) in imports would improve our payments position only to the extent that it did not cause other countries to buy less from us.

RECENT DEVELOPMENTS IN THE BALANCE OF PAYMENTS

Trade, services, and Government items. In recent years the surplus on commercial goods and services (Table 23, lines 1-6) has shown a gradual upward trend if allowance is made for the temporary bulge in this surplus in 1961, when cyclical factors dampened the U.S. demand for imports. Commercial exports have risen at a moderate but fairly steady pace as rapid economic growth in Western Europe and Japan has provided expanding markets, and our prices have remained relatively stable. At the same time, dividends and interest on our investments and loans abroad have been a large and growing element in our surplus on goods and services.

Net U.S. military expenditures abroad, although large, have steadily declined (line 9). The Department of Defense has increased its procurement in the United States of supplies for use abroad, despite the frequently higher cost of such procurement. In addition, some U.S. allies have agreed to purchase military supplies from the United States, offsetting all or part of U.S. dollar defense outlays within their borders.

The gross amount of U.S. Government economic aid programs has continued to be sizable, but the dollar payments to foreigners and international institutions (line 10) resulting from these programs have been maintained at a much lower level. More than two-thirds of current outlays under the aid program of the Agency for International Development (AID) directly finance U.S. exports and thus result in no direct dollar outflows. This proportion is over 80 percent on new commitments. Export programs administered by the Department of Agriculture and loans by the Export-Import Bank involve no direct dollar outflow abroad.

TABLE 23.—United States balance of payments, 1958–63¹

[Billions of dollars]

Line	Type of transaction	1958–60 average	1961	1962	1963		
					I	II	III
					Seasonally adjusted annual rates		
	<i>Regular transactions:</i>						
1	Balance on commercial goods and services ²	2.7	5.3	4.3	4.0	3.9	4.5
2	Balance on commercial goods.....	1.1	3.2	2.0	1.6	2.0	2.1
3	Commercial exports of goods ³	15.5	17.7	18.1	17.6	18.7	19.7
4	Commercial imports of goods.....	-14.3	-14.5	-16.1	-16.0	-16.7	-17.6
5	Investment income, net.....	2.2	3.0	3.3	3.6	3.2	3.3
6	Other commercial services, net ⁴	-.6	-.9	-1.0	-1.2	-1.3	-.9
7	Remittances and pensions.....	-.7	-.7	-.7	-.8	-.8	-.8
8	Government items, net.....	-3.3	-3.1	-3.0	-2.9	-2.7	-2.2
9	Military expenditures, net ⁵	-2.9	-2.5	-2.4	-2.3	-2.1	-2.1
10	Dollar payments to foreign countries and international institutions arising from Government grants and capital ⁶	-1.0	-1.1	-1.1	-1.0	-1.1	-.7
11	Government grants and capital, net.....	-3.2	-4.1	-4.3	-4.2	-5.4	-3.9
12	Exports of goods and services financed by Government grants and capital.....	2.2	2.7	2.9	3.0	4.0	2.9
13	Scheduled repayments on U.S. Gov- ernment loans.....	.6	.6	.6	.6	.6	.7
14	Private long-term capital, net.....	-2.1	-2.1	-2.5	-4.1	-3.6	-1.9
15	U.S. direct investment.....	-1.4	-1.6	-1.6	-2.0	-2.0	-1.1
16	Foreign long-term capital, net.....	.4	.5	.3		.8	.3
17	New issues of foreign securities.....	-.7	-.5	-1.1	-2.0	-2.1	-.7
18	Transactions in outstanding securi- ties, net.....	-.4	-.4	-.1	-.2	-.3	.2
19	Other ⁶	-.1	-.1	-.1	(*)	-.3	-.5
20	Short-term private capital, net.....	-.6	-1.5	-.7	.3	-2.4	.1
21	Unrecorded transactions.....	.1	-.9	-1.0	-.5	.6	-1.3
22	Balance on regular transactions.....	-3.9	-3.0	-3.6	-3.9	-5.0	-1.6
23	Special government transactions.....	.2	.7	1.4	1.8	.7	1.3
24	Nonscheduled repayments of debt and advances on military exports.....	.2	.7	1.1	.2	.1	1.0
25	Sale of special nonmarketable noncon- vertible securities.....			.3	.3		-.4
26	Sale of special nonmarketable convert- ible securities.....				1.4	.6	.7
27	Balance after special Government transactions except convertible securities.....	-3.7	-2.4	-2.2	-3.5	-5.0	-1.0
28	Balance after all special Government trans- actions.....	-3.7	-2.4	-2.2	-2.1	-4.3	-.3
29	Balance after all special Government trans- actions (not seasonally adjusted).....	-3.7	-2.4	-2.2	-2.8	-4.7	-2.4
30	Gold and convertible currencies.....	-1.6	-.7	-.9	-.3	-.5	-.7
31	Liquid liabilities to official and inter- national holders.....		{ -.5	-1.1	-.9	-3.6	-1.5
32	Liquid liabilities to others.....	-2.1	{ -1.1	-.2	-1.6	-.6	-.2

¹ Excludes military transfers under grants.² Excludes exports financed by Government grants and capital shown in line 12.³ Military expenditures abroad less military sales.⁴ The total includes lines 11 and 12, and a few other small balancing items.⁵ Redemptions, and other long-term items.⁶ Less than \$500 million.

NOTE.—Detail will not necessarily add to totals because of rounding.

Source: Department of Commerce.

Private capital movements. A large outflow of private long-term capital has been an important element in the balance-of-payments deficit (line 14). In the earlier postwar years, through 1955, these long-term outflows fluctuated below \$1 billion a year. Between 1956 and 1962 they ranged above \$1.6 billion but exceeded \$2.6 billion only in 1957. In the first half of 1963, however, the long-term capital flow swelled to an annual rate of nearly \$4 billion.

The upward shift in capital outflows in the mid-fifties was accounted for primarily by U.S. direct investment in countries producing raw materials. More recently, about half of U.S. direct investment has been in Western Europe, in part because American firms have acquired production and trading facilities in the Common Market countries.

Portfolio investment abroad, which had also increased after the mid-1950's, began to surge higher in late 1962. As Table 24 shows, net purchases of new foreign securities by Americans increased from \$523 million in 1961 to a seasonally adjusted annual rate of \$1.9 billion in the first half of 1963. New issues of Canadian securities in the U.S. market accounted for much of the increased long-term capital outflow in the first half of 1963. But evidence was accumulating that a striking acceleration of European and Japanese borrowing was under way.

TABLE 24.—*United States private portfolio investment abroad, 1960–63*

[Millions of dollars]

Type and country of purchase	1960	1961	1962	1963		
				I	II	III
				Seasonally adjusted annual rates		
Purchases of foreign securities.....	750	876	1,131	2,092	2,200	648
New securities.....	573	523	1,076	1,900	1,944	852
Outstanding securities, net.....	177	353	55	192	256	—204
				Unadjusted annual rates		
Purchases of foreign securities.....	750	876	1,331	2,246	2,238	512
Western Europe.....	133	266	195	336	776	68
Japan.....	(1)	79	124	188	320	228
Canada.....	241	327	379	1,328	1,044	204
Other.....	(1)	204	433	364	188	12

¹ Not available.

Source: Department of Commerce.

An increasing number of foreign borrowers had been taking advantage of the relatively low long-term interest rates, the efficient flotation facilities, and the ready availability of capital in our markets. At the same time American underwriters and investors had become increasingly willing to lend abroad. Canadian borrowers have used the U.S. market for a long time, but European and Japanese borrowers have recently found more

ready acceptance. In many instances these borrowings were not related to any financing of imports from the United States nor even to any particular need for foreign exchange. For example, the proceeds of some substantial dollar bond issues have been used to finance the purchase of already existing domestic facilities in the borrowing countries.

Private short-term capital flows (Table 23, line 20) have been more erratic in their effect on the payments balance. They increased abruptly in the latter half of 1960, and, though the flow decreased thereafter, it remained large in 1961 and rose again in the second quarter of 1963. A substantial part of the recorded outflow in 1960 was a movement of funds into higher-yielding short-term investments abroad. Since that time, monetary policy and debt management actions have been used to influence the level of short-term rates in the United States in order to bring yields on short-term assets here into closer alignment with those abroad.

U.S. bank loans and acceptance credits to foreigners appear to explain a greater proportion of changes in total recorded short-term flows than do movements of funds into and out of liquid assets abroad. In particular, acceptance credits to Japan were large in 1960 and 1961. After the first quarter of 1962 short-term credits to foreigners by U.S. banks remained at a moderate level until the spring of 1963, when Japan again borrowed heavily. At that time there was also a renewal of the flow of U.S. funds into money market assets and bank deposits abroad.

Unrecorded transactions (line 21)—thought to contain a large element of short-term capital—also contributed to a sizable outflow in 1961 and 1962, but moved in opposite directions to the recorded short-term flows in 1963.

The deficit before and after special transactions. The net outcome of the flows of funds related to exports, imports, Government outlays, and private capital movements was a deficit on regular transactions ranging between \$3 and \$4 billion in recent years. This deficit contracted temporarily in 1961, owing to cyclical factors, and increased again in late 1962. In the first half of 1963, as the result mainly of private capital outflows, the deficit increased sharply, to \$3.9 billion in the first quarter and \$5.0 billion in the second quarter, at seasonally adjusted annual rates.

The "balance on regular transactions" measures the outcome of our external transactions before taking account of special governmental transactions with some of the surplus countries. These special transactions have included prepayments on Marshall Plan and Export-Import Bank loans and advance payments by our allies for future delivery of military items. Beginning in the fourth quarter of 1962, the Treasury arranged to sell special nonmarketable, medium-term securities to foreign monetary authorities. Some of these securities are denominated in dollars, but most of them are denominated in the currency of the purchasing country. More recently, a convertibility feature was added, so that the foreign monetary authority may redeem them for short-term claims prior to their stated maturity. This pro-

vision was intended to satisfy legal and traditional requirements governing the liquidity of the instruments that certain foreign central banks may hold as a component of their monetary reserves. The official balance-of-payments statistics of the United States now present the balance-of-payments position before and after inclusion of these special transactions (lines 22-29).

POLICIES TO IMPROVE THE BALANCE OF PAYMENTS

President Kennedy's balance-of-payments message in July announced certain new policies together with an intensification of other policies that had constituted the earlier balance-of-payments program of the United States.

The program before 1963. The Federal Government has given first priority to reducing its own direct contribution to the deficit. Thus efforts have been made to reduce and offset military outlays abroad, to minimize the dollar drain associated with aid programs, and in general to scrutinize all Federal transactions affecting the balance of payments.

The effort to improve the commercial balance on goods and services has included export promotion measures and a new program of export credit insurance and guarantees. The wage-price policies described in the previous chapter—desirable in any event for domestic reasons—have taken on additional urgency because of the necessity to maintain and improve the U.S. competitive position both at home and in other markets.

The Revenue Act of 1962 removed artificial tax inducements to investment in developed countries by effectively neutralizing the so-called "tax haven" form of operation.

The Federal Reserve and the Treasury have for some time been working to maintain a level of short-term interest rates high enough to discourage outflows of short-term capital while, at the same time, encouraging domestic credit availability and a level of long-term interest rates conducive to economic expansion.

These measures to reduce the deficit were complemented by a series of other arrangements designed to prevent or correct temporary disturbances in foreign exchange markets, as described in the second part of this chapter. These arrangements have been extremely helpful in stopping or smoothing the effects of sudden and presumably reversible flows of funds, and in cushioning the impact of such potentially unsettling developments as the Berlin crisis, the revaluation of the mark and guilder in 1961, the stockmarket break of 1962, the Cuban crisis, and the assassination of President Kennedy.

Special government transactions and intergovernmental cooperation in stabilizing foreign exchange and gold markets have, in addition to their other benefits, provided major assistance in reducing incentives for the conversion of foreign-held dollar liabilities into gold. The gold outflow during the past three years has been cut to somewhat less than half of its total in the preceding three years.

Progress made in reducing the U.S. deficit during 1961 and the first half of 1962 aroused hopes that the U.S. payments problem was on its way toward solution. But the worsening of the deficit at the end of 1962 and the subsequent further deterioration during the first half of 1963—mainly as a result of enlarged short- and long-term capital outflows—interrupted this progress and indicated that further actions were necessary.

The President's July balance-of-payments program. After intensive discussion within the Government, a series of new and expanded measures was taken in July to deal with the balance-of-payments problem.

On July 16 the Federal Reserve announced an increase in the discount rate from 3 to 3½ percent. The Federal Reserve also raised interest rate ceilings on time deposits payable in 90 days to 1 year, as did the Federal Deposit Insurance Corporation, thus enabling U.S. commercial banks to compete more effectively with foreign banks for funds that might otherwise be placed abroad.

On July 18 President Kennedy sent to the Congress a special message that announced a program of companion measures. These included:

1. A proposal for the enactment of an Interest Equalization Tax (IET) to be made generally effective as of the day following the message. This measure, an excise tax on American purchases of new or outstanding foreign stocks and bonds, was designed to impose on foreign sellers the equivalent of 1 percentage point of additional interest cost.

2. Further "tying" of foreign aid to U.S. exports to reduce the dollar outflow directly attributable to the program of the AID to \$500 million by fiscal year 1965 (from \$1 billion in fiscal 1961).

3. Important further reductions in overseas military expenditures to reduce the dollar drain on this account by approximately \$300 million.

4. A further reduction of \$200 million in purchases of strategic materials abroad and another \$100 million in other Government programs.

5. An intensified effort to expand exports, a "See America Now" program to encourage both Americans and foreigners to travel in this country, and a new effort to encourage foreigners to buy U.S. private securities.

6. An additional measure, designed not to reduce the deficit but to lessen foreign purchases of gold and to strengthen the dollar in foreign exchange markets, was a \$500 million U.S. stand-by drawing, or line of credit, from the International Monetary Fund (IMF). This became desirable because, under its rules, the IMF could no longer accept additional dollars from countries other than the United States. Thus other countries that wished to use some of their current dollar holdings for making repayments to the Fund were about to be forced, instead, either to buy gold from the United States or to sell dollars for other currencies in the foreign exchange markets in order to get means of repayment acceptable to the Fund. With the stand-by arrangement, the United States is in a position to draw other currencies, which it can sell, for dollars, to the countries needing them for repayment. This stand-by arrangement also has broader significance as

a visible indication that the United States is prepared to make appropriate use of the resources of the Fund.

The President emphasized in his message that this series of immediate and specialized efforts, which would reduce the deficit by about \$2 billion when fully effective, would provide the time needed for achievement of the basic long-term program of improving the U.S. competitive position and increasing the attractiveness of investment in the United States. The tax reduction bill and continuation of price-cost stability were essential aspects of the long-term program.

Meanwhile the immediate steps taken in July were designed to be consistent with acceleration of domestic economic expansion. Thus increases in interest rates were to be confined largely to the short-term sector of the market, while the proposed IET would raise the cost of capital to foreign borrowers without increasing the domestic cost of long-term funds.

Achievement of equilibrium through expanding exports and increasing incentives for capital to remain at home will permit the United States gradually to remove the temporary measures it has been forced to apply in the past few years. The goal of the United States is to be able to untie its aid program, just as it now urges other countries with payments surpluses to untie theirs. The IET was proposed to retard temporarily, not permanently, the outflow of U.S. capital. The stiffer "Buy American" policies for U.S. procurement—adopted for balance-of-payments reasons—can be relaxed when equilibrium is restored.

Developments subsequent to the July program. The balance-of-payments deficit on regular transactions dropped from a seasonally adjusted annual rate of \$5.0 billion in the second quarter to \$1.6 billion in the third quarter—a reduction of about two-thirds—while the balance after special government transactions was even lower as a result mainly of advance debt repayments by France and the Netherlands.

It is, of course, too early to be able to evaluate the full effects of the July measures, but they clearly played a major role in this marked improvement. There was a substantial reduction in the third quarter in the outflow of U.S. portfolio capital, mainly in purchases of new issues of foreign securities. Virtually the only new foreign securities sold in the United States in the third quarter were those arranged for prior to July 18 and hence not affected by the tax proposal.

The proposed IET legislation would not apply to borrowers in less developed countries and would allow limited or full exemption of new issues of particular countries if necessary to avoid imperiling the stability of the international monetary system. The Administration has announced its intention of allowing a new-issue exemption for Canada and believes that this can be done without adverse effects on the United States. In connection with this exemption, Canadian authorities have agreed that it is not the intention of Canada to increase foreign exchange reserves

through the proceeds of borrowing in the United States, with the implication that borrowing would be restored to the more normal levels of earlier years.

Following passage of the proposed IET, some portfolio capital will continue to flow abroad, both to exempt nations and to borrowers willing to bear the tax. But total outflows are likely to continue to be sharply curtailed. The President's message anticipated that this tax would remain in effect only through 1965, when improvement in the U.S. balance of payments and a strengthening and freeing of the capital markets of other major countries are expected to permit its abandonment.

A reversal in recorded short-term capital flows also contributed to the substantial reduction in the payments deficit in the third quarter. In part, the shift reflected a cessation of the heavy lending in the form of bank loans and acceptance credits that had occurred in the preceding quarter. But following the increase in short-term interest rates—rates on 3-month Treasury bills rose from 2.99 percent on the average in June to 3.38 percent in September—there was a net movement of short-term funds back to the United States as reported by both banks and nonfinancial concerns.

At the same time, the balance on commercial goods and services also continued to improve and contributed to the reduction in the deficit on regular transactions.

Preliminary information concerning the fourth quarter indicates that the deficit on regular transactions may have turned out to be of about the same order of magnitude as in the third quarter.

THE OUTLOOK FOR THE BALANCE OF PAYMENTS

The U.S. payments position can be expected to benefit from the proposed general reduction of individual and corporate income taxes, as from the effects of the investment tax credit in the Revenue Act of 1962 and the depreciation changes of that year. Although accelerated economic expansion in the United States will bring a faster rise of imports, an offsetting beneficial effect on capital flows and favorable effects on productivity and the competitiveness of U.S. exports may also be expected. Improved profit opportunities resulting from a more vigorous economy and fuller use of capacity should reduce the net outflow of capital by encouraging domestic investment by Americans and by attracting more foreign capital to the United States. While corporations will have an enlarged volume of retained earnings, they will be confronted with an even greater increase in profitable domestic uses for funds.

Success in bringing U.S. external payments into equilibrium will also depend, however, on developments and policies abroad. Not only will sustained economic expansion in the leading industrial countries benefit their own citizens and the economies of the less developed countries, but also it is important for the continuing expansion of U.S. exports.

The Brookings report. In the spring of 1962 a group of economists at the Brookings Institution undertook a comprehensive study, *The U.S. Balance of Payments in 1968*, at the request of the Council of Economic Ad-

visers, the Treasury, and the Bureau of the Budget. The authors were asked to assess the effects on the U.S. balance of payments of a sustained expansion of the U.S. economy which, after the unemployment rate was reduced to 4 percent, would proceed at an annual rate of 4 percent and later accelerate to 4½ percent a year. The Council provided the Brookings group with a set of initial assumptions regarding growth and prices in the United States and with guidance concerning the assumptions about Western Europe. The group also calculated projections based on alternative assumptions of its own.

The Brookings group analyzed the relationships of changes in imports and exports to expansion in GNP, given assumptions about costs and prices. From these analyses, projections were derived of the U.S. "basic balance," i.e., the balance on goods and services, government items, and long-term capital (and exclusive of short-term capital flows, unrecorded transactions, and special government transactions) in 1968. These projections indicated that the United States in 1968 would have a "basic" surplus (\$1.9 billion) on the initial assumptions, or a modest deficit (\$600 million) on the alternative assumptions, compared with the basic deficit of \$2.1 billion in 1962.

A principal factor in the projected improvement in the U.S. payments balance was the assumption that the United States would be better able to maintain internal cost and price stability than the countries of Europe, where slower growth of a fully employed labor force was expected to result in greater upward pressure on money wage rates.

As the previous chapter has indicated, the recent cost and price record of the United States is quite good: wholesale prices have not increased since 1958, and this has undoubtedly helped to maintain our export surplus during the current expansion period despite a cyclical increase in imports. However, the United States must continue to maintain price stability and to pursue other measures directed at improving the balance of payments.

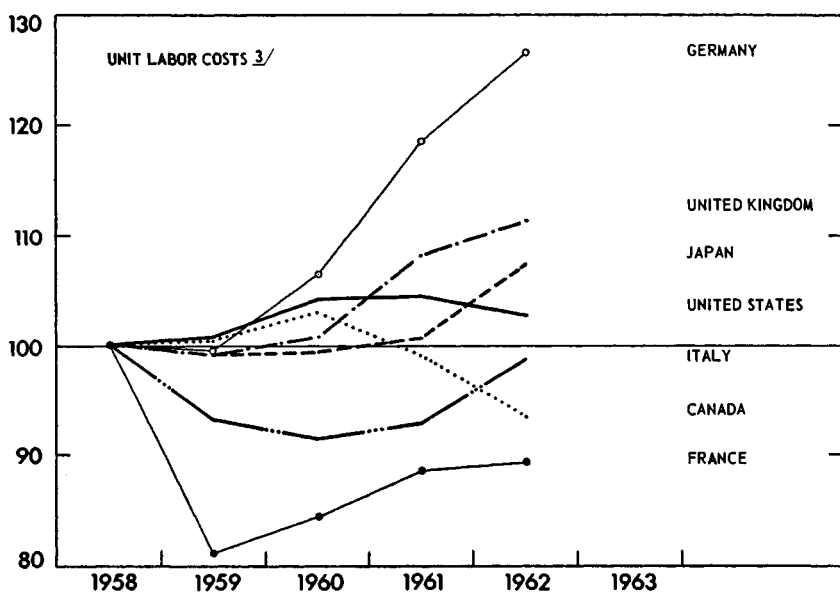
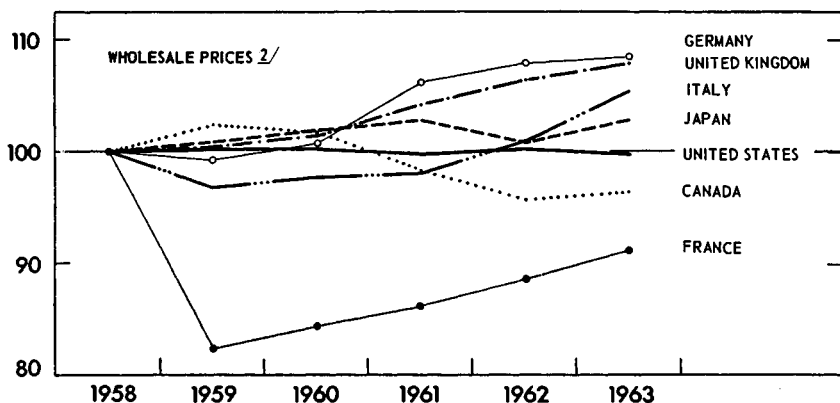
Prices and costs in the United States and abroad. The international competitive position of any country is determined by many factors besides the movement of its prices relative to prices in other countries. But relative prices are, of course, an important influence. Chart 12 presents the movements of prices and unit labor costs for a number of industrial countries, after allowing for adjustments in exchange rates. The first panel shows that while the average of U.S. wholesale prices remained stable between 1958 and 1963, French and Canadian prices, expressed in U.S. dollars, were lower in 1963 than in 1958 (both countries having undertaken exchange rate depreciations in the period). But prices in all the other countries were higher (in the case of Germany, reflecting, in part, the exchange rate appreciation of 1961).

The picture presented by relative changes in wholesale prices is supplemented in the lower panel by a comparison of movements in labor costs per unit of output in manufacturing (again adjusted for exchange rate varia-

Chart 12

Comparative Prices and Unit Labor Costs SEVEN INDUSTRIAL COUNTRIES^{1/}

INDEX, 1958 = 100



^{1/}ADJUSTED FOR EXCHANGE RATE VARIATIONS: FRANCE (1958), GERMANY (1959), AND CANADA.

^{2/}PRODUCER PRICES FOR INDUSTRIAL PRODUCTS IN UNITED KINGDOM.

^{3/}RATIO OF WAGES, SALARIES, AND SUPPLEMENTS TO PRODUCTION. ESTIMATES FOR UNITED STATES BY COUNCIL OF ECONOMIC ADVISERS AND FOR OTHER COUNTRIES BY DEPARTMENT OF LABOR (TO BE PUBLISHED IN THE FORTHCOMING REPORT "UNIT LABOR COSTS IN MANUFACTURING"). DATA RELATE TO WAGE EARNERS IN FRANCE AND ITALY AND TO ALL EMPLOYEES IN OTHER COUNTRIES.

SOURCES: ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, DEPARTMENT OF LABOR, AND COUNCIL OF ECONOMIC ADVISERS.

tion). The 1962 positions of the several countries in the two rankings are almost identical.

Naturally, such over-all calculations obscure much relevant detail. Not all goods enter into foreign trade, and prices and costs of those important for trade may move quite differently from the over-all average (as shown in Table 21, Chapter 4). Yet prices and costs of domestically produced, import-competing commodities are likely to be closely related to the general indexes, and the competitive position of exports is unlikely to resist for very long the basic economic forces at work in any economy.

Policies to curb inflation abroad. As was pointed out in Chapter 4, European policies are being adapted to counteract upward price pressures. The United States has no reason to expect surplus countries to accept inflation, just as they have no reason to expect the United States to accept unemployment and unused capacity because of its payments deficit.

In dealing with these domestic problems, the countries of the Organization for Economic Cooperation and Development (OECD) have been striving to develop general principles of cooperative behavior for surplus and deficit countries, as described in the second part of this chapter. All countries should be aware of the undesirability of initiating a chain of competitive upward movements in interest rates such as would occur if surplus countries—in their efforts to stop advancing prices—took monetary actions that attracted large amounts of capital from deficit countries.

Trade policies. Relative costs and prices will play an even more significant role in the pattern of world commerce if negotiations under the Trade Expansion Act of 1962, now about to enter the formal stage, are successful in reducing tariffs and other barriers to trade. This is a major objective of U.S. policy for a host of reasons, both political and economic. One significant outcome of successful negotiations would be to prevent an increase in discrimination against both agricultural and nonagricultural imports by the European Economic Community as intra-Community trade barriers continue to come down.

More broadly, there is much to be gained, by both industrial and developing countries, from a progressive reduction not only in tariffs but in other barriers to international trade. The United States has a strong interest in a lowering of such barriers, quite apart from balance-of-payments considerations.

THE FUTURE OF THE INTERNATIONAL MONETARY SYSTEM

The leading industrial countries—known as the “Group of Ten”—agreed in October 1963 to undertake a study of the international monetary system—the set of mutual understandings, commitments, and institutional arrangements under which international trade and payments are now conducted. A communique was issued on October 2, 1963, by the Finance Ministers and Central Bank Governors of the 10 countries: Belgium, Canada, France,

Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. It stated in part:

In reviewing the longer-run prospects, the Ministers and Governors agreed that the underlying structure of the present monetary system—based on fixed exchange rates and the established price of gold—has proven its value as the foundation for present and future arrangements. It appeared to them, however, to be useful to undertake a thorough examination of the outlook for the functioning of the international monetary system and of its probable future needs for liquidity. This examination should be made with particular emphasis on the possible magnitude and nature of the future needs for reserves and for supplementary credit facilities which may arise within the framework of national economic policies effectively aiming at the objectives of [high levels of economic activity with a sustainable rate of economic growth and in a climate of price stability]. The studies should also appraise and evaluate various possibilities for covering such needs.

This examination, and a similar study by the International Monetary Fund, necessarily involves a careful appraisal of how well the existing system advances the basic economic objectives shared by the participating countries. How, and how effectively, do present arrangements operate to minimize imbalances in international payments and to finance those that inevitably arise? How resistant is the system to shocks arising from unexpected political or economic events? Can it support a steady increase in world trade and production? The Group of Ten and the IMF will attempt to answer questions like these and review various proposals for modifying the international monetary system.

It would be neither appropriate nor fruitful to try to anticipate here the outcome of the studies now under way. But this section of the Report does provide a background to these studies by (1) suggesting the basic economic objectives to be served by the international monetary system, (2) describing briefly the international monetary system as it evolved at Bretton Woods and has been strengthened more recently, (3) discussing some of the actual or potential shortcomings of the existing system, and (4) summarizing some of the proposals for its modification, ranging from a further strengthening of existing arrangements to a major overhaul.

These discussions in the Group of Ten will focus on relationships among the leading industrial countries. These are the countries that hold most of the world's reserves and whose payments problems can be serious enough to have a significant impact on the functioning of the whole international monetary machinery. But this does not mean that the rest of the world is unaffected by these monetary arrangements. On the contrary, the less developed countries have a vital stake in a monetary system that fosters steady growth in world trade and payments.

OBJECTIVES TO BE SERVED

A properly functioning international payments system, like any monetary or financial arrangement, must be judged by its contribution to the basic economic objectives shared by all countries. These include: (1) full

employment, (2) a satisfactory rate of economic growth, (3) mutually beneficial trade that reflects and contributes to efficient international allocation of resources through freedom of international transactions, and (4) reasonable stability of prices.

In a world economy where technology is advancing, living standards are rising, and tastes are subject to change—and from which the business cycle has not been banished—it is inevitable that the external accounts of individual countries will, from time to time, develop surpluses and deficits of varying size and duration. If the monetary reserves available to finance these imbalances are too small or the credit facilities too limited, deficit countries may have to adopt monetary, fiscal, and trade policies that depress economic activity both in their own economies and elsewhere. On the other hand, if the funds available to finance imbalances are too large, deficit countries may make excessive claims on, and may even impose inflationary pressures on, their trading partners—when, instead, they should be adopting policies to restore equilibrium in their payments balances.

Along with the inevitable swings in payments positions, there are occasional economic and political shocks to which the international system is subject. Unless it is able to adjust smoothly to such disturbances, the resulting instability in foreign exchange markets is likely to disrupt the normal flow of trade and payments.

What is sought ideally is an international monetary system that facilitates attainment of all the economic objectives listed above, imposing neither inflation nor deflation, encouraging freedom of international transactions, and not giving way to disruptive instability when subjected to shock. Discipline to correct imbalances, whether surpluses or deficits, is necessary; but that discipline should exert its influence toward adoption of policies that expand rather than restrict real income, emancipate rather than shackle international trade, encourage rather than impede the flow of productive capital.

THE PRESENT SYSTEM

Present international monetary arrangements have resulted partly from design and partly from the unplanned evolution of private and official practices in international trade and payments. The basic principles governing the existing international monetary system, laid down some 20 years ago at the Bretton Woods Conference, call for the elimination of direct controls over foreign exchange transactions and, consequently, free convertibility of one currency into another—at exchange rates that fluctuate not more than 1 percent in either direction from declared parities. These exchange-rate parities are subject to adjustment only at times of “fundamental disequilibrium” in the international payments positions of individual countries.

International reserves. Countries need international monetary reserves to support the market value of their currencies within 1 percent of parity. More broadly, they need reserves to meet possible shortfalls between

receipts and payments that may arise for a variety of reasons and may persist over periods ranging from one season to several years. These reserves are held in the form of gold and foreign exchange (other national currencies). Actually only two national currencies—the dollar and the pound sterling—serve to an important extent as monetary reserves for other countries. And of these two, in recent years the dollar has been the principal reserve currency.

A reserve currency country acts in effect as a banker to other countries. Foreign-held short-term claims denominated in dollars—liabilities of the United States Government or U.S. financial institutions—constitute international money. Dollars and sterling are used as an international medium of exchange—much of world trade is transacted in these currencies—and as a store of value for balances of foreign monetary authorities and foreign private institutions, businesses, and individuals.

In addition, the dollar plays a unique role as the currency unifying foreign exchange markets. Other countries, including the United Kingdom, maintain their exchange rates within 1 percent of their declared par values, as required by the Articles of Agreement of the International Monetary Fund, by buying or selling dollars in exchange for their own currencies. The United States, while it also chooses on occasion to buy and sell foreign currencies for this purpose, meets its basic commitment to maintain the value of the dollar in world markets by undertaking to buy gold from, or sell it to, foreign monetary authorities at a fixed price—\$35 an ounce.

The reserve currency system, linked to gold through the dollar, was not created by a specific agreement. Rather it evolved from the use first of sterling, then of the dollar as important trading currencies; as currencies in which short- and long-term loans could be arranged; and as universally acceptable currencies in which reserves could be safely, conveniently, and profitably invested by both private and official holders.

Its pre-eminence as an industrial country and the strength of its financial structure make the United States attractive to other countries as a place in which to hold liquid balances—and hence account for its role as banker to the rest of the world. But this country also engages in wide-ranging activities as a trader and investor and is responsible for much of the free world's economic and military assistance programs. Its transactions with the rest of the world represent a commingling of its trading, investing, and foreign assistance activities with its banking activities.

Just as the successful operation of a bank depends on the continuing confidence of depositors that their claims on the bank will be freely usable and will not lose their value, the viability of the present reserve currency system depends on the confidence of foreign holders, both official and private, that their dollar claims will not lose value for any type of use.

Everyone agrees that a bank must be subject to special limitations and disciplines for the protection of its depositors and, indeed, of the whole community. Similarly the system that makes the United States an interna-

tional bank imposes special responsibilities. Unless this country pursues policies that encourage confidence in the continued stability of the dollar, the entire international monetary system will become vulnerable to instability or even breakdown. This responsibility imposes limits on the policies, both domestic and international, that the United States, as a reserve currency country, may pursue. It is equally clear, however, that other countries, in their own self-interest, share this responsibility for maintaining a viable international payments system.

When the United States has a deficit in its balance of payments, the corresponding surpluses of other countries accrue largely in their official holdings of dollars—usually in the form of deposits in United States banks or holdings of United States Government securities. To the extent that other countries continue to hold these liquid dollar assets instead of using them to purchase gold from the United States, total world reserves are larger. If instead they buy gold, U.S. reserves go down by the amount that the reserves of others rise.

Just as a deficit in the United States balance of payments may expand world reserves, a surplus in its balance of payments may reduce them. This would happen to the extent that countries with deficits (corresponding to the U.S. surplus) financed them by drawing down their holdings of dollar assets. This would reduce their reserves without expanding those of the United States. If, on the other hand, deficit countries sold gold to the U.S., *total* world reserves would not be diminished, although there would, of course, be a shift of reserves from the rest of the world to this country. And, if we were to accumulate the currencies of deficit countries as part of our reserves, a U.S. surplus would not contract total world reserves, but rather would expand them. Such a development would, in effect, convert other currencies into a limited form of reserve currency.

It should also be noted that, under the existing system, the volume of world reserves can be affected by shifts in surpluses and deficits among other countries, even though the U.S. balance-of-payments position remains unchanged. Other countries hold differing proportions of gold and dollars in their official monetary reserves. If a country that holds a relatively high proportion of its reserves in dollars has a deficit and transfers dollars to a surplus country whose practice is to hold relatively fewer dollars and more gold, the second country is likely to use a good part of its dollar accruals to buy gold from the United States. The result is a reduction in world monetary reserves, for the United States loses gold without gaining other reserves and the total reserves of the rest of the world remain unchanged.

Role of the IMF. The International Monetary Fund stands at the center of the present international system as a source of financing for temporary balance-of-payments deficits and as an influence toward freer international transactions.

The Fund's resources are derived from subscriptions, equal in each case to the "quota" assigned to the member country. These subscriptions were paid, in most cases, one-fourth in gold and three-fourths in the member country's own currency. The total resources of the Fund amount to \$15.8 billion, including \$2.3 billion in gold, \$3.1 billion in dollars, and \$3.5 billion in the currencies of other members of the Group of Ten.

The amount that each member can borrow from the IMF is related to its quota, the first 25 percent of which (the so-called "gold tranche") can be used virtually on demand. Under present Fund policies, further borrowing is increasingly conditional upon adoption by the member country of policies to eliminate the causes of the deficit. The total amount of Fund drawings that can be outstanding at any one time is considerably less than the total of its resources. This is so because, if the IMF is to make a net contribution to financing imbalances, the funds it makes available must ordinarily be in the currencies of surplus countries. As a supplement to the Fund's regular resources, there is a special arrangement under which the Group of Ten countries, including the United States, have agreed to lend up to \$6 billion of added resources to the Fund in case of need.

Additional bulwarks. The reserve currency system has been buttressed in other ways in recent years. These arrangements, like the special IMF borrowing agreement, represent cooperative action by governments and central banks to make the system less vulnerable to instability resulting from speculative activity in foreign exchange and gold markets.

Central banks of many of the leading industrial countries have cooperated with the Federal Reserve System in the past 3 years in developing currency "swap arrangements," which provide for reciprocal deposit balances to be drawn as needed to help stabilize foreign exchange markets. The U.S. Treasury, also in cooperation with foreign monetary authorities, has engaged in both spot and forward exchange operations for the same purposes. An informal pooling arrangement has succeeded in reducing the destabilizing effect of speculative activity in the London gold market. A number of the central banks that are members of the Bank for International Settlements have entered into special ad hoc lending arrangements to help each other at times of special need.

As was mentioned earlier, cooperation has likewise been strongly evident in the willingness of various European surplus countries to prepay debts to the United States, to purchase and make advance payments for military supplies, and to buy special nonmarketable, medium-term securities from the U.S. Treasury.

ACTUAL OR POTENTIAL SHORTCOMINGS OF THE SYSTEM

Within the framework described above, the world economy has enjoyed impressive growth in the postwar era, and international trade has flourished. Nevertheless, private and official observers of the international mone-

tary system have raised questions concerning: (1) the weaknesses in the existing adjustment process for restoring balance-of-payments equilibrium, (2) the potential instability associated with the large and growing volume of short-term claims against the United States, and (3) the means of providing for long-term growth of world reserves.

Weaknesses in the adjustment process. Under the textbook version of the 19th century gold standard, a country in deficit would lose gold to a surplus country, and an automatic process of adjustment would begin. The gold-losing country would experience contraction of its domestic money supply, rising interest rates, and falling money incomes and prices (coupled possibly with falling output and employment). The gold-gaining country would experience the opposite changes. The result would be a correction of the balance-of-payments disequilibrium through a change in relative prices of, and in demands for, the two countries' imports. This automatic adjustment in trade might be abetted and quickened by movements of capital, in response largely to interest rate differentials, from the surplus to the deficit country.

In this idealized and perhaps partly imagined system—involving a smooth and quick correction of imbalances—the flow of gold from deficit to surplus country served two functions: (1) it set in motion the process of adjustment, and meanwhile (2) it financed the imbalance.

The present international system resembles the textbook gold standard in one important respect: exchange rates are fixed within a narrow margin. But other conditions are very different. Domestic credit conditions in most countries today are to some degree independent of the volume of international monetary reserves. Prices and wages tend to resist downward movement. And most countries pursue domestic policies aimed at full employment and price stability.

This means that internal deflation in deficit countries is not an acceptable means of reducing imports and making exports more competitive. By the same token, surplus countries are understandably unwilling to accept inflation as a means of restoring balance in their external accounts.

While the Articles of Agreement of the IMF permit exchange-rate adjustment in case of a "fundamental disequilibrium"—an imbalance that is chronic and intractable at the existing exchange rate—most countries are reluctant to take this step. For a reserve currency country, this alternative is not available. For other major industrial countries, even occasional recourse to such adjustments would induce serious speculative capital movements, thereby accentuating imbalances.

What then is the adjustment mechanism under modern conditions?

Policies called for by a country's domestic situation frequently may also help to correct an imbalance in its external accounts. If a country is suffering from excessive total demand for its domestic output and also has a deficit in its balance of payments—a combination of ills that has frequently been encountered—restrictive fiscal and monetary policies

are appropriate. If successfully applied, they serve to reduce excessive domestic demand, and this effect in itself tends to reduce imports and encourage exports. In addition, stopping domestic inflation will at least prevent the country's competitive position from worsening further. Moreover, restrictive monetary policy and higher interest rates tend to attract interest-sensitive capital from other countries and to discourage domestic capital from moving abroad.

Similarly, there is no conflict between internal and external objectives in the case of a country experiencing deficient demand at home but a surplus in its balance of payments. Here the application of expansionary fiscal and monetary policies helps to restore full use of domestic resources and tends to increase imports relative to exports. This mix of policies also encourages interest-sensitive capital to move abroad.

It is not these combinations of internal and external problems that raise questions about the adequacy of the adjustment process in today's world. Rather it is the less tractable combinations, such as a deficiency of demand at home and a deficit in the balance of payments—which the United States has faced in recent years—or excess demand internally along with a surplus in the external accounts—which some European countries have been experiencing.

Conventional notions as to policies for adjustment contain a clear bias toward imposing greater pressure on deficit countries to adopt restrictive fiscal and monetary policies than on surplus countries to adopt expansionary policies. This bias results in part from the simple fact that the lower limit to which a deficit country's reserves can ultimately fall (zero) is more definite and compelling than the upper limit to which a surplus country's reserves can rise. To be sure, the availability of IMF and other credit may extend the period during which a deficit can be sustained, but such borrowing brings with it added pressures for correction of the deficit.

Related to this asymmetry is the fact that a balance-of-payments deficit is often regarded as an indication of "profligacy"—in view of the traditional association of deficits with domestic inflation—which requires the imposition of discipline on deficit countries. There is no disciplinary counterpart for surplus countries. To some extent, this conventional view is institutionalized in the IMF, whose long-standing policies require increasingly vigorous corrective measures by deficit countries as their drawings from the Fund increase beyond the first (gold) tranche. Fund policies do not place a corresponding emphasis on the need for adjustment by surplus countries.

The stability of liquid dollar claims. As was indicated at the beginning of this chapter, the United States has had payments deficits since 1949. Until the late 1950's, however, most countries were anxious to enlarge their dollar holdings and welcomed our modest deficits. But after 1957 U.S. deficits were larger; and, with a smaller appetite for dollar holdings, many foreign countries converted a higher proportion of their dollar accruals into gold. Even so, foreign dollar balances have increased by about \$8 billion

since 1957. Foreign central banks and governments held \$8 billion of short-term dollar claims at the end of 1957 and \$12½ billion in late 1963; foreign banks, businesses, and individuals held \$6 billion in December 1957 and \$9 billion in late 1963. Over the same period, the U.S. gold reserve fell by \$7½ billion, from \$23 billion to \$15½ billion.

The expanding total of liquid dollar claims, set against a declining gold stock, is sometimes viewed as a potential source of instability for the reserve currency system. This is based on the possibility of a convergence of demands by foreign monetary authorities for conversion of dollar balances into gold. The more intractable the U.S. balance-of-payments deficit appeared to be, the less remote such a threat might be considered. Conversely, evidence of U.S. progress toward balance-of-payments equilibrium mitigates such destabilizing fears.

Potential instability is regarded by some observers as inherent in a reserve currency system—or indeed in any fractional reserve system in which credit claims convertible into gold are an important element. It is characteristic of such a system that growing needs for international monetary reserves cannot be met solely from gold becoming available for monetary use. In fact many observers believe that the currency or credit component of reserves must rise relative to gold holdings. In these circumstances the system will always be subject to the possibility of instability when for one reason or another private or official holders of a reserve asset become uneasy.

As was described earlier, international cooperation has led to the development in recent years of a series of measures designed to reduce these dangers. But the risks of instability have not been wholly eliminated.

Provision for growth of reserves. The total of official reserves held by the industrial countries is generally regarded as adequate at the present time. The question is whether the present system for creating reserves will be able to function so as to meet future requirements.

It is clearly impossible to devise an exact criterion for determining the world's needs for reserves in the years ahead. This need will depend on at least three factors: (a) the strength of the forces creating potential imbalances, (b) the effectiveness of the adjustment process which tends to limit and correct these imbalances, and (c) the availability of credit supplements to official reserves.

It is an objective of the nations of the free world that trade and capital movements should be increasingly freed from restrictions. Yet, for a number of reasons, increased freedom of international transactions is likely to make each country's balance of payments more sensitive than before to changes in economic conditions within its own borders and outside.

The extent to which tendencies toward imbalance actually create large or prolonged deficits depends, of course, on the speed and effectiveness of the processes of adjustment. If the existing adjustment mechanisms are slow-acting, larger reserves will be needed; if they can be made quick and

effective—while consistent with the basic objectives of growth, stability, and unrestricted trade—smaller reserves will suffice. Of course, there is an interaction among the supply of reserves, the adjustment process, and the size of swings in payments balances. For example, if reserves are too large, countries may not have to pay much attention to current changes in their payments balances, and they may avoid or delay the adjustments needed to restore equilibrium.

Similarly, the availability and dependability of credit sources to supplement “owned” reserves influence countries’ views as to the volume of reserves they need as well as the extent to which they feel compelled to take prompt action against forces tending to disturb payments equilibrium.

Given the existing adjustment mechanisms and the priorities of economic policy in most countries, the supply of reserves and credit facilities will have to be prepared to cope with substantial future imbalances.

In the years since World War II, the growth of world reserves has had two major sources: (1) a growth of monetary gold stocks and (2) deficits in the U.S. balance of payments. In the future, gold can be expected to provide for only a part of the needed growth in world reserves, as it has in the past. In the decade from 1953 through 1962, monetary gold reserves of all countries increased by about \$5½ billion, or by less than 15 percent of total monetary reserves at the end of 1952, whereas, over the same period world trade, as measured by total imports, increased by nearly 65 percent. During this decade, the total gold and foreign exchange reserves of the rest of the world increased by about \$19 billion, or nearly 75 percent. But about two-fifths of this growth represented a transfer abroad of U.S. gold—a process which cannot continue indefinitely to provide a source of reserve growth for the rest of the world.

The net outflow of dollars from the United States has been a major source of growth in world reserves over the past decade. But reliance on this method of increasing reserves creates a dilemma. U.S. deficits are accompanied by a growth of dollar liabilities relative to the gold stock, increasing the dangers of instability referred to earlier; yet, when the U.S. deficit is eliminated—or gives way to a surplus—world reserves will probably rise too slowly (or even contract) under existing monetary arrangements. For these reasons a range of proposals has been put forward for modifying the existing method of generating monetary reserves.

PROPOSALS FOR STRENGTHENING OR CHANGING EXISTING ARRANGEMENTS

Recognition of the problems discussed in the previous sections of this chapter has stimulated a wide range of suggestions for change. They vary from a careful building on the existing system, through a series of innovations and supplements, to a rather complete revision of the whole system. The proposals, which have stimulated discussion on both sides of the Atlantic, differ in many respects. The differences arise in part from varying diagnoses of the nature of present problems, in part from differing degrees of

preoccupation with the current U.S. situation as against a future situation in which our deficits will have disappeared. They also reflect divergences in relative values placed on the several objectives of policy.

Most of the suggestions brought forward for strengthening or revising the international payments system are aimed at one or more of the following purposes: improving the balance-of-payments adjustment process, reducing the dangers of instability in the system, and providing a satisfactory means for increasing international liquidity. This section first indicates some of the possibilities for correcting payments imbalances more effectively by supplementing those built-in adjustment tendencies that now exist. It then describes a range of proposals—from a strengthening of the existing system to a major overhaul—that deal with potential instability and future growth of reserves.

Improvements in the adjustment process. Recent experience and discussion indicate that it is possible to devise combinations of policies that simultaneously promote domestic and international objectives without imposing undue pressures toward contraction in the world economy.

Two major approaches merit attention: (1) changes in the mix of fiscal and monetary policies and (2) acceleration by surplus countries of movements to relax barriers to international trade and payments.

As was pointed out above, there is no conflict between internal and external objectives if a country is subject to inflationary pressures at home and has a balance-of-payments deficit, or if it has unemployed resources at home and a payments surplus. It is the other combinations that pose particularly difficult policy problems.

In a world of relatively free capital movements, flexible changes in the mix of fiscal and monetary policies can serve to reconcile internal and external policy goals. In using this approach, a deficit country with unemployment and idle capacity would be advised to emphasize expansionary fiscal policy to deal with its domestic demand problem while pursuing a relatively restrictive monetary policy to deal with its balance-of-payments problem, particularly by affecting capital movements. This, it will be recognized, is similar to the policy prescription that the United States has been trying to apply—a large tax reduction program to spur domestic expansion, and a monetary policy, in the past two or three years, that calls for interest rates, in some sectors of the market, that are relatively high for a period of inadequate domestic investment. The United States has also used its monetary and debt management policies to influence the maturity structure of interest rates so as to raise short-term rates while moderating the upward pressure on long-term rates.

For the surplus country with excess demand at home the opposite policy mix is called for: restrictive fiscal policy and relatively easy monetary policy. Here the fiscal policy would tend to reduce internal inflationary pressures, while the monetary policy would discourage capital inflow and encourage capital outflow.

It is clear that if changes in the mix of fiscal and monetary policies are to serve in this way to facilitate both correction of payments disequilibrium and pursuit of domestic goals of full employment and price stability, fiscal policies must become more flexible. But this is desirable, in any case, for dealing with problems of internal stabilization.

A second, although self-limiting, means of adjustment involves the relaxation of restrictions on trade and capital movements by surplus countries. The removal of quantitative restrictions, reductions of tariffs, and freeing of capital flows is a continuing objective of the countries of the free world. Constant efforts in these directions can be seen in the activities of the IMF, the General Agreement on Tariffs and Trade (GATT), and the Organization for Economic Cooperation and Development (OECD).

A country prepared to relax a trade or payments restriction should not postpone that action. On the other hand, countries with persistent balance-of-payments surpluses might well be encouraged to accelerate removal of barriers to both current and capital transactions, including unilateral (even if temporary) tariff reductions. This would contribute both to a reduction in the external surplus and to an amelioration in the pressure of excess demand at home. While a permanent relaxation of restrictions is preferable, even a temporary suspension of trade or capital account impediments may be helpful as a means of adjustment. A recent example is the inclusion of selected temporary tariff reductions in the French stabilization program.

There is not a corresponding acceptable prescription for deficit countries that are suffering from deficient demand at home. Clearly it would be undesirable for a tightening of trade restrictions or an increase in tariffs to become part of the accepted means of adjustment. When a choice must be made among undesirable alternatives, measures to retard the rate of capital flow from deficit countries are preferable, in terms of effects on resource allocation, to moves away from freedom of current account transactions. The proposed temporary interest equalization tax in the United States is an example of such a step.

It may be that still other adjustment policies can be found for reconciling international and domestic goals. In this regard, the OECD and its various committees and working parties will no doubt continue to play an important role. The success of these bodies in working to harmonize policies and prevent a deflationary bias in the adjustment process stands out as a significant achievement of the past few years.

Strengthening the existing reserve currency system. Most proposals for improvement of international monetary arrangements, whatever their form and whether moderate or drastic, deal both with the problem of stability and with the adequacy of the means for providing reserves. One approach, emphasizing the evolution that has been taking place in the present system in the past few years, seeks to build on and strengthen this system through further gradual changes.

As for the problem of stability of the reserve currencies, this approach points to the success that has been achieved in stopping and reversing destabilizing speculative activity through the use of "swap" and other co-operative arrangements among central banks. With the special borrowing arrangement, the IMF can now provide up to \$4 billion of additional financing to meet any speculative run on the dollar. These arrangements could presumably be further strengthened and enlarged if the need should arise in the future.

This approach also includes the possible further development of sales by the United States of special nonmarketable securities to surplus countries. These sales, initiated recently, provide a way of consolidating short-term dollar holdings that may be considered excessive. When denominated in the currency of the country that purchases them (if this is mutually desired), these securities provide an exchange guarantee. Such securities can also provide the holder with easily available resources when its surplus turns into a deficit.

Another element in this approach involves the recognition that there is already a mechanism whereby U.S. surpluses need not reduce the reserves of other countries. The United States can acquire the currencies of industrial countries that have deficits, thus preventing a decline in the reserves of other countries as U.S. reserves increase. This practice has been initiated on a small and exploratory scale over the past few months. The United States has acquired Italian lire, in effect reciprocating in part an earlier Italian purchase of medium-term U.S. securities that was made when Italy was in surplus. In fact, regardless of whether the United States has a deficit, a balance, or a surplus, it could acquire the currencies of other industrial countries, with their agreement, thus providing additional liquid dollar balances to those countries and to the system as a whole.

Such amendments to the present reserve currency system begin to break the automatic link between changes in the balance of payments of a reserve currency country and changes in the liquid monetary reserves of the rest of the world.

This general approach recognizes that the ratio of gold to currency holdings in world monetary reserves will continue to decline, but does not view this as involving increasing instability. Rather it rests on the belief that so long as excessive and prolonged U.S. deficits are avoided, increasingly close cooperation among the leading countries and the growing availability of reciprocal credit facilities, both within or outside the IMF, can maintain confidence in the currency element of monetary reserves, and permit their expansion as needed.

Overhauling the existing system. Some proposals for more drastic changes in monetary arrangements are aimed mainly at reducing the potential for instability, and others are aimed mainly at improving the mechanism for generating reserves. But most of them contain elements

that would achieve both purposes. The plans are here sketched only very briefly, and no effort is made to deal with the problems that their implementation might involve.

The plans that focus largely on lessening potential instability propose to eliminate the possibility of disruptive and self-defeating efforts to convert non-gold reserve assets into gold by establishing a fixed ratio of gold in each country's total reserves (a ratio subject to change by general agreement). Some of these plans would also create a new type of reserve unit that would partly or wholly replace national currencies in reserves.

A proposal put forward by Professor S. Posthuma of the Netherlands Bank would require that each member country of the Group of Ten agree to hold a fixed proportion of its monetary reserves in the form of gold. The remainder would be in the currencies of the other members, and these official holdings would receive reciprocal exchange guarantees. Once the proposal had been put into effect, countries would finance deficits by reducing gold and foreign exchange holdings proportionately so as to maintain the agreed ratio, with similar provisions for countries gaining reserves.

This proposal would, after a period of time, effectively increase the number of reserve currencies, since each country, including the United States and the United Kingdom, would hold the currencies of the others. Thus the system would permit growth in reserves independently of individual deficits and surpluses, so long as gold reserves were increasing. This system could be further adapted to the need for additional growth of reserves through agreed reductions in the fixed ratio between gold and foreign exchange holdings.

A somewhat similar approach, suggested by Dr. E. M. Bernstein, is also designed to enhance international monetary stability. This proposal would establish a "reserve unit" as a generalized liability of the IMF. The major industrial countries would pay over to the IMF a quantity of their own currencies in exchange for such reserve units and would undertake to hold reserve units in an agreed proportion—ultimately, one-half—of their gold reserves. This composite reserve unit would in time come to replace the reserve currencies. This plan too could be adapted to growth needs by adjusting from time to time the fixed relationship between reserve units and gold.

A number of proposals would increase international reserves and credit availability by making IMF resources more readily usable by member countries. Any such change in Fund practices would increase international credit availability. To the extent that member countries came to regard a larger proportion of their maximum potential drawing rights at the Fund as freely available, the effect would be equivalent to an increase in "owned" reserves.

Such proposals for greater, and perhaps less conditional, use of Fund resources are usually accompanied by a plea for a change in member country attitudes toward reliance on the IMF. Instead of regarding the Fund

as a lender of last resort, member countries, especially industrial countries holding substantial amounts of reserves, would be encouraged to draw regularly on the Fund as a complement to the use of their owned reserves in financing a part of any deficits.

While these proposals aim at using the IMF more intensively, they are frequently accompanied by suggestions for regular increases in Fund quotas to provide for needed expansion in liquidity over time. Such increases could be negotiated periodically, or agreement might be reached on a regular automatic expansion of quotas.

Another approach to increasing the volume of reserves is the proposal for a "mutual currency account" to be administered by the IMF. This proposal provides that the industrial countries form an arrangement under which a surplus country could deposit the currency of a deficit country in the mutual currency account. This facility would encourage the provision of financing to the deficit country—though definite limits would be established—and would give the surplus country a claim against the mutual currency account, which would receive the usual IMF gold-value guarantee against exchange risks. Once established, such claims would become a new form of reserve, usable under certain conditions by their holders when they in turn find themselves in deficit.

Perhaps the most far-reaching of the many plans that have been widely discussed—that of Professor Robert Triffin of Yale—aims to replace the present system so that reserve creation will no longer depend on additions to the stock of monetary gold and to claims on reserve currency countries. Instead it proposes to place in the hands of an international institution (a reconstituted IMF) the power to regulate the creation of international monetary reserves. Under this proposal reserve currencies would be replaced by new claims on the expanded IMF, and these claims would be transferred from deficit to surplus countries in settlement of imbalances.

The new institution would be empowered to make loans to members by creating additional claims on itself—as does a bank. And, as in the case of bank loans, the member's policies would be scrutinized by the lending institution. In addition the new IMF could expand reserves at its own volition or on some predetermined basis by purchasing government securities of its members, with their agreement, paying for these securities by creating deposits (claims against itself). Such loans and "open market operations" would be used to expand world reserves at an appropriate rate.

This proposal, like others related to it, takes inspiration from the historical development of central banking within individual countries. Recognizing that "money does not manage itself," individual countries have established centralized institutions that now regulate the aggregate creation of new money, regardless of the size of deficits of individual borrowers. Whether such a development would also be desirable, practicable, and acceptable internationally—and, if so, when—is understandably the subject of considerable controversy.

CONCLUDING COMMENTS

Without trying to anticipate the outcome of the studies now in process, it is possible to state some general propositions that follow from the preceding discussion:

1. International monetary arrangements are not an end in themselves but a means of fostering a steadily growing world economy, in which freedom of international transactions contributes to rising living standards, and price stability helps to assure equitable distribution of the fruits of economic growth.

2. If it is to serve these purposes, the international monetary system should provide both leeway and discipline: (a) It should encourage adjustment of imbalances by both deficit and surplus countries in ways that avoid imparting either a deflationary or an inflationary bias to the world economy, and it should encourage greater rather than less freedom of international transactions. (b) It should reduce or eliminate the potential for disruptive and speculative conversions of foreign exchange reserves into gold. And (c) it should make financial resources available in a volume and under conditions adequate to finance imbalances consistently with these objectives.

3. In evaluating specific plans that are put forward for modification or reform of the existing system, it is important not to confuse form with substance. Any plan—regardless of its outward trappings—can be adapted so as to become too restrictive or too inflationary. Whatever the outcome of the present studies, it must be recognized that for any monetary arrangement to function successfully, it is essential that there be an increasing degree of mutual understanding, cooperation, and responsibility among the countries whose reserve holdings and reserve needs account for the bulk of the problem of international liquidity.

Chapter 6

U.S. Assistance of Economic Development Overseas

MUCH OF THE WORLD in which the United States conducts its economic affairs consists of poor countries now urgently striving to modernize and develop their economic systems. Our economic relations with these countries constitute a major aspect of U.S. foreign policy, and they interact with our domestic economic performance and programs. Because of the sharp debate over the U.S. foreign aid program that was mounted during the past year and still goes on, this is a particularly appropriate time for reviewing our economic relationships with these less developed countries.

Even if there were no other reasons, the sheer size of the United States would give our economic performance and policies a particular significance for the developing nations. These nations depend heavily on American savings as a major source of capital; on American science, technology, and management as a major source of productive and organizational technique; and on American markets as a major source of demand. Rapid growth and prosperity in the United States make an important contribution to establishing favorable conditions for economic development abroad.

A great variety of American activities—by U.S. businesses, consumers, tourists, and private nonprofit institutions, as well as Government—significantly affect the developing countries, and these activities reflect a variety of purposes. The focus of this chapter, however, is on the economic policies of the U. S. Government toward the developing countries.

EVOLUTION AND RATIONALE

In common usage “foreign aid” refers to transfers on concessionary terms of goods, services, or purchasing power from one government to another, either directly or through the medium of international organizations. (Frequently, although the relations between sovereign nations require that it be agreeable to the recipient government, aid is destined for specific private uses. Also the term “foreign aid” sometimes is extended to foreign transfers by private nonprofit institutions.) While all such governmental transfers are intended to serve the general foreign policy inter-

ests of the donor country, the aid mechanism is a vehicle that can be adapted—and has been adapted by the United States—to many specific uses that vary over time and from place to place. For example, arms shipments coupled with military training have been supplied to nations directly threatened by a foreign power hostile to our interests, but such programs may not be appropriate in other situations.

“Development assistance” is only one type of foreign aid. But it is a type that, while guided by the basic criterion of our foreign policy interests, is properly based on economic analysis and evaluated in concrete economic terms. This chapter will deal primarily with this type of foreign aid, rather than with programs that are of necessity dominated by political or military considerations of a tactical nature. All the same, it is well to recognize that assistance can evolve from one form to another within the same administrative framework—as the cases of Greece and Taiwan, for example, well illustrate. Since our early aid efforts in these nations were responses to military crises, internal and external, longer-run economic development considerations properly took a subsidiary position. Both countries soon gained a measure of internal security and political stability. Our interests, as well as theirs, then dictated embarking on a program of long-run economic development.

SHIFTING POLICY GOALS

American aid commitments during the early postwar period had short time horizons. The Marshall Plan and its various instrumentalities were a response to the postwar economic chaos and were designed to tide highly industrialized nations over a reconstruction period. The Marshall Plan succeeded handsomely and ended ahead of schedule.

Meanwhile, the social, political, and economic revolution sweeping the underdeveloped world was beginning to give our aid program a new focus. Throughout much of Asia, Africa, and Latin America, rising economic expectations coincided with the disintegration of traditional colonial empires and the emergence of independent but inexperienced and vulnerable nations. Their desire for the benefits of the Industrial Revolution was not matched by the skills, the social and political traditions, and the capital required for an industrial economy.

Our initial response was President Truman's Point IV Program of technical assistance. Barely had his proposal been acted upon, however, when the Communists in mid-1950 invaded the Republic of Korea—highlighting the vulnerability of the emerging nations to military attack and their need for more than technical assistance or capital for development projects. For the next few years, reinforcement of the military strength of the free world received primary attention from American policymakers.

As the decade of the 1950's proceeded, however, military and technical assistance was supplemented increasingly by economic aid designed to help emerging nations cope with particular short-run problems or to galvanize

longer-run development potentialities. The Foreign Assistance Act of 1961 marked the major reorientation of American foreign economic policy in the direction of development assistance. This reorientation was based partly on the recognition that the threat to the internal security of the developing countries from subversive elements within had become more pronounced than the threat to their external security.

THE CASE FOR DEVELOPMENT ASSISTANCE

Development assistance—the transfer of resources on concessionary terms in order to raise rates of output and living standards in less developed countries—is thus a major aspect of our present foreign aid program. While the rational case for it rests on political, security, and economic grounds, much of the American impulse in this direction comes from the heart as well as the head. We have a development assistance program because we believe in the dignity of human beings. Although simple humanitarianism may not have a high place in diplomatic confrontations, it speaks with a powerful voice between peoples in the language of common wants, fears and aspirations for themselves and for each other.

In addition to humane considerations, the prime case for development assistance rests on the Nation's international political and security interests. Over the long run the United States has a large stake in keeping the alternative of orderly nontotalitarian paths to development open to the nonaligned nations as well as to those who are allies. Even in the short run, moreover, instability, unrest, and subversion in the less developed areas constitute an ever-present threat to our security. Since the end of World War II, a high proportion of the crises that have jeopardized the peace have been located in the underdeveloped world. As tensions in such areas mount and incidents occur, the growing circle of parties to the conflict renders the dispute ever more incendiary. It is far healthier for us, and for the world as a whole, if stability can be fostered by evolving economic growth and constructive social change.

Development assistance also serves our own economic interests. Poor countries make poor markets; we need good markets for our exports. We also need dependable sources of supply for a wide variety of imports. Insecure, undiversified, inefficient economies make weak partners in the network of international economic and financial institutions, and we need strong partners. Developing countries have become better trading partners as their incomes have grown. During the past decade, the total value of imports into the developing countries has increased at a rate of about 5 percent a year or somewhat more rapidly than their total income. By creating expanding markets abroad for U.S. products, agricultural and industrial, we realize economic returns from our foreign economic development investments.

Nevertheless, it is well for us to be frank in admitting, both to ourselves and to others, that our development assistance strategy rests primarily on

what are, in the broadest sense, national security grounds. It is well to be realistic about the uncertainties that run through our development assistance strategy—about the fact, for example, that economic development will not necessarily insure democratic governments or peaceful international behavior. But it is also wise to rest our policy on the *probabilities*—and these seem to be the following:

- that free, progressing, open societies typically make better, safer, and friendlier neighbors and members of the international community;
- that, in nations imbued with surging expectations, vigorous economic development is a necessary, although not a sufficient, condition for the maintenance of orderly political processes; and
- that for most such nations, substantial external public assistance for a limited period is a necessary, although not a sufficient, condition for economic development.

In short, the premise of our development assistance effort has been—and remains—that, while the risks and uncertainties inherent in making the effort are substantial, the risks of not making it are even greater.

ROLE OF DEVELOPMENT ASSISTANCE

In those countries where development assistance is effective, the requirements curve for foreign capital is likely to be bell-shaped, rising at first, leveling off, then falling. As less developed countries succeed in promoting more rapid rates of sustained economic growth, their very success typically entails a period of severe foreign exchange shortage.

In many of the new nations the ability to use development assistance effectively is still very limited, in terms of dollar volume. These are the traditional societies that have yet to break themselves loose from economic stagnation, whose production and consumption are largely those of self-sufficient households, and whose ability to absorb capital awaits the extension of the market economy. The prime need in such cases is for technical assistance—for teachers and technicians to build skills and institutions basic to economic growth.

As a country acquires the skills and institutions needed to help itself and adopts public policies that adroitly apply both the rein and the spur, its capacity to carry out new investment activity is likely to grow more rapidly than its ability to save. Moreover, since—at least for some time—it must obtain from abroad the great bulk of the manufactured and semimanufactured goods it uses in establishing new industries and raising incomes, its requirements for imports rise swiftly. Such a country, having generated a momentum of growth and typically having encountered balance-of-payments problems as a result, can absorb substantial government-to-government capital assistance. Such assistance, by speeding the expansion of the country's imports, can accelerate the expansion of output.

Estimates for the 1950's indicate that in the less developed countries a 1-percent change in GNP was associated with changes of 1.85 percent in chemical imports, 1.65 percent in imports of agricultural raw materials and ores, and 1.49 percent in imported foodstuffs. Similarly, a 1-percent change in gross domestic fixed investment has been found to be associated, on the average, with a 1.15-percent change in imports of capital equipment. These relationships, moreover, reflect the level of imports actually achieved during the 1950's in the face of acute financing problems and may thus understate the responsiveness of imports to income change under less stringent financial conditions.

The rapid growth of import requirements, however, typically is not accompanied by a parallel, automatic rise in the developing country's exports. Indeed the growth process makes a parallel rise unlikely, for the foreign markets for the developing country's traditional exports are in most cases relatively unresponsive to income changes in the advanced countries (Table 25).

TABLE 25.—*World exports: Current value by regions, 1953–62*

[Billions of dollars; f.o.b.]

Year	World	Free world	Developed areas ¹	Less developed areas ²	Sino-Soviet bloc
1953.....	82.6	74.7	³ 53.7	21.0	7.9
1954.....	86.1	77.5	³ 55.4	22.1	8.6
1955.....	93.7	84.3	60.6	23.7	9.4
1956.....	103.7	93.6	68.7	24.9	10.1
1957.....	111.8	100.6	75.1	25.4	11.3
1958.....	107.9	95.8	71.1	24.7	12.1
1959.....	115.4	101.2	75.4	25.8	14.2
1960.....	127.7	112.7	85.4	27.3	15.0
1961.....	133.4	117.8	90.2	27.6	15.6
1962.....	140.6	123.7	94.7	29.0	⁴ 16.9

¹ Includes United States, Canada, Western Europe, Japan, Australia, New Zealand, and South Africa.

² Regions other than developed areas and Communist bloc countries.

³ Adjusted by Department of Commerce to make data comparable with subsequent years.

⁴ Estimated.

Sources: United Nations and Department of Commerce.

Since 1953, for example, while imports into the developing countries were expanding by 50 percent, their exports increased by 37 percent. Without the foreign exchange necessary to support the higher level of imports, not only would growth have been impeded, but the momentum of growth actually achieved in certain countries would have been lost.

In the broadest sense, therefore, the economic programs of the developing countries must address two problems—first to break out of traditional stagnation and establish sustained growth; and, second, to make the sustained growth self-supporting in the international market.

STRATEGIES FOR ACHIEVING SELF-SUPPORT

In order to become able themselves to finance the imports that they need for growth, developing countries can resort to two strategies, and in fact they tend to adopt mixtures of the two. First, they can design development programs that provide for the replacement of some imports through domestic production. During the past decade import substitution received prime emphasis in the development policies of most less developed countries. But its feasibility depends upon the developing country's resource endowment, the general levels of education and skills, and the size of its market.

The second strategy open to developing countries for achieving self-support is that of export expansion. At present the developing countries are producers mainly of primary products; more than 85 percent of their current exports are food and raw materials, for which the demand in the advanced countries has grown only slowly during the past decade (Table 26). While there are, of course, great differences in the positions of individual countries, realistic possibilities for a sizable expansion of export earnings tend generally to depend on a diversification of their exports—and this is in process. One of the most rapidly rising components of the developing countries' exports in recent years has been manufactured goods. Although this category still accounts for less than 15 percent of their total commodity exports, it rose at an average rate of more than 10 percent a year from 1958 to 1961, while total exports rose only 4 percent a year during the same period.

TABLE 26.—*World trade: Volume and unit value indexes of exports by regions, 1953-63*

[1953 = 100]

Year	Volume indexes			Unit value indexes		
	World	Developed areas	Less developed areas	World	Developed areas	Less developed areas
1953.....	100	100	100	100	100	100
1954.....	105	107	102	99	98	102
1955.....	114	116	110	99	98	102
1956.....	124	128	117	101	101	101
1957.....	131	136	119	103	104	101
1958.....	128	132	120	100	101	97
1959.....	138	142	129	99	100	94
1960.....	153	159	136	100	101	95
1961.....	159	167	141	99	102	92
1962.....	167	174	152	99	102	90
1963 ¹	174	182	160	100	102	91

¹ Preliminary estimates: January-June average for volume indexes and January-September average for unit values indexes.

Source: United Nations and Department of Commerce.

While both of the strategies for self-support are aimed at balancing the imports and exports required for sustained growth, both imply increased imports for an interim period. For the expansion of the processing and manufacturing industries required by either strategy needs the creation of

new productive facilities, the enlargement of existing capacity, and additional materials and supplies that can still be obtained only from advanced countries. Thus as the developing countries establish the basis for shifting from sustained to self-supporting growth, success in their development effort intensifies their aid needs, and their requirements for foreign capital will reach a maximum—the top of the bell-shaped curve.

IMPLEMENTING SELF-SUPPORT

The financing problems that accompany growth will decrease in intensity—and the need for foreign aid diminish—as self-supplying capabilities of the developing countries increase and the composition and volume of their exports more and more reflect the expanding size and diversity of their internal economies. Success, however, requires, and will continue to require, a variety of adjustments. If the advanced countries are prosperous and expanding, their demand for all products, including the exports of the developing countries, will be buoyant, and the developing countries' foreign financing problem will be smaller. Vigorous economic expansion at home is therefore one of the greatest contributions that the advanced countries can make to the growth of the developing countries. Beyond this, the commercial policies of the advanced countries can maintain a congenial environment for the poorer countries' exports. For example, the "Kennedy Round" of tariff negotiations, which will begin in the spring of 1964, can make a major contribution to the welfare of the developing countries. In addition, two steps taken in 1963 are worthy of note. The International Coffee Agreement was completed, and legislation to permit U.S. participation in it has reached an advanced stage in the Congress. And the International Monetary Fund in March 1963 created a new facility to make funds available to member countries that experience temporary declines in export earnings due to circumstances beyond their control.

However, the greater part of the responsibility for making adjustments that will accomplish a progressive narrowing of their foreign exchange deficiency lies with the developing countries themselves. They must orient their own development planning and administration, as well as the flow of development assistance, away from overexpanded industries or those with declining demand toward industries in which they are—or are likely to become—most efficient. The concentration of production in areas of comparative advantage will provide the basis for a sustainable expansion of exports. At the same time, they must exploit any good import substitution possibilities they have thus far overlooked—for example, some of the less developed countries possess the climate and soil that would permit them economically to grow the basic foods they now import. The developing countries need to manage their monetary, fiscal, and foreign exchange policies so that resources are not diverted from export markets to uneconomic domestic use. They need, in some instances and in certain quarters, further to encourage thrift and saving and a mobilization of domestic capital re-

sources. And they need to undertake far more determined, imaginative, and better organized efforts to adapt their products to foreign demands and to market them aggressively.

A major corollary of these efforts can be success in attracting private foreign capital at reasonable terms and under constructive arrangements. It is easy to exaggerate the portion of the problem that private foreign capital can solve in the near future. Nevertheless, the more successfully the developing countries pursue stable, sustained growth, the more they will induce foreign private investors to participate widely in their expansion.

Foreign development assistance can contribute significantly, if marginally, to the attainment of sustained, self-supporting growth by a number of less developed countries. On the other hand, carelessly provided, it can be used by a less developed country to postpone economic self-discipline. Such perversions of assistance should be resisted. For example, a developing country that yields to the temptation to spend its scarce resources on sophisticated military equipment for prestige reasons should not expect foreign assistance to take care of its development needs. The managers of a development assistance effort should retain sufficient discretion occasionally to risk using economic aid as an inducement to constructive political and social change. But, in general, development assistance—particularly capital assistance—should be directed only to those countries that give convincing promise of effectively combining it with their own resources to promote growth.

In recent years the U.S. aid program has been tending toward a greater concentration of its development credits. This is the effect of its insistence that, to qualify for substantial development assistance, recipients make adequate showings of “self-help” and adopt economic programs and policies that promise effective use of the assistance. Further such emphasis is warranted.

Because of its prominence in the U.S. development assistance program, special mention should be made of aid that, under Public Law 480, takes the form of surplus farm commodities—conveyed mainly through the device of selling them for local currencies. Because the proceeds of such sales are inconvertible and because their disbursement within the host countries is subject to joint U.S.-host government determination, the farm commodities provided constitute net contributions to the developing countries’ resources and entail practically no claim on their foreign exchange.

While, in the abstract, there is no assurance that the particular physical surpluses the United States happens to have consist of goods the developing countries need, in practice there is a happy convergence of interests in the case of surplus foods. For, wisely channelled, the provision of such American foods, over and above what the developing countries can afford to buy in the international market, can meet much more than relief needs. It can supply the increments to local food supplies that allow host gov-

ernments, for example, to mobilize large amounts of idle manpower, especially in rural areas, into labor-intensive investment projects without running serious inflationary dangers.

Trade and capital flows—both public and private—are interdependent. The necessity for aid depends on the level of domestic production and the volume and direction of trade; but the volume and direction of trade and the level of domestic production are themselves a function of the form and amount of public and private international capital flows. Because trade and aid are interdependent ways of coping with the foreign exchange shortages that development efforts typically engender, the two should be more systematically related within the same comprehensive development programs. The combinations that can make the greatest contribution to growth will vary not only among recipient countries, but for the same country with the progress of its development effort.

THE UNITED STATES AND OTHER DONORS

All of the principal Western industrialized countries have now initiated, or substantially expanded, their own development assistance programs. At the same time, they have stepped up their contributions to multilaterally supported programs. Despite the fact that the Communist countries are themselves in many ways underdeveloped nations, they also have chosen to divert some of their scarce resources to a foreign aid program. The United States, which was at one time the only important source of aid to non-colonial areas now accounts for about 55 percent of the world total.

If "aid" is defined as government grants, public loans of more than 5 years' duration, and contributions from official sources to multilateral agencies for use on behalf of the less developed countries, then disbursements of all donor countries (net of repayments) are estimated at approximately \$6½ billion in 1962 and may have increased by \$200-\$500 million in 1963. About 90 percent of this assistance in 1962 was provided by the 12 members of the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD). Receipts by the less developed countries have run somewhat behind the global assistance figures—about \$500 million less in 1962—because disbursements by multilateral agencies have been lower than the sums made available to them by capital subscriptions, grants, and bond purchases.

The domestic resources of the developing countries are also augmented by the inflow of foreign private capital that is invested either directly or by the purchase of securities. The problems of measuring these private capital flows are particularly severe. Probably, however, the total net flow of private capital from the developed to the developing countries in 1962 exceeded \$2 billion. This brought total long-term receipts of developing countries from public and private bilateral and multilateral sources to the neighborhood of \$8½ billion, an increase of about 50 percent over the 1956 level.

Donor countries differ widely in affluence, in the relative burden that military expenditures and domestic needs place on available resources, and in their internal budgetary and balance-of-payments problems. Table 27, which offers certain standards for assessing the bilateral aid commitments of DAC countries—gross national product, defense expenditures, and trade with the less developed countries—illustrates the fact that there is no single measure of the capability, or interest, of a donor to sustain a foreign assistance program. These figures do not reflect the recently announced plans of Canada and the United Kingdom for expanded aid contributions.

TABLE 27.—*Bilateral economic aid commitments and various measures of donor capacity and interest, 1962*

Development Assistance Committee (DAC)	Bilateral economic aid commitments			Defense expenditures as percent of GNP	Per capita GNP (U.S. dollars) ¹
	Total (millions of dollars)	Percent of GNP	Percent of exports to less developed countries		
Total DAC.....	7, 101	0. 74	34	7. 4	1, 766
United States.....	4, 656	. 84	65	9. 4	2, 974
Other DAC.....	2, 445	. 60	18	4. 7	1, 135
Belgium.....	\$ 70	. 55	13	3. 3	1, 381
Canada.....	58	. 16	13	4. 5	2, 009
Denmark.....	\$ 1	\$. 01	\$ 1	3. 1	1, 559
France.....	\$ 901	\$ 1. 26	\$ 37	6. 1	1, 524
Germany.....	428	. 50	17	5. 1	1, 558
Italy.....	60	. 15	6	3. 5	788
Japan.....	265	. 51	11	1. 1	547
Netherlands.....	42	. 32	6	4. 6	1, 105
Norway.....	4	. 08	3	3. 7	1, 423
Portugal.....	60	2. 21	46	7. 4	294
United Kingdom.....	556	. 70	16	6. 4	1, 482

¹ Converted into U.S. dollars at official exchange rates. Because official exchange rates are not an accurate measure of relative purchasing power, the comparison among countries is distorted.

² Bilateral gross expenditures.

³ Data for 1961.

⁴ Grants are expenditures.

Sources: Agency for International Development and Organization for Economic Cooperation and Development.

The response of a number of other developed countries to the needs of the poorer countries has been gratifying, and further participation is desirable. Nevertheless, without specific efforts at coordination, the multiplication of sources of finance and technical assistance can result in an inequitable sharing of responsibility and a haphazard allocation of resources.

Of special importance is coordination among donors with respect to the financing of aid. Several DAC members provide relatively more of their development assistance in the form of grant aid than does the United States. Most DAC members, however, provide credits to developing countries at considerably higher interest cost than does the United States (Table 28). Since the credits from non-U.S. sources are also of shorter duration, their annual service charges are much more burdensome, on average, than those on U.S. credits. The 1962 loan commitments of the other DAC countries, for example, will require interest payments of above \$55 million on a principal of about \$1 billion, compared with interest of \$42 million on

a principal of \$1.6 billion in the American case. Clearly, other donor countries can do more to liberalize the terms of their aid, by lowering interest rates, extending the maturity of their loans, or making more of their development assistance available in the form of grants.

TABLE 28.—*Terms of official bilateral economic aid commitments of Development Assistance Committee, 1962*

Development Assistance Committee (DAC)	Total aid (millions of dollars)	Grants		Credits ¹		
		Amount (millions of dollars)	Percent of total aid	Amount (millions of dollars)	Average maturity (years)	Average interest rate (percent)
Total DAC.....	7, 101	4, 361	61	2, 740	25.8	3.6
United States.....	4, 656	² 3, 025	65	³ 1, 631	29.9	2.6
Other DAC.....	2, 445	1, 336	55	1, 109	19.8	5.1
Belgium ⁴	70	66	94	4	7.5	5.5
Canada.....	58	44	76	14	14.0	6.0
Denmark.....	1	1	100			
France ⁴	901	772	86	129	23.3	4.4
Germany.....	428	154	36	274	17.0	4.2
Italy.....	60	19	32	41	9.8	4.9
Japan.....	265	104	39	161	8.1	6.1
Netherlands.....	42	11	26	31	20.0	5.0
Norway.....	4	4	100			
Portugal.....	60	3	5	57	22.4	4.6
United Kingdom.....	556	158	28	398	26.3	5.6

¹ Credits of 5 years or more duration.

² Includes country-use portion of sales under Public Law 480, title I, and commodity grants under Public Law 480, titles II and III.

³ Includes commodity loans under Foreign Assistance Act, Export-Import Bank, and Title IV of P.L. 480.

⁴ Expenditures; interest rate is assumption.

⁵ Grants are expenditures.

NOTE.—Data lack precision or consistency; average terms should be regarded as rough orders of magnitude.

Sources: Agency for International Development and Organization for Economic Cooperation and Development.

The developing countries already are paying about \$2.5 billion a year, or one-fifth of their gross capital inflow for servicing their externally held public debts, and the charges are mounting rapily. Still worse, the charges are mounting much more rapidly than are the export earnings required for servicing the total debt. Between 1956 and 1962 debt service rose from 3 percent to 7 percent of the value of the developing countries' exports of goods and services.

Members of the DAC are becoming increasingly aware of the need for coordinated action in this field. They have adopted a resolution recommending that the terms of their aid be liberalized, be made more comparable, and be related to the specific debt-servicing capacities of recipient countries. In keeping with this resolution, both the British and Canadian governments have recently announced new and considerably liberalized credit policies. In addition, various DAC countries have worked together in the framework of the International Bank for Reconstruction and Development and OECD consortia to ensure that their individual aid contributions to specific countries are properly integrated and that the technical assistance necessary to the use of the aid is available.

ACCOMPLISHMENTS AND NEEDS

THE INCOMPLETE RECORD

The statistical evidence, such as it is, of the impact of development assistance on the economic performance of the poorer countries is encouraging. Economic statistics are much less reliable and complete for the developing countries than for the advanced countries. Nevertheless, United Nations data for the 1950's provide some indication of progress. The average annual rate of growth of real GNP during the period 1950-59 for developing countries was estimated at 4.6 percent, considerably above the rate of the preceding decade, and also above the rate achieved by the industrialized

TABLE 29.—Selected characteristics of less developed countries receiving since 1946 U.S. economic assistance of more than \$300 million or more than \$30 per capita¹

Country	Population, 1962 (millions)	Growth rate of real GNP, 1950-62 ² (percent per year)	Per capita real GNP		U.S. economic assistance obligated, fiscal years 1946-62	
			Amount, 1961 (U.S. dollars) ³	Growth rate, 1957-62 ⁴ (percent per year)	Total (millions of dollars)	Per capita (dollars)
Israel.....	2.3	10.4	814	6.0	879	382
Greece.....	8.5	6.3	431	4.7	1,785	210
Jordan.....	1.7	7.0	184	4.3	325	191
Taiwan.....	11.9	7.7	145	4.2	2,045	172
Liberia.....	1.0	5.3	159	3.8	125	125
Brazil.....	75.0	5.6	186	3.3	1,737	23
Panama.....	1.1	5.8	416	3.0	100	91
Iran.....	21.6	5.2	211	2.8	732	34
India.....	452.0	3.8	80	2.5	3,867	9
Thailand.....	28.7	5.4	97	2.3	338	12
United Arab Republic (Egypt).....	27.3	(⁵)	120	2.1	608	22
Bolivia.....	4.0	4.2	113	2.0	258	65
Philippines.....	29.6	5.8	117	2.0	1,334	45
Colombia.....	15.6	4.6	283	1.8	360	24
Mexico.....	37.1	5.8	313	1.7	761	21
Pakistan.....	96.6	2.3	79	1.6	1,854	19
Tunisia.....	4.3	2.9	161	1.5	293	68
Guatemala.....	4.0	4.7	175	1.4	158	40
Chile.....	7.9	4.1	453	.8	675	85
Peru.....	11.6	3.4	181	.3	388	33
Turkey.....	29.2	4.5	193	.0	1,580	54
Indonesia.....	98.6	(⁵)	83	-.1	682	7
Costa Rica.....	1.3	5.6	344	-.3	89	68
Nicaragua.....	1.6	5.8	213	-.8	66	41
Argentina.....	20.6	1.5	379	-.9	572	28
Paraguay.....	1.9	(⁵)	130	-4.0	58	31

¹ Excludes countries in which economic development has not been a prime objective of U.S. economic assistance and countries where aid programs have been terminated: South Korea, South Vietnam, Laos, Cambodia, Yugoslavia, Libya, Morocco, Poland, Lebanon, Spain.

² Based on GNP in 1961 prices; since 1950 data were not available for all countries, the following substitutions were made: 1951 for Philippines; 1954 for Jordan; 1957 for Bolivia, Iran, Liberia, and Tunisia; 1956 for Thailand. Growth based on average of 2 years at beginning and end of period.

³ GNP unadjusted for inequalities of purchasing power among countries.

⁴ Data for 1956 to 1962 for Thailand; 1959 to 1962 for United Arab Republic; 1954 to 1962 for Jordan. Growth based on average of 2 years at beginning and end of period.

⁵ Not available.

NOTE.—See footnotes above for necessary substitutions because of unavailability of data for specified dates. Per capita data may not check exactly with data shown in this table because of use of unrounded data.

Source: Agency for International Development.

countries. Individual countries showed wide differences in achievement. Average annual rates of growth in real GNP since 1950, among countries that have received significant amounts of U.S. economic assistance and where economic development has been a principal objective of such assistance, varied from 10.4 percent for Israel and 7.7 percent for Taiwan to 1.5 percent for Argentina. Growth rates in per capita income, 1957-62, which in many cases are greatly depressed by high rates of population increase, have varied from 6.0 percent for Israel and 4.7 percent for Greece to -4.0 percent for Paraguay. Table 29 illustrates the diversity of experience.

There is no one universally appropriate rate of growth. Still it is encouraging that 17 of the 26 countries that were the principal recipients of U.S. aid have sustained during the years 1957-62 an annual rate of growth of 1.5 percent or more in per capita income. In 13 of these countries, the per capita rate of growth of GNP has met or exceeded an average of 2 percent.

The phenomenon of population growth intervenes, of course, between rates of growth in total output and the per capita data just cited. Comparisons of the two highlight two points. First, in many of the developing countries it is clear that a moderation of population growth could ease the task of accelerating per capita economic gains. It is for this reason that the United Nations and many of the developing countries themselves are showing great interest in appropriate population policies and that the U.S. Congress, in its most recent appropriations for the aid program, authorized the support of research into the problems of population growth.

The second point, however, is that current rates of population growth in the developing countries are not, in fact, outdistancing current average rates of growth in output. Nor do they mean that it is useless to assist development until the "population explosion" has been "brought under control." The logic of the matter runs just the other way: until population growth has slowed down, the need for productive expansion is doubly urgent.

The economic accomplishments of development assistance could be better gauged by the kind of detailed examination of concrete cases for which there is not space here. Such a review, for example, would include the case of Taiwan, where an enviably rapid economic growth (estimated at over 7 percent a year between 1950 and 1962) has been achieved with U.S. assistance. Its total imports rose from \$121 million in 1950 to an estimated \$325 million in 1963, its exports from \$93 million in 1950 to an approximate balance with imports in 1963. The private sector of Taiwan's economy is growing rapidly, and Taiwan may soon be on its own. Less need for external assistance is also now foreseen for other successful countries, including the Philippines, Greece, Mexico, Israel, and Iran.

It would be appropriate to examine other examples also. The cases of six other countries—Korea, Vietnam, India, Pakistan, Turkey, and Brazil—which, along with Taiwan, the Philippines, Greece, and Israel, have received

about three-fifths of all U.S. economic assistance to developing nations merit attention. India and Pakistan, for example, are among the poorest and most populous of the major recipients of U.S. aid. The relatively large amounts of economic assistance that India has received from the United States in recent years (averaging about \$500 million during the period 1957-62) have amounted to only a little more than \$1 per person per year, and self-support for India is still at least a decade away. But the progress made since 1950 provides grounds for cautious optimism. National income increased by 42 percent between 1950-51 and 1960-61, per capita income by 16 percent, agricultural production by 41 percent, industrial production by 94 percent, and school enrollment by 85 percent.

Even with a full set of such economic case studies, however, the record of the accomplishments of development assistance would be incomplete—in three senses:

First—harking back to the United States' underlying rationale for development assistance—the record is incomplete until one can trace the internal political consequences of economic growth in the developing countries and the effects on the aided countries' international behavior. While the Council of Economic Advisers has no special competence for making such judgments, it seems to be the view of specialists that the balance of events in this regard has already been favorable. Fewer situations have deteriorated, and more have improved than would have been the case in the absence of development and of the development-assistance contribution to it.

Second, the accomplishment record is incomplete in the sense that many of the results of our past and present efforts to promote economic development in Asia, Africa, and Latin America have yet to appear. The Alliance for Progress, for example, is not yet 3 years old. The flow of development assistance has been substantial since 1958, but before that year development per se was hardly more than an incidental feature of foreign aid programs. The process of economic development today is arduous and long because the less developed countries have so far to go. The transformation of agricultural nations, poor in capital and in trained manpower, into modern industrial states cannot be accomplished without time and travail. Industrialization inevitably involves drastic adaptations of social and economic institutions and the evolution of new attitudes and methods of work. We have only to remind ourselves of the time it has taken to achieve sustained economic development in our own Southeast or in the more recently industrialized countries of Western Europe to appreciate the lags that inevitably intervene between inputs and results.

Finally, development assistance's record of accomplishments is incomplete, because the needed effort itself still is in midstream. The job is not yet done. It is now, finally, well started. Sufficient growth momentum has been established in many countries so that the emphases of their development programs can begin to shift from getting things started to keep-

ing them going—and to expanding export capabilities and private foreign investment opportunities enough so that gradually the need for government-to-government aid will be eliminated.

Moreover, as has been emphasized, there is room for increasing the effectiveness of specific aspects of our development assistance, for improving its allocation, for improving its coordination with the efforts of other donors, and for increasing the share of the total that others provide. Continuation of our effort at this time will maintain momentum, avoid disruption of growth processes that have been arduously established, and avoid waste of much of the substance we already have committed.

WHY ARE WE "SUDDENLY SO FATIGUED"?

At his last press conference, on November 14, 1963, President Kennedy, referring to the mood of the Congress toward authorizing foreign aid funds for the current fiscal year, remarked, "I don't understand why we are suddenly so fatigued."

Probably the explanation of the fatigue lies partly in the fact that broad public understanding of the purposes of development assistance is still incomplete. It lies partly also in a difficult administrative history, partly in the inherently protracted character of the problems, and partly in the fact that the income gulf between the United States and the nations we have been assisting is so large. As a result, Americans have trouble perceiving improvements that, in the aided countries' own terms, are very significant.

Most of all, however, our recent sense of fatigue is traceable to excessive expectations. Misled by the false analogy of our experience with the Marshall Plan, whose goal was reconstruction, not construction, we have underestimated the time it takes for development assistance to work its effects. We have had exaggerated notions of how large a contribution an aid program can make to a country's internal development. And we have overestimated the orderliness with which economic and social revolution typically can be conducted.

Especially have our expectations about success and failure been unreasonable. History and experience offer no precedents for this program. It involves an attempt to influence the forces determining the historical evolution of nation-States—about which even the wisest among us has little insight. Yet we have expected the program to have a nearly perfect record of success. Such standards of accomplishment would appear too rigorous to any director of industrial research and development. We have made mistakes, of course. But we have also learned much, both from the mistakes and from the experience of working with people in the developing countries. While we can expect that the period of greatest mistakes is behind us, we can never expect a record of 100 percent success until the definitive philosophy of history has been written.

Judged by our own interests and capabilities, the fatigue is inappropriate. It is inappropriate especially now that the program, as Chapter 5 pointed out, has been stripped of most of its adverse near-term balance-of-payments effects. Moreover, there is certainly no doubt at present of our domestic economic ability to continue the development assistance effort. Indeed, the program is generating several hundred thousand jobs, and many hundred million dollars worth of business that American workers and American exporters would be loathe to lose.

In terms of the basic purpose of the development assistance program, however, the central point is that fatigue is inconsistent with the solid achievements beginning to emerge. It is out of step with the needs and prospects of the developing countries and with our strategic stake in them. In fact, the time has come for us to catch our second wind and move ahead.

Appendix A

**TESTIMONY OF THE COUNCIL OF ECONOMIC ADVISERS
BEFORE THE SUBCOMMITTEE ON EMPLOYMENT AND
MANPOWER OF THE SENATE COMMITTEE ON LABOR
AND PUBLIC WELFARE**

OCTOBER 28, 1963

**STATEMENT OF WALTER W. HELLER, CHAIRMAN,
ACCOMPANIED BY GARDNER ACKLEY AND JOHN P.
LEWIS, MEMBERS OF THE COUNCIL OF ECONOMIC
ADVISERS, BEFORE THE SUBCOMMITTEE ON EMPLOY-
MENT AND MANPOWER OF THE SENATE COMMITTEE
ON LABOR AND PUBLIC WELFARE, OCTOBER 28, 1963***

Mr. Chairman and Members of the Committee, we are pleased to have an opportunity to participate in these hearings on Employment and Manpower. The employment problem is not only of the greatest importance to the country and at the center of government economic policy, but is of particular interest to an agency operating, as the Council does, under the mandate of the Employment Act of 1946.

Recent discussions may have generated an impression of greater disagreement among the Nation's economists about the origins and solutions of the employment problem than actually exists. For in fact, the great majority of those who have studied the matter carefully would agree with the Administration's view that our excessive unemployment today cannot be traced to a single cause nor eliminated by a single cure. Rather, it has a mixture of causes which must be dealt with by a mixture—an amalgam—of cures.

One problem, and a central one, is that total expenditures in the economy—total demand for goods and services—are not sufficient to generate an adequate total number of jobs. We can, for convenience, call this kind of unemployment "demand-shortage" unemployment. In our view, demand-shortage unemployment can and must be attacked by vigorous policies—principally tax reduction—to raise the total demand for goods and services.

Another problem is that the characteristics of our available workers—their locations, skills, education, training, race, sex, age, and so on—do not fully match the characteristics employers are seeking in filling the jobs that are available (or that would be available at full employment). In a dynamic, changing economy there is always some of this mismatching, and we call the unemployment that results from it "frictional." But when

*Several passages and one entire section of the original have been deleted in re-printing this Statement, primarily where the same material is covered in the text of the *Report* either more fully or using more recent information. Footnotes added to the original are indicated with asterisks.

the pockets of such unemployment become large and stubborn—especially when they impose chronic burdens on particular disadvantaged groups and regions—we speak of the unemployment problem as “structural.”

This type of unemployment is also a serious problem, which requires major policy actions to overcome its corrosive effects. Structural problems are not new. And the available evidence does not show that the proportion of our total unemployment problem that we label “structural” has increased significantly, nor that its character has materially changed. But this in no way diminishes the need for attacking these structural problems with vigorous policies—principally education, training and retraining, and special regional programs—to match the supply of labor skills more closely to the changing demand for labor skills.

Along with demand-shortage and structural unemployment, one also hears a great deal about the problem of “technological unemployment”—of men being put out of work by machines and, more particularly, by the process which has come to be called “automation.” This is, indeed, a serious and continuing problem. But two points should be emphasized at the outset.

First, “technological unemployment” is not a third form of unemployment, separate from the other two. Rather, it expresses itself through these other forms. Technological change causes obsolescence of skills and therefore produces some of the mismatching between available workers and jobs that we call “structural” unemployment. Moreover, by raising output per worker, technological change is one of the principal sources of growth in our *potential* total output or GNP—which, if not matched by corresponding growth in *actual* GNP, opens a gap in demand and thereby causes demand-shortage unemployment.

Second, those who maintain that the economy now faces a problem of “technological unemployment” that is somehow new, and more formidable than in the past implicitly assert that the rate of technological change has recently speeded up. Unless this is the case, the problem is not new—it has always been with us and has not proved to be a long-run problem for the economy as a whole. The continuing process of rapid technological change, which has constituted the very core of the American economy’s strength and progressiveness for at least 150 years, has always put particular workers and businesses out of jobs and required particular adjustments that have been difficult and sometimes painful. It poses a new general problem for the economy only if technological change becomes so rapid that the demand adjustments and labor market adjustments it requires cannot be accomplished by the economic processes of the past. Whether technological change indeed has accelerated, or is in process of accelerating, is a factual question that we consider at some length in this statement.*

* Treatment of this question has been deleted from the latter part of the *Testimony* as reprinted here, because it is considered in the text of the *Report* (Chapter 3, subsection headed “The Trend of Labor Productivity”).

These, then—demand-shortage elements, structural elements, and a possible aggravation of both by accelerated technological change—are the principal ingredients of the unemployment problem your Committee is examining. It would be unwise and imprudent to ignore any of these ingredients either in diagnosing the problem or in prescribing remedies.

The primary attack on high unemployment must be through fiscal measures to speed the growth of total demand and thereby to create new job opportunities. But this need not—indeed, must not—impede a simultaneous attack on our stubborn structural problems. The two approaches are not merely complementary; they are mutually reinforcing. On the one hand, training and other programs to facilitate labor mobility can ease and speed the process by which demand-stimulated increases in output are translated into increases in employment. On the other, since structural maladjustments tend to flourish in slack markets, a vigorous expansion in demand helps cut structural problems down to size.

This statement deals first with the over-all dimensions of our unemployment problem and the central role of tax reduction in eliminating excessive unemployment. Second, we turn to several issues which have figured prominently in the Committee's hearings to date: the nature, extent, and recent pattern of structural unemployment; the current rate of growth in productivity and the labor force; and the fears of automation and consumer satiation. In considering these issues, we are addressing ourselves to three underlying questions:

1. Are the structural elements of the unemployment problem an important barrier to the achievement of the objectives of the tax cut?
2. Are we likely to experience speedier increases in productivity and in the labor force which, while serving our objectives of faster economic growth and balance-of-payment equilibrium, would intensify our problems of re-employing displaced workers and generating enough total demand to achieve full employment?*
3. What is the nature of the labor market policies that must go hand-in-hand with the use of over-all fiscal and monetary policies for expansion if we are to achieve our multiple economic goals?

A final section will summarize our observations on these questions.

I. UNEMPLOYMENT AND TAX REDUCTION

The American economy has been plagued with persistently excessive unemployment for 6 years. The unemployment rate has been 5 percent or more for 71 consecutive months. Since 1957, it has averaged 6 percent. Even in the face of annual advances of about \$30 billion in GNP (annual

* Treatment of this question has been deleted from the latter part of the *Testimony* as reprinted here, because it is considered in the text of the *Report* (Chapter 3, subsection headed "The Trend of Labor Productivity").

rate), unemployment has not been diminishing. Thus, although GNP rose from \$556.8 billion in the third quarter of 1962 to \$588.5 billion in the third quarter of 1963, the unemployment rate remained the same in both quarters. And even with a prospective increase of \$100 billion in the GNP rate from early 1961 to early 1964 (a rise of 20 percent in current dollars and about 15 percent in constant dollars), the unemployment rate will have come down only about 1½ percentage points in that 3-year period.

The persistence of this high level of unemployment is sometimes cited as evidence of structural difficulties which will blunt the effect of the proposed \$11 billion tax cut now being considered by the Senate Finance Committee and make it difficult to reach the interim full-employment goal of 4-percent unemployment, let alone our ultimate goals beyond the 4-percent level. The structural problem will be examined in some detail later in this statement. But here, several points should be noted to indicate why the road to 4-percent unemployment is clearly open to demand-powered measures:

1. The pre-1957 postwar performance of the U.S. economy gives ample evidence of its ability to achieve 4 percent and even lower levels of unemployment without excessive strain.
2. The availability of 1.1 million excess unemployed workers (even by the modest 4-percent criterion and not counting the labor force drop-outs resulting from slack job opportunities) and of substantial excess capacity (even after large gains, the average operating rate in manufacturing is running at only 87 percent of capacity) demonstrates that we are still suffering from a serious shortage of consumer and investment demand.
3. There are virtually no signs of economic tension, of the barriers that would divert the force of demand stimulus away from higher output, more jobs and higher incomes into higher prices—there are no visible bottlenecks in the economy, wage rate increases have been the most moderate in the postwar period, and the record of price stability in recent years has been outstanding.

In reference to the first point, the unemployment rates in the first postwar decade deserve a further word. In the period of vigorous business activity in 1947 and 1948, unemployment averaged 3.8 percent of the labor force. After the recession of 1949 and the recovery of 1950, the rate was relatively stable from early 1951 to late 1953, averaging 3.1 percent. Since that time, the rate has drifted upward. In the period of stable unemployment from mid-1955 to late 1957, unemployment averaged 4.3 percent, an increase of more than one-third above the 1951–53 period. In the first half of 1960, unemployment averaged 5.3 percent, nearly one-fourth above the 1955–57 level. Following the recession and recovery of 1960–61, the rate fluctuated within a narrow range averaging 5.6 percent in 1962 and 1963 to date, a little higher than early 1960. Looking at the 1947–

57 period, the average unemployment rate was below 4 percent in each of the following years: 1947, 1948, 1951, 1952, and 1953, and below 4½ percent in 1955, 1956, and 1957.

When one looks behind these figures to get a grasp of the economic conditions that produced them, the most notable difference between the pre-1957 and post-1957 periods is found in the strength of market demand. In the first postwar decade, markets were strong. Backlogs of consumer demand had to be worked off. The demands of the Korean conflict had to be met. Outmoded plants and equipment had to be replaced or modernized, and capacity had to be enlarged. Deficiencies in housing, office facilities, and public works had to be made up.

But 1957 marked a watershed. In the ensuing period, demand has slackened at a time when our labor force growth has been accelerating in response to the postwar jump in the birth rate. Business fixed investment dropped off from 10–11 percent of the GNP to only 9 percent—indeed, the level of such investment in 1962 barely struggled back to its level in 1956, while GNP was rising by nearly one-fifth (both in constant prices).

Thus, the clearest and most striking change since 1957 is the weakening of demand. So the clearest and most urgent need today is to remove the overburden of taxation which is retarding the growth in demand to full employment levels. Income tax rates enacted to finance war and fight inflation—though reduced in 1954—are still so high that they would yield a large surplus of revenues over expenditures if we were at full employment today. They are, in short, repressing demand and incentives in an economy operating well short of its capacity.

To avoid misunderstanding, it is important to stress that any employment program would be unbalanced and incomplete without determined measures (a) to upgrade and adapt the skills and education of the labor force to the more exacting demands of our advancing technology and (b) to facilitate the flow of workers from job to job, industry to industry, and place to place. Nevertheless, our principal reliance for a return to the 4-percent-or-better levels of unemployment we took for granted in the early postwar period must be on measures to boost demand for the products of American industry and agriculture.

The amount of the increase in total demand which would be necessary to reduce unemployment to the 4-percent interim-target level can be approximated in several ways. We have made direct estimates of the relationship between unemployment rates and output levels; and we have independently estimated the potential GNP that the economy could produce at 4-percent unemployment. Both of these approaches yield consistent estimates of the output and demand requirements associated with 4-percent unemployment at a given time. Except for small differences reflecting cyclical variations in productivity and erratic fluctuations in labor force participation rates, these estimates of potential output (in constant prices) are very closely approximated by a 3½-percent trend line passing through actual GNP

in mid-1955. The several methods of computing potential GNP were reviewed in some detail in our *Annual Reports* both for 1962 and 1963, and are analyzed more fully in a recent paper by one of the Council's consultants.¹ Although estimates of this kind cannot be precise—and efforts to improve and update them as new data come in must continue—the careful cross-checking by different methods provides confidence in their general order of magnitude.

These estimates show that the gap between actual GNP and the potential GNP at 4-percent unemployment has been substantial in every year since 1957. In both 1962 and 1963, it has approximated \$30 billion.

Our analysis thus suggests that total demand for goods and services would have had to average some \$30 billion higher than it was in each of these past 2 years for unemployment to average 4 percent. The basic purpose of the tax cut is to close that \$30 billion gap—and to realize the benefits to employment, growth and our international competitive position that will flow from this advance.

To be sure, by the time the full effects of the proposed two-stage tax cut will be reflected in demand and output, the economy's potential will have grown considerably, and total demand growth will therefore have to be considerably more than \$30 billion. But when the tax cut lifts the expanding level of private demand in the U.S. economy by the extra \$30 billion (in terms of 1963 GNP and price levels) that can confidently be expected, it will have achieved its basic purpose. Had this increase been effective during the past 6 years, it would have eliminated our persistent slack and allowed our unemployment rate to average 4 percent.

The process by which an \$11.1 billion tax cut can add as much as \$30 billion to total demand has been frequently described and needs only to be summarized briefly here.

If the new proposed personal income tax rates were in full effect today, disposable after-tax incomes of consumers would be approximately \$8.8 billion higher than they are, at present levels of pretax incomes. In addition, if the lower corporate tax rates were now in effect, after-tax profits would be about \$2.3 billion higher. Based on past dividend practice, one can assume that corporate dividends received by individuals (after deducting personal income taxes on such dividends) would then be more than \$1 billion higher, giving a total increment of consumer after-tax incomes—at present levels of production—of about \$10 billion.

Since consumer spending on current output has remained close to 93 percent of disposable income in each of the past dozen years, one can safely project that consumer spending would rise by about 93 percent of the rise in disposable incomes, or by over \$9 billion.

¹ Arthur M. Okun, "Potential GNP: Its Measurement and Significance," Cowles Foundation paper No. 190, reprinted from the 1962 *Proceedings of the Business and Economic Statistics Section of the American Statistical Association*.

But this is far from the end of the matter. The higher production of consumer goods to meet this extra spending would mean extra employment, higher payrolls, higher profits, and higher farm and professional and service incomes. This added purchasing power would generate still further increases in spending and incomes in an endless, but rapidly diminishing, chain. The initial rise of \$9 billion, plus this extra consumption spending and extra output of consumer goods would add over \$18 billion to our annual GNP—not just once, but year-in and year-out, since this is a permanent, not a one-shot, tax cut. We can summarize this continuing process by saying that a “multiplier” of approximately 2 has been applied to the direct increment of consumption spending.

But that is not the end of the matter either. For the higher volume of sales, the higher productivity associated with fuller use of existing capacity, and the lower tax rates on corporate profits also provided by the tax bill would increase after-tax profits, and especially the rate of expected after-tax profit on investment in new facilities. Adding to this the financial incentives embodied in last year’s tax changes, which are yet to have their full effect, one can expect a substantial induced rise in business plant and equipment spending, and a rise in the rate of inventory investment. Further, higher consumer incomes will stimulate extra residential construction; and the higher revenues that State and local governments will receive under existing tax rates will prompt a rise in their investments in schools, roads, and urban facilities. The exact amount of each of these increases is hard to estimate with precision. But it is reasonable to estimate their sum as in the range of \$5 to \$7 billion. This extra spending would also be subject to a multiplier of 2 as incomes rose and consumer spending increased. Thus there would be a further expansion of \$10 to \$14 billion in GNP to add to the \$18 billion or so from the consumption factor alone. The total addition to GNP would match rather closely the estimated \$30 billion gap.

II. THE PERSISTENT PROBLEMS OF STRUCTURAL UNEMPLOYMENT

The tax cut would thus increase demand to levels consistent with a 4-percent rate of unemployment. It would ease our most pressing unemployment problems. But no one can assume that our worries about unemployment would then be over. Some of its most distressing and inequitable aspects would remain.

To be sure, tax-reduction will create new jobs in every community across the Nation and expand employment in every industry. The overwhelming majority of American families will benefit directly from the income tax cuts that will accrue to 50 million tax-paying individuals and 600,000 tax-paying corporations. Their direct rise in after-tax income will soon be translated, through the marketplace, into stronger markets for all kinds of goods and services and a quickening of the business pulse in all communities.

With average working hours already at a high level, this added demand and activity will in large part be translated, in turn, into additional jobs, and income for the unemployed. Thus, the non-taxpaying minority will, in a very real sense, be the greatest beneficiaries of the tax program.

Experience (which we will review later in this statement) clearly shows (1) that the unemployment rate will decline for every major category of workers and (2) that the sharpest declines will occur where the incidence of unemployment is the highest: among teenagers, the Negroes, the less-skilled, the blue-collar groups generally.

But even so, the unemployment rates of many groups will still be intolerably high. Back in 1957, for instance, when the average unemployment rate was just over 4 percent for the whole economy, the rates were much higher for many disadvantaged groups and regions—e.g., 10.8 percent for teenagers, 8.0 percent for nonwhites, 9.4 percent for unskilled manual workers, and 11.5 percent for workers in Wilkes-Barre-Hazleton, Pennsylvania.

These *high specific unemployment rates, which persist even when the general rate falls to an acceptable level*, are the essence of the problem of structural unemployment. Even a fully successful tax cut cannot solve problems like these by itself. They require a more direct attack.

To reduce the abnormally high and stubborn unemployment rate for Negroes requires a major improvement in their education and training and an attack on racial discrimination. To reduce the persistent high rate for the unskilled and the uneducated groups demands measures to help them acquire skills and knowledge. To reduce excessive unemployment associated with declining industries and technological advance requires retraining and relocation. To reduce high unemployment in distressed areas of Pennsylvania, Michigan, Minnesota, and elsewhere calls for special measures to rebuild the economic base of those communities and assist their workers.

Both the Administration and the Congress have recognized that these measures must be taken concurrently with measures to expand aggregate demand. Coal miners in Harlan County are structurally unemployed *now*, and so are Negro and Puerto Rican youths in New York City. Yet, programs to reduce structural unemployment will run into severe limits *in the absence of an adequate growth of demand*, i.e., in the absence of rapid expansion of total job opportunities. Such expansion is needed to assure that retrained and upgraded workers, for example, *will* find jobs at the end of the training period and *will not* do so at the expense of job opportunities for other unemployed workers. As structural programs create new and upgraded skills, they will in some cases fit the participants for jobs that had previously gone begging. But for the most part, the needed jobs must be created by expansion of total demand.

Quite apart from the human significance of structural unemployment, it also has great economic importance. For only as we reduce structural and

frictional unemployment can we achieve the higher levels of total output which would be associated with unemployment rates below our 4-percent interim target. The Council emphasized this point in its 1963 *Annual Report* (p. 42), as follows:

“Success in a combined policy of strengthening demand and adapting manpower supplies to evolving needs would enable us to achieve an interim objective of 4 percent unemployment and permit us to push beyond it in a setting of reasonable price stability. Bottlenecks in skilled labor, middle-level manpower, and professional personnel [now] tend to become acute as unemployment approaches 4 percent. The result is to retard growth and generate wage-price pressures at particular points in the economy. As we widen or break these bottlenecks by intensified and flexible educational, training, and retraining efforts, our employment sights will steadily rise.”

Every worker needlessly unemployed represents a human cost which offends the sensibilities of a civilized society. But each worker needlessly unemployed also represents a waste of potential goods and services, which even an affluent society can ill afford. More intensive measures to attack structural unemployment are necessary to reduce the unemployment rate not merely to 4 percent, but beyond.

III. HAS STRUCTURAL UNEMPLOYMENT INCREASED?

The preceding section addressed itself to structural unemployment as a human and social problem and considered its role in the process of lowering the unemployment rate to and below 4 percent. But it is also appropriate to ask: has structural unemployment increased to such an extent since 1957—the last time unemployment was near 4 percent—that it will impede the expansionary effects of demand-creating measures in general and the tax cut in particular?

An affirmative answer would, we believe, represent a misreading of the facts. As we have already pointed out, there *are* serious structural problems, and prompt action is needed both to root out inequities and hardships they inflict and to help us reach our employment goals. But this conclusion need not—and does not—rest on a belief that there has been a disproportionate surge in structural unemployment since 1957.

A reading of the evidence on this score must focus principally on what happens, over time, to the unemployment rates of particular groups—teenagers, untrained and unskilled workers, Negroes, and other disadvantaged groups and regions—in relation to the total unemployment rate. It would clearly be misleading simply to compare unemployment rates for such groups in a year like 1957, when the total rate was about 4 percent, with the corresponding rates in 1962–63, when the total rate has averaged 5.6 percent. Rather, it is the *relationship* between the total rate and the groups’

rates—and its historical development—that reveals whether the structural problem is getting worse or not. And this relationship has been remarkably stable.

The disadvantaged groups almost invariably share more than proportionately—and the skilled and white-collar groups less than proportionately—in both decreases and increases in total employment. In the past, when the over-all unemployment rate has risen (or fallen) 1 percentage point, the rate for nonwhites and teenagers has risen (or fallen) by about 2 percentage points, the rate for unskilled workers by about 2½ percentage points. But the rate for professional and technical workers has risen or fallen by only about one-fourth of a percentage point.

One obvious reason for the disproportionate impact on teenagers is that they are the most recent additions to the labor force. When new job opportunities are few, there is a backing-up at the point of entry. Furthermore, even when they do find jobs, they tend to have the lowest seniority and are therefore first to be laid off. Much the same is true of Negroes. Given existing patterns of discrimination, they are often in marginal jobs or at the bottom of seniority lists. Moreover, when jobs are scarce and labor is plentiful, racial discrimination, where it exists, is more likely to enter into hiring and firing decisions. And at such times, employers are also more inclined to pass over inexperienced and untrained workers and less inclined to press their own efforts to adapt such personnel to their needs via in-service training programs. They tend to be less aggressive in seeking new employees outside their own local labor markets. And labor supply considerations are less likely to determine the location of new plants.

On the other hand, employers do not typically discharge many supervisory and technical personnel when output drops and, as a result, they do not need to expand their employment of such persons proportionately when output rises.

Moreover, there are other reasons why the employment of many categories of workers does not rise and fall in the same proportion as the total. Some disparities arise from the complex interrelationship between the composition and the level of total output. To cite just one example, the rate of inventory accumulation is highly sensitive to the rate of expansion or contraction in total output, and goods that typically are inventoried tend to require large numbers of production workers. In contrast, the service industries, whose output is not subject to inventory accumulation nor to such wide fluctuations in consumption, generally use more technical and white-collar workers.

Thus it is not surprising to find that slackened demand since 1957 has intensified inter-group and inter-regional disparities in unemployment rates at the same time that it raised the total unemployment rate. Nonwhites, teenagers, unskilled and semi-skilled workers have suffered a greater-than-average increase in unemployment since 1957. But these same groups will

also benefit disproportionately as demand expands and the over-all unemployment rate declines. This point is illustrated in the table below, which shows how the incidence of unemployment changed during the 1960–61 recession and the 1961–62 recovery.

Change in unemployment rate, selected groups and areas

	Percentage points	
	1960–61	1961–62
Total.....	1.1	–1.1
Teenagers.....	1.6	–1.9
Nonwhites.....	2.3	–1.5
Nonfarm laborers.....	2.0	–2.1
Operatives.....	1.6	–2.1
Manufacturing workers.....	1.5	–1.9
Miners.....	2.1	–3.0
For illustrative purposes:		
Michigan.....	3.4	–3.4
Wheeling, W. Va.....	6.9	–7.8

Studies of changes in the incidence of unemployment among unskilled and semi-skilled blue-collar workers—whose jobs would seem to be highly vulnerable to technological change—can provide important insights into the structural unemployment problem. One would expect an accelerated rate of technological displacement to be reflected in rising rates of unemployment for these groups—relative to total unemployment. One would also expect to find such a relative rise for workers in industries such as manufacturing, mining, and transportation where automation has so far found its widest application.

To test this possibility, we have correlated the unemployment rate in specific occupations and industries with the rate for all experienced workers in the labor force during the 1948–57 period—in other words, for the period before the main structural unemployment upsurge is alleged to have occurred. These correlations were then used to calculate what the occupational and industrial distribution of unemployment *would* have been in 1962 if the old relationships had held. If there had been a substantial increase in structural maladjustments, the actual 1962 unemployment rates for what we may call the “technologically vulnerable groups” should have been *higher* than these calculated rates. But in fact, as Table 1 shows a majority of the rates are *lower*. For some of these occupations and industries, the actual increase in unemployment was greater than expected, but in most cases it was less. And taking all of the blue-collar occupations and goods-producing industries together, we also find that the rise in actual unemployment was somewhat less than the 1948–57 experience would have suggested.

TABLE 1.—*Unemployment rates in industries and occupations most vulnerable to technological displacement, 1957 and 1962*

[Percent]

Industry or occupation	1957	1962	Change in rate, 1957-62	
			Actual	Expected ¹
All workers.....	4.3	5.6	1.3	-----
Experienced wage and salary workers.....	4.5	5.5	1.0	-----
Workers in selected industries (goods producing)...	5.4	6.4	1.0	1.3
Mining, forestry, and fisheries.....	6.3	8.6	2.3	1.8
Construction.....	9.8	12.0	2.2	1.8
Durable goods manufacturing.....	4.9	5.7	.8	1.4
Nondurable goods manufacturing.....	5.3	5.9	.6	1.0
Transportation and public utilities.....	3.1	3.9	.8	1.0
Experienced workers.....	3.9	4.9	1.0	-----
Workers in selected occupations (blue collar).....	6.0	7.4	1.4	1.7
Craftsmen, foremen, and kindred workers (skilled).....	3.8	5.1	1.3	1.3
Operatives and kindred workers (semi-skilled)...	6.3	7.5	1.2	1.6
Laborers, except farm and mine (unskilled)...	9.4	12.4	3.0	2.6

¹ Calculated by use of correlations of (a) unemployment rates by industry with the rate for all experienced wage and salary workers, and (b) unemployment rates by occupation with the rate for all experienced workers, using data for the period 1948-57 in both cases.

Sources: Department of Labor and Council of Economic Advisers.

We do not conclude from this evidence, nor from similar findings by Edward Denison and Otto Eckstein ² as to the *geographic* distribution of unemployment, that a reduction in structural unemployment has occurred. Similarly, however, we do not conclude that the unusually high unemployment rates experienced by teenagers this year, or the rather low rates experienced by adult males, prove an adverse structural shift. In some labor market areas, imbalances have lessened; in others they have increased. But this does not suggest that the over-all rate of structural unemployment has risen significantly.

One similar piece of evidence relates to job vacancies. Since structural unemployment is a form of joblessness that persists over a protracted period even if unfilled jobs are available, an increase in structural unemployment would be clearly suggested if it were found that the number of job vacancies were rising along with the number of unemployed men.

Unhappily we have no comprehensive and adequate series designed to measure job vacancies in the United States. The Department of Labor currently is proposing experimental work leading toward the eventual establishment of such a series. This is a proposal we strongly endorse, although we share the Labor Department's awareness that such a series involves many technical problems and will need to be interpreted with care, especially in its early years.

² Edward F. Denison, *The Incidence of Unemployment by States and Regions, 1950 and 1960*, and *The Dispersion of Unemployment Among Standard Metropolitan Statistical Areas, 1950 and 1960*. Mimeograph. Otto Eckstein, *The Unemployment Problem in Our Day*, paper delivered before the Conference on Unemployment and the American Economy, Berkeley, California, April 1963.

But meanwhile the only available indicator that bears upon the job-vacancy situation is the National Industrial Conference Board's index of the number of help-wanted advertisements published in the classified section of a leading newspaper in each of 33 leading labor market areas. While this series does a good job of reporting what it is designed to report, obviously it provides a comparatively sketchy and imperfect indication of job vacancies. All the same, it is interesting that, after adjustment for changes in the size of the labor force, the help-wanted index was substantially lower in 1960 and 1962 than in 1955-57, when the total unemployment rate was about 4 percent. We have further adjusted the index for changes in the total unemployment rate in order to screen out the effects of slack demand. Even in this form the index fails to rise significantly since 1957—as one would expect it to do if underlying structural unemployment had broadened.

The evidence reviewed above does not yield persuasive indications that structural elements are today a significantly larger factor in our unemployment than in 1957. Nevertheless, it would not be surprising if some particular aspects of structural unemployment have intensified. One would assume that the longer a period of slack persists, the more likely it would be that the detailed structure of skills, experience, and training of the labor force would fail to reflect fully the pattern of job requirements at high levels of employment. High employment in 1967 will call for a somewhat different pattern of jobs than existed in 1957, and a slack labor market does not accurately foretell what that pattern will be. Moreover, there is danger that, after a long period of slack, new hiring standards, habits of mind, and expectations appropriate to an "easy" labor market will have become entrenched, rationalizing increased discriminations against disadvantaged groups. Thus, after the period of prolonged slack since 1957, there is more need than in the usual "cyclical" recovery for an effective program of specific labor-market policies to assist demand-stimulating policies in tailoring men to jobs and jobs to men.

IV. SHIFTING EDUCATIONAL REQUIREMENTS AND POSSIBLE SKILLED MANPOWER BOTTLENECKS

In recent weeks—partly before this Committee, partly elsewhere—particular attention has been given to one aspect of the problem of structural maladjustments. This is the question of whether a recent shift in the pace and character of technological change has accelerated the long-term rise in job educational and skill requirements in a way that imposes a new bottleneck on expansion. The issue merits special discussion because of the obstacle to the employment-expanding effects of the tax program that this skilled-manpower bottleneck is alleged to present.

The argument is that the nature of recent technological change has caused a rapid shift in the pattern of manpower demand, pushing down the demand for workers with little training and pushing up the demand for the highly

educated. Everyone agrees that the educational level of the Nation's population has continued to advance, causing the supply of highly educated manpower to grow rapidly, and the supply of relatively uneducated manpower to decline. Thus the concern expressed is not about keeping pace with an absolute increase in job educational requirements—which have been rising right along—but about being unable to keep pace with an abrupt recent rise in such requirements.

It is feared that as demand increases, there will not be enough highly educated workers to fill the key technical and professional positions that must be manned if production is to expand to levels consistent with 4-percent unemployment; that, in consequence, expansion of output will be frustrated; and that, because of this, high percentages of the remainder of the labor force—including poorly educated workers—will be left unemployed.

It is important to distinguish this quite specific point about near-term bottlenecks from other propositions about the economic importance of education. It is unquestionably true, we believe, that greatly reinforced education is needed to press the attack on the pockets of long-term structural unemployment that have plagued the economy for a long time.

It is unquestionably true, moreover, that educational attainment enormously affects the employment prospects of the individual. Whether the economy is booming or stagnating, the poorly educated always come off second best. A grade school graduate is 5 times likelier to be unemployed than is a college graduate. Today's school dropouts are tomorrow's unemployed.

It is further well-known that long-term shifts, which can be projected to continue, in the relative importance of various industries, and long-term trends in technological development, are, on the whole, raising (as well as altering) educational requirements. The *Report on Manpower Requirements, Resources, Utilization, and Training* by Secretary Wirtz last March indicated the nature of these continuing shifts, including projections by broad groups to 1970 and 1975. The clearly indicated rise in the requirement for professional, technical, and kindred workers—teachers, scientists, physicians, engineers, technicians, and nurses—pose obvious demands on education in general and higher education in particular. And increased demands for many special skills create needs for expanded programs of vocational education and for more persons with a basic high school education. These long-term trends are not at issue in the present discussion.

Likewise, there can be little doubt about the enormous importance of education as an engine for stimulating the long-term growth of our productive potential. Edward Denison has estimated that 42 percent of the increase in output *per worker* between 1929 and 1957 was the result of education and another 36 percent the result of the general advance in the application of scientific and technological knowledge to which our educational

process and institutions clearly were heavy contributors. All of these are extremely important—in fact, conclusive—reasons for strengthening our educational programs. But they should not be confused with the view that educational deficiencies prevent the solution of our current problem of excessive unemployment, and, specifically, that near-term manpower bottlenecks will significantly restrain a demand expansion—stimulated by a tax cut—from accomplishing its employment objective.

The statistical testing of the educational bottleneck hypothesis turns out, if properly done, to be a very complex undertaking. There are problems of the noncomparability between Decennial Census data and information drawn from Current Population Surveys; of the lack of appropriate annual series; of calculating appropriate current full-employment labor-force participation rates for particular age and educational-attainment groups instead of arbitrarily projecting the rates of a remote year; and of including not merely the male but the female components of our population . . .

. . . however, some reliable impressions already have emerged from the figures at hand. One is that, while there does appear to have been some rise in the demand for highly educated workers relative to their supply during the postwar period *as a whole*, the timing of this change is crucial for purposes of evaluating the bottleneck thesis. Since the economy operated at approximately a 4-percent unemployment rate in the mid-fifties without encountering serious skilled-manpower bottlenecks the key question is whether most of this shift occurred *before* or after the 1955–57 period. Hence a shift in job educational requirements relative to supply that had occurred before those years, and was not serious enough to obstruct expansion then, poses little threat to a new move back toward 4-percent unemployment now.

The available unemployment data seems to show that whatever shift may have occurred in job educational requirements relative to supply *did* occur prior to 1957. Indeed it may have been partially reversed since that time. From 1957 to 1962, for example, the unemployment rate for male workers with an 8th grade education or less rose by about one-half, roughly the same as the rate of overall unemployment. But the unemployment rate for college graduates rose from 0.6 percent to 1.4 percent.

In addition to unemployment rates, the percentages of labor-force participation by groups of different educational attainments also have changed during the postwar period. Here the data currently in hand do not permit us to locate the timing of these changes to the degree that has been possible with the unemployment rates. And so we simply do not know whether here, too, the shift toward greater participation by the well-educated, and lesser participation by the poorly educated, may largely have occurred before 1957.*

* From data examined since the Testimony was prepared, it appears that the shift toward greater participation by the well educated primarily occurred before 1957; as to the poorly educated, roughly half of the shift toward lower participation occurred prior to and half after 1957.

If, in the absence of information, one assumes that the shift in relative participation rates occurred more recently, one might conclude that there have been some withdrawals from the labor force by poorly educated male workers. Whenever they occurred, they present an obvious challenge to both public and private training programs. But the magnitude of these shifts is easily exaggerated—especially if one fails to make adequate allowance for the improvements in retirement programs during the past dozen years. It is clear that the vast majority of the so-called “losses” of less educated workers from the male labor force were concentrated in the 65-and-older age group.

In any event . . . none of this goes to the real nub of the issue. That nub is the failure of the bottleneck hypothesis to make any allowance for the proven capacity of a free labor market—especially one endowed with a high average level of education and enterprise and expanding programs to improve labor skills and mobility—to reconcile discrepancies between particular labor supplies and particular labor demands.

If relative shortages of particular skills develop, the price system and the market will moderate them, as they always have done in the past. Employers will be prompted to step up their in-service training programs and, as more jobs become available, poorly skilled and poorly educated workers will be more strongly motivated to avail themselves of training, retraining, and adult education opportunities. Government manpower programs begun in the 1961–63 period will also be operating to help ease the adjustment of specific shortages.

As for the personnel with the very highest skills, many—for the very reason that they are scarce—have been “stockpiled” by their employers and are not working to capacity when business is slack. As business picks up, they will be used more fully—and they will be used more efficiently. As engineers become scarce, and more expensive, their talents will be concentrated on engineering assignments, leaving drafting (for example) for draftsmen, who can be trained more quickly.

Naturally, most college graduates will have jobs no matter how high the unemployment rate in the whole economy, even if they have to work below the level for which they are qualified. If they are already in the supervisory or technical jobs for which they are best qualified, their employers will not have to increase by 10 percent the number of such jobs in order to increase total employment by 10 percent. And to the extent that they are not already in such jobs, they are a hidden reservoir of superior talent.

The highly-educated-manpower-bottleneck argument arrives at its alarming conclusion by projecting to new situations a perfectly static set of educational requirements. The argument makes no allowance for flexibility in the system. Flexibility, of course, is not unlimited. If we were talking about accomplishing a massive increase in output within a few months, manpower bottlenecks might indeed become critical. But we find it unrealistic to be-

lieve that they represent a major constraint upon an extra \$30 billion of output in what will soon be a \$600 billion economy—especially when (a) there are virtually no current signs of tension in either labor markets or product markets and (b) the demand expansion that will accomplish the closure will be spread over 2 or more years in which continuing new supplies of highly trained manpower will be entering the labor market.

At the beginning of Section III the question was raised whether structural elements in unemployment have grown so much since 1957 that they threaten to impede an economic expansion induced by the tax cut. In Sections III and IV we have examined this question from a number of directions, and we now summarize our answer.

The answer is clear: The evidence we have assembled and the tests we have made do not support the thesis that, over-all, the incidence of structural unemployment has increased in importance since we last achieved high employment. There may be some problems that seem more serious today than earlier; but in other areas we have probably progressed.

Expansion of the economy in response to a stepping-up of the growth of demand will not be impeded by pockets of surplus labor existing in a limited number of categories—we have always had distressing surpluses in certain categories, and the tax cut will not fully eliminate them. Economic expansion could eventually be impeded by shortages in strategic categories of skills and training, but the statistical evidence reveals no such shortages enroute to 4-percent unemployment.

It is difficult to believe that an economy that was able to absorb the dramatic shifts needed to convert to war production in World War II, and that operated at unemployment levels as low as 1.2 percent during that war and more recently (1953) at 2.9 percent, could not move rather readily, over the space of 2 or 3 years, to our interim target of 4-percent unemployment.

Unsatisfied as we all must be with our Nation's achievements in education—and with the distressing problem of school dropouts—we must not disregard the fact that our labor force today is better educated and, as a result, more flexible than ever before. The median level of education among the adult male members of the labor force has risen by an astonishing 50 percent since the beginning of the Second World War. New entrants into the labor force are on the average better equipped than ever before to respond to a changing pattern of demand. By 1966, when the full effects of the tax cut will be apparent, the ranks of trained workers will have been swelled by two more annual graduating classes from our high schools, colleges, and professional and graduate schools. In each case, the size of the groups will dwarf all previous records.³

³ For example, the projected numbers graduating from college (bachelors or first professional degrees) in 1964 and 1965 will be about 30 percent above the numbers graduated in 1959 and 1960. By 1970, the estimated number will exceed 1960 by 85 percent.

Our own recent economic history assures us of the economy's ability to adapt to rapid change. Additional assurance along this line is found in the experience of other countries whose systems and values are similar to our own. During the past decade, the Western European economy has undergone staggering structural changes. France and Belgium have adjusted to the decline of important mining areas, Germany to the inflow of millions of refugees from the East, and Italy to the problem of absorbing large numbers of poorly educated rural migrants into urban occupations. And all of Western Europe has adjusted to the replacement of obsolete capital, and of productive methods often unchanged for a century or more with machinery and methods geared to the most advanced technology in the world. The advance of productivity has been revolutionary. During the 1950's, output per manufacturing worker increased $2\frac{1}{4}$ times as fast in Germany as in the United States, 3 times as fast in France, and 4 times as fast in Italy. In their adjustment to these changes the Europeans, though they may have other advantages, did not have the advantage of a labor force nearly as well educated, as well trained, as mobile, or as flexible as ours.

Nonetheless, the Europeans have maintained unemployment rates considerably lower than ours. After adjustment for conceptual differences, the unemployment rate in 1960 was 1.0 percent in Germany, 1.9 percent in France, and 4.3 percent in Italy. In Italy and Germany these low rates represented a considerable improvement over earlier postwar experience, and the higher Italian rate has subsequently declined materially.

The major explanation for such low unemployment rates in economies undergoing such profound transitions lies in the maintenance of a very high level of demand. During the 1950's the average annual growth rate in France was 4 percent, in Italy, 6 percent, and in Germany, over 7 percent—and both Italy and France have had even higher rates so far in the 1960's. This experience demonstrates beyond any doubt that, under the stimulus of adequate demand, and with the aid of active labor market policies, modern economies are sufficiently resilient to absorb poorly educated workers, to adapt to skill shortages, and to adjust to rapid technological change in a manner which maintains extremely low unemployment rates. This European experience—which in broad outline has been matched in Japan—reassures us that, once high and growing demand presses our capacity, we too will adapt to rapid change and maintain our economic health.

Structural unemployment is a human and an economic problem that we must attack by every means available. But the expansion of total demand through tax reduction remains the crucial central element in our attack upon unemployment.

V. THE RATE OF GROWTH OF PRODUCTIVITY*

VI. THE CHALLENGE OF AUTOMATION**

In a way it is surprising how reluctant we are to embrace the higher productivity levels and living standards which "automation" makes possible. Some of the more popular literature on the subject treats it as a new and frightening development. But in fact, it is only the most recent aspect of a continuing process of technological advance that dates back to the beginning of the Industrial Revolution. Taking full advantage of this process, the United States has built the most productive and most remunerative economy in the world. Through time, brute strength has been progressively replaced by simple machines, mechanical power, complex machines, assembly lines, and today increasingly by sophisticated automatic feedback systems. At each stage of the process individuals were temporarily displaced from existing jobs, new skills were found to be needed and were acquired, and total output and employment expanded as demand increased in line with the new higher production capabilities.

Ultimately the total effect has always in the past been a higher standard of living for almost everyone—higher pay for workers, cheaper and better products for consumers, and larger profits for businessmen and stockholders. On the basis of our historical experience, automation should be recognized for what it is—an open door to a more productive economy, to higher levels of private consumption, to more effective public services, and to larger resources for the support of our international objectives.

Despite this historical record, it is occasionally argued that the newest techniques are becoming so much more productive than those they replace that we cannot possibly adjust to them as smoothly as in the past. As indicated earlier, the evidence available to date does not enable us to draw firm conclusions about the prospective rate of increase in productivity. Yet, it is clearly *possible* that as the newest production techniques are increasingly embodied in new capital, the future growth of productivity will speed up.

Should this possibility be a source of concern? Rather than viewing it with concern or alarm, we would argue that we should work as hard as we can for faster productivity growth—indeed, it holds the key to success of our national policies for faster economic growth and for the cost-cutting that is essential to our international competitive position. It is a prime objective of this year's tax bill as well as last year's special tax stimulants to investment.

Doubts about our ability to adjust to automation seem to be based on two questions: Can we really use the enlarged output of goods and services

*The text of this section has been deleted because the same material is covered—using more recent data—in Chapter 3 of the *Report*, especially in the subsection headed "The Trend of Labor Productivity."

**Parts of this section overlap with material contained in the text of the *Report*.

made possible by a rising rate of productivity advance? Will the new speed and character of technological change create impossible problems of adjustment for the labor force?

Those who raise the first question sometimes argue that we cannot possibly consume all that the new techniques can produce—that the persistent high level of unemployment over the past few years is evidence of “satiation”—that the fantastic productivity of the American economy has outdistanced the needs of the American people. What do the facts show?

First and most obvious, it is impossible to square this notion with the persistence of poverty in the American economy. We are indeed an affluent society, by every comparative standard. Nonetheless, even in this age of affluence, one-fifth of American families still have annual incomes below \$3,000—that is, they live in poverty. To them, the suggestion that we are economically satiated must seem ridiculous, if not cruel. Until our society has met the challenge of poverty in the midst of plenty, it is in no danger of being satiated with goods and services.

But—quite apart from the persistence of poverty—there is nothing in the economic behavior of even the more affluent American consumers to support the satiation hypothesis. At all income levels—except perhaps in the top 2 or 3 percent of the income-wealth distribution—the ratio of consumption to disposable income is one of our most stable economic relationships. Year-in, year-out—ever since 1950—American consumers have continued to spend from 92 to 94 percent of their aggregate disposable income—their income after taxes—on consumer goods and services. During this period total income and average family income have both risen markedly; but there is no evidence of any growing disinclination to spend a stable and high percentage of each additional dollar of income on consumption. Even those in the upper “middle” income groups who are already able to meet without strain the basic requirements for food, clothing, housing, and transportation find that they have ample, and often urgent uses, for additional incomes. This may take the form of an improved quality or manner in which basic requirements are satisfied—a larger house, a newer car—or it may take the form of meeting new and different demands: longer and more rewarding vacations, better education for one’s children, better medical care, more books and more concerts, and more expensive hobbies.

This does not, of course, rule out the possibility that—as in the past—some, many, or even all of us will prefer to forego still higher income in favor of greater leisure in the form of shorter hours, longer vacations, or earlier retirements. (There are indications, incidentally, that many people find it easier to become satiated with leisure than with income!)

In addition to unsatisfied private consumption needs, there are pressing needs for goods and services which are ordinarily and in some cases inevitably provided by the public sector. Admittedly there is disagreement as to just which of these “public goods” most need to be increased. There are also differences of opinion as to which levels of government should under-

take expanded activities. Nevertheless, almost all major segments of the American community support increases in the level of one or another of such "public" goods and services, whether they be, for example, urban renewal, or improved health services, or better schools, or better roads and airports, or purer water and air, or more adequate facilities in national parks. Certainly none of this bespeaks a satiated society.

In a somewhat different vein, it should also be noted that technologically advancing societies also generate high levels of investment demand, demand for producer goods like machines, equipment, buildings. In large part, of course, this reflects the favorable impact of new technological developments on the profitability of investment. During most of our history, American business has responded to such opportunities by enlarging its investment outlays. Postwar Western Europe and Japan provide examples of economies with impressive rates of productivity increase along with buoyant demand, reflecting—more than anything else—extremely high quotas of investment.

Clearly, we need not fear that the increasing productivity associated with even a speeded-up rate of technological progress will founder upon a contradiction between our needs and our ability to satisfy them. As people continue to receive the extra incomes which our enlarging production can generate, they will also continue to use those extra incomes to buy the enlarged output—for private and public consumption and for investment.

The second question raised about our ability to adjust to automation concerns the labor force adjustments it necessitates.

If the advance of technological progress has speeded up, it is reasonable to suppose that, as a by-product, the rate at which particular skills are rendered obsolescent is also increasing. But a further and different point is sometimes made, namely, that automation (in its narrower technical sense) is shifting not merely the *rate* but the *character* of skill requirements generated by technological change. Previously, it is suggested, technological change simplified the work process and hence created many semi-skilled jobs, which could be filled by workers with little training. Automation, however, reintegrates the production process and thus eliminates many unskilled and semi-skilled jobs.

Whether this interpretation is correct is a highly complex empirical question. Many of the jobs displaced by automation are low-skilled and some of the jobs added are extremely high-skilled. The design and installation of automation equipment surely requires highly trained personnel. Yet the need for these people is clearly limited, and they do not stay with the equipment long after installation. Once in operation, the equipment may actually diminish rather than raise skill requirements. Examples of highly automated installations have been cited where all of the maintenance is done by high school graduates with a fairly short trade school course in electronic repair. High skills are required for the programming function, but this also tends to be concentrated in the initial stages and "canned" programs are increasingly available in some applications. A good deal

more study and experience is needed before we can safely generalize about the impact of automation on skill requirements for the labor force as a whole.

Beyond the question of how automation (in the narrow sense) affects average skill requirements lies the broader question of the impact on labor markets of any general acceleration that may occur in the rate of technological advance. This broader question involves at least two dimensions.

A "vertical" dimension relates to the impact of speeded technological change on the long-term rate of increase in the average educational content of jobs. As noted repeatedly, our past rapid increase in educational levels has both responded to and helped bring about our steady technological advance and rising productivity. The exact nature of the complex interrelationships between the average educational accomplishment of the labor force, job educational requirements, and a further speeding up of the pace of technological advance is a matter for some speculation. But whatever the answer, more and better education will continue to have one of the highest priorities among the values of American society.

The "horizontal" dimension of our question requires less speculation. We can be certain that a speeded pace of technological change will increase the rate of job displacement, and will require even greater attention to measures for improving labor mobility, for training and retraining of workers, and for an effective level of basic education to promote adaptability and flexibility. The possibility of an accelerated pace of technical change thus underscores an already powerful case for stonger labor market policies to meet existing problems of displacement.

Our past economic growth has brought unparalleled levels of well-being for all in our society. Today we need and we actively seek even higher levels of productivity, to help us solve both domestic and international problems. If, as a result of our policies to stimulate investment and improve efficiency, or as an unexpected bonus from autonomous developments in technology, the U.S. rate of productivity growth accelerates, we may encounter problems, but we will reap large rewards. If we pursue appropriate policies, we can meet the challenge of automation.

VII. CONCLUSIONS

This statement has been long and necessarily complex. But the issues involved are of the highest urgency and significance for the economic future of our Nation, and they are far from simple. In so characterizing them we know we share the view of this Subcommittee, which has been so tirelessly pursuing all aspects of this subject.

We have tried to draw our conclusions from the evidence as we have gone along, and therefore need only pull them together here. These are our principal conclusions:

1. Enactment of the major tax reduction program which is now before the Senate is a necessary condition for solution of the problems that concern this Subcommittee. It will directly add \$30 billion to total output and create 2 to 3 million extra jobs. Without the continuing lift in total demands for goods and services that the tax program is designed to accomplish, little progress can be expected in reducing and eliminating problems of excessive unemployment for the Nation as a whole. Had this lift in demand been effective in the years 1958 through 1963, it would have overcome economic slack; achieved a considerably higher level of output of needed goods and services; maintained unemployment rates comparable with those realized in the years before 1957; and—in the process—reduced or eliminated our budget deficits.

2. Although tax reduction will alleviate, it will not by itself cure, long-standing problems of structural unemployment, of incomplete adaptation of the structure of our labor force to the structure of demand, of regional imbalances, and of consequent hardship, inequity, and inefficiency. The need to attack these problems stems, first, from our concern to alleviate unnecessary human distress. Second, it stems from the desire to convert unproductive and unwanted idleness into productive employment, so that we can increase our output of needed goods and services even beyond the potential output associated with our interim target of a 4-percent rate of unemployment. And third, if the rate of technological displacement of workers is in the process of accelerating, it will need to be matched by a similar increase in the mobility and adaptability of our labor force.

This Administration has placed high priority upon measures to accelerate our productivity gains—through the stimulation of investment by tax measures, the improvement of technology in lagging sectors of the civilian economy, and in other ways—with the urgent purpose of improving the competitive position of American producers in world markets and of stepping up our long-term growth rate. It has promoted policies designed to realize the benefits of maximum productive efficiency—policies which may require shifts in our resource use and consequent displacement of labor.

It would be irresponsible not to complement these policies with others designed to facilitate the transfer of resources and to ease necessary burdens of adjustment—as, indeed, was done in the “adjustment” provisions of the Trade Expansion Act.

Without attempting to be comprehensive, we can indicate some of the important channels of attack on structural problems:

- improved labor market information services;
- improved guidance and placement services;
- improved programs of apprenticeship;
- strengthened programs to reduce discriminatory hiring and employment practices by race, sex, or national origin;
- expanded and more effective programs of vocational education, general adult education, and retraining;

—basic improvements in the quality of our educational system at all levels;

—measures to enlarge educational opportunities for children of low income families and minority groups;

—programs to assist the geographical movement of workers;

—expanded policies to strengthen the economic base and to speed the economic growth of distressed communities and regions.

The tax cut and other measures to expand total demand are no substitute for policies like these; while these policies, in turn, are no substitute for a tax cut. Yet a more vigorous expansion of demand will release forces that will powerfully aid in the solution of structural problems. The existence of a stronger demand for labor will by itself strengthen the incentives for workers to undertake training or retraining and for employers to help provide it; will attract workers to move to the places where jobs are plentiful and stimulate employers to assist such movement; will ease the financial burdens on local communities in undertaking improvements in their educational systems; will reduce discriminatory practices both by employers and by unions; and will increase the effectiveness of the free-market price system in encouraging appropriate adjustments of both labor supply and labor demand, the need for which is now partly obscured by slack markets.

3. Important as is the attack on structural problems, we need not fear that structural obstacles will block a healthy expansion of jobs and output resulting from the tax cut. The feasibility of our 4-percent interim target assumes not some newly perfected system of labor market adjustment but the labor market as it exists today with its present adjustment mechanism. Possible and desirable improvements in our labor market adjustment processes can smooth and accelerate achievement of the interim target. And they can permit us to penetrate beyond it to even lower unemployment rates. But it is on demand stimulus that we must rely to get to the provisional 4-percent objective.

4. There are hopeful hints in the most recent evidence that we may be achieving a somewhat higher rate of average productivity growth than in the past, although it is too early to be sure. If our potential output per worker should grow more rapidly in the future than in the past, it would mean that an even more rapid expansion of total demand would be required to reach and maintain reasonably full employment of the labor force. But we see no basis for fears that our wants and needs are already satiated, or that total spending will fail to rise with potential output and thus thwart faster expansion. It is true that demand does not *automatically* adjust, year-by-year, to the growth of potential output. But there is no reason to suppose that demand is more likely to be deficient when potential output is more rapidly growing, than when growth in potential output is less dynamic. On the contrary, the conditions that are conducive to faster productivity growth are also conducive to more rapid expansion in private demands.

Instead of fearing an accelerated growth of productivity, we should and do seek it

- to achieve more fully our private and public domestic economic goals;
- to help us correct our balance-of-payments deficit;
- and to raise the standard and quality of life for all of our citizens.

Appendix B

**REPORT TO THE PRESIDENT ON THE ACTIVITIES OF
THE COUNCIL OF ECONOMIC ADVISERS DURING 1963**

LETTER OF TRANSMITTAL

DECEMBER 31, 1963.

The PRESIDENT.

SIR: The Council of Economic Advisers submits this report on its activities during the calendar year 1963 in accordance with the requirements of Congress, as set forth in Section 4(d) of the Employment Act of 1946.

Respectfully,

WALTER W. HELLER, *Chairman.*
GARDNER ACKLEY
JOHN P. LEWIS

Report to the President on the Activities of the Council of Economic Advisers During 1963

COUNCIL MEMBERSHIP

During 1963 the Council remained under the direction of Walter W. Heller, who has served as Chairman since the change of Administration in January 1961. Gardner Ackley, who joined the Council in August 1962, continued as a member throughout 1963, and John P. Lewis, the third Council member, took office on May 17, 1963. All three were asked by President Johnson to continue in office following the assassination of President Kennedy.

Mr. Heller is on leave from his post as Professor and Chairman of the Department of Economics at the University of Minnesota; Mr. Ackley from his post as Professor of Economics at the University of Michigan; and Mr. Lewis from his post as Professor and Chairman of the Department of Business Economics and Public Policy in the Graduate School of Business at Indiana University.

Following is a list of all past Council members and their dates of service:

Name	Position	Oath of office date	Separation date
Edwin G. Nourse.....	Chairman.....	August 9, 1946.....	November 1, 1949.
Leon H. Keyserling.....	Vice Chairman.....	August 9, 1946.....	November 1, 1949.
	Acting Chairman.....	November 2, 1949.....	May 9, 1950.
	Chairman.....	May 10, 1950.....	January 20, 1953.
John D. Clark.....	Member.....	August 9, 1946.....	May 9, 1950.
	Vice Chairman.....	May 10, 1950.....	February 11, 1953.
Roy Blough.....	Member.....	June 29, 1950.....	August 20, 1952.
Robert C. Turner.....	Member.....	September 8, 1952.....	January 20, 1953.
Arthur F. Burns.....	Chairman.....	March 19, 1953.....	December 1, 1956.
Neil H. Jacoby.....	Member.....	September 15, 1953.....	February 9, 1955.
Walter W. Stewart.....	Member.....	December 2, 1953.....	April 29, 1955.
Joseph S. Davis.....	Member.....	May 2, 1955.....	October 31, 1958.
Raymond J. Saulnier.....	Member.....	April 4, 1955.....	December 2, 1956.
	Chairman.....	December 3, 1956.....	January 20, 1961.
Paul W. McCracken.....	Member.....	December 3, 1956.....	January 31, 1959.
Karl Brandt.....	Member.....	November 1, 1958.....	January 20, 1961.
Henry C. Wallich.....	Member.....	May 7, 1959.....	January 20, 1961.
James Tobin.....	Member.....	January 27, 1961.....	July 31, 1962.
Kermit Gordon.....	Member.....	January 27, 1961.....	December 27, 1962.

COUNCIL STAFF

The Council members are currently assisted by a professional staff of 18. These staff members are W. H. Locke Anderson, Richard M. Bailey, Eugene A. Birnbaum, James T. Bonnen, William M. Capron, Frances M.

James, Myron L. Joseph, Edward D. Kalachek, Marshall A. Kaplan, Susan J. Lepper, David W. Lusher, Timothy W. McGuire, Fredric Q. Raines, Robert Solomon, Penelope H. Thunberg, Joseph J. Walka, Burton A. Weisbrod, and Betty J. Willis.

In addition, the Council draws on the expertise of leading members of the economics profession by making frequent use of outside consultants. During 1963 the following served the Council in this capacity: Kenneth J. Arrow, Robert E. Asher, E. Cary Brown, Richard E. Caves, Charles A. Cooper, Richard N. Cooper, Robert Dorfman, James Duesenberry, Otto Eckstein, Rashi Fein, W. Lee Hansen, Robert J. Lampman, David D. Martin, John R. Meyer, Richard A. Musgrave, Richard R. Nelson, Arthur M. Okun, Joseph A. Pechman, George L. Perry, Lee E. Preston, Jr., Paul A. Samuelson, Warren L. Smith, Robert M. Solow, Charles A. Taff, James Tobin, Robert Triffin, and Lloyd Ulman.

Every year a number of staff members who have joined the Council on a leave-of-absence basis return to their posts in private life or in government. Those leaving the Council in 1963 were: Michael F. Brewer, Charles A. Cooper, Richard N. Cooper, Rashi Fein, Robert J. Lampman, Richard R. Nelson, George L. Perry, Vernon W. Ruttan, Paul S. Sarbanes, Norman J. Simler, Warren L. Smith, and Nancy H. Teeters.

Each summer, for the last three years, the Council has conducted a student intern program. Those selected in 1963 were Leslie Aspin, Peter A. Diamond, Donald A. Nichols, and Robert N. Stearns.

In addition, under an arrangement with the Great Lakes College Association, a group of 12 liberal arts colleges, the Council in 1963 also had a summer faculty intern, Maurice L. Branch, Professor of Economics at Albion College.

COUNCIL ACTIVITIES

The Council is charged by the Employment Act of 1946 with responsibility for analyzing and interpreting current and prospective economic developments and trends and for developing and recommending economic policies that will promote the goals of "maximum employment, production, and purchasing power." This charge, and the increased responsibilities as an economic staff agency that have been assigned to it in recent years by the President, require the Council to consider a wide range of policy problems and areas. As a consequence, the Council consults and works closely with other members of the Executive Office and White House staff and with numerous other Government departments and agencies in analyzing domestic and international economic issues and in formulating appropriate recommendations.

Participation in Interagency Activities

In addition to discharging its advisory duties through informal consultations with other Government agencies, the Council also participates on a formal basis in a number of interagency activities:

1. The Chairman regularly attends meetings of the Cabinet, where he frequently briefs the President and Cabinet members on the current economic situation.

2. He is Chairman of the Cabinet Committee on Economic Growth. This Committee was established in August 1962 to coordinate Federal activities and policies in this field and to advise the President on steps to accelerate the growth of the U.S. economy. Other members are the Secretaries of the Treasury, Commerce, and Labor, and the Director of the Bureau of the Budget.

3. He is a member of the Cabinet Committee on the Balance of Payments.

4. He is Vice-Chairman of the Interdepartmental Energy Study, undertaken by a group of 9 agencies organized in February to study the development and use of our total energy resources in order to help determine the most effective allocation of research and development efforts.

5. The Secretary of the Treasury, the Director of the Bureau of the Budget, and the Chairman of the Council form a coordinating committee on economic, budgetary, and revenue developments and forecasts, which reports its findings to the President from time to time.

6. The Chairman of the Board of Governors of the Federal Reserve System joins the above officials and their associates to form an advisory group which meets periodically with the President to discuss domestic and international monetary matters.

7. Mr. Ackley serves as Chairman of the Interagency Committee on the Economic Impact of Defense and Disarmament, which also includes representatives of the Departments of Defense, Commerce, and Labor; the Arms Control and Disarmament Agency, the Atomic Energy Commission, the National Aeronautics and Space Administration, the Bureau of the Budget, and the Office of Emergency Planning. This Committee, which functioned on an informal basis for most of the year, was formally established by President Johnson on December 21. In his memorandum the President stated: "The Committee will be responsible for the review and coordination of activities in the various departments and agencies designed to improve our understanding of the economic impact of defense expenditures and of changes either in the composition or in the total level of such expenditures."

8. Mr. Lewis serves as a member of the Interagency Committee on Transportation Mergers, which advises the President as to positions the Government should take with respect to merger proposals that transportation companies have submitted to Federal regulatory agencies.

9. Mr. Ackley serves as Chairman of an interagency committee, including representatives of the Department of Labor and Commerce and the Bureau of the Budget, which is responsible for developing and supervising an integrated program of studies and projections of United States economic growth.

10. Members or staff of the Council served on a number of other inter-agency committees dealing with a wide variety of domestic economic matters:

- a. the Advisory Committee on Domestic Federal Credit Programs;
- b. the Interagency Committee to Review the Civil Aeronautics Board Local Airline Subsidy Reduction Program;
- c. the Interagency Committee on Air User Charges;
- d. the Natural Resources Committees of both the Federal Council for Science and Technology and the National Academy of Sciences;
- e. the Water Resources Research Committee of the Federal Council for Science and Technology;
- f. the Army-Interior Advisory Board on Passamaquoddy and Upper St. John River;
- g. the Committee on Federal Mental Health Programs;
- h. the Interdepartmental Advisory Committee on the U.S. National Health Survey.

11. The Council continued its work with the President's Advisory Committee on Labor-Management Policy, attending meetings of the Committee and participating in planning a study of automation as part of its agenda for the coming year.

12. Along with the Bureau of the Budget and members of the White House staff, the Council reviewed measures proposed for inclusion in the President's 1964 legislative program. The Council had primary responsibility for analysis and coordination of proposals for an assault on the problem of poverty in the United States.

Consumer Advisory Council

Acting for the President, the Council of Economic Advisers was advised on consumer matters by the Consumer Advisory Council. It had been established by the Chairman in July 1962 pursuant to the Presidential Message on Consumers' Protection and Interest Programs. The Consumer Advisory Council made its First Report on September 30, 1963. It reviewed the history of Federal activities on behalf of the consumer, noted recent progress in Federal consumer protection programs, and made numerous recommendations on behalf of consumers.

Dr. Helen G. Canoyer, Dean of the New York State College of Home Economics at Cornell University, was the first Chairman of the Consumer Advisory Council from its inception in July 1962 until November 1963. Mrs. John G. Lee, Past President of the League of Women Voters, then served as Acting Chairman.

At year-end, acting on recommendations made by the Council of Economic Advisers and concurred in by the other agencies concerned, the President approved the appointment of a White House Special Assistant for Consumer Affairs and the establishment by executive order of the

President's Committee on Consumer Interests. This Committee will consist of (1) high-level representatives of 9 Federal agencies concerned with consumer affairs, including the Council of Economic Advisers; (2) such other governmental representatives as the President may name; and (3) private citizens especially qualified to represent the consumer interest. The third group will retain its identity as the Consumer Advisory Council, serving as the successor to the present group of that title. The Council of Economic Advisers will continue to look to this group for advice from a consumer point of view on broad matters of economic policy.

Committee on Financial Institutions

President Kennedy established three interagency committees in 1962 to examine the issues raised by the Report of the Commission on Money and Credit. The Council was represented on the two groups that reported to the President late in 1962—the Committee on Federal Credit Programs and the Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs. The latter committee's report was referred in turn to the President's Advisory Committee on Labor-Management Policy, which reported recently to the President.

The Chairman of the Council chaired the Committee on Financial Institutions, which made its report in April 1963. Other members of the Committee were the Secretaries of the Treasury; Agriculture; and Health, Education, and Welfare; the Attorney General; the Administrator of the Housing and Home Finance Agency; the Chairman of the Board of Governors of the Federal Reserve System; the Chairman of the Federal Home Loan Bank Board; the Chairman of the Federal Deposit Insurance Corporation; the Comptroller of the Currency; and the Director of the Bureau of the Budget.

The Committee on Financial Institutions formulated goals and objectives of Federal policy designed to enable private financial institutions to function more effectively. It thereby indicated desirable directions of legislative action, but did not attempt to lay out a specific legislative program. The topics covered were reserve requirements, interest rate and portfolio regulations, Federal charters for financial institutions, deposit insurance, structural changes and competition, conflicts of interest, and supervision and examination of institutions.

A number of bills have been introduced in the Congress this year which would implement some of the conclusions of the Committee.

International Economic Activities

Economic policy decisions in the United States must be made increasingly in an international context. The Council participates in a number of international activities in order to exchange views with foreign officials and to obtain the necessary cooperation in economic matters among the countries of the free world:

1. The Chairman was a member of the U.S. delegation to:
 - a. The eighth annual meeting of the Cabinet-level United States-Canada Joint Committee on Trade and Economic Affairs, which met in Washington on September 20-21;
 - b. The third annual meeting of a similar United States-Japan Cabinet-level Committee, whose scheduled meeting in Japan in late November was postponed until January 1964 because of the death of President Kennedy;
 - c. The September-October meetings in Washington of the International Monetary Fund and the International Bank for Reconstruction and Development.
2. The Council participated actively in the work of the Organization for Economic Cooperation and Development (OECD) :
 - a. Mr. Heller continued to serve as Chairman of the U.S. delegation to meetings of the Economic Policy Committee of the OECD;
 - b. Mr. Ackley and Messrs. Robert Solomon, Richard Cooper, and Warren Smith of the Council staff were members of the U.S. delegation to the Committee's Working Party on Balance-of-Payments Equilibrium;
 - c. Mr. Lewis was Chairman of the U.S. delegation to the Committee's Working Party on Costs of Production and Prices;
 - d. Mr. Ackley served as Chairman of the U.S. delegation to the Committee's Working Party on Policies for the Promotion of Economic Growth;
 - e. Mr. Ackley headed the U.S. delegation for the review of the U.S. economy carried on annually by the Economic Development and Review Committee of the OECD.
3. In addition to its participation in the work of the Cabinet Committee on Balance of Payments, the Council was represented on the Committee on Balance-of-Payments Information, the Interagency Committee on Foreign Trade Statistics, the National Advisory Council on International Monetary and Financial Problems and other groups concerned with our foreign trade, our balance of payments, and international monetary reform.
4. In January the Brookings Institution transmitted to the Council its five-year outlook for the U.S. basic balance of payments. This report was financed in 1962 by the Council, in conjunction with the Treasury Department and the Bureau of the Budget. The Report provides a detailed five-year outlook on factors that will affect the U.S. balance of payments and was the subject of hearings by the Joint Economic Committee of the Congress this year.

CONGRESSIONAL TESTIMONY

In addition to its testimony before Appropriations Committees in support of its own budget request, the Council appeared before Congressional Committees as follows during 1963:

1. On January 28 Mr. Heller, accompanied by Mr. Ackley, opened testimony on the 1963 *Economic Report of the President* before the Joint Economic Committee.

2. On May 1 Mr. Heller appeared before the Education Subcommittee of the Senate Committee on Labor and Public Welfare as a participant in the discussion on the proposed National Education Improvement Act of 1963.

3. On July 25 Mr. Heller, accompanied by Mr. Ackley and Mr. Lewis, testified before the House Committee on Banking and Currency in their hearings on Recent Changes in Monetary Policy and the Balance-of-Payments Problem.

4. On the same day Mr. Lewis, accompanied by Mr. Capron and Mr. Lusher of the Council's staff, appeared before the Senate Commerce Committee to discuss the economic impact of a possible railroad strike.

5. On October 28 Mr. Heller, accompanied by Mr. Ackley and Mr. Lewis, testified at hearings on the Nation's Manpower Revolution conducted by the Subcommittee on Employment and Manpower of the Senate Committee on Labor and Public Welfare.

6. On November 12 Mr. Heller, accompanied by Mr. Ackley and Mr. Lewis, appeared before the Senate Committee on Finance in support of the tax bill, H.R. 8363.

Also, in response to a request from the Chairman of the Joint Economic Committee, Senator Paul H. Douglas, the Council provided the Committee in October with a Summary Analysis of the Probable Effects of the Proposed Quality Stabilization Act on Prices, Incomes, Employment, and Production.

NONGOVERNMENTAL MEETINGS AND ACTIVITIES

The Council attempts to contribute to the process of informing public opinion as it bears on current economic issues. The members and staff of the Council spoke during 1963 before a number of private and public organizations and institutes, appeared on radio and television programs, and wrote articles for popular and professional publications.

The Employment Act of 1946 explicitly provides for consultation with "representatives of industry, agriculture, labor, consumers, State and local governments, and other groups . . ." The Council has frequent informal interchanges with such representatives and also meets from time to time with four advisory groups (in addition to the Consumer Advisory Council):

1. The Economic Policy Committee of the AFL-CIO, including—in addition to George Meany, President, and William F. Schnitzler, Secretary—

Treasurer, of the AFL-CIO—the following: Walter P. Reuther, Chairman, James B. Carey, David Dubinsky, George Harrison, A. J. Hayes, Joseph Keenan, O. A. Knight, David J. McDonald, Paul L. Phillips, Emil Rieve, Joseph Rourke, Peter T. Schoemann, and James Suffridge.

2. The Liaison Committee of the Business Council, including—in addition to Roger Blough, past Chairman, and Frederick Kappel, present Chairman, of the Business Council—the following: Chairman of the Liaison Committee, Donald K. David, Vice-Chairman, Ford Foundation; Paul C. Cabot, Chairman, State Street Investment Corporation; John Cowles, President, *Minneapolis Star and Tribune*; Joseph B. Hall, Chairman, Kroger Company; and W. B. Murphy, President, Campbell Soup Company.

3. The Conference of Business Economists, an organization of almost 50 members, chaired in 1963 by Ira T. Ellis of E. I. DuPont de Nemours & Company.

4. The AFL-CIO economists and research directors.

PUBLICATIONS

In January the Council transmitted to the Congress its 1963 *Annual Report*, together with the *Economic Report of the President*. As in the past, copies of the Report were distributed to members of the Congress, government officials, the press, and depository libraries. The Superintendent of Documents sold an additional 35,374 copies to the public, a 60 percent increase over the previous record sale of 22,125 copies of the 1962 *Report*.

The monthly *Economic Indicators*, an important source of current economic statistics, has been prepared since 1948 at the Council under the direction of Miss Frances M. James. It is published by the Joint Economic Committee of the Congress, and, under authority of a Joint Resolution of the Congress, copies are furnished to members of the Congress and to depository libraries. The Superintendent of Documents sells about 9,000 copies a month to the public.

APPROPRIATIONS

The Council received an appropriation of \$615,000 for fiscal year 1964. The Council's request for 1965, which assumes no increase in staff, is the same as 1964 except for adjustments made necessary by the salary increases resulting from the pay legislation of 1962 and by the increased cost to the Council of overtime, communications, printing, and other services.

Appendix C

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EMPLOYMENT, AND PRODUCTION**

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Note.—Detail in these tables will not necessarily add to totals because of rounding.

Data for Alaska and Hawaii are not included unless specifically noted.

Unless otherwise noted, all dollar figures are in current prices.

NATIONAL INCOME OR EXPENDITURE

TABLE C-1.—Gross national product or expenditure, 1929-63

(Billions of dollars)

Year or quarter	Total gross national product	Personal consumption expenditures ¹	Gross private domestic investment ²						Net exports of goods and services ³	Government purchases of goods and services					
			Total	New construction			Producers' durable equipment	Net change in business inventories		Total	Federal				State and local
				Total	Residential nonfarm	Other					Total	National defense ⁴	Other	Less: Government sales	
1929.....	104.4	79.0	16.2	8.7	3.6	5.1	5.8	1.7	0.8	8.5	1.3	1.3	(⁵)	7.2	
1930.....	91.1	71.0	10.3	6.2	2.1	4.1	4.5	— .4	.7	9.2	1.4	1.4	(⁵)	7.8	
1931.....	76.3	61.3	5.5	4.0	1.6	2.4	2.8	— 1.3	.2	9.2	1.5	1.5	(⁵)	7.7	
1932.....	58.5	49.3	.9	1.9	.6	1.2	1.6	— 2.6	.2	8.1	1.5	1.5	(⁵)	6.6	
1933.....	56.0	46.4	1.4	1.4	.5	1.0	1.6	— 1.6	.2	8.0	2.0	2.0	(⁵)	6.0	
1934.....	65.0	51.9	2.9	1.7	.6	1.1	2.3	— 1.1	.4	9.8	3.0	3.0	(⁵)	6.8	
1935.....	72.5	58.3	6.3	2.3	1.0	1.3	3.1	.9	— 1.1	10.0	2.9	2.9	(⁵)	7.1	
1936.....	82.7	62.6	8.4	3.3	1.6	1.7	4.2	1.0	— 1.1	11.8	4.8	4.8	(⁵)	7.0	
1937.....	90.8	67.3	11.7	4.4	1.9	2.5	5.1	2.2	.1	11.7	4.6	4.6	(⁵)	7.2	
1938.....	85.2	64.6	6.7	4.0	2.0	2.0	3.6	— .9	1.1	12.8	5.3	5.3	(⁵)	7.5	
1939.....	91.1	67.6	9.3	4.8	2.7	2.1	4.2	.4	.9	13.3	5.2	1.3	3.9	(⁵)	8.2
1940.....	100.6	71.9	13.2	5.5	3.0	2.5	5.5	2.2	1.5	14.1	6.2	2.2	4.0	(⁵)	7.9
1941.....	125.8	81.9	18.1	6.6	3.5	3.1	6.9	4.5	1.1	24.8	16.9	13.8	3.2	(⁵)	7.8
1942.....	159.1	89.7	9.9	3.7	1.7	2.0	4.3	1.8	— 2.2	59.7	52.0	49.6	2.7	0.2	7.7
1943.....	192.5	100.5	5.6	2.3	.9	1.4	4.0	— .8	— 2.2	88.6	81.2	80.4	1.5	.6	7.4
1944.....	211.4	109.8	7.1	2.7	.8	1.9	5.4	— 1.0	— 2.1	96.5	89.0	88.6	1.6	1.2	7.5
1945.....	213.6	121.7	10.4	3.8	1.1	2.7	7.7	— 1.1	— 1.4	82.9	74.8	75.9	1.0	2.2	8.1
1946.....	210.7	147.1	28.1	11.0	4.8	6.3	10.7	6.4	4.9	30.5	20.6	18.8	4.5	2.7	9.9
1947.....	234.3	165.4	31.5	15.3	7.5	7.7	16.7	— 5.0	9.0	28.4	15.6	11.4	5.4	1.1	12.7
1948.....	259.4	178.3	43.1	19.5	10.1	9.3	18.9	4.7	3.5	34.5	19.3	11.6	8.2	.5	15.2
1949.....	258.1	181.2	33.0	18.8	9.6	9.2	17.2	— 3.1	3.8	40.2	22.2	13.6	8.9	.2	17.9
1950.....	294.6	195.0	50.0	24.2	14.1	10.1	18.9	6.8	.6	39.0	19.3	14.3	5.2	.1	19.7
1951.....	329.0	209.8	56.3	24.8	12.5	12.3	21.3	10.2	2.4	60.5	38.8	33.9	5.2	.3	21.7
1952.....	347.0	219.8	49.9	25.5	12.8	12.7	21.3	3.1	1.3	76.0	52.9	46.4	6.7	.3	23.2
1953.....	365.4	232.6	50.3	27.6	13.8	13.8	22.3	.4	— 4.4	82.8	58.0	49.3	9.0	.3	24.9
1954.....	363.1	238.0	48.9	29.7	15.4	14.3	20.8	— 1.6	1.0	75.3	47.5	41.2	6.7	.3	27.7
1955.....	397.5	256.9	63.8	34.9	18.7	16.2	23.1	5.8	1.1	75.6	45.3	39.1	6.6	.4	30.3
1956.....	419.2	269.9	67.4	35.5	17.7	17.8	27.2	4.7	2.9	79.0	45.7	40.4	5.7	.3	33.2
1957.....	442.8	285.2	66.1	36.1	17.0	19.0	28.5	1.6	4.9	86.5	49.7	44.4	5.7	.4	36.8
1958.....	444.5	293.2	56.6	35.5	18.0	17.4	23.1	— 2.0	1.2	93.5	52.6	44.8	8.3	.5	40.8
1959.....	482.7	313.5	72.7	40.2	22.3	17.9	25.9	6.6	— 8.0	97.2	53.6	46.2	7.9	.5	43.6
1960.....	502.6	328.2	71.8	40.7	21.1	19.7	27.6	3.5	3.0	99.6	53.1	45.7	8.0	.6	46.5
1961.....	518.2	336.8	69.0	41.6	21.0	20.5	25.5	1.9	4.4	107.9	57.4	49.0	8.9	.6	50.6
1962.....	554.9	355.4	78.8	44.4	23.2	21.2	28.8	5.5	3.8	117.0	62.4	53.3	10.0	.8	54.6
1963 ⁶	585.0	373.2	82.3	46.6	25.0	21.6	31.0	4.7	4.4	125.1	66.4	56.8	10.6	1.0	58.8
Seasonally adjusted annual rates															
1961: I.....	500.4	330.7	59.6	39.3	19.0	20.3	24.6	— 4.3	5.4	104.7	55.4	47.5	8.5	0.6	49.3
II.....	512.5	334.9	66.6	41.0	20.1	20.8	24.5	1.1	4.3	106.8	57.1	49.0	8.7	.6	49.7
III.....	521.9	337.9	72.0	42.6	21.9	20.7	25.8	3.5	4.1	107.9	57.1	48.6	9.1	.6	50.8
IV.....	537.8	343.8	77.6	43.2	22.8	20.4	27.1	7.2	4.0	112.3	59.8	50.9	9.5	.6	52.5
1962: I.....	544.5	348.8	77.3	41.7	21.2	20.6	27.4	8.1	3.3	115.1	61.8	52.6	9.9	.7	53.3
II.....	562.4	352.9	79.6	44.5	23.3	21.2	28.7	6.5	4.4	115.5	61.9	52.9	9.8	.8	53.6
III.....	556.8	356.7	78.9	46.0	24.2	21.7	29.3	3.6	4.1	117.0	62.4	53.6	9.7	.8	54.6
IV.....	565.2	362.9	78.8	45.0	23.7	21.2	29.9	4.0	3.3	120.2	63.6	54.3	10.4	1.1	56.6
1963: I.....	571.8	367.4	77.8	43.7	22.7	21.0	29.0	5.1	3.6	123.0	65.5	56.4	10.1	1.0	57.5
II.....	579.6	370.4	80.7	45.8	24.8	21.0	30.7	4.3	4.8	123.8	66.5	56.7	10.6	.8	57.3
III.....	588.7	374.9	83.7	47.9	25.9	22.0	31.6	4.2	4.3	125.7	66.4	56.7	10.8	1.2	59.4
IV ⁶	600.0	380.0	87.0	49.1	26.7	22.4	32.6	5.3	5.0	128.0	67.0	57.3	10.8	1.0	61.0

¹ See Table C-9 for major components.

² See Table C-10 for further detail and explanation of components.

³ For 1929-45, net exports of goods and services and net foreign investment have been equated, since foreign net transfers by Government were negligible during that period. See Table C-7 for exports and imports separately.

⁴ Prior to 1959, this category corresponds closely to the national defense classification in the *Budget of the United States Government for the Fiscal Year ending June 30, 1965*. Beginning with 1959, they differ because of inclusion of space program expenditures in this table; these expenditures, small in 1959-61, amounted to \$1.6 billion in 1962 and \$3.0 billion in 1963. See also Table C-57.

⁵ Less than \$50 million.

⁶ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-2.—Gross national product or expenditure, in 1963 prices, 1929-63 ¹

[Billions of dollars, 1963 prices]

Year or quarter	Total gross national product	Personal consumption expenditures				Gross private domestic investment					
		Total	Durable goods	Non-durable goods	Services	Total	New construction			Producers' durable equipment	Change in business inventories
							Total	Residential non-farm	Other		
1929.....	214.2	145.2	15.7	72.0	57.4	42.9	26.1	10.3	15.7	13.5	3.4
1930.....	194.6	136.6	12.5	68.5	55.5	29.5	19.4	6.1	13.3	10.7	-6
1931.....	180.3	132.4	10.9	68.2	53.4	18.4	13.6	5.0	8.6	7.2	-2.4
1932.....	153.8	120.5	8.2	62.8	49.5	5.3	7.6	2.5	5.1	4.2	-6.5
1933.....	148.9	117.7	8.0	60.9	48.8	5.8	5.8	1.9	3.9	4.5	-4.4
1934.....	164.2	123.7	9.1	65.0	49.6	10.0	6.4	2.2	4.2	6.1	-2.5
1935.....	179.8	131.3	11.3	68.6	51.4	19.0	8.4	3.7	4.7	8.1	2.5
1936.....	204.9	144.5	13.9	76.4	54.2	26.0	11.7	5.4	6.3	11.1	3.1
1937.....	215.6	149.6	14.6	79.0	56.0	32.1	14.1	5.9	8.2	12.7	5.4
1938.....	206.3	147.1	11.8	80.4	54.9	19.1	12.5	6.1	6.5	8.8	-2.3
1939.....	223.2	155.3	14.1	84.7	56.6	26.4	15.1	8.1	7.0	10.3	1.1
1940.....	242.0	163.5	16.2	88.6	58.8	34.9	16.8	8.7	8.1	13.2	4.9
1941.....	281.8	174.3	18.7	94.5	61.1	44.1	18.9	9.4	9.5	15.6	9.6
1942.....	323.2	170.8	11.5	96.4	62.9	22.6	9.7	4.3	5.4	9.0	3.9
1943.....	364.4	175.4	10.0	99.4	66.1	13.5	5.5	2.1	3.4	8.3	-3
1944.....	391.1	181.8	9.1	103.7	68.9	15.2	6.1	1.7	4.3	11.1	-2.0
1945.....	383.1	194.4	10.4	112.0	72.1	21.0	8.4	2.2	6.2	15.4	-2.9
1946.....	332.0	217.5	20.5	118.8	78.2	51.2	21.6	8.7	12.9	19.5	10.1
1947.....	331.3	221.1	24.7	116.2	80.2	51.2	24.7	11.5	13.3	26.3	.2
1948.....	344.4	225.3	26.0	116.0	83.3	59.9	28.1	13.6	14.5	27.6	4.3
1949.....	345.5	231.0	27.9	117.3	85.8	47.8	27.7	13.4	14.3	24.0	-3.8
1950.....	374.0	244.9	34.0	120.5	90.4	67.5	33.8	18.5	15.3	25.8	7.9
1951.....	404.9	247.2	30.9	122.7	93.6	70.0	32.3	15.3	17.0	26.6	11.0
1952.....	420.8	253.7	30.1	126.9	96.7	61.5	32.2	15.3	16.9	26.4	2.9
1953.....	440.1	265.8	35.0	130.6	100.2	62.2	34.2	16.2	18.0	27.3	.8
1954.....	431.4	269.3	34.3	131.7	103.3	59.8	36.8	18.3	18.5	25.2	-2.2
1955.....	464.9	289.3	41.9	138.4	109.0	75.8	41.9	21.6	20.3	27.3	6.6
1956.....	474.7	299.0	40.3	143.8	114.9	75.3	40.1	19.3	20.7	30.2	5.0
1957.....	483.9	307.0	40.8	146.3	119.8	70.8	39.5	18.3	21.2	29.8	1.6
1958.....	476.7	309.7	37.6	147.1	125.0	69.9	38.4	19.3	19.1	23.5	-2.0
1959.....	508.4	327.2	43.4	153.1	130.7	74.9	42.5	23.3	19.2	25.9	6.5
1960.....	521.3	337.8	44.7	156.0	137.1	73.4	42.5	21.7	20.8	27.4	3.4
1961.....	531.2	344.3	43.9	158.1	142.3	70.3	43.0	21.6	21.4	25.5	1.8
1962.....	563.6	360.1	48.2	163.1	143.7	79.4	45.3	23.6	21.7	28.9	5.3
1963 ^a	585.0	373.2	51.5	167.2	154.5	82.3	46.6	25.0	21.6	31.0	4.7
Seasonally adjusted annual rates											
1961: I.....	514.9	338.6	41.6	156.6	140.4	61.0	41.0	19.8	21.2	24.5	-4.4
II.....	526.0	342.7	43.3	157.8	141.7	67.9	42.4	20.7	21.7	24.5	1.0
III.....	534.5	345.3	44.0	158.4	142.9	73.1	43.9	22.4	21.5	25.8	3.4
IV.....	549.5	350.5	46.7	159.7	144.1	78.8	44.5	23.4	21.1	27.2	7.2
1962: I.....	555.2	354.9	47.4	161.2	146.3	78.3	42.9	21.8	21.1	27.5	7.9
II.....	562.2	358.2	47.3	162.7	148.2	80.2	45.5	23.7	21.8	28.6	6.1
III.....	564.6	361.2	47.6	164.2	149.4	79.3	46.7	24.5	22.2	29.3	3.4
IV.....	571.4	366.0	50.6	164.3	151.1	79.5	45.6	24.0	21.6	30.1	3.7
1963: I.....	575.7	369.0	50.9	165.6	152.4	78.4	44.2	22.9	21.2	29.0	5.1
II.....	580.8	370.8	50.9	166.1	153.8	80.9	46.0	24.9	21.1	30.6	4.3
III.....	587.5	374.3	50.8	168.4	155.2	83.4	47.6	25.8	21.9	31.6	4.2
IV ^a	595.7	378.1	53.6	168.2	156.4	86.4	48.6	26.4	22.2	32.5	6.3

See footnotes at end of table.

TABLE C-2.—Gross national product or expenditure, in 1963 prices, 1929-63 ¹—Continued

(Billions of dollars, 1963 prices)

Year or quarter	Net exports of goods and services ²	Government purchases of goods and services				
		Total	Federal			State and local
			Total ³	National defense ^{3, 4}	Other	
1929.....	1.0	25.0	3.9	(5)	(5)	21.2
1930.....	.8	27.7	4.4	(5)	(5)	23.3
1931.....	.3	29.2	4.8	(5)	(5)	24.3
1932.....	.2	27.7	5.1	(5)	(5)	22.6
1933.....	— .4	26.8	6.9	(5)	(5)	19.9
1934.....	— .1	30.6	9.1	(5)	(5)	21.6
1935.....	—1.4	31.0	8.8	(5)	(5)	22.2
1936.....	—1.6	36.1	13.5	(5)	(5)	22.6
1937.....	—1.0	34.9	12.6	(5)	(5)	22.3
1938.....	1.5	38.7	15.0	(5)	(5)	23.6
1939.....	.9	40.5	14.4	3.5	10.9	26.1
1940.....	1.8	41.7	17.2	6.2	11.0	24.5
1941.....	.1	63.4	40.3	32.7	7.6	23.1
1942.....	—2.4	132.1	111.1	105.4	5.7	21.0
1943.....	—6.1	181.5	162.4	159.5	3.0	19.1
1944.....	—6.2	200.3	181.5	178.4	3.2	18.8
1945.....	—4.9	172.7	153.6	151.5	2.1	19.1
1946.....	4.9	58.4	37.0	28.9	8.1	21.4
1947.....	9.4	49.6	25.4	16.6	8.8	24.2
1948.....	3.0	56.2	30.0	17.2	12.8	26.2
1949.....	3.7	63.0	33.1	20.0	13.2	29.9
1950.....	1.2	60.3	28.3	20.7	7.6	32.0
1951.....	3.4	84.3	51.5	44.6	6.9	32.8
1952.....	2.4	103.2	69.8	61.0	8.9	33.3
1953.....	.2	111.8	77.1	65.1	12.0	34.7
1954.....	2.2	100.1	62.4	53.6	8.8	37.7
1955.....	2.3	97.4	57.1	48.8	8.3	40.4
1956.....	4.1	96.3	54.7	47.8	6.8	41.7
1957.....	5.5	100.6	56.7	50.2	6.5	43.9
1958.....	1.3	105.7	58.3	49.1	9.2	47.4
1959.....	— .6	106.9	57.6	49.1	8.5	49.3
1960.....	3.4	106.6	55.5	47.1	8.4	51.1
1961.....	4.0	112.6	58.8	49.6	9.2	53.8
1962.....	3.6	120.4	64.2	54.0	10.3	56.2
1963 ⁶	4.4	125.1	66.4	55.8	10.6	58.8
Seasonally adjusted annual rates						
1961: I.....	5.4	109.9	56.6	47.9	8.7	53.3
II.....	3.6	111.7	58.5	49.6	8.9	53.3
III.....	3.6	112.4	58.5	49.2	9.3	53.8
IV.....	3.5	116.7	61.7	51.9	9.8	55.0
1962: I.....	2.7	119.3	63.9	53.6	10.3	55.5
II.....	4.4	119.4	64.0	53.8	10.2	55.4
III.....	4.2	119.9	64.0	54.0	9.9	56.0
IV.....	3.3	122.7	65.0	54.4	10.6	57.6
1963: I.....	3.6	124.7	66.3	56.1	10.2	58.4
II.....	4.8	124.3	66.9	56.3	10.7	57.4
III.....	4.3	125.5	66.4	55.6	10.8	59.1
IV ⁶	5.0	126.2	65.8	55.2	10.6	60.4

¹ These estimates represent an approximate conversion of the Department of Commerce series in 1954 prices. (See Tables C-3 and C-6.) This was done by major components, using the implicit price indexes converted to a 1963 base. Although it would have been preferable to redeflate the series by minor components, this would not substantially change the results except possibly for the period of World War II, and for the series on change in business inventories.

For explanation of conversion of estimates in current prices to those in 1954 prices, see *U. S. Income and Output, A Supplement to the Survey of Current Business*, 1958.

² For 1929-45, net exports of goods and services and net foreign investment have been equated, since foreign net transfers by Government were negligible during that period.

³ Net of Government sales, which are not shown separately in this table. See Table C-1 for Government sales in current prices.

⁴ See footnote 4, Table C-1.

⁵ Not available separately.

⁶ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE C-3.—Gross national product or expenditure, in 1954 prices, 1929-63¹

[Billions of dollars, 1954 prices]

Year or quarter	Total gross national product	Personal consumption expenditures				Gross private domestic investment					
		Total	Durable goods	Non-durable goods	Services	Total	New construction			Producers' durable equipment	Change in business inventories
							Total	Residential non-farm	Other		
1929.....	181.8	128.1	14.9	65.3	48.0	35.0	20.9	8.7	12.2	11.1	3.0
1930.....	164.5	120.3	11.8	62.1	46.4	23.6	15.4	5.1	10.4	8.8	-1.7
1931.....	153.0	116.6	10.3	61.8	44.6	15.0	10.9	4.2	6.6	5.9	-1.8
1932.....	130.1	106.0	7.8	56.9	41.4	3.9	6.0	2.1	3.9	3.5	-5.6
1933.....	128.6	103.5	7.5	55.2	40.8	4.0	4.6	1.6	3.0	3.7	-4.2
1934.....	138.5	108.9	8.6	58.8	41.5	7.4	5.1	1.9	3.2	5.0	-2.8
1935.....	152.9	115.8	10.7	62.1	42.9	16.1	6.7	3.1	3.6	6.7	2.6
1936.....	173.3	127.7	13.1	69.2	45.3	21.0	9.4	4.6	4.9	9.2	2.4
1937.....	183.5	132.1	13.8	71.6	46.8	27.0	11.3	5.0	6.3	10.5	5.2
1938.....	175.1	129.9	11.2	72.8	45.9	15.5	10.1	5.1	5.0	7.3	-1.8
1939.....	189.3	137.3	13.3	76.7	47.2	21.6	12.2	6.8	5.4	8.5	1.0
1940.....	205.8	144.6	15.3	80.2	49.1	29.0	13.6	7.3	6.3	10.9	4.5
1941.....	238.1	154.3	17.6	85.6	51.1	36.7	15.3	7.9	7.4	12.9	8.6
1942.....	266.9	150.8	10.9	87.3	52.6	18.8	7.8	3.6	4.2	7.4	3.6
1943.....	296.7	154.6	9.4	90.0	55.2	10.7	4.4	1.7	2.7	6.9	-1.6
1944.....	317.9	160.2	8.6	94.0	57.6	12.3	4.8	1.4	3.4	9.2	-1.7
1945.....	314.0	171.4	9.8	101.4	60.2	17.0	6.6	1.8	4.8	12.7	-2.4
1946.....	282.5	192.3	19.4	107.6	65.3	42.4	17.3	7.3	10.0	16.7	9.0
1947.....	282.3	195.6	23.3	105.3	67.0	41.5	19.9	9.6	10.3	21.7	-1.1
1948.....	293.1	199.3	24.6	105.1	69.6	49.8	22.7	11.4	11.2	22.8	4.4
1949.....	292.7	204.3	26.3	106.3	71.7	38.5	22.3	11.2	11.1	19.8	-3.6
1950.....	318.1	216.8	32.1	109.2	75.5	55.9	27.4	15.5	11.9	21.3	7.2
1951.....	341.8	218.5	29.2	111.2	78.2	57.7	26.0	12.9	13.2	22.0	9.7
1952.....	353.5	224.2	28.5	115.0	80.8	50.4	26.0	12.8	13.2	21.8	2.6
1953.....	369.0	235.1	33.1	118.3	83.7	50.6	27.6	13.6	14.0	22.5	.5
1954.....	363.1	238.0	32.4	119.3	86.3	48.9	29.7	15.4	14.3	20.8	-1.6
1955.....	392.7	256.0	39.6	125.4	91.0	62.5	33.9	18.2	15.7	22.5	6.1
1956.....	400.9	264.3	38.0	130.3	96.0	61.7	32.3	16.2	16.1	25.0	4.5
1957.....	408.6	271.2	38.5	132.6	100.1	58.1	31.8	15.3	16.5	24.6	1.6
1958.....	401.3	273.2	35.5	133.3	104.4	49.0	31.1	16.2	14.8	19.4	-1.5
1959.....	428.6	288.9	41.0	138.7	109.2	61.7	34.4	19.5	14.9	21.4	5.9
1960.....	439.9	298.1	42.2	141.4	114.5	60.2	34.4	18.2	16.2	22.7	3.1
1961.....	447.7	303.6	41.5	143.3	118.9	57.5	34.7	18.2	16.6	21.0	1.7
1962.....	474.8	317.6	45.6	147.8	124.3	65.2	36.7	19.8	16.8	23.8	4.8
1963 ²	493.0	329.1	48.7	151.4	129.0	67.7	37.7	21.0	16.8	25.5	4.4
Seasonally adjusted annual rates											
1961: I.....	434.0	298.5	39.3	141.9	117.3	49.7	33.1	16.6	16.5	20.2	-3.6
II.....	443.4	302.2	40.9	142.9	118.4	55.6	34.2	17.4	16.9	20.2	1.2
III.....	450.4	304.5	41.6	143.5	119.4	59.9	35.5	18.8	16.7	21.3	3.1
IV.....	463.1	309.2	44.1	144.7	120.4	64.7	36.0	19.6	16.4	22.4	6.3
1962: I.....	467.8	313.0	44.7	146.0	122.3	64.4	34.7	18.3	16.4	22.7	7.0
II.....	474.0	315.9	44.7	147.4	123.8	66.0	36.8	19.9	16.9	23.6	5.7
III.....	475.6	318.6	45.0	148.8	124.8	64.8	37.8	20.6	17.2	24.2	2.9
IV.....	481.4	322.9	47.8	148.9	126.2	65.2	36.9	20.2	16.8	24.8	3.4
1963: I.....	485.3	325.5	48.1	150.1	127.3	64.6	35.7	19.2	16.5	24.0	4.9
II.....	489.4	327.0	48.0	150.5	128.5	66.4	37.3	20.9	16.4	25.3	3.8
III.....	495.1	330.1	48.0	152.6	129.6	68.6	38.6	21.6	17.0	26.1	4.0
IV.....	502.3	333.6	50.6	152.4	130.6	71.3	39.4	22.1	17.2	26.9	5.0

See footnotes at end of table.

TABLE C-3.—Gross national product or expenditure, in 1954 prices, 1929-63¹—Continued

[Billions of dollars, 1954 prices]

Year or quarter	Net exports of goods and services ²			Government purchases of goods and services			Gross private product ⁴
	Net exports	Exports	Imports	Total	Federal ³	State and local	
1929.....	0.2	11.1	10.9	18.5	2.9	15.6	171.5
1930.....	.2	9.9	9.7	20.5	3.4	17.1	153.7
1931.....	-.3	8.4	8.7	21.6	3.7	17.9	142.0
1932.....	-.3	6.8	7.1	20.5	3.9	16.6	119.4
1933.....	-.8	6.8	7.7	19.9	5.3	14.6	115.0
1934.....	-.6	6.9	7.5	22.8	6.9	15.8	125.1
1935.....	-1.9	7.3	9.2	23.0	6.7	16.3	138.7
1936.....	-2.2	7.7	9.8	26.9	10.3	16.6	156.6
1937.....	-1.6	9.3	10.9	26.0	9.6	16.4	167.8
1938.....	.8	9.3	8.5	28.8	11.4	17.4	158.0
1939.....	.3	9.5	9.2	30.1	11.0	19.1	172.1
1940.....	1.1	10.5	9.4	31.1	13.1	18.0	188.1
1941.....	-.6	10.6	11.3	47.7	30.7	16.9	216.0
1942.....	-2.9	7.6	10.5	100.1	84.7	15.4	234.8
1943.....	-6.6	6.7	13.2	137.9	123.9	14.0	246.4
1944.....	-6.7	7.4	14.1	152.2	138.4	13.8	259.8
1945.....	-5.6	9.8	15.3	131.2	117.1	14.0	257.0
1946.....	3.8	15.8	12.0	43.9	28.2	15.8	252.7
1947.....	8.0	19.2	11.1	37.2	19.4	17.8	259.6
1948.....	2.0	14.7	12.8	42.1	22.9	19.2	270.3
1949.....	2.6	15.1	12.4	47.2	25.3	21.9	268.7
1950.....	.2	14.5	14.2	45.1	21.6	23.5	293.3
1951.....	2.2	17.3	15.1	63.3	39.3	24.1	311.1
1952.....	1.2	16.9	15.7	77.7	53.3	24.5	320.4
1953.....	-.9	16.4	17.3	84.3	58.8	25.5	336.2
1954.....	1.0	17.5	16.5	75.3	47.5	27.7	330.8
1955.....	.9	19.2	18.3	73.2	43.5	29.7	360.4
1956.....	2.5	22.4	19.8	72.3	41.7	30.6	368.2
1957.....	3.8	24.4	20.6	75.5	43.2	32.2	375.4
1958.....	-.2	21.4	21.6	79.3	44.5	34.8	367.9
1959.....	-2.1	21.9	24.1	80.1	43.9	36.2	394.8
1960.....	1.7	24.9	23.2	79.9	42.3	37.6	405.2
1961.....	2.3	25.5	23.3	84.3	44.8	39.5	412.1
1962.....	1.8	27.0	25.2	90.2	49.0	41.2	437.7
1963 ⁵	2.5	28.7	26.2	93.8	50.6	43.2	455.1
Seasonally adjusted annual rates							
1961: I.....	3.6	25.9	22.3	82.3	43.1	39.1	398.9
II.....	1.9	24.5	22.5	83.7	44.6	39.1	408.1
III.....	1.9	25.8	23.9	84.2	44.6	39.5	414.6
IV.....	1.7	26.0	24.3	87.4	47.0	40.4	426.6
1962: I.....	.9	25.7	24.8	89.4	48.7	40.7	430.7
II.....	2.6	27.6	25.1	89.5	48.8	40.7	436.8
III.....	2.3	27.6	25.3	89.9	48.8	41.1	438.3
IV.....	1.4	26.9	25.5	91.9	49.6	42.3	444.2
1963: I.....	1.8	26.7	24.9	93.4	50.6	42.9	447.9
II.....	2.8	28.7	25.9	93.2	51.0	42.1	451.6
III.....	2.3	29.4	27.1	94.1	50.7	43.4	457.0
IV.....	3.0	29.9	26.9	94.5	50.2	44.4	464.0

¹ For explanation of conversion of estimates in current prices to those in 1954 prices, see *U.S. Income and Output, A Supplement to the Survey of Current Business*, 1958. See Table C-6 for implicit price deflators.² For 1929-45, net exports of goods and services and net foreign investment have been equated, since foreign net transfers by Government were negligible during that period.³ Net of Government sales.⁴ Gross national product less compensation of general government employees; i.e., gross product accruing from domestic business, households, and institutions, and from the rest of the world.⁵ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-4.—Gross national product by major type of product, 1947-63

[Billions of dollars]

Year or quarter	Total gross national product	Final sales	Inventory change	Goods output									Services	Construction
				Total			Durable goods			Nondurable goods				
				Total goods	Final sales	Inventory change	Total	Final sales	Inventory change	Total	Final sales	Inventory change		
1947	234.3	234.8	-0.5	143.8	144.3	-0.5	47.4	46.0	1.4	96.4	98.2	-1.8	71.8	18.7
1948	259.4	254.7	4.7	157.0	152.3	4.7	49.8	48.9	.9	107.2	103.4	3.8	78.1	24.3
1949	258.1	261.1	-3.1	149.3	152.4	-3.1	47.9	49.9	-2.1	101.5	102.4	-1.0	83.5	25.2
1950	284.6	277.8	6.8	163.6	156.8	6.8	60.7	56.7	4.0	102.9	100.1	2.8	89.8	31.2
1951	329.0	318.7	10.2	191.8	181.6	10.2	74.4	67.5	6.9	117.4	114.1	3.3	102.9	34.2
1952	347.0	343.9	3.1	198.2	195.2	3.1	75.6	74.5	1.2	122.6	120.7	1.9	112.3	36.4
1953	365.4	364.9	.4	206.9	206.4	.4	79.8	78.9	.9	127.0	127.5	-.5	119.5	39.0
1954	363.1	364.8	-1.6	197.4	199.0	-1.6	71.6	74.1	-2.5	125.9	125.0	.9	124.1	41.6
1955	397.5	391.7	5.8	217.2	211.4	5.8	84.3	81.3	3.0	132.9	130.2	2.7	133.4	46.9
1956	419.2	414.5	4.7	227.6	223.0	4.7	89.6	86.7	2.8	138.1	136.2	1.8	143.3	48.2
1957	442.8	441.2	1.6	238.2	236.6	1.6	94.5	93.4	1.0	143.7	143.2	.5	154.5	50.1
1958	444.5	446.5	-2.0	229.4	231.4	-2.0	80.4	83.3	-2.8	149.0	148.1	.9	164.2	50.9
1959	482.7	476.1	6.6	250.6	244.0	6.6	95.0	91.5	3.5	155.6	152.5	3.1	175.8	56.3
1960	502.6	499.1	3.5	257.1	253.7	3.5	96.5	94.2	2.3	160.6	159.5	1.1	188.8	56.7
1961	518.2	516.3	1.9	259.1	257.3	1.9	93.4	93.8	-.4	165.7	163.5	2.2	200.4	58.6
1962	554.9	549.3	5.5	278.3	272.8	5.5	104.4	101.5	2.9	173.9	171.3	2.6	214.5	62.1
1963 ¹	585.0	580.3	4.7	291.7	286.9	4.7	111.7	109.8	1.9	179.9	177.1	2.8	228.0	65.3
Seasonally adjusted annual rates														
1961: I	500.4	504.7	-4.3	248.5	252.8	-4.3	84.0	90.6	-6.6	164.5	162.2	2.3	195.3	56.7
II	512.5	511.4	1.1	255.7	254.6	1.1	90.5	92.1	-1.5	165.2	162.5	2.6	199.1	57.7
III	521.9	518.3	3.5	261.1	257.6	3.5	96.4	94.3	2.0	164.8	163.3	1.5	201.5	59.2
IV	537.8	530.5	7.2	271.2	264.0	7.2	102.9	98.2	4.7	168.3	165.8	2.5	205.7	60.9
1962: I	544.5	536.3	8.1	276.3	268.1	8.1	104.8	99.9	4.8	171.5	168.2	3.3	209.0	59.2
II	552.4	546.0	6.5	277.2	270.7	6.5	102.9	99.9	3.1	174.2	170.8	3.4	213.5	61.8
III	556.8	553.1	3.6	278.4	274.8	3.6	105.1	102.6	2.5	173.3	172.1	1.2	215.2	63.1
IV	565.2	561.2	4.0	281.4	277.4	4.0	104.8	103.5	1.3	176.6	174.0	2.6	220.2	63.6
1963: I	571.8	566.6	5.1	286.8	281.7	5.1	107.5	106.3	1.1	179.4	175.3	4.0	222.5	62.5
II	579.6	575.4	4.3	289.8	285.6	4.3	112.6	109.6	3.0	177.3	176.0	1.3	226.5	63.3
III	588.7	584.5	4.2	292.4	288.2	4.2	111.8	110.0	1.8	180.7	178.3	2.4	229.6	66.7
IV ¹	600.0	594.7	5.3	297.7	292.3	5.3	115.2	113.4	1.8	182.5	178.9	3.6	233.5	68.9

¹ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-5.—Gross national product by major type of product, in 1954 prices, 1947-63¹

[Billions of dollars, 1954 prices]

Year or quarter	Total gross national product	Final sales	Inventory change	Goods output									Services	Construction
				Total			Durable goods			Nondurable goods				
				Total goods	Final sales	Inventory change	Total	Final sales	Inventory change	Total	Final sales	Inventory change		
1947.....	282.3	282.4	-0.1	163.3	163.4	-0.1	55.8	54.3	1.5	107.5	109.2	-1.6	94.7	24.3
1948.....	293.1	288.7	4.4	167.7	163.4	4.4	55.4	54.6	.8	112.3	108.8	3.5	97.2	28.2
1949.....	292.7	296.3	-3.6	162.3	165.9	-3.6	51.9	54.3	-2.4	110.5	111.6	-1.2	100.7	29.7
1950.....	318.1	310.9	7.2	177.6	170.4	7.2	65.3	61.0	4.3	112.3	109.4	2.9	105.0	35.4
1951.....	341.8	332.1	9.7	191.7	182.0	9.7	74.6	67.4	7.1	117.1	114.5	2.6	114.2	36.0
1952.....	353.5	350.9	2.6	196.8	194.2	2.6	75.1	73.9	1.2	121.8	120.3	1.5	119.8	36.9
1953.....	369.0	368.5	.5	207.7	207.2	.5	80.8	79.8	1.0	126.9	127.4	-.5	122.5	38.8
1954.....	363.1	364.8	-1.6	197.4	199.0	-1.6	71.6	74.1	-2.5	125.9	125.0	.9	124.1	41.6
1955.....	392.7	386.6	6.1	216.9	210.8	6.1	83.1	80.1	3.0	133.8	130.7	3.1	130.2	45.6
1956.....	400.9	396.4	4.5	221.4	217.0	4.5	84.9	82.3	2.7	136.5	134.7	1.8	135.5	43.9
1957.....	403.6	406.9	-1.6	223.4	221.7	1.6	85.5	84.5	1.0	137.9	137.2	.7	141.2	44.0
1958.....	401.3	402.8	-1.5	211.5	213.1	-1.5	71.7	74.1	-2.4	139.8	139.0	.8	145.2	44.5
1959.....	428.6	422.7	5.9	228.8	222.9	5.9	82.9	80.0	3.0	145.9	143.0	2.9	151.4	48.3
1960.....	439.9	436.8	3.1	233.0	229.9	3.1	84.2	82.2	2.1	148.8	147.7	1.1	158.8	48.1
1961.....	447.7	446.0	1.7	233.2	231.5	1.7	81.3	81.6	-.3	151.9	149.8	2.0	165.3	49.2
1962.....	474.8	470.1	4.8	249.1	244.4	4.8	91.0	88.5	2.6	158.1	155.9	2.2	174.4	51.4
1963 ²	493.0	488.6	4.4	259.6	255.1	4.4	97.3	95.6	1.7	162.3	159.5	2.8	180.7	52.8
Seasonally adjusted annual rates														
1961: I.....	434.0	437.6	-3.6	223.9	227.5	-3.6	73.2	78.9	-5.7	150.7	148.6	2.1	162.2	47.9
II.....	443.4	442.2	1.2	230.4	229.2	1.2	78.8	80.1	-1.3	151.6	149.2	2.5	164.3	48.6
III.....	450.4	447.3	3.1	234.7	231.6	3.1	83.7	81.9	1.8	151.0	149.8	1.3	166.1	49.6
IV.....	463.1	456.8	6.3	243.8	237.5	6.3	89.7	85.6	4.0	154.1	151.8	2.3	168.5	50.8
1962: I.....	467.8	460.7	7.0	247.5	240.5	7.0	91.2	87.1	4.1	156.3	153.4	2.9	170.9	49.3
II.....	474.0	468.3	5.7	248.5	242.8	5.7	89.6	86.9	2.7	158.8	155.9	2.9	174.2	51.3
III.....	475.6	472.7	2.9	248.8	245.9	2.9	91.4	89.2	2.2	157.5	156.7	.8	174.8	52.0
IV.....	481.4	478.0	3.4	251.7	248.2	3.4	91.9	90.7	1.2	159.8	157.6	2.2	177.5	52.2
1963: I.....	485.3	480.4	4.9	256.4	251.4	4.9	94.0	93.0	1.0	162.4	158.4	3.9	177.8	51.2
II.....	489.4	485.6	3.8	257.8	254.0	3.8	97.8	95.2	2.5	160.0	158.8	1.3	180.2	51.4
III.....	495.1	491.1	4.0	259.8	255.8	4.0	97.1	95.5	1.6	162.7	160.4	2.3	181.8	53.5
IV ²	502.3	497.3	5.0	264.3	259.2	5.0	100.2	98.6	1.6	164.1	160.6	3.5	183.0	55.0

¹ For explanation of conversion of estimates in current prices to those in 1954 prices, see *U.S. Income and Output, A Supplement to the Survey of Current Business*, 1958.² Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-6.—*Implicit price deflators for gross national product, 1929-63*

[Index numbers, 1954=100]

Year or quarter	Gross national product ¹	Personal consumption expenditures				Gross private domestic investment ¹			
		Total	Durable goods	Non-durable goods	Services	New construction			Producers' durable equipment
						Total	Residential non-farm	Other	
1929.....	57.4	61.6	62.0	57.7	66.8	41.7	41.8	41.6	52.5
1930.....	55.4	59.0	60.5	54.8	64.2	40.0	40.8	39.7	50.5
1931.....	49.9	52.6	53.5	46.9	60.3	36.5	37.1	36.2	47.9
1932.....	44.9	46.5	47.0	40.0	55.3	31.1	30.1	31.7	45.5
1933.....	44.2	44.8	46.1	40.3	50.7	31.2	29.8	31.9	43.1
1934.....	46.9	47.6	48.8	45.3	50.7	33.3	33.1	33.4	45.9
1935.....	47.4	48.6	47.9	47.2	50.9	34.1	32.6	35.4	45.6
1936.....	47.7	49.1	47.9	47.4	51.9	34.8	34.3	35.2	45.4
1937.....	49.5	50.9	50.3	49.1	53.8	39.0	37.8	39.9	48.7
1938.....	48.7	49.8	50.8	46.7	54.5	39.1	39.2	39.1	50.2
1939.....	48.1	49.2	50.2	45.8	54.5	39.0	39.5	38.4	49.4
1940.....	48.9	49.7	50.7	46.4	54.8	40.1	40.9	39.1	50.6
1941.....	52.9	53.1	54.8	50.5	56.8	43.4	44.6	42.2	54.0
1942.....	59.6	59.5	64.2	58.8	59.8	47.6	47.7	47.6	58.5
1943.....	64.9	65.0	70.3	65.8	62.8	53.0	51.4	54.0	58.4
1944.....	66.5	68.6	78.7	69.5	65.5	56.3	56.2	56.3	59.3
1945.....	68.0	71.0	82.8	72.2	67.1	57.8	60.0	56.9	60.0
1946.....	74.6	76.5	82.0	78.8	71.1	63.7	65.3	62.6	66.7
1947.....	83.0	84.6	88.4	88.7	76.8	76.6	78.4	74.8	76.8
1948.....	88.5	89.5	92.4	94.0	81.7	85.9	88.6	83.1	83.1
1949.....	88.2	88.7	93.5	90.9	83.6	84.3	85.9	82.6	87.0
1950.....	89.5	89.9	94.6	91.4	85.9	88.3	90.9	85.1	89.0
1951.....	96.2	96.0	101.1	99.0	89.8	95.3	97.5	93.1	96.8
1952.....	98.1	98.0	102.2	100.1	93.6	98.4	100.3	96.5	97.5
1953.....	99.0	99.0	99.4	99.7	97.7	100.1	101.3	98.9	99.0
1954.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1955.....	101.2	100.4	100.1	99.5	101.7	103.1	103.0	103.2	102.6
1956.....	104.6	102.1	101.3	100.9	104.1	109.8	109.0	110.7	109.0
1957.....	108.4	105.1	104.7	103.9	107.0	113.6	111.2	115.7	115.7
1958.....	110.8	107.3	104.9	106.3	109.4	114.2	111.2	117.6	118.9
1959.....	112.6	108.5	106.3	106.0	112.5	116.8	114.3	120.1	121.4
1960.....	114.2	110.1	106.3	107.4	114.8	118.4	115.5	121.6	121.6
1961.....	115.7	111.0	105.3	108.3	116.1	119.7	115.9	123.8	121.3
1962.....	116.9	111.9	105.9	109.2	117.3	121.1	117.1	125.9	121.0
1963 ²	118.7	113.4	105.8	110.4	119.7	123.5	119.2	128.8	121.1
1961: I.....	115.3	110.8	105.0	108.5	115.6	118.9	114.4	123.4	121.7
II.....	115.6	110.8	105.4	108.1	116.0	119.6	115.9	123.5	121.5
III.....	115.9	111.0	105.6	108.2	116.3	120.0	116.5	124.0	121.3
IV.....	116.1	111.2	105.2	108.4	116.7	120.2	116.6	124.4	120.9
1962: I.....	116.4	111.4	105.7	108.8	116.7	120.3	116.0	125.1	120.8
II.....	116.6	111.7	106.3	108.9	117.0	120.8	116.9	125.4	121.5
III.....	117.1	112.0	106.0	109.2	117.5	121.7	117.9	126.2	121.5
IV.....	117.4	112.4	105.6	109.9	118.0	121.7	117.6	126.7	120.3
1963: I.....	117.8	112.9	105.3	110.2	118.9	122.2	117.7	127.4	120.7
II.....	118.4	113.2	106.2	110.2	119.4	122.7	118.6	127.9	121.3
III.....	118.9	113.6	106.0	110.5	120.0	124.2	119.9	129.6	121.2
IV ²	119.4	113.9	105.8	110.8	120.7	124.6	120.5	129.9	121.3

See footnotes at end of table.

TABLE C-6.—*Implicit price deflators for gross national product, 1929-63—Continued*

[Index numbers, 1954=100]

Year or quarter	Exports and imports of goods and services ¹		Government purchases of goods and services		
	Exports	Imports	Total	Federal	State and local
1929.....	63.1	57.3	45.8	44.5	46.1
1930.....	55.0	48.9	44.9	41.8	45.5
1931.....	43.2	39.7	42.7	41.7	43.0
1932.....	36.2	32.3	39.4	38.2	39.7
1933.....	35.2	29.3	40.3	38.3	41.1
1934.....	43.0	33.8	42.9	43.2	42.8
1935.....	44.7	36.0	43.4	43.7	43.3
1936.....	46.0	36.9	44.0	46.9	42.2
1937.....	48.9	41.1	45.1	47.3	43.8
1938.....	46.5	38.0	44.5	46.1	43.4
1939.....	46.9	38.6	44.2	46.8	42.7
1940.....	51.2	40.9	45.2	47.0	43.9
1941.....	56.1	43.0	51.9	55.1	46.2
1942.....	64.9	48.9	59.6	61.4	49.8
1943.....	68.1	51.3	64.3	65.6	52.7
1944.....	73.3	53.3	63.4	64.3	54.6
1945.....	75.3	57.4	63.2	63.9	57.4
1946.....	80.8	65.5	69.4	73.0	63.0
1947.....	93.4	79.7	76.4	80.8	71.5
1948.....	98.6	86.3	82.0	84.4	79.3
1949.....	92.7	82.0	85.1	88.0	81.7
1950.....	90.3	87.8	86.5	89.6	83.7
1951.....	103.3	102.8	95.5	98.7	90.2
1952.....	103.0	102.8	97.8	99.2	94.8
1953.....	101.0	98.2	98.3	98.6	97.5
1954.....	100.0	100.0	100.0	100.0	100.0
1955.....	100.7	99.9	103.3	104.1	102.2
1956.....	103.4	101.8	109.2	109.7	108.6
1957.....	107.4	103.2	114.6	114.9	114.2
1958.....	105.9	99.2	117.9	118.3	117.3
1959.....	104.3	98.2	121.4	122.2	120.3
1960.....	105.5	100.5	124.7	125.5	123.8
1961.....	107.7	99.2	127.9	127.9	127.9
1962.....	107.1	99.7	129.7	127.4	132.3
1963 ²	106.8	99.9	133.4	131.1	136.1
1961: I.....	106.1	99.1	127.3	128.4	126.1
II.....	108.2	98.6	127.6	128.1	127.0
III.....	107.8	99.1	128.2	127.8	128.6
IV.....	108.8	99.8	128.4	127.2	129.9
1962: I.....	108.4	99.2	128.7	126.9	130.9
II.....	106.8	100.0	129.1	126.9	131.7
III.....	106.4	99.8	130.1	127.9	132.8
IV.....	106.8	99.9	130.8	128.2	133.8
1963: I.....	106.8	99.9	131.6	129.6	134.0
II.....	106.8	99.9	132.9	130.4	135.9
III.....	106.8	99.9	133.7	131.0	136.8
IV ²	106.8	99.9	135.5	133.7	137.6

¹ Separate deflators are not available for total gross private domestic investment, change in business inventories, and net exports of goods and services.

For explanation of conversion of estimates in current prices to those in 1954 prices, see *U.S. Income and Output, A Supplement to the Survey of Current Business, 1958*.

² Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-7.—*Gross national product: Receipts and expenditures by major economic groups, 1929-63*

[Billions of dollars]

Year or quarter	Persons			Business			International				
	Dis- pos- able per- sonal income	Per- sonal con- sump- tion ex- pen- ditures	Per- sonal saving or dis- saving (-)	Gross re- tained earn- ings ¹	Gross private do- mestic invest- ment	Excess of re- ceipts or in- vest- ment (-)	For- eign net trans- fers by gov- ernment ²	Net exports of goods and services ²			Excess of trans- fers or net ex- ports (-)
								Net exports	Ex- ports	Im- ports	
1929.....	83.1	79.0	4.2	11.5	16.2	-4.7	(?)	0.8	7.0	6.3	-0.8
1930.....	74.4	71.0	3.4	8.8	10.3	-1.5	(?)	.7	5.4	4.8	-.7
1931.....	63.8	61.3	2.5	5.2	5.5	-.3	(?)	.2	3.6	3.4	-.2
1932.....	48.7	49.3	-6	2.7	.9	1.8	(?)	.2	2.5	2.3	-.2
1933.....	45.7	46.4	-6	2.6	1.4	1.2	(?)	.2	2.4	2.3	-.2
1934.....	52.0	51.9	.1	4.9	2.9	2.0	(?)	.4	3.0	2.5	-.4
1935.....	58.3	56.3	2.0	6.3	6.3	-.1	(?)	-1	3.3	3.3	.1
1936.....	66.2	62.6	3.6	6.5	8.4	-1.9	(?)	-1	3.5	3.6	.1
1937.....	71.0	67.3	3.7	7.8	11.7	-4.0	(?)	.1	4.6	4.5	-.1
1938.....	65.7	64.6	1.1	7.8	6.7	1.2	(?)	1.1	4.3	3.2	-1.1
1939.....	70.4	67.6	2.9	8.3	9.3	-1.0	(?)	.9	4.4	3.5	-.9
1940.....	76.1	71.9	4.2	10.4	13.2	-2.8	(?)	1.5	5.4	3.8	-1.5
1941.....	93.0	81.9	11.1	11.5	18.1	-6.6	(?)	1.1	6.0	4.8	-1.1
1942.....	117.5	89.7	27.8	14.1	9.9	4.3	(?)	-2	4.9	5.1	.2
1943.....	133.5	100.5	33.0	16.3	5.6	10.7	(?)	-2.2	4.5	6.8	2.2
1944.....	146.8	109.8	36.9	17.2	7.1	10.1	(?)	-2.1	5.4	7.5	2.1
1945.....	150.4	121.7	28.7	15.6	10.4	5.2	(?)	-1.4	7.4	8.8	1.4
1946.....	160.6	147.1	13.5	13.1	28.1	-15.1	0.3	4.9	12.8	7.9	-4.6
1947.....	170.1	166.4	4.7	18.9	31.5	-12.6	.1	9.0	17.9	8.9	-8.9
1948.....	189.3	178.3	11.0	26.6	43.1	-16.5	1.6	3.5	14.5	11.0	-1.9
1949.....	189.7	181.2	8.5	27.6	33.0	-5.4	3.2	3.8	14.0	10.2	-.5
1950.....	207.7	195.0	12.6	27.7	50.0	-22.3	2.8	.6	13.1	12.5	2.2
1951.....	227.5	209.8	17.7	31.5	56.3	-24.8	2.1	2.4	17.9	15.5	-.2
1952.....	238.7	219.8	18.9	33.2	49.9	-16.6	1.5	1.3	17.4	16.1	.2
1953.....	252.5	232.6	19.8	34.3	50.3	-16.0	1.6	-4	16.6	17.0	2.0
1954.....	256.9	235.0	18.9	35.5	48.9	-13.4	1.4	1.0	17.5	16.5	.4
1955.....	274.4	256.9	17.5	42.1	63.8	-21.8	1.5	1.1	19.4	18.3	.4
1956.....	292.9	269.9	23.0	43.0	67.4	-24.3	1.5	2.9	23.1	20.2	-1.5
1957.....	308.8	285.2	23.6	45.6	66.1	-20.5	1.5	4.9	26.2	21.3	-3.5
1958.....	317.9	293.2	24.7	44.8	56.6	-11.9	1.3	1.2	22.7	21.5	.1
1959.....	337.1	313.5	23.6	51.3	72.7	-21.4	1.5	-8	22.9	23.6	2.3
1960.....	349.9	328.2	21.7	50.7	71.8	-21.1	1.6	3.0	26.3	23.3	-1.4
1961.....	364.4	336.8	27.6	50.8	69.0	-18.2	1.6	4.4	27.5	23.1	-2.9
1962.....	384.4	355.4	29.1	57.6	78.8	-21.1	1.6	3.8	28.9	25.1	-2.2
1963 ⁴	402.6	373.2	29.4	*60.6	82.3	*-21.7	1.7	4.4	30.6	26.2	-2.7
Seasonally adjusted annual rates											
1961: I.....	355.3	330.7	24.5	48.0	59.6	-11.6	1.6	5.4	27.5	22.1	-3.8
II.....	362.0	334.9	27.1	50.8	66.6	-15.8	1.5	4.3	26.5	22.2	-2.7
III.....	367.2	337.9	29.2	51.1	72.0	-20.9	1.5	4.1	27.8	23.7	-2.6
IV.....	373.1	343.8	29.3	53.5	77.6	-24.1	1.6	4.0	28.3	24.2	-2.4
1962: I.....	377.3	348.8	28.5	56.6	77.3	-20.7	1.8	3.3	27.9	24.6	-1.4
II.....	382.7	352.9	29.8	57.2	79.6	-22.4	1.5	4.4	29.5	25.0	-3.0
III.....	386.5	356.7	29.7	57.4	78.9	-21.5	1.5	4.1	29.4	25.3	-2.6
IV.....	391.4	362.9	28.5	59.4	78.8	-19.5	1.5	3.3	28.8	25.5	-1.7
1963: I.....	394.5	367.4	27.1	59.3	77.8	-18.5	1.5	3.6	28.6	24.9	-2.2
II.....	400.0	370.4	29.6	59.6	80.7	-21.1	1.8	4.8	30.7	25.9	-3.1
III.....	404.4	374.9	29.5	61.9	83.7	-21.9	1.7	4.3	31.4	27.1	-2.6
IV ⁴	411.3	380.0	31.3	(⁶)	87.0	(⁶)	2.0	5.0	31.9	26.9	-3.0

See footnotes at end of table.

TABLE C-7.—Gross national product: Receipts and expenditures by major economic groups, 1929-63—Continued

[Billions of dollars]

Year or quarter	Government							Total income or receipts	Statistical discrepancy	Gross national product or expenditure
	Receipts			Expenditures			Surplus or deficit (—) on income and product account			
	Net receipts	Tax and non-tax receipts or accruals	Transfers, interest, and subsidies ¹	Purchases of goods and services	Total expenditures	Transfers, interest, and subsidies ²				
1929.....	9.5	11.3	1.7	8.5	10.2	1.7	1.0	104.2	0.3	104.4
1930.....	8.9	10.8	1.8	9.2	11.0	1.8	— .3	92.1	—1.0	91.1
1931.....	6.4	9.5	3.1	9.2	12.3	3.1	—2.8	75.4	.8	76.3
1932.....	6.4	8.9	2.5	8.1	10.6	2.5	—1.7	57.7	.8	58.5
1933.....	6.7	9.3	2.6	8.0	10.7	2.6	—1.4	55.0	.9	56.0
1934.....	7.4	10.5	3.1	9.8	12.8	3.1	—2.4	64.2	.7	65.0
1935.....	8.0	11.4	3.4	10.0	13.3	3.4	—2.0	72.7	— .2	72.5
1936.....	8.9	12.9	4.1	11.8	15.9	4.1	—3.0	81.6	1.1	82.7
1937.....	12.3	15.4	3.1	11.7	14.8	3.1	.6	91.0	— .2	90.8
1938.....	11.2	15.0	3.8	12.8	16.6	3.8	—1.6	84.8	.5	85.2
1939.....	11.2	15.4	4.2	13.3	17.5	4.2	—2.1	89.9	1.2	91.1
1940.....	13.3	17.7	4.4	14.1	18.5	4.4	— .7	99.8	.8	100.6
1941.....	21.0	25.0	4.0	24.8	28.8	4.0	—3.8	125.4	.4	125.8
1942.....	28.3	32.6	4.3	59.7	64.0	4.3	—31.4	160.0	— .8	159.1
1943.....	44.4	49.2	4.8	88.6	93.4	4.8	—44.2	194.2	—1.7	192.5
1944.....	44.6	51.2	6.5	96.5	103.1	6.5	—51.9	208.6	2.8	211.4
1945.....	43.1	53.2	10.1	82.9	92.9	10.1	—39.7	209.1	4.5	213.6
1946.....	34.6	51.1	16.5	30.5	47.0	16.5	4.1	208.6	2.1	210.7
1947.....	41.6	57.1	15.4	28.4	43.8	15.4	13.3	230.7	3.5	234.3
1948.....	42.8	59.2	16.5	34.5	51.0	16.5	8.2	260.3	— .8	259.4
1949.....	37.0	56.4	19.4	40.2	59.5	19.4	—3.1	257.5	.5	258.1
1950.....	47.2	69.3	22.1	39.0	61.1	22.1	8.2	285.3	— .7	284.6
1951.....	66.6	85.5	18.9	60.5	79.4	18.9	6.1	327.7	1.2	329.0
1952.....	72.2	90.6	18.4	76.0	94.4	18.4	—3.9	345.6	1.4	347.0
1953.....	75.7	94.9	19.2	82.8	102.0	19.2	—7.1	364.1	1.3	365.4
1954.....	68.5	90.0	21.5	75.3	96.7	21.5	—6.7	362.3	.9	363.1
1955.....	78.4	101.4	23.0	75.6	98.6	23.0	2.9	396.5	1.0	397.5
1956.....	84.2	109.5	25.3	79.0	104.3	25.3	5.2	421.6	—2.4	419.2
1957.....	87.5	116.3	28.7	86.5	115.3	28.7	1.0	443.4	— .6	442.8
1958.....	82.0	115.1	33.1	93.5	126.6	33.1	—11.4	446.0	—1.5	444.5
1959.....	95.7	130.2	34.4	97.2	131.6	34.4	—1.5	485.7	—3.0	482.7
1960.....	103.5	140.6	37.1	99.6	136.7	37.1	3.9	505.6	—3.0	502.6
1961.....	103.2	145.5	42.2	107.9	150.2	42.2	—4.7	520.1	—1.9	518.2
1962.....	113.0	156.8	43.8	117.0	160.7	43.8	—3.9	556.7	—1.8	554.9
1963 ⁴	⁵ 123.4	⁶ 168.8	45.3	125.1	170.5	45.3	—1.7	⁷ 588.3	⁸ —3.3	585.0
Seasonally adjusted annual rates										
1961: I.....	98.4	138.7	40.3	104.7	145.1	40.3	—6.4	503.2	—2.8	500.4
II.....	101.4	144.0	42.6	106.8	149.4	42.6	—5.4	515.7	—3.2	512.5
III.....	103.9	146.6	42.7	107.9	150.6	42.7	—4.0	523.6	—1.8	521.9
IV.....	109.5	152.6	43.1	112.3	155.4	43.1	—2.8	537.7	.0	537.8
1962: I.....	109.7	153.5	43.9	115.1	159.0	43.9	—5.4	545.4	— .9	544.5
II.....	113.6	156.7	43.1	115.5	158.6	43.1	—1.9	554.9	—2.5	552.4
III.....	114.0	157.3	43.3	117.0	160.2	43.3	—3.0	559.4	—2.6	556.8
IV.....	114.8	159.7	44.9	120.2	165.1	44.9	—5.4	567.1	—1.9	565.2
1963: I.....	118.8	164.0	45.2	123.0	168.2	45.2	—4.2	574.1	—2.3	571.8
II.....	122.5	167.2	44.7	123.8	168.5	44.7	—1.3	583.8	—4.1	579.6
III.....	125.1	170.1	45.0	125.7	170.7	45.0	— .6	593.1	—4.4	588.7
IV ⁴	(⁹)	(⁹)	46.5	128.0	174.5	46.5	(⁹)	(⁹)	(⁹)	600.0

¹ Undistributed corporate profits, corporate inventory valuation adjustment, capital consumption allowances, and excess of wage accruals over disbursements.

² For 1929-45, foreign net transfers by Government were negligible; therefore, for that period, net exports of goods and services and net foreign investment have been equated.

³ Government transfer payments to persons, foreign net transfers by Government, net interest paid by government, and subsidies less current surplus of Government enterprises.

⁴ Preliminary estimates by Council of Economic Advisers.

⁵ Data for corporate profits are approximations for the year as a whole; data for fourth quarter are not available. All other data incorporating or derived from these figures are correspondingly approximate.

⁶ Not available.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-8.—Gross private and government product, in current and 1963 prices, 1929–63

[Billions of dollars]

Year or quarter	Current prices				1963 prices ¹				
	Total gross national product	Gross private product ¹			Total gross national product	Gross private product ¹			Gross government product ²
		Total	Farm ³	Non-farm		Total	Farm ³	Non-farm	
1929.....	104.4	100.1	9.8	90.3	4.3	214.2	198.3	15.8	182.5
1930.....	91.1	86.6	7.7	78.8	4.5	194.6	178.0	14.5	163.5
1931.....	76.3	71.6	6.2	65.4	4.7	180.3	163.4	16.9	146.5
1932.....	58.5	54.0	4.4	49.6	4.4	153.8	137.2	15.9	121.3
1933.....	56.0	51.3	4.6	46.7	4.7	149.9	132.2	15.7	116.5
1934.....	65.0	59.4	4.3	55.1	5.6	164.2	143.7	13.0	130.8
1935.....	72.5	66.6	6.9	59.6	5.9	179.8	158.0	15.8	142.1
1936.....	82.7	75.5	6.3	69.2	7.3	204.9	179.3	13.5	165.7
1937.....	90.8	83.9	8.1	75.8	6.9	215.6	191.4	16.9	174.5
1938.....	85.2	77.6	6.7	70.9	7.6	206.3	180.1	17.1	163.0
1939.....	91.1	83.5	6.5	77.0	7.6	223.2	196.7	17.1	179.7
1940.....	100.6	92.8	6.8	86.0	7.8	242.0	214.8	16.8	198.0
1941.....	125.8	116.4	9.4	107.0	9.4	281.8	247.9	18.0	229.9
1942.....	159.1	144.0	13.4	130.6	15.1	323.2	273.9	19.6	254.3
1943.....	192.5	167.0	15.3	151.7	25.6	364.4	287.1	18.0	269.1
1944.....	211.4	179.2	15.7	163.5	32.2	391.1	301.7	18.4	283.3
1945.....	213.6	178.4	16.2	162.2	35.2	383.1	295.6	17.4	278.2
1946.....	210.7	189.9	19.3	170.7	20.7	332.0	286.1	17.6	268.5
1947.....	234.3	217.6	20.7	196.9	16.7	331.3	296.3	16.2	280.1
1948.....	259.4	242.0	23.8	218.2	17.4	344.4	309.3	18.5	290.8
1949.....	258.1	238.7	19.3	219.4	19.4	345.5	308.8	17.6	291.2
1950.....	284.6	263.8	20.5	243.2	20.8	374.0	335.9	18.6	317.4
1951.....	329.0	301.7	23.6	278.2	27.3	404.9	357.6	17.3	340.3
1952.....	347.0	316.0	22.8	293.2	31.0	420.8	369.8	18.0	351.7
1953.....	365.4	333.6	20.9	312.7	31.8	440.1	389.6	18.7	370.9
1954.....	363.1	330.8	20.3	310.5	32.3	431.4	381.7	19.5	362.2
1955.....	397.5	363.5	19.6	343.9	34.0	464.9	415.3	20.5	394.8
1956.....	419.2	382.8	19.3	363.5	36.4	474.7	424.4	20.1	404.4
1957.....	442.8	403.8	19.4	384.5	38.9	483.9	432.8	19.8	413.1
1958.....	444.5	402.6	21.3	381.2	42.0	476.7	425.3	20.0	405.2
1959.....	482.7	438.6	20.0	418.6	44.1	508.4	456.4	19.9	436.5
1960.....	502.6	455.3	20.9	434.4	47.3	521.3	468.0	20.9	447.1
1961.....	518.2	467.4	21.2	446.3	50.8	531.2	476.4	20.9	455.5
1962.....	554.9	500.3	21.6	478.7	54.6	563.6	506.4	21.0	485.4
1963 ⁴	585.0	526.7	21.4	505.3	58.3	585.0	526.7	21.4	505.3
Seasonally adjusted annual rates									
1961: I.....	500.4	451.1	(⁵)	(⁵)	49.3	514.9	460.9	(⁵)	(⁵)
II.....	512.5	462.4	(⁵)	(⁵)	50.1	526.0	471.7	(⁵)	(⁵)
III.....	521.9	470.8	(⁵)	(⁵)	51.1	534.5	479.5	(⁵)	(⁵)
IV.....	537.8	485.3	(⁵)	(⁵)	52.5	549.5	493.5	(⁵)	(⁵)
1962: I.....	544.5	490.8	(⁵)	(⁵)	53.7	555.2	498.3	(⁵)	(⁵)
II.....	552.4	498.2	(⁵)	(⁵)	54.2	562.2	505.0	(⁵)	(⁵)
III.....	556.8	502.0	(⁵)	(⁵)	54.8	564.6	507.4	(⁵)	(⁵)
IV.....	565.2	509.5	(⁵)	(⁵)	55.7	571.4	514.1	(⁵)	(⁵)
1963: I.....	571.8	515.0	(⁵)	(⁵)	56.8	575.7	518.1	(⁵)	(⁵)
II.....	579.6	522.0	(⁵)	(⁵)	57.6	580.8	522.7	(⁵)	(⁵)
III.....	588.7	530.2	(⁵)	(⁵)	58.5	587.5	529.0	(⁵)	(⁵)
IV ⁶	600.0	539.7	(⁵)	(⁵)	60.3	595.7	536.8	(⁵)	(⁵)

¹ Gross national product less compensation of general government employees, i. e., gross product accruing from domestic business, households, and institutions, and from the rest of the world.

² See *Survey of Current Business*, October 1958, for description of series and estimates in current and constant prices and implicit deflators for 1910–57.

³ Includes compensation of general government employees and excludes compensation of employees in government enterprises. Government enterprises are those agencies of government whose operating costs are at least to a substantial extent covered by the sale of goods and services, in contrast to the general activities of government which are financed mainly by tax revenues and debt creation. Government enterprises, in other words, conduct operations essentially commercial in character, even though they perform them under governmental auspices. The Post Office and public power systems are typical examples of government enterprises. On the other hand, State universities and public parks, where the fees and admissions cover only a nominal part of operating costs, are part of general government activities.

⁴ See footnote 1, Table C-2.

⁵ Preliminary estimates by Council of Economic Advisers.

⁶ Not available.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE C-9.—Personal consumption expenditures, 1929–63

[Billions of dollars]

Year or quarter	Total personal consumption expenditures	Durable goods				Nondurable goods					Services				
		Total	Automobiles and parts	Furniture and household equipment	Other	Total	Food excluding alcoholic beverages ¹	Clothing and shoes ²	Gasoline and oil	Other	Total	Housing ³	Household operation	Transportation	Other
1929.....	79.0	9.2	3.2	4.8	1.2	37.7	19.5	9.4	1.8	7.0	32.1	11.4	4.0	2.6	14.0
1930.....	71.0	7.2	2.2	3.9	1.1	34.0	18.0	8.0	1.7	6.3	29.8	11.0	3.9	2.2	12.7
1931.....	61.3	5.5	1.6	3.1	.9	28.9	14.7	6.9	1.5	5.7	26.9	10.3	3.5	1.9	11.2
1932.....	49.3	3.6	.9	2.1	.6	22.8	11.4	5.1	1.5	4.8	22.9	9.0	3.0	1.6	9.3
1933.....	46.4	3.5	1.1	1.9	.5	22.3	10.9	4.6	1.5	5.3	20.7	7.9	2.8	1.5	8.5
1934.....	51.9	4.2	1.4	2.2	.6	26.7	12.2	5.7	1.6	7.2	21.0	7.6	3.0	1.6	8.8
1935.....	56.3	5.1	1.9	2.6	.7	29.3	13.6	6.0	1.7	7.9	21.9	7.6	3.2	1.7	9.4
1936.....	62.6	6.3	2.3	3.2	.8	32.8	15.2	6.6	1.9	9.1	23.5	7.9	3.4	1.9	10.3
1937.....	67.3	6.9	2.4	3.6	1.0	35.2	16.4	6.8	2.1	9.8	25.1	8.4	3.7	2.0	11.1
1938.....	64.6	5.7	1.6	3.1	.9	34.0	15.6	6.8	2.1	9.5	25.0	8.8	3.6	1.9	10.7
1939.....	67.6	6.7	2.2	3.5	1.0	35.1	15.7	7.1	2.2	10.1	25.8	9.0	3.8	2.1	11.0
1940.....	71.9	7.8	2.7	3.9	1.1	37.2	16.7	7.4	2.3	10.8	26.9	9.3	4.0	2.1	11.4
1941.....	81.9	9.7	3.4	4.9	1.4	43.2	19.4	8.8	2.6	12.3	29.0	10.0	4.3	2.4	12.3
1942.....	89.7	7.0	.7	4.7	1.6	51.3	23.7	11.0	2.1	14.5	31.5	10.8	4.8	2.7	13.1
1943.....	100.5	6.6	.8	3.9	1.9	59.3	27.8	13.4	1.3	16.7	34.7	11.3	5.2	3.4	14.7
1944.....	109.8	6.8	.8	3.8	2.2	65.4	30.6	14.6	1.4	18.7	37.0	11.9	5.9	3.7	16.3
1945.....	121.7	8.1	1.0	4.6	2.5	73.2	34.1	16.5	1.8	20.8	40.4	12.4	6.4	4.0	17.5
1946.....	147.1	15.9	3.9	8.7	3.3	84.8	40.7	18.2	3.0	22.9	46.4	13.8	6.7	5.1	20.8
1947.....	165.4	20.6	6.3	11.0	3.4	93.4	45.8	18.8	3.6	25.2	51.4	15.6	7.4	5.5	23.0
1948.....	178.3	22.7	7.4	11.9	3.4	98.7	48.2	20.1	4.4	26.0	56.9	17.6	7.9	6.0	25.4
1949.....	181.2	24.6	9.8	11.5	3.3	96.6	46.4	19.3	5.0	25.9	60.0	19.3	8.4	6.1	26.2
1950.....	195.0	30.4	13.0	14.0	3.4	99.8	47.4	19.6	5.4	27.4	64.9	21.2	9.3	6.3	28.1
1951.....	209.8	29.5	11.6	14.2	3.7	110.1	53.4	21.1	6.0	29.5	70.2	23.2	10.1	6.9	29.9
1952.....	219.8	29.1	11.0	14.1	3.9	115.1	55.8	21.9	6.7	30.7	75.6	25.4	10.8	7.4	32.0
1953.....	232.6	32.9	14.0	14.7	4.1	118.0	56.6	21.9	7.5	31.8	81.8	27.5	11.7	8.0	34.6
1954.....	238.0	32.4	13.4	14.8	4.3	119.3	57.7	21.9	8.0	31.7	86.3	29.1	12.1	7.9	37.1
1955.....	256.9	39.6	18.3	16.6	4.8	124.8	59.2	23.4	8.8	33.4	92.5	30.7	13.5	8.3	39.9
1956.....	269.9	38.5	15.8	17.4	5.3	131.4	62.2	24.5	9.6	35.2	100.0	32.7	14.8	8.6	43.8
1957.....	285.2	40.4	17.1	17.4	5.8	137.7	65.2	25.4	10.4	36.7	107.1	35.2	15.8	9.0	47.0
1958.....	293.2	37.3	13.9	17.4	6.0	141.6	67.4	25.7	10.5	38.0	114.3	37.7	16.9	9.2	50.6
1959.....	313.5	43.6	18.1	18.9	6.6	147.1	68.1	27.5	11.1	40.5	122.8	39.6	18.1	10.0	55.1
1960.....	328.2	44.9	18.8	19.1	7.1	151.8	69.7	28.1	11.7	42.3	131.5	41.9	19.5	10.7	59.5
1961.....	336.8	43.6	17.1	19.2	7.3	155.1	70.9	28.6	11.9	43.8	138.0	44.1	20.4	10.7	62.8
1962.....	355.4	48.2	20.4	20.2	7.6	161.4	73.6	29.8	12.3	45.8	145.7	46.6	21.5	11.3	66.2
1963.....	373.2	51.5	22.3	21.3	7.9	167.2	75.5	30.3	13.0	48.3	154.5	49.2	22.6	12.1	70.6
Seasonally adjusted annual rates															
1961:															
I.....	330.7	41.2	15.7	18.3	7.2	153.9	70.5	28.2	11.9	43.3	135.6	43.3	20.0	10.7	61.6
II.....	334.9	43.1	16.7	19.1	7.3	154.5	70.8	28.2	11.7	43.8	137.3	43.8	20.4	10.6	62.5
III.....	337.9	43.9	17.0	19.6	7.3	155.3	71.0	28.6	11.9	43.8	138.8	44.4	20.6	10.7	63.1
IV.....	343.8	46.4	18.9	20.0	7.5	156.9	71.2	29.3	11.9	44.5	140.5	45.0	20.8	10.8	63.9
1962:															
I.....	348.8	47.3	19.7	20.0	7.6	158.9	72.2	29.7	12.1	44.9	142.6	45.6	21.3	11.1	64.6
II.....	352.9	47.5	20.1	19.8	7.6	160.6	73.3	29.5	12.2	45.6	144.8	46.3	21.5	11.3	65.7
III.....	356.7	47.7	19.8	20.3	7.6	162.5	74.3	29.9	12.3	46.0	146.6	46.9	21.5	11.4	66.8
IV.....	362.9	50.5	22.2	20.6	7.7	163.6	74.4	29.9	12.6	46.7	148.9	47.6	21.8	11.6	67.9
1963:															
I.....	367.4	50.6	22.0	20.9	7.7	165.3	74.8	30.2	12.8	47.5	151.4	48.2	22.2	11.8	69.2
II.....	370.4	51.0	22.3	20.7	8.0	165.9	75.2	29.7	13.0	48.0	153.5	48.8	22.4	12.1	70.2
III.....	374.9	50.8	21.5	21.3	8.0	168.6	75.9	30.9	13.1	48.7	155.5	49.5	22.8	12.2	71.0
IV.....	380.0	53.5	23.2	22.3	8.0	168.8	76.1	30.5	13.2	49.0	157.6	50.2	23.0	12.4	72.1

¹ Quarterly data are estimates by Council of Economic Advisers.² Includes standard clothing issued to military personnel.³ Includes imputed rental value of owner-occupied dwellings.⁴ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-10.—Gross private domestic investment, 1929-63

[Billions of dollars]

Year or quarter	Total gross private domestic investment	Fixed investment									Change in business inventories			
		Total	New construction ¹						Producers' durable equipment			Total	Non-farm	Farm
			Total	Residential non-farm	Other ²			Total	Non-farm	Farm				
					Total	Non-farm	Farm							
1929-----	16.2	14.6	8.7	3.6	5.1	4.8	0.3	5.8	5.2	0.6	1.7	1.8	-0.2	
1930-----	10.3	10.6	6.2	2.1	4.1	3.9	.2	4.5	4.0	.5	-.4	-.1	-.3	
1931-----	5.5	6.8	4.0	1.6	2.4	2.3	.1	2.8	2.6	.3	-1.3	-1.6	.3	
1932-----	.9	3.5	1.9	.6	1.2	1.2	(3)	1.6	1.4	.1	-2.6	-2.6	(3)	
1933-----	1.4	3.0	1.4	.5	1.0	.9	(3)	1.6	1.5	.1	-1.6	-1.4	-.3	
1934-----	2.9	4.0	1.7	.6	1.1	1.0	.1	2.3	2.1	.3	-1.1	.2	-1.3	
1935-----	6.3	5.4	2.3	1.0	1.3	1.2	.1	3.1	2.7	.4	.9	.4	.5	
1936-----	8.4	7.4	3.3	1.6	1.7	1.6	.2	4.2	3.6	.5	1.0	2.1	-1.1	
1937-----	11.7	9.5	4.4	1.9	2.5	2.3	.2	5.1	4.5	.6	2.2	1.7	.5	
1938-----	6.7	7.6	4.0	2.0	2.0	1.8	.2	3.6	3.1	.5	-.9	-1.0	.1	
1939-----	9.3	8.9	4.8	2.7	2.1	1.9	.2	4.2	3.7	.5	.4	.3	.1	
1940-----	13.2	11.0	5.5	3.0	2.5	2.2	.2	5.5	4.9	.6	2.2	1.9	.3	
1941-----	18.1	13.6	6.6	3.5	3.1	2.8	.3	6.9	6.1	.8	4.5	4.0	.5	
1942-----	9.9	8.1	3.7	1.7	2.0	1.7	.3	4.3	3.7	.7	1.8	.7	1.2	
1943-----	5.6	6.4	2.3	.9	1.4	1.2	.3	4.0	3.5	.6	-.8	-.6	-.2	
1944-----	7.1	8.2	2.7	.8	1.9	1.6	.3	5.4	4.7	.7	-1.0	-.6	-.4	
1945-----	10.4	11.5	3.8	1.1	2.7	2.5	.3	7.7	6.9	.7	-1.1	-.6	-.5	
1946-----	28.1	21.8	11.0	4.8	6.3	5.4	.9	10.7	9.8	.9	6.4	6.4	(3)	
1947-----	31.5	31.9	15.3	7.5	7.7	6.3	1.4	16.7	14.9	1.8	-.5	1.3	-1.8	
1948-----	43.1	38.4	19.5	10.1	9.3	7.8	1.5	18.9	16.4	2.6	4.7	3.0	1.7	
1949-----	33.0	36.0	18.8	9.6	9.2	7.7	1.5	17.2	14.4	2.9	-3.1	-2.2	-.9	
1950-----	50.0	43.2	24.2	14.1	10.1	8.5	1.6	18.9	16.2	2.7	6.8	6.0	.8	
1951-----	56.3	46.1	24.8	12.5	12.3	10.4	1.8	21.3	18.4	2.9	10.2	9.1	1.2	
1952-----	49.9	46.8	25.5	12.8	12.7	10.8	1.9	21.3	18.6	2.7	3.1	2.1	.9	
1953-----	50.3	49.9	27.6	13.8	13.8	12.1	1.7	22.3	19.5	2.8	.4	1.1	-.6	
1954-----	48.9	50.5	29.7	15.4	14.3	12.7	1.6	20.8	18.5	2.3	-1.6	-2.1	.5	
1955-----	63.8	58.1	34.9	18.7	16.2	14.6	1.6	23.1	20.6	2.5	5.8	5.5	.3	
1956-----	67.4	62.7	35.5	17.7	17.8	16.3	1.6	27.2	25.0	2.2	4.7	5.1	-.4	
1957-----	66.1	64.6	36.1	17.0	19.0	17.5	1.6	28.5	26.2	2.3	1.6	.8	.8	
1958-----	56.6	58.6	35.5	18.0	17.4	15.9	1.5	23.1	20.3	2.8	-2.0	-2.9	.9	
1959-----	72.7	66.2	40.2	22.3	17.9	16.2	1.7	25.9	23.1	2.9	6.6	6.5	.1	
1960-----	71.8	68.3	40.7	21.1	19.7	18.0	1.6	27.6	25.1	2.4	3.5	3.2	.3	
1961-----	69.0	67.1	41.6	21.0	20.5	18.6	1.9	25.5	22.9	2.6	1.9	1.5	.3	
1962-----	78.8	73.2	44.4	23.2	21.2	19.5	1.7	28.8	26.0	2.9	5.5	4.9	.7	
1963 ⁴ -----	82.3	77.6	46.6	25.0	21.6	19.8	1.8	31.0	27.9	3.1	4.7	4.2	.5	
Seasonally adjusted annual rates														
1961: I-----	59.6	63.9	39.3	19.0	20.3	18.9	1.5	24.6	21.7	2.8	-4.3	-4.6	0.3	
II-----	66.6	65.5	41.0	20.1	20.8	18.5	2.3	24.5	21.9	2.6	1.1	.8	.3	
III-----	72.0	68.4	42.6	21.9	20.7	18.5	2.3	25.8	23.4	2.4	3.5	3.2	.4	
IV-----	77.6	70.3	43.2	22.8	20.4	18.6	1.8	27.1	24.5	2.6	7.2	6.9	.4	
1962: I-----	77.3	69.1	41.7	21.2	20.5	19.0	1.6	27.4	24.7	2.7	8.1	7.6	.5	
II-----	79.6	73.2	44.5	23.3	21.2	19.4	1.8	28.7	25.8	2.8	6.5	5.8	.7	
III-----	78.9	75.3	46.0	24.2	21.7	19.8	1.9	29.3	26.6	2.8	3.6	2.8	.8	
IV-----	78.8	74.9	45.0	23.7	21.2	19.5	1.7	29.9	26.8	3.1	4.0	3.2	.8	
1963: I-----	77.8	72.7	43.7	22.7	21.0	19.4	1.6	29.0	25.9	3.1	5.1	4.3	.8	
II-----	80.7	76.5	45.8	24.8	21.0	19.1	1.9	30.7	27.6	3.0	4.3	3.6	.6	
III-----	83.7	79.5	47.9	25.9	22.0	20.2	1.8	31.6	28.8	2.8	4.2	3.7	.5	
IV ⁴ -----	87.0	81.6	49.1	26.7	22.4	20.6	1.8	32.6	29.3	3.3	5.3	5.1	.3	

¹ Revisions in series on new construction shown in Table C-36 have not yet been incorporated into these series.² Includes petroleum and natural gas well drilling, which are excluded from estimates in Table C-36.³ Less than \$50 million.⁴ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-11.—National income by type of income, 1929-63

[Billions of dollars]

Year or quarter	Total national income ¹	Compensation of employees ²	Business and professional income and inventory valuation adjustment			Income of farm proprietors ³	Rental income of persons	Corporate profits and inventory valuation adjustment			Net interest
			Total	Income of unincorporated enterprises	Inventory valuation adjustment			Total	Corporate profits before taxes ⁴	Inventory valuation adjustment	
1929	87.8	51.1	8.8	8.6	0.1	6.0	5.4	10.1	9.6	0.5	6.4
1930	75.7	46.8	7.4	6.7	.8	4.1	4.8	6.6	3.3	3.3	6.0
1931	59.7	39.7	5.6	5.0	.6	3.2	3.8	1.6	— .8	2.4	5.8
1932	42.5	31.1	3.4	3.1	.3	1.9	2.7	—2.0	—3.0	1.0	5.4
1933	40.2	29.5	3.2	3.7	— .5	2.4	2.0	—2.0	.2	—2.1	5.0
1934	49.0	34.3	4.6	4.6	— .1	2.4	1.7	1.1	1.7	— .6	4.9
1935	57.1	37.3	5.4	5.4	— .1	5.0	1.7	2.9	3.1	— .2	4.8
1936	64.9	42.9	6.5	6.6	— .1	4.0	1.8	5.0	5.7	— .7	4.7
1937	73.6	47.9	7.1	7.1	(⁵)	5.6	2.1	6.2	6.2	(⁵)	4.7
1938	67.6	45.0	6.8	6.6	.2	4.3	2.6	4.3	3.3	1.0	4.6
1939	72.8	48.1	7.3	7.5	— .2	4.3	2.7	5.7	6.4	— .7	4.6
1940	81.6	52.1	8.4	8.5	(⁵)	4.6	2.9	9.1	9.3	— .2	4.5
1941	104.7	64.8	10.9	11.5	— .6	6.5	3.5	14.5	17.0	—2.5	4.5
1942	137.7	85.3	13.9	14.3	— .4	10.0	4.5	19.7	20.9	—1.2	4.3
1943	170.3	109.6	16.8	17.0	— .2	11.4	5.1	23.8	24.6	— .8	3.7
1944	182.6	121.3	18.0	18.1	— .1	11.5	5.4	23.0	23.3	— .3	3.3
1945	181.2	123.2	19.0	19.1	— .1	11.8	5.6	18.4	19.0	— .6	3.2
1946	180.9	117.7	21.3	23.0	—1.7	15.3	6.2	17.3	22.6	—5.3	3.1
1947	198.2	128.8	19.9	21.4	—1.5	15.5	6.5	23.6	29.5	—5.9	3.8
1948	223.5	141.0	22.4	22.8	— .4	17.8	7.3	30.8	33.0	—2.2	4.2
1949	217.7	140.8	22.7	22.2	.5	12.9	8.3	28.2	26.4	1.9	4.8
1950	241.9	154.2	23.5	24.6	—1.1	14.0	9.0	35.7	40.6	—5.0	5.5
1951	279.3	180.3	26.0	26.3	— .3	16.3	9.4	41.0	42.2	—1.2	6.3
1952	292.2	195.0	26.9	26.7	.2	15.3	10.2	37.7	36.7	1.0	7.1
1953	305.6	208.8	27.4	27.6	— .2	13.3	10.5	37.3	38.3	—1.0	8.2
1954	301.8	207.6	27.8	27.8	(⁵)	12.7	10.9	33.7	34.1	— .3	9.1
1955	330.2	223.9	30.4	30.6	— .2	11.8	10.7	43.1	44.9	—1.7	10.4
1956	350.8	242.5	32.1	32.6	— .5	11.6	10.9	42.0	44.7	—2.7	11.7
1957	366.9	255.5	32.7	33.0	— .3	11.8	11.9	41.7	43.2	—1.5	13.4
1958	367.4	257.1	32.5	32.6	— .1	13.5	12.2	37.2	37.4	— .3	14.8
1959	400.5	278.5	35.1	35.2	— .1	11.4	11.9	47.2	47.7	— .5	16.4
1960	414.5	293.6	34.2	34.2	(⁵)	12.0	12.1	44.5	44.3	.2	18.1
1961	426.1	302.1	35.3	35.3	(⁵)	12.8	12.1	43.8	43.8	(⁵)	20.0
1962	453.7	322.9	36.5	36.5	(⁵)	13.3	12.0	47.0	46.8	.2	22.0
1963 ⁶	478.4	340.4	37.7	37.7	(⁵)	12.8	12.1	51.3	51.7	— .4	24.1
Seasonally adjusted annual rates											
1961: I	411.1	294.0	34.2	34.2	(⁵)	12.8	12.1	38.8	38.5	0.3	19.1
II	423.2	300.1	35.0	34.8	0.2	12.6	12.1	43.6	43.4	.2	19.8
III	429.0	304.4	35.7	35.8	— .1	12.6	12.1	44.0	44.3	— .3	20.3
IV	441.0	309.9	36.3	36.3	(⁵)	13.2	12.0	48.6	48.9	— .3	21.0
1962: I	444.7	316.0	36.0	36.1	— .1	13.5	12.0	46.1	45.9	.1	21.2
II	452.4	322.5	36.5	36.5	(⁵)	13.1	12.0	46.5	46.7	— .2	21.7
III	455.5	325.3	36.6	36.7	— .1	13.2	12.0	46.1	46.2	— .1	22.3
IV	462.2	327.7	36.9	36.6	.3	13.4	12.0	49.3	48.4	.9	23.0
1963: I	466.7	332.0	37.2	37.0	.2	13.5	12.0	48.8	48.3	.4	23.3
II	474.6	338.7	37.4	37.5	— .1	12.6	12.0	50.1	51.0	— .9	23.7
III	482.0	342.8	37.8	37.8	(⁵)	12.7	12.1	52.2	52.2	(⁵)	24.3
IV ⁶	(⁵)	347.9	38.2	38.4	— .2	12.6	12.2	(⁵)	(⁵)	(⁵)	25.0

¹ National income is the total net income earned in production. It differs from gross national product mainly in that it excludes depreciation charges and other allowances for business and institutional consumption of durable capital goods, and indirect business taxes. See Table C-12.

² Wages and salaries and supplements to wages and salaries (employer contributions for social insurance; employer contributions to private pension, health, and welfare funds; compensation for injuries; directors' fees; pay of the military reserve; and a few other minor items).

³ Excludes income resulting from net reductions of farm inventories and gives credit in computing income to net additions to farm inventories during the period. Data for 1929-45 differ from those shown in Table C-71 because of revisions by the Department of Agriculture not yet incorporated into the national income accounts.

⁴ See Table C-63 for corporate tax liability (Federal and State income and excess profits taxes), corporate profits after taxes and footnote 3.

⁵ Less than \$50 million.

⁶ Preliminary estimates by Council of Economic Advisers.

⁷ Data for corporate profits are approximations for the year as a whole; data for fourth quarter are not available. All other data incorporating or derived from these figures are correspondingly approximate.

⁸ Not available.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-12.—*Relation of gross national product and national income, 1929-63*

(Billions of dollars)

Year or quarter	Gross national product	Less: Capital consumption allowances			Equals: Net national product	Plus: Subsidies less current surplus of government enterprises	Less:					Equals: National income
		Total	Depreciation charges	Other ¹			Indirect business taxes			Business transfer payments	Statistical discrepancy	
							Total	Federal	State and local			
1929.....	104.4	8.6	7.7	0.9	95.8	-0.1	7.0	1.2	5.8	0.6	0.3	87.8
1930.....	91.1	8.5	7.7	.8	82.6	-.1	7.2	1.0	6.1	.5	-1.0	75.7
1931.....	76.3	8.2	7.6	.6	68.1	(2)	6.9	.9	6.0	.6	.8	59.7
1932.....	58.5	7.6	7.0	.6	50.9	(2)	6.8	.9	5.8	.7	.8	42.5
1933.....	56.0	7.2	6.7	.5	48.8	(2)	7.1	1.6	5.4	.7	.9	40.2
1934.....	65.0	7.1	6.6	.5	57.9	.3	7.8	2.2	5.6	.6	.7	49.0
1935.....	72.5	7.2	6.7	.6	65.3	.4	8.2	2.2	6.0	.6	-.2	57.1
1936.....	82.7	7.5	6.7	.8	75.2	(2)	8.7	2.3	6.4	.6	1.1	64.9
1937.....	90.8	7.7	6.9	.8	83.0	.1	9.2	2.4	6.8	.6	-.2	73.6
1938.....	85.2	7.8	6.9	.8	77.4	.2	9.2	2.2	6.9	.4	.5	67.6
1939.....	91.1	7.8	7.1	.7	83.3	.5	9.4	2.3	7.0	.5	1.2	72.8
1940.....	100.6	8.1	7.3	.8	92.5	.4	10.0	2.6	7.4	.4	.8	81.6
1941.....	125.8	9.0	8.1	1.0	116.8	.1	11.3	3.6	7.7	.5	.4	104.7
1942.....	159.1	10.2	9.2	1.0	149.0	.2	11.8	4.0	7.7	.5	-.8	137.7
1943.....	192.5	10.9	9.9	1.0	181.6	.2	12.7	4.9	7.8	.5	-1.7	170.3
1944.....	211.4	12.0	10.8	1.2	199.4	.7	14.1	6.2	8.0	.5	2.8	182.6
1945.....	213.6	12.5	11.2	1.3	201.0	.8	15.5	7.1	8.4	.5	4.5	181.2
1946.....	210.7	10.7	9.0	1.7	200.0	.9	17.3	7.9	9.4	.6	2.1	180.9
1947.....	234.3	13.0	11.1	2.0	221.3	-.2	18.6	7.9	10.8	.7	3.5	198.2
1948.....	259.4	15.5	13.1	2.4	244.0	-.2	20.4	8.1	12.3	.7	8	223.5
1949.....	258.1	17.3	15.1	2.2	240.8	-.2	21.6	8.2	13.5	.8	.5	217.7
1950.....	284.6	19.1	16.5	2.6	265.5	.2	23.7	9.0	14.7	.8	-.7	241.9
1951.....	329.0	22.0	18.8	3.2	307.0	.2	25.6	9.5	16.1	1.0	1.2	279.3
1952.....	347.0	24.0	20.9	3.1	323.0	-.2	28.1	10.5	17.6	1.2	1.4	292.2
1953.....	365.4	26.5	23.1	3.5	338.9	-.4	30.2	11.2	19.0	1.4	1.3	305.6
1954.....	363.1	28.8	25.2	3.6	334.3	-.2	30.2	10.1	20.1	1.3	.9	301.8
1955.....	397.5	32.0	27.9	4.0	365.5	(2)	32.9	11.0	21.8	1.5	1.0	330.2
1956.....	419.2	34.4	30.5	3.9	384.8	.9	35.7	11.6	24.1	1.6	-.4	350.8
1957.....	442.8	37.4	33.4	4.0	405.3	1.0	38.2	12.2	26.0	1.8	-.6	366.9
1958.....	444.5	38.6	35.2	3.4	405.9	1.1	39.3	11.9	27.4	1.8	-1.5	367.4
1959.....	482.7	41.0	37.3	3.7	441.7	.4	42.6	13.0	29.6	2.1	-3.0	400.5
1960.....	502.6	43.0	39.1	3.8	459.6	.5	46.4	14.0	32.5	2.2	-3.0	414.5
1961.....	518.2	44.3	40.5	3.8	473.9	1.7	49.1	14.2	34.9	2.3	-1.9	426.1
1962.....	554.9	49.4	45.3	4.1	505.5	1.7	53.0	15.2	37.8	2.3	-1.8	453.7
1963 ²	585.0	51.6	47.7	3.9	533.4	.6	56.6	16.2	40.5	2.3	-3.3	478.4
Seasonally adjusted annual rates												
1961: I.....	500.4	43.5	(³)	(³)	456.9	0.7	47.1	13.3	33.7	2.3	-2.8	411.1
II.....	512.5	44.1	(³)	(³)	468.4	2.2	48.4	13.9	34.5	2.3	-3.2	423.2
III.....	521.9	44.5	(³)	(³)	477.4	1.9	49.7	14.5	35.2	2.3	-1.8	429.0
IV.....	537.8	45.3	(³)	(³)	492.5	2.1	51.2	15.0	36.2	2.3	.0	441.0
1962: I.....	544.5	48.5	(³)	(³)	496.0	2.2	52.0	15.1	36.9	2.3	-.9	444.7
II.....	552.4	49.2	(³)	(³)	503.2	1.7	52.7	15.2	37.6	2.3	-2.5	452.4
III.....	556.8	49.7	(³)	(³)	507.1	1.4	53.3	15.2	38.1	2.3	-2.6	455.5
IV.....	565.2	50.1	(³)	(³)	515.1	1.6	54.1	15.4	38.7	2.3	-1.9	462.2
1963: I.....	571.8	50.6	(³)	(³)	521.2	.7	55.2	15.7	39.5	2.3	-2.3	466.7
II.....	579.6	51.3	(³)	(³)	528.3	.4	56.0	16.0	40.0	2.3	-4.1	474.6
III.....	588.7	52.1	(³)	(³)	536.6	.5	57.2	16.4	40.5	2.3	-4.4	482.0
IV ³	600.0	52.7	(³)	(³)	547.3	.8	58.2	16.5	41.7	2.3	(³)	(³)

¹ Accidental damage to fixed capital and capital outlays charged to current account.² Less than \$50 million.³ Preliminary estimates by Council of Economic Advisers.⁴ Data for corporate profits are approximations for the year as a whole; data for fourth quarter are not available. All other data incorporating or derived from these figures are correspondingly approximate.⁵ Not available.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-13.—*Relation of national income and personal income, 1929-63*

(Billions of dollars)

Year or quarter	National income	Less:			Plus:				Equals:
		Corporate profits and inventory valuation adjustment	Contributions for social insurance	Excess of wage accruals over disbursements	Government transfer payments to persons	Net interest paid by government	Dividends	Business transfer payments	
1929.....	87.8	10.1	0.2	-----	0.9	1.0	5.8	0.6	85.8
1930.....	75.7	6.6	.3	-----	1.0	1.0	5.5	.5	76.9
1931.....	59.7	1.6	.3	-----	2.1	1.1	4.1	.6	65.7
1932.....	42.5	-2.0	.3	-----	1.4	1.1	2.6	.7	50.1
1933.....	40.2	-2.0	.3	-----	1.5	1.2	2.1	.7	47.2
1934.....	49.0	1.1	.3	-----	1.6	1.2	2.6	.6	53.6
1935.....	57.1	2.9	.3	-----	1.8	1.1	2.9	.6	60.2
1936.....	64.9	5.0	.6	-----	2.9	1.1	4.5	.6	68.5
1937.....	73.6	6.2	1.8	-----	1.9	1.2	4.7	.6	73.9
1938.....	67.6	4.3	2.0	-----	2.4	1.2	3.2	.4	68.6
1939.....	72.8	5.7	2.1	-----	2.5	1.2	3.8	.5	72.9
1940.....	81.6	9.1	2.3	-----	2.7	1.3	4.0	.4	78.7
1941.....	104.7	14.5	2.8	-----	2.6	1.3	4.5	.5	96.3
1942.....	137.7	19.7	3.5	-----	2.6	1.5	4.3	.5	123.5
1943.....	170.3	23.8	4.5	0.2	2.5	2.1	4.5	.5	151.4
1944.....	182.6	23.0	5.2	- .2	3.1	2.8	4.7	.5	165.7
1945.....	181.2	18.4	6.1	-----	5.6	3.7	4.7	.5	171.2
1946.....	180.9	17.3	6.0	-----	10.9	4.5	5.8	.6	179.3
1947.....	198.2	23.6	5.7	-----	11.1	4.4	6.5	.7	191.6
1948.....	223.5	30.8	5.2	-----	10.5	4.5	7.2	.7	210.4
1949.....	217.7	28.2	5.7	-----	11.6	4.7	7.5	.8	208.3
1950.....	241.9	35.7	6.9	-----	14.3	4.8	9.2	.8	228.5
1951.....	279.3	41.0	8.2	.1	11.6	5.0	9.0	1.0	256.7
1952.....	292.2	37.7	8.6	-----	12.0	5.0	9.0	1.2	273.1
1953.....	305.6	37.3	8.7	- .1	12.9	5.2	9.2	1.4	288.3
1954.....	301.8	33.7	9.7	-----	15.0	5.4	9.8	1.3	289.8
1955.....	330.2	43.1	11.0	-----	16.0	5.4	11.2	1.5	310.2
1956.....	350.8	42.0	12.6	-----	17.2	5.7	12.1	1.6	332.9
1957.....	366.9	41.7	14.5	-----	20.1	6.2	12.6	1.8	351.4
1958.....	367.4	37.2	14.8	-----	24.5	6.2	12.4	1.8	360.3
1959.....	400.5	47.2	17.6	-----	25.4	7.1	13.7	2.1	383.9
1960.....	414.5	44.5	20.6	-----	27.3	7.8	14.5	2.2	401.3
1961.....	426.1	43.8	21.4	-----	31.3	7.7	15.3	2.3	417.4
1962.....	453.7	47.0	23.9	-----	32.5	8.0	16.6	2.3	442.1
1963 ¹	² 478.4	² 51.3	27.2	-----	34.6	8.4	17.8	2.3	463.0
Seasonally adjusted annual rates									
1961: I.....	411.1	38.8	20.9	-----	30.4	7.7	15.0	2.3	406.6
II.....	423.2	43.6	21.3	-----	31.3	7.6	15.1	2.3	414.5
III.....	429.0	44.0	21.6	-----	31.7	7.6	15.2	2.3	420.2
IV.....	441.0	48.6	21.9	-----	31.7	7.7	15.8	2.3	428.0
1962: I.....	444.7	46.1	23.5	-----	32.1	7.8	16.2	2.3	433.5
II.....	452.4	46.5	23.9	-----	32.1	7.9	16.4	2.3	440.7
III.....	455.5	46.1	24.0	-----	32.3	8.1	16.5	2.3	444.5
IV.....	462.2	49.3	24.2	-----	33.6	8.2	17.1	2.3	449.9
1963: I.....	466.7	48.8	28.5	-----	34.7	8.3	17.1	2.3	453.9
II.....	474.6	50.1	27.0	-----	34.2	8.4	17.6	2.3	459.9
III.....	482.0	52.2	27.4	-----	34.4	8.5	17.6	2.3	465.2
IV ¹	(³)	(³)	27.8	-----	35.2	8.5	18.8	2.3	473.0

¹ Preliminary estimates by Council of Economic Advisers.² Data for corporate profits are approximations for the year as a whole; data for fourth quarter are not available. All other data incorporating or derived from these figures are correspondingly approximate.³ Not available.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-14.—Sources of personal income, 1929-63

(Billions of dollars)

Year or quarter	Total personal income	Wage and salary disbursements ¹						Other labor income ¹	Proprietors' income ²	
		Total	Commodity-producing industries		Distributive industries	Service industries	Government		Business and professional	Farm ³
			Total	Manufacturing						
1929.....	85.8	50.4	21.5	16.1	15.6	8.4	4.9	0.6	8.8	6.0
1930.....	76.9	46.2	18.5	13.8	14.5	8.0	5.2	.6	7.4	4.1
1931.....	65.7	39.1	14.3	10.8	12.5	7.1	5.3	.5	5.6	3.2
1932.....	50.1	30.5	9.9	7.7	9.8	5.8	5.0	.5	3.4	1.9
1933.....	47.2	29.0	9.8	7.8	8.8	5.2	5.1	.4	3.2	2.4
1934.....	53.6	33.7	12.1	9.6	9.9	5.7	6.1	.4	4.6	2.4
1935.....	60.2	36.7	13.5	10.8	10.7	5.9	6.5	.5	5.4	5.0
1936.....	68.5	41.9	15.8	12.4	11.8	6.5	7.9	.6	6.5	4.0
1937.....	73.9	46.1	18.4	14.6	13.2	7.1	7.5	.6	7.1	5.6
1938.....	68.6	43.0	15.3	11.8	12.6	6.8	8.2	.6	6.8	4.3
1939.....	72.9	45.9	17.4	13.6	13.3	7.1	8.2	.6	7.3	4.3
1940.....	78.7	49.8	19.7	15.6	14.2	7.5	8.4	.7	8.4	4.6
1941.....	96.3	62.1	27.5	21.7	16.3	8.1	10.2	.7	10.9	6.5
1942.....	123.5	82.1	39.2	30.9	18.0	9.0	16.0	.9	13.9	10.0
1943.....	151.4	105.6	49.0	40.9	20.1	9.9	26.6	1.1	16.8	11.4
1944.....	165.7	117.0	50.4	42.9	22.7	10.9	33.0	1.5	18.0	11.5
1945.....	171.2	117.6	45.9	38.2	24.8	12.0	34.9	1.8	19.0	11.8
1946.....	179.3	111.9	46.0	36.5	30.9	14.3	20.6	1.9	21.3	15.3
1947.....	191.6	122.8	54.3	42.5	35.2	16.0	17.3	2.3	19.9	15.5
1948.....	210.4	135.2	60.3	46.5	38.8	17.3	18.8	2.7	22.4	17.8
1949.....	208.3	134.4	56.9	43.9	39.0	17.9	20.5	3.0	22.7	12.9
1950.....	228.5	146.4	63.5	49.4	41.3	19.3	22.3	3.8	23.5	14.0
1951.....	256.7	170.7	74.9	58.3	46.0	21.1	28.8	4.8	26.0	16.3
1952.....	273.1	184.9	80.5	63.0	48.7	22.6	32.9	5.3	26.9	15.3
1953.....	288.3	198.1	88.1	69.9	51.8	24.3	33.9	6.0	27.4	13.3
1954.....	289.8	196.3	84.1	66.1	52.3	25.5	34.4	6.2	27.8	12.7
1955.....	310.2	210.9	91.4	72.3	55.8	27.8	36.0	7.1	30.4	11.8
1956.....	332.9	227.6	98.7	77.7	60.3	30.5	38.0	8.1	32.1	11.6
1957.....	351.4	238.5	102.2	80.6	63.4	32.8	40.2	9.1	32.7	11.8
1958.....	360.3	239.8	97.9	76.7	63.8	34.8	43.2	9.4	32.5	13.5
1959.....	383.9	258.5	107.2	84.7	68.2	37.7	45.3	10.4	35.1	11.4
1960.....	401.3	271.3	110.4	87.4	71.8	40.7	48.4	11.0	34.2	12.0
1961.....	417.4	278.8	110.8	87.5	72.9	43.4	51.8	11.4	35.3	12.8
1962.....	442.1	297.1	118.5	94.2	76.6	46.4	55.6	12.1	36.5	13.3
1963 ^a	463.0	312.3	123.8	98.3	79.8	49.5	59.3	12.6	37.7	12.8
Seasonally adjusted annual rates										
1961: I.....	406.6	271.2	106.8	84.0	71.7	42.3	50.4	11.2	34.2	12.8
II.....	414.5	276.9	110.3	87.1	72.4	43.1	51.2	11.3	35.0	12.6
III.....	420.2	281.0	111.7	88.2	73.4	43.8	52.2	11.4	35.7	12.6
IV.....	428.0	286.1	114.3	90.7	73.9	44.3	53.6	11.6	36.3	13.2
1962: I.....	433.6	290.7	115.8	92.1	75.1	45.2	54.6	11.8	36.0	13.5
II.....	440.7	296.8	119.2	94.8	76.4	46.2	55.1	12.0	36.5	13.1
III.....	444.5	299.4	119.5	95.0	77.3	47.0	55.7	12.2	36.6	13.2
IV.....	449.9	301.5	119.6	94.8	77.8	47.3	56.8	12.3	36.9	13.4
1963: I.....	453.9	304.5	120.1	95.5	78.4	48.2	57.8	12.4	37.2	13.5
II.....	459.9	310.8	123.6	98.2	79.6	49.1	58.6	12.6	37.4	12.6
III.....	465.2	314.6	124.9	98.0	80.3	50.0	59.5	12.7	37.8	12.7
IV ^a	473.0	319.4	126.5	100.5	81.0	50.6	61.3	12.8	38.2	12.6

See footnotes at end of table.

TABLE C-14.—Sources of personal income, 1929-63—Continued

(Billions of dollars)

Year or quarter	Rental income of persons	Dividends	Personal interest income	Transfer payments					Less: Personal contributions for social insurance	Non-agricultural personal income ¹
				Total	Old-age and survivors insurance benefits	State unemployment insurance benefits	Veterans' benefits	Other		
1929-----	5.4	5.8	7.4	1.5	-----	-----	0.6	0.9	0.1	77.7
1930-----	4.8	5.5	6.9	1.5	-----	-----	.6	.9	.1	70.8
1931-----	3.8	4.1	6.9	2.7	-----	-----	1.6	1.1	.2	60.9
1932-----	2.7	2.6	6.2	2.2	-----	-----	.8	1.4	.2	46.9
1933-----	2.0	2.1	6.2	2.1	-----	-----	.5	1.6	.2	43.6
1934-----	1.7	2.6	6.1	2.2	-----	-----	.4	1.8	.2	49.8
1935-----	1.7	2.9	5.9	2.4	-----	-----	.5	1.9	.2	53.9
1936-----	1.8	4.5	5.8	3.5	-----	-----	1.9	1.6	.2	63.2
1937-----	2.1	4.7	5.9	2.4	(²)	(³)	.6	1.8	.6	67.0
1938-----	2.6	3.2	5.8	2.8	(²)	0.4	.5	1.9	.6	62.8
1939-----	2.7	3.8	5.8	3.0	(²)	.4	.5	2.0	.6	67.1
1940-----	2.9	4.0	5.8	3.1	(⁴)	.5	.5	2.0	.7	72.6
1941-----	3.5	4.5	5.8	3.1	0.1	.3	.5	2.2	.8	88.0
1942-----	4.5	4.3	5.8	3.1	.1	.3	.5	2.2	1.2	111.5
1943-----	5.1	4.5	5.8	3.0	.2	.1	.5	2.2	1.8	137.6
1944-----	5.4	4.7	6.2	3.6	.2	.1	.9	2.4	2.2	151.6
1945-----	5.6	4.7	6.9	6.2	.3	.4	2.8	2.7	2.3	156.8
1946-----	6.2	5.8	7.6	11.4	.4	1.1	6.8	3.2	2.0	161.2
1947-----	6.5	6.5	8.2	11.8	.5	.8	6.7	3.8	2.1	172.8
1948-----	7.3	7.2	8.7	11.3	.6	.8	5.8	4.2	2.2	189.2
1949-----	8.3	7.5	9.4	12.4	.7	1.7	5.1	4.9	2.2	192.1
1950-----	9.0	9.2	10.3	15.1	1.0	1.4	4.9	7.9	2.9	211.3
1951-----	9.4	9.0	11.2	12.6	1.9	.8	3.9	6.0	3.4	237.0
1952-----	10.2	9.0	12.1	13.2	2.2	1.0	3.9	6.2	3.8	254.3
1953-----	10.5	9.2	13.4	14.3	3.0	1.0	3.7	6.6	3.9	271.5
1954-----	10.9	9.8	14.6	16.2	3.6	2.0	3.8	6.7	4.6	273.8
1955-----	10.7	11.2	15.8	17.5	4.9	1.4	4.2	7.0	5.2	295.0
1956-----	10.9	12.1	17.5	18.8	5.7	1.4	4.2	7.5	5.8	317.9
1957-----	11.9	12.6	19.6	21.9	7.3	1.8	4.4	8.4	6.7	336.1
1958-----	12.2	12.4	21.0	26.3	8.5	3.9	4.6	9.4	6.9	343.0
1959-----	11.9	13.7	23.5	27.5	10.2	2.5	4.5	10.3	7.9	368.6
1960-----	12.1	14.5	25.8	29.5	11.1	2.8	4.5	11.1	9.2	385.1
1961-----	12.1	15.3	27.7	33.6	12.6	4.0	4.8	12.2	9.5	400.3
1962-----	12.0	16.6	30.0	34.8	14.3	2.9	4.8	12.8	10.2	424.5
1963 ⁵ -----	12.1	17.8	32.5	36.9	15.3	2.8	5.0	13.8	11.8	445.7
Seasonally adjusted annual rates										
1961: I-----	12.1	15.0	26.8	32.6	11.8	3.8	4.7	12.3	9.3	389.6
II-----	12.1	15.1	27.4	33.5	12.5	4.4	4.9	11.7	9.5	397.7
III-----	12.1	15.2	27.9	33.9	12.8	3.9	4.7	12.5	9.6	403.2
IV-----	12.0	15.8	28.7	34.0	13.4	3.7	4.7	12.1	9.8	410.4
1962: I-----	12.0	16.2	29.0	34.4	13.6	3.3	4.7	12.7	10.1	415.7
II-----	12.0	16.4	29.7	34.4	14.3	2.7	4.7	12.6	10.2	423.1
III-----	12.0	16.5	30.3	34.6	14.5	2.7	4.7	12.8	10.3	427.1
IV-----	12.0	17.1	31.1	35.9	14.8	3.2	4.9	13.0	10.3	432.1
1963: I-----	12.0	17.1	31.6	37.0	14.8	3.0	4.9	14.2	11.5	435.9
II-----	12.0	17.6	32.1	36.5	15.4	2.6	5.0	13.5	11.7	442.8
III-----	12.1	17.6	32.8	36.7	15.5	2.6	5.0	13.6	11.9	448.1
IV ⁶ -----	12.2	18.8	33.5	37.5	15.5	3.1	5.1	13.8	12.0	456.1

¹ The total of wage and salary disbursements and other labor income differs from compensation of employees in Table C-11 in that it excludes employer contributions for social insurance and excludes the excess of wage accruals over wage disbursements.

² Excludes income resulting from net reductions of inventories and gives credit in computing income to net additions to inventories during the period.

³ Data for 1929-45 differ from those in Table C-71 because of revisions by the Department of Agriculture not yet incorporated into the national income accounts.

⁴ Nonagricultural income is personal income exclusive of net income of unincorporated farm enterprises, farm wages, agricultural net interest, and net dividends paid by agricultural corporations.

⁵ Less than \$50 million.

⁶ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-15.—Disposition of personal income, 1929–63

Year or quarter	Personal income	Less: Personal taxes ¹	Equals: Disposable personal income	Less: Personal consumption expenditures	Equals: Personal saving	Percent of disposable personal income	
						Personal consumption expenditures	Personal saving
	Billions of dollars					Percent	
1929.....	85.8	2.6	83.1	79.0	4.2	95.1	5.1
1930.....	76.9	2.5	74.4	71.0	3.4	95.4	4.6
1931.....	65.7	1.9	63.8	61.3	2.5	96.1	3.9
1932.....	50.1	1.5	48.7	49.3	-.6	101.2	-1.2
1933.....	47.2	1.6	45.7	46.4	-.6	101.5	-1.3
1934.....	53.6	1.6	52.0	51.9	.1	99.8	.2
1935.....	60.2	1.9	58.3	56.3	2.0	96.6	3.4
1936.....	68.5	2.3	66.2	62.6	3.6	94.6	5.4
1937.....	73.9	2.9	71.0	67.3	3.7	94.8	5.2
1938.....	68.6	2.9	65.7	64.6	1.1	98.3	1.7
1939.....	72.9	2.4	70.4	67.6	2.9	96.0	4.1
1940.....	78.7	2.6	76.1	71.9	4.2	94.5	5.5
1941.....	96.3	3.3	93.0	81.9	11.1	88.1	11.9
1942.....	123.5	6.0	117.5	89.7	27.8	76.3	23.7
1943.....	151.4	17.8	133.5	100.5	33.0	75.3	24.7
1944.....	165.7	18.9	146.8	109.8	36.9	74.8	25.1
1945.....	171.2	20.9	150.4	121.7	28.7	80.9	19.1
1946.....	179.3	18.7	160.6	147.1	13.5	91.6	8.4
1947.....	191.6	21.5	170.1	165.4	4.7	97.2	2.8
1948.....	210.4	21.1	189.3	178.3	11.0	94.2	5.8
1949.....	208.3	18.7	189.7	181.2	8.5	95.5	4.5
1950.....	228.5	20.8	207.7	195.0	12.6	93.9	6.1
1951.....	256.7	29.2	227.5	209.8	17.7	92.2	7.8
1952.....	273.1	34.4	238.7	219.8	18.9	92.1	7.9
1953.....	288.3	35.8	252.5	232.6	19.8	92.1	7.8
1954.....	289.8	32.9	256.9	238.0	18.9	92.6	7.4
1955.....	310.2	35.7	274.4	256.9	17.5	93.6	6.4
1956.....	332.9	40.0	292.9	269.9	23.0	92.1	7.9
1957.....	351.4	42.6	308.8	285.2	23.6	92.4	7.6
1958.....	360.3	42.3	317.9	293.2	24.7	92.2	7.8
1959.....	383.9	46.8	337.1	313.5	23.6	93.0	7.0
1960.....	401.3	51.4	349.9	328.2	21.7	93.8	6.2
1961.....	417.4	52.9	364.4	336.8	27.6	92.4	7.6
1962.....	442.1	57.7	384.4	355.4	29.1	92.5	7.6
1963 ²	463.0	60.4	402.6	373.2	29.4	92.7	7.3
	Seasonally adjusted annual rates						
1961: I.....	406.6	51.3	355.3	330.7	24.5	93.1	6.9
II.....	414.5	52.5	362.0	334.9	27.1	92.5	7.5
III.....	420.2	53.0	367.2	337.9	29.2	92.0	8.0
IV.....	428.0	54.9	373.1	343.8	29.3	92.1	7.9
1962: I.....	433.5	56.2	377.3	348.8	28.5	92.4	7.6
II.....	440.7	57.9	382.7	352.9	29.8	92.2	7.8
III.....	444.5	58.1	386.5	356.7	29.7	92.3	7.7
IV.....	449.9	58.5	391.4	362.9	28.5	92.7	7.3
1963: I.....	453.9	59.4	394.5	367.4	27.1	93.1	6.9
II.....	459.9	59.9	400.0	370.4	29.6	92.6	7.4
III.....	465.2	60.8	404.4	374.9	29.5	92.7	7.3
IV ²	473.0	61.7	411.3	380.0	31.3	92.4	7.6

¹ Includes also such items as fines and penalties.² Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-16.—*Total and per capita disposable personal income and personal consumption expenditures, in current and 1963 prices, 1929-63*

Year or quarter	Total disposable personal income (billions of dollars)		Per capita disposable personal income (dollars)		Total personal consumption expenditures (billions of dollars)		Per capita personal consumption expenditures (dollars)		Population (thousands) ⁴
	Current prices	1963 prices ¹	Current prices	1963 prices ¹	Current prices	1963 prices ²	Current prices	1963 prices ²	
1929-----	83.1	152.8	682	1,254	79.0	145.2	648	1,191	121,875
1930-----	74.4	143.1	604	1,162	71.0	136.6	576	1,109	123,188
1931-----	63.8	137.8	514	1,110	61.3	132.4	494	1,066	124,149
1932-----	48.7	119.1	390	953	49.3	120.5	395	964	124,949
1933-----	45.7	116.0	364	923	46.4	117.7	369	936	125,690
1934-----	52.0	123.8	411	979	51.9	123.7	410	978	126,485
1935-----	58.3	135.9	458	1,067	56.3	131.3	442	1,031	127,362
1936-----	66.2	152.9	516	1,193	62.6	144.5	488	1,127	128,181
1937-----	71.0	157.8	551	1,224	67.3	149.6	522	1,160	128,961
1938-----	65.7	149.7	506	1,152	64.6	147.1	497	1,132	129,969
1939-----	70.4	161.8	537	1,235	67.6	155.3	516	1,185	131,028
1940-----	76.1	173.0	576	1,309	71.9	163.5	544	1,237	132,122
1941-----	93.0	197.9	697	1,483	81.9	174.3	614	1,307	133,402
1942-----	117.5	223.8	871	1,659	89.7	170.8	665	1,266	134,860
1943-----	133.5	253.0	976	1,704	100.5	175.4	735	1,283	136,739
1944-----	146.8	243.0	1,061	1,756	109.8	181.8	793	1,314	138,397
1945-----	150.4	240.3	1,075	1,717	121.7	194.4	870	1,389	139,928
1946-----	160.6	237.6	1,136	1,680	147.1	217.5	1,040	1,538	141,389
1947-----	170.1	227.4	1,180	1,578	165.4	221.1	1,148	1,534	144,126
1948-----	189.3	239.3	1,291	1,632	178.3	225.3	1,216	1,537	146,631
1949-----	189.7	242.0	1,272	1,622	181.2	231.0	1,215	1,548	149,188
1950-----	207.7	260.9	1,369	1,720	195.0	244.9	1,286	1,614	151,689
1951-----	227.5	268.0	1,475	1,737	209.8	247.2	1,360	1,602	154,283
1952-----	238.7	275.6	1,521	1,756	219.8	253.7	1,400	1,616	156,947
1953-----	252.5	288.6	1,582	1,806	232.6	265.8	1,458	1,666	159,559
1954-----	256.9	290.6	1,582	1,790	238.0	269.3	1,466	1,658	162,388
1955-----	274.4	309.0	1,660	1,870	256.9	289.3	1,554	1,750	165,276
1956-----	292.9	324.4	1,741	1,928	269.9	299.0	1,604	1,777	168,225
1957-----	308.8	332.4	1,803	1,941	285.2	307.0	1,665	1,792	171,278
1958-----	317.9	335.7	1,825	1,928	293.2	309.7	1,684	1,778	174,154
1959-----	337.1	351.9	1,904	1,987	313.5	327.2	1,770	1,848	177,080
1960-----	349.9	360.0	1,937	1,993	328.2	337.8	1,817	1,870	180,676
1961-----	364.4	372.6	1,983	2,028	336.8	344.3	1,833	1,874	183,742
1962-----	384.4	389.5	2,060	2,087	355.4	360.1	1,905	1,930	186,591
1963 ³ -----	402.6	402.6	2,127	2,127	373.2	373.2	1,972	1,972	189,278
Seasonally adjusted annual rates									
1961: I-----	355.3	363.7	1,945	1,991	330.7	338.6	1,810	1,854	182,666
II-----	362.0	370.5	1,974	2,020	334.9	342.7	1,826	1,869	183,375
III-----	367.2	375.1	1,994	2,037	337.9	345.3	1,835	1,879	184,150
IV-----	373.1	380.3	2,017	2,056	343.8	350.5	1,859	1,895	184,952
1962: I-----	377.3	383.8	2,033	2,068	348.8	354.9	1,879	1,912	185,607
II-----	382.7	388.5	2,055	2,086	352.9	358.2	1,895	1,923	186,258
III-----	386.5	391.2	2,067	2,092	356.7	361.2	1,908	1,932	186,980
IV-----	391.4	394.6	2,085	2,102	362.9	366.0	1,933	1,950	187,738
1963: I-----	394.5	396.1	2,094	2,102	367.4	369.0	1,951	1,959	188,356
II-----	400.0	400.4	2,117	2,119	370.4	370.8	1,960	1,962	188,953
III-----	404.4	403.6	2,132	2,128	374.9	374.3	1,977	1,974	189,654
IV ⁴ -----	411.3	409.3	2,160	2,150	380.0	378.1	1,996	1,986	190,388

¹ Estimates in current prices divided by the implicit price deflator for personal consumption expenditures on a 1963 base.

² See Table C-2 for explanation.

³ Total expenditures in 1963 prices divided by population.

⁴ Population of the United States including armed forces abroad. Annual data are for July 1; quarterly data are for middle of period.

⁵ Preliminary estimates by Council of Economic Advisers.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Sources: Department of Commerce and Council of Economic Advisers.

TABLE C-17.—Financial saving by individuals, 1939-63¹
[Billions of dollars]

Year or quarter	Total	Cur- rency and bank de- posits	Sav- ings shares (²)	Securities				Pri- vate insur- ance re- serves (³)	Non- insur- ed pen- sion funds	Gov- ern- ment insur- ance and pen- sion re- serves ⁴	Less: Increase in debt		
				Total	U.S. sav- ings bonds	Other gov- ern- ment ⁵	Cor- porate and other				Mort- gage debt ⁶	Con- sumer debt ⁷	Secu- rities loans ⁸
1939.....	4.2	3.0	0.1	-0.8	0.7	-0.9	-0.6	1.7	0.1	1.3	0.5	0.8	-0.2
1940.....	4.2	2.9	.3	-.4	.9	-.8	-.4	1.8	.1	1.3	.9	1.0	-.2
1941.....	10.5	4.8	.4	2.6	2.8	.4	-.5	2.1	.1	1.9	.8	.7	-.1
1942.....	29.3	10.9	.3	10.3	8.0	2.3	(⁹)	2.5	.1	2.6	.1	-3.0	.3
1943.....	38.7	16.2	.6	14.1	11.1	3.2	-.3	2.8	.2	3.9	-.4	-1.0	.6
1944.....	41.4	17.5	.9	15.7	11.8	4.6	-.7	3.2	.6	5.0	-.1	.1	1.4
1945.....	37.3	19.0	1.1	9.9	6.9	4.2	-1.2	3.5	.9	5.1	.2	.5	1.5
1946.....	14.1	10.6	1.2	-1.4	1.0	-2.4	(⁹)	3.4	.3	3.5	.6	2.3	-2.3
1947.....	6.5	2.0	1.3	2.4	2.0	-.3	.7	3.6	.3	3.5	4.6	2.8	-.8
1948.....	2.8	-1.8	1.3	3.1	1.6	.4	1.1	3.7	.4	3.6	4.7	2.4	.4
1949.....	2.2	-1.4	1.6	2.4	1.5	.2	.7	3.7	.6	2.3	4.1	2.6	.3
1950.....	.8	3.5	1.7	.9	.3	-.1	.7	3.9	.9	1.1	7.3	3.6	-.2
1951.....	11.1	5.9	2.3	.5	-.5	-.4	1.4	4.1	1.4	4.2	6.6	1.0	-.3
1952.....	13.1	7.0	3.3	3.5	.1	1.3	2.2	4.8	1.5	4.4	6.5	4.4	.6
1953.....	10.9	4.7	4.0	3.4	.2	2.0	1.2	5.0	1.8	3.2	7.3	3.6	.4
1954.....	9.5	5.4	4.8	.4	.6	-.9	.7	5.2	1.9	2.6	9.0	1.0	.9
1955.....	7.1	3.3	5.2	6.4	.3	3.9	2.2	5.5	2.1	3.1	11.8	6.1	.6
1956.....	14.1	4.7	5.4	5.2	-.1	3.3	2.0	5.5	2.4	3.6	10.3	3.1	-.8
1957.....	15.5	4.9	5.2	4.6	-1.9	3.7	2.8	5.1	2.9	3.2	7.9	2.5	-.1
1958.....	16.9	10.2	6.3	1.3	-.5	-.8	2.6	5.4	3.1	.6	9.3	.2	.4
1959.....	13.3	4.4	7.2	9.9	-1.8	10.8	.9	5.5	3.4	2.3	13.2	6.1	.2
1960.....	8.1	2.8	8.3	-.1	-.2	-1.0	1.1	5.5	3.7	3.4	11.0	4.2	.3
1961.....	15.9	9.3	9.4	1.2	.8	-.4	.8	5.9	4.0	1.2	12.5	1.5	1.0
1962.....	19.6	19.1	10.1	-.7	.4	.4	-1.5	6.2	4.0	2.8	15.4	5.3	1.1
1963 ¹⁰	19.3	15.0	12.0	.3	1.2	1.1	-2.0	6.4	4.3	4.4	16.7	5.7	.9
1961: I.....	4.4	1.2	2.0	-1.1	.3	-1.2	-.2	1.3	1.1	-.2	2.8	-1.8	-1.0
II.....	3.2	2.0	2.7	-.8	.1	-2.1	1.1	1.2	.9	1.5	2.8	.6	.8
III.....	6.1	3.2	1.5	1.7	.2	1.6	(⁹)	1.5	.9	.6	2.9	.3	.2
IV.....	2.2	2.9	3.2	1.3	.2	1.3	-.2	1.8	1.0	-.8	4.0	2.2	1.1
1962: I.....	7.0	4.3	2.1	.1	.2	.4	-.5	1.3	1.0	-.1	3.3	-1.1	-.5
II.....	4.0	3.4	2.8	-1.0	.1	-.6	-.5	1.6	1.0	2.0	3.8	2.5	-.4
III.....	6.4	6.0	1.7	.3	.2	.4	-.2	1.7	.9	1.0	3.9	1.0	.2
IV.....	2.3	5.4	3.5	-.2	(⁹)	.2	-.4	1.7	1.0	-.1	4.4	2.9	1.8
1963: I.....	6.6	3.5	3.2	-1.2	.4	-.9	-.6	1.5	1.1	.4	4.1	-.9	-1.3
II.....	3.3	2.4	3.3	-.3	.2	-.1	-.4	1.5	1.0	2.7	4.0	2.3	.9
III.....	5.2	4.6	1.7	1.1	.3	1.6	-.7	1.7	1.0	1.4	4.1	1.5	-.8
IV ¹⁰	4.2	4.5	3.8	.8	.3	.7	-.2	1.8	1.2	-.1	4.5	2.8	.5

¹ Individuals' saving, in addition to personal holdings, covers saving of unincorporated business, trust funds, and nonprofit institutions in the forms specified.

² Includes shares in savings and loan associations and shares and deposits in credit unions.

³ "Other government" includes U.S. Government issues (except savings bonds), State and local government securities, and beginning 1951, nonguaranteed Federal agency issues, which are included in "corporate and other" for years prior to 1951.

⁴ Includes insured pension reserves.

⁵ Includes Social Security funds, State and local retirement systems, etc.

⁶ Mortgage debt to institutions on one- to four-family nonfarm dwellings.

⁷ Consumer debt owed to corporations, largely attributable to purchases of automobiles and other durable consumer goods, although including some debt arising from purchases of consumption goods. Policy loans on Government and private life insurance have been deducted from those items of saving.

⁸ Change in bank loans to brokers and dealers and others for the purpose of purchasing or carrying securities.

⁹ Less than \$50 million.

¹⁰ Preliminary.

NOTE.—Figures beginning 1960 have been revised since the *Economic Report of the President*, January 1963.

In addition to the concept of saving shown above, there are other concepts of individuals' saving, with varying degrees of coverage, currently in use. The personal saving estimates of the Department of Commerce are derived as the difference between disposable personal income and expenditures. Conceptually, Commerce saving includes the following items not included in Securities and Exchange Commission saving: housing, farm and unincorporated business investment in inventories and plant and equipment, net of depreciation, and increase in debt. Government insurance is excluded from the Commerce saving series. For a reconciliation of the two series, see Securities and Exchange Commission *Statistical Bulletin*, July 1963, and *Survey of Current Business*, July 1963.

The flow-of-funds system of accounts of the Board of Governors of the Federal Reserve System includes capital investments as well as financial components of saving and covers saving of Federal, State, and local governments, businesses, financial institutions, and consumers. While the Federal Reserve's estimates of consumer saving in financial form are similar to the Securities and Exchange Commission estimates of individuals' saving, there are some statistical and conceptual differences in the two sets of data.

Revisions for 1960-63 in the consumer credit statistics of the Board of Governors of the Federal Reserve System have not yet been incorporated into these estimates.

Data for Alaska and Hawaii included for all periods.

Source: Securities and Exchange Commission.

TABLE C-18.—*Sources and uses of gross saving, 1929-63*

(Billions of dollars)

Year or quarter	Gross private saving and government surplus or deficit on income and product transactions							Gross investment			Statistical discrepancy
	Total	Private saving			Government surplus or deficit (-)			Total	Gross private domestic investment	Net foreign investment ¹	
		Total	Personal saving	Gross business saving	Total	Federal	State and local				
1929.....	16.7	15.7	4.2	11.5	1.0	1.2	-0.1	17.0	16.2	0.8	0.3
1930.....	11.9	12.2	3.4	8.8	-3	.3	-5	11.0	10.3	.7	-1.0
1931.....	4.9	7.7	2.5	5.2	-2.8	-2.1	-7	5.7	5.5	.2	.8
1932.....	.3	2.0	-6	2.7	-1.7	-1.5	-2	1.1	.9	.2	.8
1933.....	.6	1.9	-6	2.6	-1.4	-1.3	(²)	1.5	1.4	.2	.9
1934.....	2.6	5.0	.1	4.9	-2.4	-2.9	.5	3.3	2.9	.4	.7
1935.....	6.4	8.4	2.0	6.3	-2.0	-2.6	.6	6.2	6.3	-.1	-.2
1936.....	7.2	10.1	3.6	6.5	-3.0	-3.5	.5	8.3	8.4	-.1	1.1
1937.....	12.1	11.5	3.7	7.8	.6	-2	.7	11.8	11.7	.1	-.2
1938.....	7.3	8.9	1.1	7.8	-1.6	-2.0	.4	7.8	6.7	1.1	.5
1939.....	9.0	11.2	2.9	8.3	-2.1	-2.2	.1	10.2	9.3	.9	1.2
1940.....	13.9	14.6	4.2	10.4	-.7	-1.4	.7	14.7	13.2	1.5	.8
1941.....	18.8	22.6	11.1	11.5	-3.8	-5.1	1.3	19.2	18.1	1.1	.4
1942.....	10.5	41.9	27.8	14.1	-31.4	-33.2	1.8	9.7	9.9	-.2	-.8
1943.....	5.1	49.3	33.0	16.3	-44.2	-46.7	2.5	3.4	5.6	-2.2	-1.7
1944.....	2.3	54.2	36.9	17.2	-51.9	-54.6	2.7	5.0	7.1	-2.1	2.8
1945.....	4.5	44.3	28.7	15.6	-39.7	-42.3	2.6	9.0	10.4	-1.4	4.5
1946.....	30.6	26.5	13.5	13.1	4.1	2.2	1.9	32.7	28.1	4.6	2.1
1947.....	36.8	23.6	4.7	18.9	13.3	12.2	1.1	40.4	31.5	8.9	3.5
1948.....	45.9	37.6	11.0	26.6	8.2	8.0	.3	45.0	43.1	1.9	-.8
1949.....	33.0	36.1	8.5	27.6	-3.1	-2.5	-.6	33.5	33.0	.5	.5
1950.....	48.5	40.3	12.6	27.7	8.2	9.2	-1.0	47.8	50.0	-2.2	-.7
1951.....	55.3	49.2	17.7	31.5	6.1	6.4	-.3	56.6	56.3	.2	1.2
1952.....	48.3	52.2	18.9	33.2	-3.9	-3.9	.1	49.7	49.9	-.2	1.4
1953.....	47.0	54.1	19.8	34.3	-7.1	-7.4	.3	48.3	50.3	-2.0	1.3
1954.....	47.6	54.4	18.9	35.5	-6.7	-5.8	-.9	48.5	48.9	-.4	.9
1955.....	62.4	59.6	17.5	42.1	2.9	3.8	-1.0	63.4	63.8	-.4	1.0
1956.....	71.3	66.1	23.0	43.0	5.2	5.7	-.5	68.8	67.4	1.5	-2.4
1957.....	70.2	69.2	23.6	45.6	1.0	2.0	-1.0	69.6	66.1	3.5	-.6
1958.....	58.1	69.5	24.7	44.8	-11.4	-9.4	-2.1	56.6	56.6	-.1	-1.5
1959.....	73.4	74.9	23.6	51.3	-1.5	-1.1	-.3	70.4	72.7	-2.3	-3.0
1960.....	76.2	72.3	21.7	50.7	3.9	3.5	.4	73.2	71.8	1.4	-3.0
1961.....	73.8	78.4	27.6	50.8	-4.7	-4.5	-.1	71.9	69.0	2.9	-1.9
1962.....	82.8	86.7	29.1	57.6	-3.9	-4.3	.4	81.0	78.8	2.2	-1.8
1963 ³	488.3	490.0	29.4	460.6	4-1.7	4-2.8	41.1	85.0	82.3	2.7	4-3.3
Seasonally adjusted annual rates											
1961: I.....	66.1	72.5	24.5	48.0	-6.4	-6.0	-0.4	63.4	59.6	3.8	-2.8
II.....	72.5	77.9	27.1	50.8	-5.4	-5.4	(⁴)	69.3	66.6	2.7	-3.2
III.....	76.3	80.3	29.2	51.1	-4.0	-4.0	(⁵)	74.6	72.0	2.6	-1.8
IV.....	80.0	82.8	29.3	53.5	-2.8	-2.5	-.3	80.1	77.6	2.4	(⁶)
1962: I.....	79.7	85.1	28.5	56.6	-5.4	-5.6	.2	78.7	77.3	1.4	-.9
II.....	85.0	86.9	29.8	57.2	-1.9	-3.0	1.1	82.6	79.6	3.0	-2.5
III.....	84.1	87.1	29.7	57.4	-3.0	-3.6	.6	81.6	78.9	2.6	-2.6
IV.....	82.4	87.8	28.5	59.4	-5.4	-5.3	-1.1	80.5	78.8	1.7	-1.9
1963: I.....	82.3	86.4	27.1	59.3	-4.2	-4.6	.4	79.9	77.8	2.2	-2.3
II.....	87.9	89.2	29.6	59.6	-1.3	-3.0	1.7	83.7	80.7	3.1	-4.1
III.....	90.8	91.4	29.5	61.9	-.6	-1.8	1.2	86.3	83.7	2.6	-4.4
IV ²	(⁷)	(⁷)	31.3	(⁷)	(⁷)	(⁷)	(⁷)	90.0	87.0	3.0	(⁷)

¹ Net exports of goods and services less foreign net transfers by Government. For 1929-45, net foreign investment and net exports of goods and services have been equated, since foreign net transfers by Government were negligible during that period.

² Deficit of \$35 million.

³ Preliminary estimates by Council of Economic Advisers.

⁴ Data for corporate profits are approximations for the year as a whole; data for fourth quarter are not available. All other data incorporating or derived from these figures are correspondingly approximate.

⁵ Less than \$50 million.

⁶ Not available.

NOTE.—Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

EMPLOYMENT, WAGES, AND PRODUCTIVITY

TABLE C-19.—Noninstitutional population and the labor force, 1929-63

Year or month	Non-institutional population ¹	Total labor force (including armed forces) ¹	Armed forces ¹	Civilian labor force					Total labor force as percent of non-institutional population	Unemployment as percent of civilian labor force		
				Total	Employment ²			Unemployment ²				
					Total	Agricultural	Non-agricultural					
Thousands of persons 14 years of age and over											Percent	
Old definitions: ²												
1929.....	(³)	49,440	260	49,180	47,630	10,450	37,180	1,550	(³)	3.2		
1930.....	(³)	50,080	260	49,820	45,480	10,340	35,140	4,340	(³)	8.7		
1931.....	(³)	50,680	260	50,420	42,400	10,290	32,110	8,020	(³)	15.9		
1932.....	(³)	51,250	250	51,000	38,940	10,170	28,770	12,060	(³)	23.6		
1933.....	(³)	51,840	250	51,590	38,760	10,090	28,670	12,830	(³)	24.9		
1934.....	(³)	52,490	260	52,230	40,890	9,900	30,990	11,340	(³)	21.7		
1935.....	(³)	53,140	270	52,870	42,260	10,110	32,150	10,610	(³)	20.1		
1936.....	(³)	53,740	300	53,440	44,410	10,000	34,410	9,030	(³)	16.9		
1937.....	(³)	54,320	320	54,000	46,300	9,820	36,480	7,700	(³)	14.3		
1938.....	(³)	54,950	340	54,610	44,220	9,690	34,530	10,390	(³)	19.0		
1939.....	(³)	55,600	370	55,230	45,750	9,610	36,140	9,480	(³)	17.2		
1940.....	100,380	56,180	540	55,640	47,520	9,540	37,980	8,120	56.0	14.6		
1941.....	101,520	57,530	1,620	55,910	50,350	9,100	41,250	5,560	56.7	9.9		
1942.....	102,610	60,380	3,970	56,410	53,750	9,250	44,500	2,660	58.8	4.7		
1943.....	103,660	64,560	9,020	55,540	54,470	9,080	45,390	1,070	62.3	1.9		
1944.....	104,630	66,040	11,410	54,630	53,960	8,950	45,010	670	63.1	1.2		
1945.....	105,530	65,300	11,440	53,860	52,820	8,580	44,240	1,040	61.9	1.9		
1946.....	106,520	60,970	3,450	57,520	55,250	8,320	46,930	2,270	57.2	3.9		
1947.....	107,608	61,758	1,590	60,168	58,027	8,266	49,761	2,142	57.4	3.6		
New definitions: ²												
1947.....	107,608	61,758	1,590	60,168	57,812	8,256	49,557	2,356	57.4	3.9		
1948.....	108,632	62,898	1,456	61,442	59,117	7,960	51,156	2,325	57.9	3.8		
1949.....	109,773	63,721	1,616	62,105	58,423	8,017	50,406	3,682	58.0	5.9		
1950.....	110,929	64,749	1,650	63,099	59,748	7,497	52,251	3,351	58.4	5.3		
1951.....	112,075	65,983	3,099	62,884	60,784	7,048	53,736	2,099	58.9	3.3		
1952.....	113,270	66,560	3,594	62,966	61,035	6,792	54,243	1,932	58.8	3.1		
1953.....	115,094	67,362	3,547	63,815	61,945	6,555	55,390	1,870	58.5	2.9		
1954.....	116,219	67,818	3,350	64,468	60,890	6,495	54,395	3,578	58.4	5.6		
1955.....	117,388	68,896	3,048	65,848	62,944	6,718	56,225	2,904	58.7	4.4		
1956.....	118,734	70,387	2,857	67,530	64,708	6,572	58,135	2,822	59.3	4.2		
1957.....	120,445	70,744	2,798	67,946	65,011	6,222	58,789	2,936	58.7	4.3		
1958.....	121,950	71,284	2,637	68,647	63,966	5,844	58,122	4,681	58.5	6.8		
1959.....	123,366	71,946	2,552	69,394	65,581	5,836	59,745	3,813	58.3	5.5		
1960.....	124,878	72,820	2,514	70,306	66,392	5,696	60,697	3,913	58.3	5.6		
Including Alaska and Hawaii												
1960.....	125,368	73,126	2,514	70,612	66,681	5,723	60,958	3,931	58.3	5.6		
1961.....	127,852	74,175	2,572	71,603	66,796	5,463	61,333	4,806	58.0	6.7		
1962 ⁴	130,117	74,839	2,828	72,011	67,999	5,255	62,744	4,012	57.5	5.6		
1962.....	130,081	74,681	2,827	71,854	67,846	5,190	62,657	4,007	57.4	5.6		
1963.....	132,125	75,712	2,737	72,975	68,809	4,946	63,863	4,166	57.3	5.7		
1962: January.....	129,118	72,564	2,843	69,721	65,058	4,417	60,641	4,663	56.2	6.7		
February.....	129,290	73,218	2,886	70,332	65,789	4,578	61,211	4,543	56.6	6.5		
March.....	129,471	73,582	2,885	70,697	66,316	4,782	61,533	4,382	56.8	6.2		
April.....	129,641	73,864	2,885	70,979	67,027	5,048	61,979	3,952	57.0	5.6		
April ⁵	129,587	73,654	2,885	70,769	66,824	4,961	61,863	3,946	56.8	5.6		
May.....	129,752	74,797	2,875	71,922	68,203	5,428	62,775	3,719	57.6	5.2		
June.....	129,930	76,857	2,856	74,001	69,539	6,290	63,249	4,463	59.2	6.0		
July.....	130,183	76,437	2,855	73,582	69,564	6,064	63,500	4,018	58.7	5.5		
August.....	130,359	76,554	2,859	73,695	69,762	5,770	63,993	3,932	58.7	5.3		
September.....	130,546	74,914	2,735	72,179	68,668	5,564	63,103	3,512	57.4	4.9		
October.....	130,730	74,923	2,736	72,187	68,893	5,475	63,418	3,294	57.3	4.6		
November.....	130,910	74,532	2,750	71,782	67,981	4,883	63,098	3,801	56.9	5.3		
December.....	131,096	74,142	2,764	71,378	67,561	4,066	63,495	3,817	56.6	5.3		

See footnotes at end of table.

TABLE C-19.—Noninstitutional population and the labor force, 1929-63—Continued

Year or month	Non-institutional population ¹	Total labor force (including armed forces) ¹	Armed forces ¹	Civilian labor force					Total labor force as percent of non-institutional population	Unemployment as percent of civilian labor force
				Total	Employment ²			Unemployment ³		
					Total	Agricultural	Non-agricultural			
Thousands of persons 14 years of age and over									Percent	
1963: January	131,253	73,323	2,716	70,607	65,935	4,206	61,730	4,672	55.9	6.6
February	131,414	73,999	2,724	71,275	66,358	4,049	62,309	4,918	56.3	6.9
March	131,589	74,382	2,732	71,650	67,148	4,337	62,812	4,501	56.5	6.3
April	131,739	74,897	2,736	72,161	68,097	4,673	63,424	4,063	56.9	5.6
May	131,865	75,864	2,737	73,127	69,061	5,178	63,883	4,066	57.5	5.6
June	132,036	77,901	2,736	75,165	70,319	5,954	64,365	4,846	59.0	6.4
July	132,196	77,917	2,744	75,173	70,851	5,969	64,882	4,322	58.9	5.7
August	132,345	77,167	2,749	74,418	70,561	5,496	65,065	3,857	58.3	5.2
September	132,497	75,811	2,749	73,062	69,546	5,326	64,220	3,516	57.2	4.8
October	132,682	76,086	2,742	73,344	69,891	5,350	64,541	3,453	57.3	4.7
November	132,853	76,000	2,739	73,261	69,325	4,777	64,548	3,936	57.2	5.4
December	133,025	75,201	2,740	72,461	68,615	4,039	64,576	3,846	56.5	5.3
Seasonally adjusted ⁶										
1962: January		74,277		71,434	67,262	5,380	61,882	4,172		5.8
February		74,599		71,713	67,629	5,481	62,148	4,084		5.7
March		74,688		71,803	67,860	5,504	62,356	3,943		5.5
April ⁴		74,470		71,585	67,591	5,296	62,295	3,994		5.6
May		74,657		71,782	67,821	5,269	62,552	3,961		5.5
June		74,529		71,673	67,731	5,190	62,541	3,942		5.5
July		74,585		71,730	67,833	5,118	62,715	3,897		5.4
August		75,066		72,197	68,104	5,087	63,017	4,093		5.7
September		74,989		72,254	68,188	5,114	63,074	4,066		5.6
October		74,651		71,915	68,076	5,040	63,036	3,839		5.3
November		74,577		71,827	67,691	4,983	62,708	4,136		5.8
December		74,848		72,084	68,091	4,843	63,248	3,993		5.5
1963: January		75,064		72,348	68,171	5,183	62,988	4,177		5.8
February		75,225		72,501	68,086	4,841	63,245	4,415		6.1
March		75,430		72,698	68,636	5,008	63,628	4,062		5.6
April		75,738		73,002	68,874	5,023	63,851	4,128		5.7
May		75,726		72,989	68,676	5,033	63,643	4,313		5.9
June		75,456		72,720	68,602	4,909	63,693	4,118		5.7
July		76,013		73,269	69,161	5,024	64,137	4,108		5.6
August		75,664		72,915	68,917	4,838	64,079	3,998		5.5
September		75,855		73,136	69,076	4,884	64,192	4,060		5.6
October		75,843		73,101	69,075	4,919	64,156	4,026		5.5
November		76,076		73,337	69,045	4,892	64,153	4,292		5.9
December		76,003		73,263	69,206	4,883	64,323	4,057		5.5

¹ Data for 1940-52 revised to include about 150,000 members of the armed forces who were outside the United States in 1940 and who were, therefore, not enumerated in the 1940 Census and were excluded from the 1940-52 estimates.

² See Note.

³ Not available.

⁴ Averages have been adjusted by the Council of Economic Advisers for comparison with previous data. See Note.

⁵ Beginning April 1962, not comparable with prior data. See Note.

⁶ Seasonally adjusted totals may differ from the sum of components because totals and components have been seasonally adjusted separately.

NOTE.—Civilian labor force data beginning with January 1963 are based on a 357-area sample. For January 1960-December 1962 on a 333-area sample; for May 1956-December 1959 on a 330-area sample; for January 1954-April 1956 on a 230-area sample; for 1946-53 on a 68-area sample; for 1940-45 on a smaller sample; and for 1929-39 on sources other than direct enumeration.

Effective January 1957, persons on layoff with definite instructions to return to work within 30 days of layoff and persons waiting to start new wage and salary jobs within the following 30 days are classified as unemployed. Such persons had previously been classified as employed (with a job but not at work). The combined total of the groups changing classification has averaged about 200,000 to 300,000 a month in recent years. The small number of persons in school during the survey week and waiting to start new jobs are classified as not in the labor force instead of employed, as formerly. Persons waiting to open new businesses or start new farms within 30 days continued to be classified as employed.

Beginning July 1955, monthly data are for the calendar week ending nearest the 15th of the month; previously, for week containing the 8th. Annual data are averages of monthly figures.

Beginning April 1962, estimating procedures made use of 1960 Census data; January 1963-March 1962, 1950 Census data and 1940-52, 1940 Census data were used. For the effects of this change on the historical comparability of the data, see *Employment and Earnings*, May 1962, p. xiv.

Source: Department of Labor (except as noted).

TABLE C-20.—*Employment and unemployment, by sex and age, 1947-63*

[Thousands of persons 14 years of age and over]

Year or month	Employed						Unemployed							
	Males			Females			Males			Females				
	Total	14-19 years	20 years and over	Total	14-19 years	20 years and over	Total	14-19 years	20 years and over	Total	14-19 years	20 years and over		
Old definitions: ¹														
1947.....	58,027	41,677	2,795	38,883	16,349	1,921	14,429	2,142	1,595	279	1,316	547	146	402
1948.....	59,378	42,428	2,911	39,518	16,950	1,930	15,020	2,064	1,430	262	1,171	633	153	480
1949.....	58,710	41,660	2,687	38,974	17,049	1,826	15,225	3,395	2,415	367	2,048	981	228	753
1950.....	59,957	42,287	2,787	39,499	17,670	1,777	15,893	3,142	2,155	339	1,816	987	204	784
1951.....	61,005	42,490	2,753	39,738	18,515	1,863	16,652	1,879	1,123	206	917	756	150	609
1952.....	61,293	42,391	2,674	39,717	18,902	1,857	17,047	1,673	1,062	222	840	611	140	471
1953.....	62,213	43,125	2,686	40,440	19,088	1,829	17,259	1,602	1,069	195	875	533	117	416
1954.....	61,238	42,377	2,550	39,827	18,861	1,736	17,125	3,230	2,161	318	1,842	1,069	197	873
1955.....	63,193	43,290	2,642	40,646	19,904	1,803	18,101	2,654	1,752	292	1,460	903	179	724
1956.....	64,979	44,148	2,802	41,345	20,831	1,962	18,869	2,551	1,608	296	1,314	943	214	730
New definitions: ¹														
1957.....	65,011	43,990	2,750	41,239	21,021	1,970	19,050	2,936	1,893	351	1,541	1,043	222	820
1958.....	63,866	43,042	2,631	40,410	20,924	1,881	19,043	4,681	3,155	473	2,680	1,526	284	1,242
1959.....	65,581	44,089	2,821	41,268	21,492	1,968	19,523	3,813	2,473	451	2,022	1,340	276	1,064
1960 ²	66,681	44,485	2,941	41,543	22,196	2,091	20,104	3,931	2,541	480	2,058	1,390	310	1,078
1961.....	66,796	44,318	2,976	41,342	22,478	2,181	20,295	4,806	3,060	542	2,518	1,747	379	1,366
1962 ³	67,846	44,892	3,077	41,815	22,954	2,262	20,693	4,007	2,488	472	2,016	1,519	344	1,176
1963.....	68,809	45,330	3,079	42,259	23,479	2,223	21,257	4,166	2,537	566	1,971	1,629	413	1,216
Seasonally adjusted ⁴														
1962:														
January.....	67,262	44,533	3,000	41,533	22,729	2,203	20,526	4,172	2,564	490	2,074	1,608	354	1,254
February.....	67,629	44,765	3,041	41,724	22,864	2,213	20,651	4,084	2,561	519	2,042	1,523	359	1,134
March.....	67,860	44,980	3,110	41,820	22,930	2,239	20,691	3,943	2,450	458	1,992	1,493	354	1,169
April ³	67,591	44,770	3,046	41,724	22,821	2,216	20,605	3,994	2,497	481	2,016	1,497	387	1,101
May.....	67,821	44,949	3,151	41,798	22,872	2,307	20,565	3,961	2,490	509	1,981	1,471	356	1,115
June.....	67,731	44,899	3,135	41,764	22,832	2,336	20,496	3,942	2,521	469	2,052	1,421	308	1,113
July.....	67,833	44,908	3,124	41,784	22,925	2,305	20,620	3,897	2,442	461	1,981	1,455	337	1,118
August.....	68,104	45,006	3,112	41,894	23,098	2,343	20,755	4,093	2,496	439	2,057	1,597	330	1,267
September.....	68,188	45,037	3,089	41,948	23,151	2,272	20,879	4,066	2,471	465	2,006	1,595	305	1,200
October.....	68,076	45,091	3,067	42,024	22,985	2,192	20,793	3,839	2,338	430	1,908	1,501	340	1,161
November.....	67,691	44,722	2,862	41,860	22,969	2,198	20,771	4,136	2,529	549	1,980	1,607	384	1,223
December.....	68,091	44,969	3,110	41,859	23,122	2,248	20,874	3,993	2,469	411	2,058	1,524	382	1,142
1963:														
January.....	68,171	44,953	3,023	41,930	23,218	2,222	20,996	4,177	2,594	462	2,132	1,583	387	1,196
February.....	68,086	44,799	2,892	41,907	23,287	2,240	21,047	4,415	2,789	556	2,233	1,626	393	1,233
March.....	68,636	45,147	2,940	42,207	23,489	2,215	21,274	4,062	2,572	547	2,025	1,490	358	1,132
April.....	68,874	45,306	3,100	42,206	23,568	2,224	21,344	4,128	2,581	612	1,969	1,547	373	1,174
May.....	68,676	45,170	3,077	42,093	23,506	2,287	21,219	4,313	2,633	692	1,941	1,680	467	1,213
June.....	68,602	45,352	3,035	42,317	23,250	2,120	21,130	4,118	2,508	569	1,939	1,610	413	1,197
July.....	69,161	45,650	3,108	42,542	23,511	2,250	21,261	4,108	2,498	605	1,893	1,610	431	1,179
August.....	68,917	45,597	3,202	42,395	23,320	2,247	21,073	3,998	2,373	538	1,835	1,625	358	1,267
September.....	69,076	45,619	3,184	42,435	23,457	2,252	21,205	4,060	2,362	562	1,800	1,698	397	1,301
October.....	69,075	45,495	3,167	42,328	23,580	2,197	21,383	4,026	2,329	508	1,821	1,697	471	1,261
November.....	69,045	45,316	3,040	42,276	23,729	2,181	21,548	4,292	2,533	614	1,919	1,759	468	1,296
December.....	69,206	45,360	3,055	42,305	23,846	2,307	21,539	4,057	2,440	504	1,936	1,617	427	1,190

¹ See Note, Table C-19, for explanation of differences between the old and new definitions.² Beginning January 1960, data for Alaska and Hawaii are included.³ Beginning April 1962, not comparable with prior data; see Note, Table C-19.⁴ Seasonally adjusted totals may differ from the sum of components because totals and components have been seasonally adjusted separately.

Note.—See Note, Table C-19, for information on area sample used and reporting periods.

Source: Department of Labor.

TABLE C-21.—*Employed persons not at work, by reason for not working, and special groups of unemployed persons, 1946-63*

[Thousands of persons 14 years of age and over]

Year or month	Employed persons not at work, by reason for not working						Special groups of un- employed persons ¹	
	Total	Bad weather	Indus- trial dispute	Vacation	Illness	All other reasons	Tempo- rary layoff ²	New wage and salary job ³
New definitions: ⁴								
1946.....	2, 103	(⁵)	(⁵)	662	819	(⁵)	97	58
1947.....	2, 259	211	95	834	847	273	123	92
1948.....	2, 489	197	97	1, 044	844	308	141	121
1949.....	2, 244	110	79	1, 044	719	291	185	101
1950.....	2, 440	151	85	1, 137	718	349	92	116
1951.....	2, 460	111	57	1, 073	782	436	117	103
1952.....	2, 555	68	164	1, 130	775	418	142	117
1953.....	2, 530	96	73	1, 171	827	362	167	101
1954.....	2, 688	73	53	1, 361	776	425	221	127
1955.....	2, 682	103	61	1, 268	835	416	133	117
1956.....	2, 889	163	76	1, 346	901	456	124	147
1957.....	3, 017	139	45	1, 447	962	425	150	110
1958.....	3, 076	182	59	1, 479	882	474	166	122
1959.....	3, 161	115	160	1, 494	907	484	128	134
1960 ⁶	3, 231	168	40	1, 576	942	505	147	119
1961.....	3, 146	143	56	1, 492	898	556	149	129
1962 ⁴	3, 281	160	33	1, 533	940	615	121	125
1963.....	3, 501	106	41	1, 655	1, 000	698	120	138
1962: January.....	2, 681	698	39	322	1, 036	587	186	100
February.....	2, 570	275	37	396	1, 224	639	95	82
March.....	2, 130	201	27	374	1, 040	487	115	80
April ⁴	1, 994	104	40	428	949	474	93	107
May.....	2, 032	10	34	663	870	455	107	111
June.....	3, 870	40	61	2, 129	832	808	96	211
July.....	7, 477	29	48	5, 637	862	900	128	152
August.....	6, 839	3	12	5, 132	843	849	183	248
September.....	2, 780	17	32	1, 448	811	472	107	154
October.....	2, 263	29	19	818	898	499	114	95
November.....	2, 174	32	22	618	916	586	116	94
December.....	2, 559	476	30	430	1, 002	621	117	63
1963: January.....	2, 421	304	78	360	1, 040	639	217	82
February.....	2, 698	318	29	404	1, 291	656	130	103
March.....	2, 677	188	41	380	1, 403	665	105	92
April.....	2, 737	75	23	1, 030	1, 005	603	120	141
May.....	2, 172	43	25	643	921	540	80	76
June.....	4, 085	17	45	2, 266	861	897	71	288
July.....	7, 916	24	57	5, 897	877	1, 060	130	149
August.....	7, 338	14	50	5, 460	824	991	189	191
September.....	3, 102	26	24	1, 553	931	568	90	173
October.....	2, 387	2	38	848	948	551	123	118
November.....	2, 205	33	51	601	932	587	116	112
December.....	2, 269	232	31	420	968	618	93	126

¹ Under the old definitions of employment and unemployment, these groups were included in the "employed but not at work" category.

² Persons on layoff with definite instructions to return to work within 30 days of the layoff.

³ Persons scheduled to start new wage and salary jobs within 30 days. Under the old definitions, the "new job or business" group included these persons as well as persons waiting to open new businesses or start new farms within 30 days (see "all other" category in this table) and persons in school during the survey week and waiting to start new jobs (these are now classified as "not in the labor force").

⁴ See Note, Table C-19 for explanation.

⁵ Not available.

⁶ Beginning January 1960, data for Alaska and Hawaii are included.

NOTE.—See Note, Table C-19 for information on area sample used and reporting periods.

Source: Department of Labor.

TABLE C-22.—Selected measures of unemployment and part-time employment, 1948-63

Year or month	Unemployment rate (percent of civilian labor force in group)			Labor force time lost through unemployment and part-time work ²	Persons employed part- time in nonagricultural industries for economic reasons	
	All workers	Experienced wage and salary workers	Married men ¹		Usually full-time ³	Usually part-time ⁴
Percent					Thousands of persons 14 years of age and over	
New definitions:						
1948.....	3.8	4.2				
1949.....	5.9	6.7	3.4		1,530	786
1950.....	5.3	6.0	4.6		1,032	965
1951.....	3.3	3.7	1.5		917	694
1952.....	3.1	3.3	1.4		958	642
1953.....	2.9	3.2	1.7		(⁵)	(⁵)
1954.....	5.6	6.0	4.0		1,543	866
1955.....	4.4	4.8	2.6		934	876
1956.....	4.2	4.4	2.3	5.1	1,067	900
1957.....	4.3	4.6	2.8	5.3	1,183	986
1958.....	6.8	7.2	5.1	8.1	1,638	1,315
1959.....	5.5	5.6	3.6	6.6	1,032	1,304
1960 ⁶	5.6	5.7	3.7	6.7	1,243	1,317
1961.....	6.7	6.8	4.6	8.0	1,297	1,516
1962 ⁷	5.6	5.5	3.6	6.7	1,049	1,287
1963.....	5.7	5.5	3.4	6.8	1,070	1,219
Seasonally adjusted						
1962: January.....	5.8	5.8	3.8	6.9	939	1,267
February.....	5.7	5.7	3.6	6.7	919	1,285
March.....	5.5	5.4	3.5	6.7	1,057	1,320
April.....	5.6	5.5	3.7	6.6	998	1,202
May.....	5.5	5.5	3.5	6.6	1,099	1,253
June.....	5.5	5.4	3.6	6.6	1,039	1,239
July.....	5.4	5.4	3.5	6.7	1,085	1,339
August.....	5.7	5.7	3.5	6.7	1,124	1,252
September.....	5.6	5.6	3.4	6.8	1,143	1,262
October.....	5.3	5.2	3.4	6.6	1,072	1,364
November.....	5.8	5.6	3.4	6.9	1,145	1,316
December.....	5.5	5.5	3.5	6.6	996	1,303
1963: January.....	5.8	5.7	3.8	6.8	1,092	1,253
February.....	6.1	6.0	4.1	7.1	965	1,231
March.....	5.6	5.5	3.5	6.6	1,000	1,229
April.....	5.7	5.4	3.3	6.6	1,080	1,099
May.....	5.9	5.5	3.4	6.9	1,010	1,184
June.....	5.7	5.6	3.1	7.0	1,067	1,257
July.....	5.6	5.4	3.2	6.8	1,042	1,219
August.....	5.5	5.4	3.0	6.7	1,222	1,309
September.....	5.6	5.4	2.9	6.7	1,211	1,218
October.....	5.5	5.4	2.9	6.6	1,109	1,245
November.....	5.9	5.6	3.2	6.9	1,054	1,180
December.....	5.5	5.3	3.4	6.5	1,002	1,162

¹ Married men living with their wives. Data for 1949 and 1951-54 are for April; 1950 for March. These data, including 1955 and 1956, have not been adjusted to reflect the change in the definition of employment and unemployment adopted in January 1957. See Note, Table C-19.

² Assumes unemployed persons lost 37.5 hours a week; those on part-time for economic reasons lost difference between 37.5 hours and actual number of hours worked.

³ Includes persons who worked part-time because of slack work, material shortages or repairs, new job started, or job terminated. Data for 1949-55 are for the month of May.

⁴ Primarily includes persons who could find only part-time work. Data for 1949-55 are for the month of May.

⁵ Not available.

⁶ Beginning with January 1960, data for Alaska and Hawaii are included.

⁷ Not comparable with prior data. See Note, Table C-19.

Source: Department of Labor.

TABLE C-23.—*Unemployed persons, by duration of unemployment, 1947-63*

Year or quarter	Total unemployed	Duration of unemployment				Average duration of unemployment (weeks)
		4 weeks and under	5-14 weeks	15-26 weeks	Over 26 weeks	
Thousands of persons 14 years of age and over						
New definitions:						
1947.....	2,356	1,255	704	234	164	9.8
1948.....	2,325	1,349	669	193	116	8.6
1949.....	3,682	1,804	1,195	427	256	10.0
1950.....	3,351	1,515	1,055	425	357	12.1
1951.....	2,099	1,223	574	166	137	9.7
1952.....	1,932	1,183	517	148	84	8.3
1953.....	1,870	1,178	482	132	79	8.1
1954.....	3,578	1,651	1,115	495	317	11.7
1955.....	2,904	1,387	815	367	336	13.2
1956.....	2,822	1,485	805	301	232	11.3
1957.....	2,936	1,486	890	321	239	10.4
1958.....	4,681	1,833	1,397	785	667	13.8
1959.....	3,813	1,658	1,113	469	571	14.5
1960 ¹	3,931	1,798	1,176	502	454	12.8
1961.....	4,806	1,897	1,375	728	804	15.5
1962 ²	4,007	1,754	1,134	534	585	14.7
1963.....	4,166	1,847	1,231	535	553	14.0
1961: I.....	5,528	1,997	1,922	903	705	14.0
II.....	5,103	2,043	1,188	953	919	16.1
III.....	4,589	1,831	1,314	544	900	16.4
IV.....	4,005	1,724	1,079	512	691	16.0
1962: I.....	4,529	1,690	1,450	686	703	15.7
II ²	4,042	1,862	917	607	656	15.4
III.....	3,820	1,729	1,171	371	549	14.0
IV.....	3,637	1,734	1,000	471	432	13.5
1963: I.....	4,697	1,788	1,628	664	617	14.4
II.....	4,325	2,077	1,004	631	613	14.5
III.....	3,898	1,753	1,222	399	523	13.5
IV.....	3,745	1,771	1,071	445	458	13.2

¹ Beginning January 1960, data for Alaska and Hawaii are included.² Beginning April 1962, not comparable with prior data; see Note, Table C-19.

NOTE.—See Note, Table C-19 for information on area sample used and reporting periods.

Source: Department of Labor.

TABLE C-24.—Unemployment insurance programs, selected data, 1940–63

Year or month	All programs			State programs							
	Covered employment ¹	Insured unemployment (weekly average) ^{2,3}	Total benefits paid (millions of dollars) ^{2,4}	Insured unemployment ⁵	Initial claims	Exhaustions ⁶	Insured unemployment as percent of covered employment		Total (millions of dollars) ⁽⁷⁾	Average weekly check (dollars) ⁸	
							Unadjusted	Seasonally adjusted			
	Thousands			Weekly average, thousands			Percent				
1940.....	24,291	1,331	534.7	1,282	214	50	5.6	-----	518.7	10.56	
1941.....	28,136	842	358.8	814	164	30	3.0	-----	344.3	11.06	
1942.....	30,819	661	350.4	649	122	21	2.2	-----	344.1	12.66	
1943.....	32,419	149	80.5	147	36	4	.5	-----	79.6	13.84	
1944.....	31,714	111	67.2	105	29	2	.4	-----	62.4	15.90	
1945.....	30,087	720	574.9	589	116	5	2.1	-----	445.9	18.77	
1946.....	31,856	2,804	2,878.5	1,295	189	38	4.3	-----	1,094.9	18.50	
1947.....	33,876	1,805	1,785.0	1,009	187	24	3.1	-----	775.1	17.83	
1948.....	34,646	1,468	1,328.7	1,002	210	20	3.0	-----	789.9	19.03	
1949.....	33,098	2,479	2,269.8	1,979	322	37	6.2	-----	1,736.0	20.48	
1950.....	34,308	1,605	1,467.6	1,503	236	36	4.6	-----	1,373.1	20.76	
1951.....	36,334	1,000	862.9	969	16	28	2.8	-----	840.4	21.09	
1952.....	37,006	1,069	1,043.5	1,024	215	18	2.9	-----	998.2	22.79	
1953.....	38,072	1,065	1,050.6	995	218	15	2.8	-----	962.2	23.58	
1954.....	36,617	2,048	2,291.8	1,865	303	34	5.2	-----	2,026.9	24.93	
1955.....	40,014	1,395	1,560.2	1,254	226	25	3.5	-----	1,350.3	25.04	
1956.....	42,758	1,318	1,540.6	1,212	226	20	3.2	-----	1,380.7	27.02	
1957.....	43,436	1,567	1,913.0	1,450	263	23	3.6	-----	1,733.9	28.17	
1958.....	44,412	3,269	4,209.2	2,509	370	50	6.4	-----	3,512.7	30.88	
1959.....	45,728	2,099	2,803.0	1,682	281	33	4.4	-----	2,279.0	30.41	
1960.....	46,334	2,067	3,022.7	1,906	331	31	4.8	-----	2,726.7	32.87	
1961.....	46,264	2,994	4,358.2	2,290	350	46	5.6	-----	3,422.7	33.80	
1962.....	47,669	1,924	3,160.0	1,783	302	32	4.4	-----	2,675.4	34.56	
1963.....	48,675	1,907	2,994.0	1,775	290	32	4.3	-----	2,737.0	35.15	
1962: January.....	46,022	3,015	395.2	2,486	429	39	6.2	4.6	314.9	34.44	
February.....	46,146	2,914	353.4	2,415	320	39	6.0	4.6	287.2	34.73	
March.....	46,542	2,702	381.0	2,218	273	39	5.5	4.9	310.2	34.98	
April.....	47,372	2,216	297.9	1,831	267	39	4.5	4.1	239.6	34.52	
May.....	47,821	1,840	254.3	1,870	250	33	3.9	4.1	215.0	34.04	
June.....	48,442	1,667	215.4	1,469	258	30	3.6	4.9	188.9	34.20	
July.....	48,434	1,699	205.2	1,543	319	28	3.8	4.4	187.0	34.01	
August.....	48,718	1,628	218.9	1,469	261	26	3.6	4.4	197.4	34.29	
September.....	48,639	1,497	181.1	1,331	235	25	3.3	4.4	160.6	34.42	
October.....	48,393	1,539	198.9	1,385	275	25	3.4	4.6	176.6	34.69	
November.....	48,229	1,730	215.5	1,625	314	26	4.0	4.6	193.6	34.97	
December.....	48,432	2,223	236.5	2,063	422	28	5.1	4.7	214.2	35.11	
1963: January.....	46,665	2,778	373.0	2,591	447	35	6.3	4.8	342.4	35.53	
February.....	46,632	2,726	339.6	2,546	325	36	6.2	4.6	313.3	35.72	
March.....	47,163	2,465	343.0	2,298	272	36	5.6	4.4	316.4	35.82	
April.....	48,159	2,089	297.8	1,918	273	37	4.7	4.2	274.8	35.54	
May.....	48,592	1,799	254.6	1,624	239	33	3.9	4.2	235.9	34.91	
June.....	49,285	1,628	205.0	1,468	240	32	3.5	4.1	188.2	34.34	
July.....	(8)	1,651	211.8	1,493	298	28	3.6	4.1	195.6	34.43	
August.....	(8)	1,568	204.8	1,419	246	26	3.4	4.2	186.8	34.67	
September.....	(8)	1,409	179.8	1,261	223	24	3.0	4.0	163.1	34.93	
October.....	(8)	1,476	190.0	1,333	256	24	3.1	4.1	172.0	35.15	
November.....	(8)	1,686	181.3	1,542	292	22	3.6	4.1	165.0	35.37	
December.....	(8)	2,120	225.0	1,972	415	23	4.7	4.4	205.0	35.15	

¹ Includes persons under the State, UCFF (Federal employee, effective January 1955), and RRB (Railroad Retirement Board) programs. Beginning October 1958, also includes the UCX program (unemployment compensation for ex-servicemen).

² Includes State, UCFF, RR, UCX, UCV (unemployment compensation for veterans, October 1952–January 1960), and SRA (Servicemen's Readjustment Act, September 1944–September 1951) programs. Also includes Federal and State programs for temporary extension of benefits from June 1958 through June 1962, expiration date of program.

³ Covered workers who have completed at least 1 week of unemployment.

⁴ Includes benefits paid under extended duration provisions of State laws, beginning June 1958. Annual data are net amounts and monthly data are gross amounts.

⁵ Individuals receiving final payments in benefit year.

⁶ For total unemployment only.

⁷ Preliminary.

⁸ March 1963 is latest month for which data are available for all programs combined; workers covered by State programs account for about 87 percent of the total.

⁹ Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning October 1963.

NOTE.—Data for Alaska and Hawaii included for all periods and for Puerto Rico since January 1961.

Source: Department of Labor.

TABLE C-25.—*Number of wage and salary workers in nonagricultural establishments, 1929-63¹*

[Thousands of employees]

Year or month	Total wage and salary workers	Manufacturing			Mining	Contract construction	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Service and miscellaneous	Government	
		Total	Durable goods	Non-durable goods							Federal	State and local
1929.....	31,339	10,702	(2)	(2)	1,087	1,497	3,916	6,123	1,509	3,440	533	2,532
1930.....	29,424	9,562	(2)	(2)	1,009	1,372	3,685	5,797	1,475	3,376	526	2,622
1931.....	26,649	8,170	(2)	(2)	873	1,214	3,254	5,284	1,407	3,183	560	2,704
1932.....	23,628	6,931	(2)	(2)	731	970	2,816	4,683	1,341	2,931	559	2,666
1933.....	23,711	7,397	(2)	(2)	744	809	2,672	4,755	1,295	2,873	565	2,601
1934.....	25,953	8,501	(2)	(2)	883	862	2,750	5,281	1,319	3,058	652	2,647
1935.....	27,053	9,069	(2)	(2)	897	912	2,786	5,431	1,335	3,142	753	2,728
1936.....	29,082	9,827	(2)	(2)	946	1,145	2,973	5,809	1,388	3,326	826	2,842
1937.....	31,026	10,794	(2)	(2)	1,015	1,112	3,134	6,265	1,432	3,518	833	2,923
1938.....	29,209	9,440	(2)	(2)	891	1,055	2,863	6,179	1,425	3,473	829	3,054
1939.....	30,618	10,273	4,715	5,564	854	1,150	2,936	6,426	1,462	3,517	905	3,090
1940.....	32,376	10,985	5,363	5,622	925	1,294	3,038	6,750	1,502	3,681	996	3,206
1941.....	36,554	13,192	6,968	6,225	957	1,790	3,274	7,210	1,549	3,921	1,340	3,320
1942.....	40,125	15,280	8,823	6,458	992	2,170	3,460	7,118	1,538	4,084	2,213	3,270
1943.....	42,452	17,602	11,084	6,518	925	1,567	3,647	6,982	1,502	4,148	2,905	3,174
1944.....	41,883	17,323	10,856	6,472	892	1,094	3,829	7,058	1,476	4,163	2,923	3,116
1945.....	40,394	15,524	9,074	6,450	836	1,132	3,906	7,314	1,497	4,241	2,808	3,137
1946.....	41,674	14,703	7,742	6,962	862	1,661	4,061	8,376	1,697	4,719	2,254	3,341
1947.....	43,881	15,545	8,385	7,159	955	1,982	4,166	8,955	1,754	5,050	1,892	3,842
1948.....	44,891	15,582	8,326	7,256	994	2,169	4,189	9,272	1,829	5,206	1,863	3,787
1949.....	43,778	14,441	7,489	6,953	930	2,165	4,001	9,264	1,857	5,264	1,908	3,948
1950.....	45,222	15,241	8,094	7,147	901	2,333	4,034	9,386	1,919	5,382	1,928	4,098
1951.....	47,849	16,393	9,089	7,304	929	2,603	4,226	9,742	1,991	5,576	2,302	4,087
1952.....	48,825	16,632	9,349	7,284	898	2,634	4,248	10,004	2,069	5,730	2,420	4,188
1953.....	50,232	17,549	10,110	7,438	866	2,623	4,290	10,247	2,146	5,867	2,305	4,340
1954.....	49,022	16,314	9,129	7,185	791	2,612	4,084	10,235	2,234	6,002	2,188	4,563
1955.....	50,675	16,882	9,541	7,340	792	2,802	4,141	10,535	2,335	6,274	2,187	4,727
1956.....	52,408	17,243	9,834	7,409	822	2,999	4,244	10,858	2,429	6,536	2,209	5,069
1957.....	52,904	17,174	9,856	7,319	828	2,923	4,241	10,886	2,477	6,749	2,217	5,409
1958.....	51,423	15,945	8,830	7,116	751	2,778	3,978	10,750	2,519	6,811	2,191	5,702
1959.....	53,404	16,675	9,373	7,303	732	2,960	4,011	11,127	2,594	7,115	2,233	5,957
1960.....	54,370	16,796	9,459	7,336	712	2,885	4,004	11,391	2,669	7,392	2,270	6,250
1961.....	54,224	16,327	9,072	7,255	672	2,816	3,903	11,337	2,731	7,610	2,279	6,548
1962.....	55,841	16,859	9,493	7,367	652	2,909	3,903	11,582	2,798	7,949	2,340	6,849
1963 ¹	57,183	17,036	9,659	7,377	634	3,033	3,914	11,863	2,866	8,304	2,357	7,176
Seasonally adjusted												
1961: January.....	53,725	16,157	8,947	7,210	681	2,811	3,914	11,330	2,703	7,486	2,230	6,413
February.....	53,541	16,075	8,870	7,205	675	2,765	3,902	11,277	2,704	7,490	2,213	6,440
March.....	53,615	16,102	8,877	7,225	674	2,814	3,893	11,210	2,706	7,527	2,225	6,464
April.....	53,713	16,148	8,928	7,220	670	2,782	3,876	11,285	2,712	7,528	2,229	6,483
May.....	53,911	16,269	9,036	7,233	671	2,774	3,884	11,298	2,719	7,541	2,244	6,511
June.....	54,165	16,341	9,082	7,259	673	2,836	3,892	11,322	2,728	7,579	2,261	6,533
July.....	54,294	16,376	9,114	7,262	675	2,811	3,909	11,350	2,734	7,613	2,271	6,555
August.....	54,444	16,422	9,152	7,270	671	2,826	3,911	11,352	2,741	7,655	2,282	6,584
September.....	54,480	16,382	9,128	7,254	672	2,831	3,918	11,342	2,745	7,688	2,286	6,616
October.....	54,593	16,438	9,149	7,289	667	2,843	3,911	11,347	2,752	7,702	2,292	6,641
November.....	54,825	16,580	9,271	7,309	670	2,834	3,912	11,390	2,756	7,732	2,296	6,655
December.....	54,927	16,627	9,303	7,324	662	2,835	3,900	11,386	2,762	7,770	2,297	6,688

See footnotes at end of table.

TABLE C-25.—*Number of wage and salary workers in nonagricultural establishments, 1929-63*¹—
Continued

[Thousands of employees]

Year or month	Total wage and salary workers	Manufacturing			Mining	Contract construction	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Service and miscellaneous	Government	
		Total	Durable goods	Non-durable goods							Federal	State and local
Seasonally adjusted												
1962: January.....	54,946	16,639	9,319	7,320	662	2,785	3,896	11,403	2,771	7,787	2,306	6,697
February.....	55,223	16,732	9,395	7,337	662	2,858	3,905	11,465	2,772	7,814	2,289	6,726
March.....	55,368	16,809	9,454	7,355	660	2,841	3,912	11,460	2,779	7,857	2,299	6,751
April.....	55,703	16,926	9,527	7,399	659	2,926	3,911	11,548	2,786	7,871	2,301	6,775
May.....	55,822	16,921	9,530	7,391	659	2,934	3,914	11,584	2,793	7,902	2,318	6,797
June.....	55,908	16,931	9,534	7,397	655	2,894	3,905	11,611	2,796	7,941	2,338	6,837
July.....	56,010	16,930	9,541	7,389	653	2,949	3,882	11,616	2,802	7,997	2,345	6,836
August.....	56,019	16,867	9,492	7,375	652	2,949	3,899	11,620	2,804	8,017	2,346	6,865
September.....	56,125	16,921	9,542	7,379	647	2,941	3,901	11,637	2,807	8,019	2,341	6,911
October.....	56,195	16,910	9,543	7,367	644	2,939	3,904	11,627	2,817	8,044	2,342	6,968
November.....	56,205	16,858	9,509	7,349	640	2,942	3,896	11,637	2,821	8,063	2,353	6,995
December.....	56,211	16,851	9,518	7,333	633	2,913	3,898	11,629	2,822	8,079	2,349	7,037
1963: January.....	56,333	16,871	9,542	7,329	631	2,967	3,821	11,685	2,834	8,110	2,353	7,061
February.....	56,458	16,872	9,546	7,326	631	2,920	3,899	11,729	2,839	8,144	2,332	7,092
March.....	56,706	16,948	9,586	7,362	631	2,928	3,894	11,795	2,848	8,207	2,340	7,115
April.....	56,873	17,037	9,660	7,377	639	3,005	3,890	11,784	2,853	8,199	2,339	7,127
May.....	57,060	17,095	9,683	7,412	640	3,019	3,909	11,825	2,864	8,228	2,345	7,135
June.....	57,194	17,075	9,685	7,390	639	3,046	3,919	11,864	2,865	8,282	2,349	7,155
July.....	57,340	17,103	9,701	7,402	640	3,069	3,936	11,884	2,870	8,349	2,351	7,138
August.....	57,344	17,033	9,652	7,381	635	3,083	3,941	11,907	2,873	8,373	2,348	7,151
September.....	57,453	17,076	9,705	7,371	632	3,071	3,950	11,922	2,873	8,377	2,347	7,205
October.....	57,646	17,119	9,718	7,401	629	3,066	3,937	11,935	2,887	8,430	2,352	7,291
November ²	57,623	17,062	9,688	7,374	628	3,059	3,933	11,945	2,888	8,459	2,347	7,302
December ³	57,805	17,127	9,735	7,392	623	3,112	3,921	11,935	2,891	8,493	2,349	7,354

¹ Includes all full- and part-time wage and salary workers in nonagricultural establishments who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month. Excludes proprietors, self-employed persons, domestic servants, and unpaid family workers. Not comparable with estimates of nonagricultural employment of the civilian labor force (Table C-19) which include proprietors, self-employed persons, domestic servants, and unpaid family workers; which count persons as employed when they are not at work because of industrial disputes, bad weather, etc.; and which are based on a sample survey of households, whereas the estimates in this table are based on reports from employing establishments.

² Not available.

³ Preliminary.

NOTE.—Data are based on the 1957 Standard Industrial Classification and March 1962 benchmark data. Data for Alaska and Hawaii included beginning January 1959.

Source: Department of Labor.

TABLE C-26.—Average weekly hours of work in selected industries, 1929-63

Year or month	Manufacturing			Contract construction	Retail trade (except eating and drinking places)	Wholesale trade	Bituminous coal mining	Class I railroads ¹	Telephone communication ²
	Total	Durable goods	Non-durable goods						
1929.....	44.2	(3)	(3)	(3)	(3)	(3)	38.1	(3)	(3)
1930.....	42.1	(3)	(3)	(3)	(3)	(3)	33.3	(3)	(3)
1931.....	40.5	(3)	(3)	(3)	(3)	(3)	28.1	(3)	(3)
1932.....	38.3	32.5	41.9	(3)	(3)	(3)	27.0	(3)	(3)
1933.....	38.1	34.7	40.0	(3)	(3)	(3)	29.3	(3)	(3)
1934.....	34.6	33.8	35.1	(3)	(3)	(3)	26.8	(3)	(3)
1935.....	36.6	37.2	36.1	(3)	(3)	41.6	26.2	(3)	(3)
1936.....	39.2	40.9	37.7	(3)	(3)	42.9	28.5	(3)	(3)
1937.....	38.6	39.9	37.4	(3)	(3)	43.1	27.7	(3)	38.8
1938.....	35.6	34.9	36.1	(3)	(3)	42.3	23.3	(3)	38.9
1939.....	37.7	37.9	37.4	(3)	43.4	41.8	26.8	43.7	39.1
1940.....	38.1	39.2	37.0	(3)	43.2	41.3	27.8	44.3	39.5
1941.....	40.6	42.0	38.9	(3)	42.8	41.1	30.7	45.8	40.1
1942.....	43.1	45.0	40.3	(3)	41.8	41.4	32.4	47.0	40.5
1943.....	45.0	46.5	42.5	(3)	40.9	42.3	36.3	48.7	41.9
1944.....	45.2	46.5	43.1	(3)	41.0	43.0	43.0	48.9	42.3
1945.....	43.5	44.0	42.3	(3)	40.9	42.8	42.0	48.5	41.7
1946.....	40.3	40.4	40.5	(3)	41.3	41.6	41.3	46.0	39.4
1947.....	40.4	40.5	40.2	38.2	41.0	41.1	40.3	46.4	37.4
1948.....	40.0	40.4	39.6	38.1	40.9	41.0	37.7	46.2	39.2
1949.....	39.1	39.4	38.9	37.7	41.0	40.8	32.3	43.7	38.5
1950.....	40.5	41.1	39.7	37.4	41.1	40.7	34.7	40.8	38.9
1951.....	40.6	41.5	39.5	38.1	40.9	40.8	34.9	41.0	39.1
1952.....	40.7	41.5	39.7	38.9	40.5	40.7	33.8	40.6	38.5
1953.....	40.5	41.2	39.6	37.9	39.8	40.6	34.1	40.6	38.7
1954.....	39.6	40.1	39.0	37.2	39.7	40.5	32.3	40.8	38.9
1955.....	40.7	41.3	39.9	37.1	39.6	40.7	37.3	41.9	39.6
1956.....	40.4	41.0	39.6	37.5	39.1	40.5	37.5	41.7	39.5
1957.....	39.8	40.3	39.2	37.0	38.7	40.3	36.3	41.7	39.0
1958.....	39.2	39.5	38.8	36.8	38.7	40.2	33.3	41.6	38.4
1959.....	40.3	40.7	39.7	37.0	38.7	40.6	35.8	41.9	39.2
1960.....	39.7	40.1	39.2	36.7	38.5	40.5	35.8	41.7	39.6
1961.....	39.8	40.3	39.3	36.9	38.1	40.5	35.9	42.3	39.4
1962.....	40.4	40.9	39.6	37.0	37.9	40.6	38.7	42.6	39.9
1963 ³	40.4	41.1	39.6	37.2	37.8	40.6	38.8	(3)	40.1
Seasonally adjusted					Unadjusted				
1962: January.....	40.0	40.5	39.4	34.9	37.9	40.4	37.7	42.9	39.3
February.....	40.3	40.9	39.7	36.6	37.9	40.3	37.9	42.9	39.4
March.....	40.6	41.0	39.9	37.2	38.0	40.5	37.7	42.5	39.3
April.....	40.6	41.2	40.0	36.9	37.8	40.6	37.3	41.8	39.2
May.....	40.5	41.0	39.9	37.6	37.9	40.6	35.3	43.1	39.4
June.....	40.4	40.9	39.9	36.8	37.9	40.7	37.4	42.4	39.7
July.....	40.4	40.9	39.7	37.1	37.9	40.9	(3)	42.5	40.3
August.....	40.2	40.9	39.5	37.1	37.9	40.7	36.6	43.3	40.2
September.....	40.7	41.2	39.8	37.4	37.9	40.7	36.2	41.1	40.6
October.....	40.2	40.8	39.3	36.8	37.9	40.6	36.9	43.2	40.6
November.....	40.4	40.9	39.5	36.8	37.9	40.6	36.0	42.7	40.9
December.....	40.2	41.1	39.4	36.1	37.9	40.8	38.3	41.9	39.9
1963: January.....	40.4	40.9	39.6	37.0	37.8	40.4	39.0	43.0	39.5
February.....	40.3	41.0	39.7	36.1	37.8	40.3	39.1	43.3	39.8
March.....	40.5	41.0	39.8	37.3	37.8	40.4	36.6	41.5	39.6
April.....	40.1	40.7	39.3	37.5	37.9	40.4	38.4	43.0	39.5
May.....	40.5	41.1	39.7	37.5	37.8	40.6	39.7	43.6	39.7
June.....	40.5	41.3	39.6	37.6	37.9	40.7	41.2	41.9	40.0
July.....	40.4	41.2	39.5	37.3	37.9	40.8	(3)	(3)	40.3
August.....	40.3	41.0	39.6	37.2	37.8	40.7	38.0	(3)	40.1
September.....	40.7	41.3	39.7	37.3	37.7	40.6	39.3	(3)	40.5
October.....	40.6	41.2	39.8	37.6	37.8	40.7	39.2	(3)	40.4
November ⁴	40.5	41.1	39.5	36.8	37.7	40.6	38.1	(3)	41.1
December ⁵	40.5	41.4	39.6	(3)	(3)	(3)	(3)	(3)	(3)

¹ Based upon data summarized in the M-300 report by the Interstate Commerce Commission. Hours and earnings data relate to all employees who received pay during the month, except executives, officials and staff assistants.

² Prior to April 1945, data relate to all employees except executives. See footnote 2, Table C-27.

³ Not available.

⁴ Nine-month average, April through December, because of new series started in April 1945.

⁵ Eleven-month average, excludes data for July.

⁶ Preliminary.

NOTE.—See Note, Table C-25.

Data are for production workers in manufacturing and mining, construction workers in contract construction, and for nonsupervisory employees in other industries (except as noted). Data are for pay period ending nearest the 15th of the month.

The annual figures for 1963 are simple arithmetic averages of the monthly figures shown and are not strictly comparable with the averages for earlier years, which have been weighted by data on employment. See Table C-29 for unadjusted average weekly hours in manufacturing.

Data for Alaska and Hawaii included beginning January 1959.

Source: Department of Labor.

TABLE C-27.—Average gross hourly earnings in selected industries, 1929-63

Year or month	Manufacturing			Contract construction	Retail trade (except eating and drinking places)	Wholesale trade	Bituminous coal mining	Class I railroads ¹	Telephone communication ²	Agriculture ³
	Total	Durable goods	Non-durable goods							
1929.....	\$0.560	(4)	(4)	(4)	(4)	(4)	\$0.659	(4)	(4)	\$0.241
1930.....	.546	(4)	(4)	(4)	(4)	(4)	.662	(4)	(4)	.226
1931.....	.599	(4)	(4)	(4)	(4)	(4)	.626	(4)	(4)	.172
1932.....	.441	\$0.492	\$0.412	(4)	(4)	(4)	.503	(4)	(4)	.129
1933.....	.437	.467	.419	(4)	(4)	(4)	.485	(4)	(4)	.115
1934.....	.526	.550	.505	(4)	(4)	(4)	.651	(4)	(4)	.129
1935.....	.544	.571	.520	(4)	(4)	\$0.610	.720	(4)	(4)	.142
1936.....	.550	.580	.519	(4)	(4)	.628	.768	(4)	(4)	.152
1937.....	.617	.667	.566	(4)	(4)	.658	.828	(4)	\$0.774	.172
1938.....	.620	.679	.572	(4)	(4)	.674	.849	(4)	.816	.166
1939.....	.627	.691	.571	(4)	\$0.484	.688	.858	\$0.730	.822	.166
1940.....	.655	.716	.590	(4)	.494	.711	.854	.733	.827	.169
1941.....	.726	.799	.627	(4)	.518	.763	.960	.743	.820	.206
1942.....	.851	.937	.709	(4)	.559	.828	1.030	.937	.843	.268
1943.....	.957	1.048	.787	(4)	.606	.898	1.101	.852	.870	.353
1944.....	1.011	1.105	.844	(4)	.653	.948	1.147	.948	.911	.423
1945.....	1.016	1.099	.886	(4)	.699	.990	1.199	.955	\$.962	.472
1946.....	1.075	1.144	.995	(4)	.797	1.107	1.357	1.087	1.124	.515
1947.....	1.217	1.278	1.145	\$1.541	.901	1.220	1.582	1.186	1.197	.547
1948.....	1.328	1.395	1.250	1.713	.972	1.308	1.835	1.301	1.248	.580
1949.....	1.378	1.453	1.295	1.792	1.015	1.360	1.877	1.427	1.345	.559
1950.....	1.440	1.519	1.347	1.863	1.050	1.427	1.944	1.572	1.398	.561
1951.....	1.56	1.65	1.44	2.02	1.13	1.52	2.14	1.73	1.49	.625
1952.....	1.65	1.75	1.51	2.13	1.18	1.61	2.22	1.83	1.59	.661
1953.....	1.74	1.86	1.58	2.28	1.25	1.70	2.40	1.88	1.68	.672
1954.....	1.78	1.90	1.62	2.39	1.29	1.76	2.40	1.93	1.76	.661
1955.....	1.86	1.99	1.67	2.45	1.34	1.83	2.47	1.96	1.82	.675
1956.....	1.95	2.08	1.77	2.57	1.40	1.94	2.72	2.12	1.86	.705
1957.....	2.05	2.19	1.85	2.71	1.47	2.02	2.92	2.26	1.95	.728
1958.....	2.11	2.26	1.91	2.82	1.52	2.09	2.93	2.44	2.05	.757
1959.....	2.19	2.36	1.98	2.93	1.57	2.18	3.11	2.54	2.18	.798
1960.....	2.26	2.43	2.05	3.08	1.62	2.24	3.14	2.61	2.26	.818
1961.....	2.32	2.49	2.11	3.20	1.68	2.31	3.12	2.67	2.37	.834
1962.....	2.39	2.56	2.16	3.31	1.74	2.37	3.12	2.72	2.48	.856
1963 ⁷	2.46	2.63	2.22	3.42	1.80	2.46	3.15	(4)	2.56	.880
1962: January.....	2.38	2.56	2.15	3.34	1.72	2.33	3.13	2.67	2.44	.932
February.....	2.37	2.55	2.15	3.24	1.72	2.34	3.12	2.73	2.44	-----
March.....	2.38	2.55	2.15	3.28	1.73	2.35	3.13	2.67	2.44	-----
April.....	2.39	2.56	2.16	3.29	1.74	2.36	3.14	2.68	2.44	.779
May.....	2.39	2.55	2.16	3.25	1.75	2.37	3.09	2.66	2.44	-----
June.....	2.39	2.55	2.17	3.25	1.75	2.38	3.11	2.72	2.46	-----
July.....	2.38	2.55	2.17	3.29	1.75	2.38	(4)	2.74	2.47	.848
August.....	2.37	2.54	2.16	3.30	1.74	2.37	3.11	2.73	2.47	-----
September.....	2.39	2.57	2.17	3.35	1.76	2.40	3.14	2.78	2.52	-----
October.....	2.39	2.57	2.17	3.34	1.76	2.39	3.11	2.73	2.52	.868
November.....	2.41	2.58	2.18	3.35	1.77	2.40	3.09	2.76	2.52	-----
December.....	2.42	2.61	2.19	3.41	1.74	2.42	3.13	2.78	2.54	-----
1963: January.....	2.43	2.60	2.20	3.42	1.78	2.41	3.10	2.75	2.53	.948
February.....	2.43	2.61	2.19	3.41	1.78	2.43	3.14	2.81	2.54	-----
March.....	2.44	2.61	2.20	3.39	1.78	2.44	3.13	2.77	2.54	-----
April.....	2.44	2.62	2.21	3.34	1.79	2.44	3.12	2.75	2.53	.799
May.....	2.45	2.63	2.21	3.37	1.80	2.45	3.14	2.74	2.55	-----
June.....	2.46	2.64	2.22	3.38	1.81	2.46	3.17	2.78	2.55	-----
July.....	2.45	2.63	2.22	3.40	1.80	2.44	(4)	(4)	2.54	.872
August.....	2.43	2.61	2.21	3.42	1.80	2.45	3.14	(4)	2.55	-----
September.....	2.47	2.65	2.24	3.47	1.82	2.48	3.18	(4)	2.60	-----
October.....	2.47	2.65	2.23	3.47	1.82	2.48	3.15	(4)	2.61	.898
November ⁷	2.49	2.67	2.25	3.44	1.83	2.49	3.15	(4)	2.59	-----
December ⁷	2.50	2.68	2.26	(4)	(4)	(4)	(4)	(4)	(4)	-----

¹ For coverage of series, see footnote 1, Table C-26.² Prior to April 1945, data relate to all employees except executives; for April 1945-May 1949, mainly to employees subject to the Fair Labor Standards Act; and beginning June 1949, to nonsupervisory employees only.³ Weighted average of all farm wage rates on a per hour basis.⁴ Not available.⁵ Nine-month average, April through December, because of new series started in April 1945.⁶ Eleven-month average, excludes data for July.⁷ Preliminary.

NOTE.—See Note, Table C-25.

Data are for production workers in manufacturing and mining, construction workers in contract construction, and for all nonsupervisory employees in other industries (except as noted). Data are for pay period ending nearest the 15th of the month.

The annual figures for 1963 are simple arithmetic averages of the monthly figures shown and are not strictly comparable with the averages for earlier years, which have been weighted by data on man-hours. Data for Alaska and Hawaii included beginning January 1969.

Sources: Department of Labor and Department of Agriculture.

TABLE C-28.—Average gross weekly earnings in selected industries, 1929-63

Year or month	Manufacturing			Contract construction	Retail trade (except eating and drinking places)	Wholesale trade	Bituminous coal mining	Class I railroads ¹	Telephone communication ²
	Total	Durable goods	Non-durable goods						
1929.....	\$24.76	\$26.84	\$22.47	(3)	(3)	(3)	\$25.11	(3)	(3)
1930.....	23.00	24.42	21.40	(3)	(3)	(3)	22.04	(3)	(3)
1931.....	20.64	20.98	20.09	(3)	(3)	(3)	17.59	(3)	(3)
1932.....	16.89	15.99	17.26	(3)	(3)	\$26.75	13.58	(3)	(3)
1933.....	16.65	16.20	16.76	(3)	(3)	25.19	14.21	(3)	(3)
1934.....	18.20	18.59	17.73	(3)	(3)	25.44	17.45	(3)	(3)
1935.....	19.91	21.24	18.77	(3)	(3)	25.38	18.86	(3)	(3)
1936.....	21.56	23.72	19.57	(3)	(3)	26.96	21.89	(3)	(3)
1937.....	23.82	26.61	21.17	(3)	(3)	28.36	22.94	(3)	\$30.03
1938.....	22.07	23.70	20.65	(3)	(3)	28.51	19.78	(3)	31.74
1939.....	23.64	26.19	21.36	(3)	\$21.01	28.76	22.99	\$31.90	32.14
1940.....	24.96	28.07	21.83	(3)	21.34	29.36	23.74	32.47	32.67
1941.....	29.48	33.56	24.39	(3)	22.17	31.36	29.47	34.03	32.88
1942.....	36.68	42.17	28.57	(3)	23.37	34.28	33.37	39.34	34.14
1943.....	43.07	48.73	33.45	(3)	24.79	37.99	39.97	41.49	36.45
1944.....	44.70	51.38	36.38	(3)	26.77	40.76	49.32	46.36	38.54
1945.....	45.20	48.36	37.48	(3)	28.59	42.37	50.36	46.32	40.12
1946.....	43.32	46.22	40.30	(3)	32.92	46.05	56.04	50.00	44.29
1947.....	49.17	51.76	46.03	\$58.87	36.94	50.14	63.75	55.03	44.77
1948.....	53.12	56.36	49.50	65.27	39.75	53.63	69.18	60.11	48.92
1949.....	53.88	57.25	50.38	67.56	41.62	55.49	60.63	62.36	51.78
1950.....	58.32	62.43	53.48	69.68	43.16	58.08	67.46	64.14	54.38
1951.....	63.34	68.48	56.88	76.96	46.22	62.02	74.69	70.93	58.26
1952.....	67.16	72.63	59.95	82.86	47.79	65.53	75.04	74.30	61.22
1953.....	70.47	76.63	62.57	86.41	49.75	69.02	81.84	76.33	65.02
1954.....	70.49	76.19	63.18	88.91	51.21	71.28	77.52	78.74	68.46
1955.....	75.70	82.19	66.63	90.90	53.06	74.48	92.13	82.12	72.07
1956.....	78.78	85.28	70.09	96.38	54.74	78.57	102.00	88.40	73.47
1957.....	81.59	88.26	72.52	100.27	56.89	81.41	106.00	94.24	76.05
1958.....	82.71	89.27	74.11	103.78	58.82	84.02	97.57	101.50	78.72
1959.....	88.26	96.05	78.61	108.41	60.76	88.51	111.34	106.43	85.46
1960.....	89.72	97.44	80.36	113.04	62.37	90.72	112.41	108.84	89.50
1961.....	92.34	100.35	82.92	118.08	64.01	93.56	112.01	112.94	93.38
1962.....	96.56	104.70	85.54	122.47	65.95	96.22	114.50	115.87	98.95
1963 ³	99.38	108.09	87.91	127.22	68.04	99.88	122.22	(3)	102.66
1962: January.....	94.49	103.17	83.85	111.56	64.84	94.13	118.00	114.54	95.89
February.....	94.80	103.53	84.28	113.72	64.67	94.30	118.25	117.12	96.14
March.....	95.91	104.04	84.93	118.41	65.22	95.18	118.00	113.48	95.89
April.....	96.56	105.22	85.54	120.74	65.42	95.82	117.12	112.02	95.65
May.....	96.80	104.81	85.97	123.83	65.98	96.22	109.08	114.65	96.14
June.....	97.27	105.06	87.02	121.88	66.68	96.87	116.31	115.33	97.66
July.....	96.39	104.04	86.80	126.01	67.38	97.34	102.66	116.45	99.54
August.....	95.75	103.89	86.18	127.71	67.16	96.46	113.83	118.21	99.29
September.....	97.27	105.88	86.80	128.64	66.70	97.68	113.67	114.26	102.31
October.....	96.32	105.37	85.50	127.25	66.18	97.03	114.76	117.94	102.06
November.....	97.36	105.78	86.33	121.61	66.38	97.44	111.24	117.85	103.07
December.....	98.01	107.53	86.94	118.67	66.29	98.74	119.88	116.48	101.35
1963: January.....	97.44	105.82	86.24	121.07	66.93	97.36	120.90	118.25	99.94
February.....	97.20	106.23	85.85	118.33	66.75	97.93	122.77	121.67	101.09
March.....	98.09	106.49	86.68	122.72	66.75	98.58	114.56	114.96	100.58
April.....	97.36	106.37	85.97	124.58	67.48	98.58	119.81	118.25	99.94
May.....	99.23	108.36	87.52	128.06	67.68	99.47	124.66	119.46	101.24
June.....	100.37	109.82	88.36	129.79	68.96	100.12	130.80	116.48	102.00
July.....	99.23	108.09	88.36	130.90	69.30	99.55	110.21	(3)	102.36
August.....	98.42	107.01	88.40	132.70	69.30	99.72	119.32	(3)	102.26
September.....	100.53	109.45	89.38	132.90	68.61	100.69	124.97	(3)	105.30
October.....	100.53	109.71	88.98	134.98	68.25	100.94	123.48	(3)	105.04
November ⁴	100.85	110.00	89.10	124.87	68.26	101.09	120.02	(3)	106.45
December ⁵	102.00	111.22	90.17	(3)	(3)	(3)	(3)	(3)	(3)

¹ For coverage of series, see footnote 1, Table C-26.² Prior to April 1945, data relate to all employees except executives; for April 1945-May 1949, mainly to employees subject to the Fair Labor Standards Act; and beginning June 1949, to nonsupervisory employees only.³ Not available.⁴ Nine-month average, April through December, because of new series started in April 1945.⁵ Preliminary.

NOTE.—See Note, Table C-25.

Data are for production workers in manufacturing and mining, construction workers in contract construction, and for nonsupervisory employees in other industries (except as noted). Data are for pay period ending nearest the 15th of the month.

The annual figures for 1963 are simple arithmetic averages of the monthly figures shown and are not strictly comparable with the averages for earlier years, which have been weighted by data on man-hours. Data for Alaska and Hawaii included beginning January 1959.

Source: Department of Labor.

TABLE C-29.—Average weekly hours and hourly earnings, gross and excluding overtime, in manufacturing industries, 1939-63

Year or month	All manufacturing industries					Durable goods manufacturing industries				Nondurable goods manufacturing industries			
	Average weekly hours		Average hourly earnings			Average weekly hours		Average hourly earnings		Average weekly hours		Average hourly earnings	
	Gross	Excluding overtime	Gross	Excluding overtime	Excluding overtime and inter-industry shift (1957-59=100)	Gross	Excluding overtime	Gross	Excluding overtime	Gross	Excluding overtime	Gross	Excluding overtime
1939.....	37.7	(1)	\$0.627	(1)	32.2	37.9	(1)	\$0.691	(1)	37.4	(1)	\$0.571	(1)
1940.....	38.1	(1)	.655	(1)	(1)	39.2	(1)	.716	(1)	37.0	(1)	.690	(1)
1941.....	40.6	(1)	.726	\$0.691	33.4	42.0	(1)	.799	\$0.762	38.9	(1)	.627	\$0.613
1942.....	43.1	(1)	.851	.793	37.5	45.0	(1)	.937	.872	40.3	(1)	.709	.684
1943.....	45.0	(1)	.957	.881	40.8	46.5	(1)	1.048	.966	42.5	(1)	.787	.748
1944.....	45.2	(1)	1.011	.933	43.7	46.5	(1)	1.105	1.019	43.1	(1)	.844	.798
1945.....	43.5	(1)	1.016	1.049	45.5	44.0	(1)	1.099	1.031	42.3	(1)	.886	1.841
1946.....	40.3	(1)	1.075	1.035	50.4	40.4	(1)	1.144	1.111	40.5	(1)	.995	.962
1947.....	40.4	(1)	1.217	1.18	57.8	40.5	(1)	1.278	1.24	40.2	(1)	1.145	1.11
1948.....	40.0	(1)	1.328	1.29	63.2	40.4	(1)	1.395	1.35	39.6	(1)	1.250	1.21
1949.....	39.1	(1)	1.378	1.34	66.1	39.4	(1)	1.453	1.42	38.9	(1)	1.295	1.26
1950.....	40.5	(1)	1.440	1.39	68.2	41.1	(1)	1.519	1.46	39.7	(1)	1.347	1.31
1951.....	40.6	(1)	1.56	1.51	73.6	41.5	(1)	1.65	1.59	39.5	(1)	1.44	1.40
1952.....	40.7	(1)	1.65	1.59	77.4	41.5	(1)	1.75	1.68	39.7	(1)	1.51	1.46
1953.....	40.5	(1)	1.74	1.68	81.6	41.2	(1)	1.86	1.79	39.6	(1)	1.58	1.53
1954.....	39.6	(1)	1.78	1.73	84.3	40.1	(1)	1.90	1.84	39.0	(1)	1.62	1.58
1955.....	40.7	(1)	1.86	1.79	86.9	41.3	(1)	1.99	1.91	39.9	(1)	1.67	1.62
1956.....	40.4	37.6	1.95	1.89	91.5	41.0	38.0	2.08	2.01	39.6	37.2	1.77	1.72
1957.....	39.8	37.5	2.05	1.99	96.2	40.3	37.9	2.19	2.12	39.2	37.0	1.85	1.80
1958.....	39.2	37.2	2.11	2.05	100.2	39.5	37.6	2.26	2.21	38.8	36.6	1.91	1.86
1959.....	40.3	37.6	2.19	2.12	103.9	40.7	38.0	2.36	2.28	39.7	37.0	1.98	1.91
1960.....	39.7	37.3	2.26	2.19	106.8	40.1	37.7	2.43	2.36	39.2	36.7	2.05	1.99
1961.....	39.8	37.4	2.32	2.25	109.8	40.3	38.0	2.49	2.42	39.3	36.8	2.11	2.05
1962.....	40.4	37.6	2.39	2.31	112.5	40.9	38.1	2.56	2.48	39.6	36.9	2.16	2.09
1963.....	40.4	37.6	2.46	2.37	115.2	41.1	38.2	2.63	2.54	39.6	36.9	2.22	2.15
1962: January.....	39.7	37.1	2.38	2.31	111.9	40.3	37.7	2.56	2.48	39.0	36.5	2.15	2.09
February.....	40.0	37.5	2.37	2.30	111.8	40.6	38.1	2.55	2.47	39.2	36.7	2.15	2.08
March.....	40.3	37.7	2.38	2.30	111.9	40.8	38.1	2.55	2.47	39.5	36.9	2.15	2.08
April.....	40.4	37.7	2.39	2.31	112.3	41.1	38.4	2.56	2.48	39.6	37.0	2.16	2.09
May.....	40.5	37.7	2.39	2.31	112.1	41.1	38.3	2.55	2.47	39.8	37.0	2.16	2.09
June.....	40.7	37.8	2.39	2.30	112.3	41.2	38.2	2.55	2.46	40.1	37.2	2.17	2.09
July.....	40.5	37.7	2.38	2.30	112.5	40.8	38.0	2.55	2.47	40.0	37.2	2.17	2.10
August.....	40.4	37.6	2.37	2.29	112.3	40.9	38.1	2.54	2.45	39.9	37.2	2.16	2.09
September.....	40.7	37.7	2.39	2.31	112.8	41.2	38.1	2.57	2.48	40.0	37.1	2.17	2.09
October.....	40.3	37.5	2.39	2.31	113.0	41.0	38.1	2.57	2.48	39.4	36.7	2.17	2.10
November.....	40.4	37.5	2.41	2.33	113.5	41.0	38.0	2.58	2.49	39.6	36.9	2.18	2.11
December.....	40.5	37.6	2.42	2.34	113.9	41.2	38.1	2.61	2.51	39.7	37.1	2.19	2.12
1963: January.....	40.1	37.6	2.43	2.35	114.0	40.7	38.1	2.60	2.52	39.2	36.8	2.20	2.13
February.....	40.0	37.5	2.43	2.35	114.4	40.7	38.1	2.61	2.52	39.2	36.7	2.19	2.13
March.....	40.2	37.6	2.44	2.36	114.6	40.8	38.1	2.61	2.53	39.4	36.8	2.20	2.13
April.....	39.9	37.5	2.44	2.37	114.9	40.6	38.1	2.62	2.54	39.9	36.5	2.21	2.14
May.....	40.5	37.7	2.45	2.37	114.9	41.2	38.3	2.63	2.54	39.6	37.0	2.21	2.14
June.....	40.8	37.8	2.46	2.37	115.1	41.6	38.4	2.64	2.54	39.8	37.0	2.22	2.14
July.....	40.5	37.6	2.45	2.37	115.2	41.1	38.2	2.63	2.54	39.8	37.0	2.22	2.15
August.....	40.5	37.6	2.43	2.35	115.0	41.0	38.0	2.61	2.52	40.0	37.2	2.21	2.13
September.....	40.7	37.6	2.47	2.38	116.0	41.3	38.2	2.65	2.55	39.8	36.9	2.24	2.16
October.....	40.7	37.7	2.47	2.38	116.1	41.4	38.2	2.65	2.55	39.9	37.0	2.23	2.16
November.....	40.5	37.5	2.49	2.40	116.7	41.2	38.1	2.67	2.57	39.6	36.8	2.25	2.17
December.....	40.8	37.8	2.50	2.41	(1)	41.5	38.3	2.68	2.58	39.9	37.1	2.26	2.18

¹ Not available.

² April used. Annual average not available.

³ Eleven-month average; August 1945 excluded because of VJ Day holiday period.

⁴ Preliminary.

NOTE.—Series revised; see Note, Table C-25.

Data relate to production workers and are for pay period ending nearest the 15th of the month.

The annual figures for 1963 are simple arithmetic averages of the monthly figures shown and are not strictly comparable with the averages for earlier years, which have been weighted by data on employment (in the case of hours) and man-hours (in the case of earnings).

See Table C-26 for seasonally adjusted average gross weekly hours.

Data for Alaska and Hawaii included beginning January 1959.

Source: Department of Labor.

TABLE C-30.—Average weekly earnings, gross and spendable, in manufacturing industries in current and 1963 prices, 1939–63

Year or month	Average gross weekly earnings		Average spendable weekly earnings ¹			
	Current prices	1963 prices ¹	Worker with no dependents		Worker with three dependents	
			Current prices	1963 prices ¹	Current prices	1963 prices ¹
1939.....	\$23.64	\$52.07	\$23.37	\$51.48	\$23.40	\$51.54
1940.....	24.96	54.62	24.46	53.52	24.71	54.07
1941.....	29.48	61.29	27.96	58.13	29.19	60.69
1942.....	36.68	68.95	31.80	59.77	36.31	68.25
1943.....	43.07	76.23	35.95	63.63	41.33	73.15
1944.....	45.70	79.48	37.99	66.07	43.76	76.10
1945.....	44.20	75.17	36.82	62.62	42.59	72.43
1946.....	43.32	68.01	37.31	58.57	42.79	67.17
1947.....	49.17	67.45	42.10	57.75	47.58	65.27
1948.....	53.12	67.67	46.57	59.32	52.31	66.64
1949.....	53.88	69.25	47.21	60.68	52.95	68.06
1950.....	58.32	74.29	50.26	64.03	56.36	71.80
1951.....	63.34	74.69	52.97	62.46	60.18	70.97
1952.....	67.16	77.46	55.04	63.48	62.98	72.64
1953.....	70.47	80.72	57.59	65.97	65.60	75.14
1954.....	70.49	80.38	58.45	66.65	65.65	74.86
1955.....	75.70	86.61	62.51	71.52	69.79	79.85
1956.....	75.78	88.72	64.92	73.11	72.25	81.36
1957.....	81.59	88.88	66.93	72.91	74.31	80.95
1958.....	82.71	87.62	67.82	71.84	75.23	79.69
1959.....	88.26	92.81	71.89	75.59	79.40	83.49
1960.....	89.72	92.88	72.57	75.12	80.11	82.93
1961.....	92.34	94.51	74.60	76.36	82.18	84.11
1962.....	96.56	97.73	77.86	78.81	85.53	86.57
1963 ²	99.38	99.38	79.63	79.63	87.37	87.37
1962: January.....	94.49	96.52	76.20	77.83	83.83	85.63
February.....	94.80	96.54	76.45	77.85	84.09	85.63
March.....	95.91	97.47	77.34	78.60	85.00	86.38
April.....	96.56	97.93	77.86	78.97	85.53	86.74
May.....	96.80	98.17	78.05	79.16	85.73	86.95
June.....	97.27	98.55	78.43	79.46	86.11	87.24
July.....	96.39	97.46	77.72	78.58	85.39	86.34
August.....	95.75	96.81	77.21	78.07	84.87	85.81
September.....	97.27	97.86	78.43	78.90	86.11	86.63
October.....	96.32	97.00	77.67	78.22	85.33	85.93
November.....	97.36	98.06	78.50	79.05	86.19	86.80
December.....	98.01	98.80	79.02	79.66	86.72	87.42
1963: January.....	97.44	98.13	78.11	78.66	85.78	86.38
February.....	97.20	97.79	77.92	78.39	85.58	86.10
March.....	98.09	98.58	78.63	79.03	86.31	86.74
April.....	97.36	97.85	78.04	78.43	85.72	86.15
May.....	99.23	99.73	79.51	79.91	87.25	87.69
June.....	100.37	100.47	80.38	80.46	88.18	88.27
July.....	99.23	98.83	79.51	79.19	87.25	86.90
August.....	98.42	98.03	78.89	78.58	86.58	86.24
September.....	100.53	100.13	80.51	79.83	88.31	87.96
October.....	100.53	100.03	80.51	80.11	88.31	87.87
November ³	100.85	100.15	80.75	80.19	88.58	87.96
December ⁴	102.00	(⁴)	81.63	(⁴)	89.52	(⁴)

¹ Estimates in current prices divided by the consumer price index on a 1963 base (using 11-month average).

² Average gross weekly earnings less social security and income taxes.

³ Preliminary.

⁴ Not available.

NOTE.—Series revised; see Note, Table C-25.

Data relate to production workers and are for pay period ending nearest the 15th of the month.

The annual figures for 1963 are simple arithmetic averages of the monthly figures shown and are not strictly comparable with the averages for earlier years, which have been weighted by data on man-hours.

Data for Alaska and Hawaii included beginning January 1959.

Source: Department of Labor.

TABLE C-31.—*Labor turnover rates in manufacturing industries, 1930-63*
[Rates per 100 employees]

Year or month	Accession rates		Separation rates		
	Total ¹	New hires	Total ²	Quits	Layoffs
1930.....	3.8	(9)	5.9	1.9	3.6
1931.....	3.7	(9)	4.8	1.1	3.5
1932.....	4.1	(9)	5.2	.9	4.2
1933.....	6.5	(9)	4.5	1.1	3.2
1934.....	5.7	(9)	4.9	1.1	3.7
1935.....	5.1	(9)	4.3	1.1	3.0
1936.....	5.3	(9)	4.0	1.3	2.4
1937.....	4.3	(9)	5.2	1.5	3.5
1938.....	4.7	(9)	4.8	.8	3.9
1939.....	5.0	(9)	3.7	1.0	2.6
1940.....	5.4	(9)	4.0	1.1	2.6
1941.....	6.5	(9)	4.7	2.4	1.6
1942.....	9.3	(9)	7.8	4.6	1.3
1943.....	9.1	(9)	8.6	6.3	.7
1944.....	7.4	(9)	8.1	6.2	.7
1945.....	7.7	(9)	9.6	6.1	2.6
1946.....	8.1	(9)	7.2	5.2	1.4
1947.....	6.2	(9)	5.7	4.1	1.1
1948.....	5.4	(9)	5.4	3.4	1.6
1949.....	4.3	(9)	5.0	1.9	2.9
1950.....	5.3	(9)	4.1	2.3	1.3
1951.....	5.3	4.1	5.3	2.9	1.4
1952.....	5.4	4.1	4.9	2.8	1.4
1953.....	4.8	3.6	5.1	2.8	1.6
1954.....	3.6	1.9	4.1	1.4	2.3
1955.....	4.5	3.0	3.9	1.9	1.5
1956.....	4.2	2.8	4.2	1.9	1.7
1957.....	3.6	2.2	4.2	1.6	2.1
1958.....	3.6	1.7	4.1	1.1	2.6
1959.....	4.2	2.6	4.1	1.5	2.0
1960.....	3.8	2.2	4.3	1.3	2.4
1961.....	4.1	2.2	4.0	1.2	2.2
1962.....	4.1	2.5	4.1	1.4	2.0
1963 ⁴	4.0	2.5	3.9	1.4	1.8
Seasonally adjusted					
1962: January.....	4.2	2.6	3.9	1.4	1.9
February.....	4.2	2.6	3.9	1.5	1.9
March.....	4.1	2.6	3.9	1.5	1.7
April.....	4.2	2.7	4.0	1.4	1.8
May.....	4.1	2.7	4.2	1.6	2.0
June.....	4.0	2.6	4.2	1.5	2.0
July.....	4.2	2.5	4.3	1.4	2.1
August.....	3.9	2.4	4.5	1.5	2.3
September.....	4.0	2.3	4.0	1.3	1.9
October.....	3.9	2.3	4.0	1.4	2.0
November.....	3.8	2.3	3.9	1.4	1.9
December.....	3.8	2.2	3.8	1.3	2.0
1963: January.....	3.7	2.3	4.0	1.4	2.0
February.....	3.9	2.2	3.7	1.3	1.8
March.....	3.8	2.4	3.8	1.5	1.8
April.....	4.1	2.6	4.0	1.4	1.8
May.....	3.8	2.4	4.0	1.4	1.8
June.....	3.9	2.4	3.8	1.4	1.7
July.....	4.0	2.4	4.0	1.4	1.9
August.....	3.7	2.4	4.2	1.5	2.0
September.....	3.9	2.3	3.9	1.3	1.8
October.....	3.9	2.4	3.7	1.4	1.7
November ⁵	3.5	2.3	3.6	1.4	1.7

¹ Includes rehires and other accessions, not published separately.

² Includes discharges and miscellaneous separations, not published separately. (Prior to 1940 quits include miscellaneous separations.)

³ Not available.

⁴ January-November average.

⁵ Preliminary.

NOTE.—See Note, Table C-25.

Beginning January 1943, data relate to all employees; previously to production workers only.

Beginning January 1959, transfers between establishments of the same firm are included in total accessions and total separations, therefore rates for these items are not strictly comparable with prior data.

Data for Alaska and Hawaii included beginning January 1959.

Source: Department of Labor

TABLE C-32.—Indexes of output per man-hour and related data, 1947-63

[1957-59=100]

Year	Output per man-hour					Output ¹					Man-hours				
	Total private	Agriculture	Nonagricultural industries			Total private	Agriculture	Nonagricultural industries			Total private	Agriculture	Nonagricultural industries		
			Total	Manufacturing	Non-manufacturing			Total	Manufacturing	Non-manufacturing			Total	Manufacturing	Non-manufacturing
Establishment basis ²															
1947	70.9	50.2	76.3	74.8	76.8	68.4	81.2	67.7	71.1	65.9	96.5	161.8	88.7	95.1	85.8
1948	73.4	59.6	77.9	76.8	78.2	71.2	92.8	70.0	72.6	68.7	97.0	155.8	89.9	94.5	87.9
1949	75.5	56.8	80.8	78.5	82.1	70.8	88.0	69.8	67.6	71.0	93.8	154.8	86.4	86.1	86.5
1950	80.9	64.7	85.1	83.7	85.6	77.3	92.8	76.4	78.3	75.5	95.6	143.4	89.8	93.5	88.2
1951	82.9	64.0	86.5	85.2	86.8	82.0	87.0	81.7	85.7	79.6	98.9	136.0	94.4	100.6	91.7
1952	84.7	69.9	87.6	86.4	87.9	84.4	90.4	84.1	88.4	81.9	99.6	129.4	96.0	102.3	93.2
1953	88.2	77.8	90.0	90.6	89.0	88.6	93.7	88.3	97.3	83.7	100.5	120.5	98.1	107.4	94.0
1954	89.8	83.4	91.4	89.8	92.0	87.2	97.6	86.6	88.1	85.8	97.1	117.0	94.7	98.1	93.3
1955	93.8	86.4	95.3	96.0	94.6	95.0	102.9	94.5	99.5	92.0	101.3	119.1	99.2	103.6	97.3
1956	93.9	88.3	94.9	97.1	93.4	97.0	100.5	96.8	102.1	94.1	103.3	113.8	102.0	105.2	100.7
1957	97.2	94.2	97.6	97.3	97.6	98.9	99.0	98.9	100.7	98.0	101.7	105.1	101.3	103.5	100.4
1958	99.6	103.0	99.4	99.1	99.8	97.0	100.5	96.8	94.2	98.1	97.4	97.6	97.4	95.1	98.3
1959	103.2	102.8	103.0	103.7	102.6	104.1	100.0	104.3	105.0	103.9	100.9	97.3	101.3	101.3	101.3
1960	105.2	109.3	104.6	(3)	(3)	106.8	104.8	106.9	(3)	(3)	101.5	95.9	102.2	(3)	(3)
1961	108.7	115.8	107.6	(3)	(3)	108.6	104.3	108.8	(3)	(3)	99.9	90.1	101.1	(3)	(3)
1962	112.9	119.7	111.7	(3)	(3)	115.3	105.3	115.9	(3)	(3)	102.1	88.0	103.8	(3)	(3)
1963 ⁴	116.8	128.5	115.0	(3)	(3)	120.0	107.2	120.7	(3)	(3)	102.7	83.4	105.0	(3)	(3)
Labor force basis ⁵															
1947	68.5	50.2	73.8	(6)	(6)	68.4	81.2	67.7	(6)	(6)	99.8	161.8	91.7	(6)	(6)
1948	70.6	59.6	74.5	(6)	(6)	71.2	92.8	70.0	(6)	(6)	100.9	155.6	93.9	(6)	(6)
1949	72.0	56.4	76.9	(6)	(6)	70.8	88.0	69.8	(6)	(6)	98.3	156.1	90.8	(6)	(6)
1950	77.5	64.5	81.4	(6)	(6)	77.3	92.8	76.4	(6)	(6)	99.7	143.9	93.9	(6)	(6)
1951	81.1	63.6	84.7	(6)	(6)	82.0	87.0	81.7	(6)	(6)	101.1	136.8	96.5	(6)	(6)
1952	83.7	69.4	86.7	(6)	(6)	84.4	90.4	84.1	(6)	(6)	100.8	130.2	97.0	(6)	(6)
1953	87.5	77.3	89.5	(6)	(6)	88.6	93.7	88.3	(6)	(6)	101.3	121.2	98.7	(6)	(6)
1954	89.7	83.0	91.5	(6)	(6)	87.2	97.6	86.6	(6)	(6)	97.2	117.6	94.6	(6)	(6)
1955	94.1	85.9	95.8	(6)	(6)	95.0	102.9	94.5	(6)	(6)	101.0	119.8	98.6	(6)	(6)
1956	94.4	87.8	95.7	(6)	(6)	97.0	100.5	96.8	(6)	(6)	102.7	114.5	101.2	(6)	(6)
1957	97.5	94.2	98.0	(6)	(6)	98.9	99.0	98.9	(6)	(6)	101.4	105.1	100.9	(6)	(6)
1958	99.1	103.1	98.8	(6)	(6)	97.0	100.5	96.8	(6)	(6)	97.9	97.5	98.0	(6)	(6)
1959	103.4	102.7	103.2	(6)	(6)	104.1	100.0	104.3	(6)	(6)	100.7	97.4	101.1	(6)	(6)
1960	104.8	109.3	104.1	(6)	(6)	106.8	104.8	106.9	(6)	(6)	101.9	95.9	102.7	(6)	(6)
1961	107.4	116.3	106.0	(6)	(6)	108.6	104.3	108.8	(6)	(6)	101.1	89.7	102.6	(6)	(6)
1962	112.1	119.9	110.6	(6)	(6)	115.3	105.3	115.9	(6)	(6)	102.9	87.8	104.8	(6)	(6)
1963 ⁴	115.8	128.8	113.5	(6)	(6)	120.0	107.2	120.7	(6)	(6)	103.6	83.2	106.3	(6)	(6)

¹ Output refers to gross national product in 1954 prices.² Man-hour estimates based primarily on establishment data.³ Department of Commerce will complete revision of output data for recent years early in 1964. In view of these revisions the Department of Labor considers it inappropriate to publish interim, revised output per man-hour indexes for manufacturing (and nonmanufacturing) for the years 1960-63. At the same time, it would be misleading to continue publishing the indexes previously released. Consequently, indexes for the last few years will not be published until mid-1964, when all revised production data will be available.⁴ Preliminary.⁵ Man-hour estimates based primarily on labor force data.⁶ Not available.NOTE.—For information on sources and methodology, see Bureau of Labor Statistics (Department of Labor) Bulletin No. 1249, *Trends in Output per Man-hour in the Private Economy, 1909-58*.

Data for Alaska and Hawaii included beginning 1960.

Source: Department of Labor.

PRODUCTION AND BUSINESS ACTIVITY

TABLE C-33.—Industrial production indexes, market groupings, 1947–63

[1957–59=100]

Year or month	Total industrial production ¹	Final products						Materials		
		Total	Consumer goods ²			Equipment		Total	Durable goods	Non-durable goods
			Total	Auto-motive products	Home goods	Total, including defense	Business			
1947.....	65.7	64.2	67.1	69.4	68.8	55.4	69.9	67.0	68.2	64.9
1948.....	68.4	66.6	69.2	72.6	71.7	58.3	72.6	70.2	71.0	68.2
1949.....	64.7	64.5	68.8	72.0	66.3	52.0	63.5	64.8	64.2	64.2
1950.....	74.9	72.8	78.6	90.6	91.4	56.4	68.0	76.9	79.5	73.3
1951.....	81.3	78.6	77.8	80.1	78.7	78.4	83.1	83.8	87.8	78.8
1952.....	84.3	84.3	79.5	72.1	78.8	94.1	94.1	84.3	88.9	79.0
1953.....	91.3	89.9	85.0	91.3	90.2	100.5	96.6	92.6	100.7	84.1
1954.....	85.8	85.7	84.3	85.0	86.0	88.9	85.1	85.9	88.4	83.3
1955.....	96.6	93.9	93.3	118.3	97.3	95.0	91.9	99.0	104.7	93.0
1956.....	99.9	98.1	95.5	97.8	100.9	103.7	104.7	101.6	105.3	97.7
1957.....	100.7	99.4	97.0	105.2	96.6	104.6	105.3	101.9	104.8	98.9
1958.....	93.7	94.8	96.4	86.7	92.8	91.3	89.8	92.7	90.0	95.4
1959.....	105.6	105.7	106.6	108.1	110.7	104.1	104.9	105.4	106.1	105.7
1960.....	108.7	109.9	111.0	123.2	110.8	107.6	110.2	107.6	108.6	108.7
1961.....	109.8	111.3	112.7	111.8	112.2	108.3	110.1	108.4	104.8	112.1
1962.....	118.3	119.7	119.7	131.1	122.2	119.6	122.1	117.0	114.1	112.0
1963 ³	124.3	124.9	125.3	141.2	129.6	124.2	128.3	123.7	121.2	126.3
Seasonally adjusted										
1962: January.....	114.6	115.4	116.2	125.7	119.0	113.5	114.4	113.5	110.3	116.7
February.....	116.3	116.8	117.3	124.5	120.5	115.0	116.3	115.6	113.1	118.2
March.....	117.3	117.8	118.4	123.9	122.0	116.0	118.0	116.8	114.7	119.0
April.....	117.8	118.2	118.7	129.3	122.3	116.9	119.3	117.2	116.2	118.2
May.....	118.3	119.4	120.0	133.0	124.1	118.3	121.2	117.4	114.9	119.9
June.....	118.4	119.9	120.0	126.5	124.2	119.8	123.1	117.2	113.7	120.9
July.....	119.4	121.3	121.2	135.8	122.4	121.4	124.4	117.3	113.8	120.8
August.....	119.4	121.4	121.0	134.6	122.0	122.8	125.6	117.4	114.3	120.6
September.....	119.8	121.7	121.4	135.3	122.0	123.0	126.2	118.2	114.9	121.6
October.....	119.2	121.4	120.6	135.6	122.1	123.3	126.1	117.2	114.0	120.6
November.....	119.5	121.3	120.5	135.2	122.9	123.1	125.9	117.8	114.1	122.4
December.....	119.1	121.7	121.2	136.9	123.9	122.4	125.1	116.9	113.2	121.1
1963: January.....	119.2	122.3	121.8	136.5	125.8	122.0	125.0	116.8	113.3	120.5
February.....	120.2	122.6	122.9	137.7	125.9	121.5	125.0	118.0	114.4	121.8
March.....	121.3	122.4	123.1	136.3	127.3	120.7	124.9	120.2	118.0	122.6
April.....	122.5	122.1	122.5	137.6	126.9	120.4	124.3	122.9	121.2	124.7
May.....	124.5	123.5	124.1	137.1	130.3	122.1	125.9	125.7	124.5	126.9
June.....	125.8	125.2	125.9	145.3	131.0	123.8	127.8	126.6	125.8	127.3
July.....	126.5	125.9	126.4	141.1	130.1	124.8	129.0	126.7	125.2	128.3
August.....	125.7	126.2	126.7	134.8	132.0	125.3	130.1	125.1	121.9	128.4
September.....	125.7	126.5	126.7	138.0	132.3	126.2	131.0	125.0	122.1	128.0
October.....	126.5	127.7	127.8	146.8	131.3	127.6	132.0	125.6	122.6	128.6
November.....	126.7	128.0	128.2	149.1	133.0	127.6	132.0	125.6	122.3	129.0
December ⁴	127.2	128.6	128.8	149.0	(*)	128.5	133.0	126.1	122.0	130.0

¹ Annual indexes for 1929–46 are, respectively: 38.4, 32.0, 26.5, 20.7, 24.4, 26.6, 30.7, 36.3, 39.7, 31.4, 38.3, 43.9, 56.4, 69.3, 82.9, 81.7, 70.5, and 59.5.

² Also includes apparel and consumer staples, not shown separately.

³ Preliminary.

⁴ Not available.

Source: Board of Governors of the Federal Reserve System.

TABLE C-34.—Industrial production indexes, industry groupings, 1947-63

[1957-59=100]

Year or month	Total industrial production	Manufacturing								
		Total	Durable manufactures							
			Total	Primary metals	Fabricated metal products	Machinery	Transportation equipment	Instruments and related products	Clay, glass, and lumber	Furniture and miscellaneous
1947.....	65.7	66.4	64.3	90.7	75.9	65.3	42.9	53.7	75.8	73.5
1948.....	68.4	68.9	67.0	94.3	77.2	66.5	46.9	55.2	79.7	77.4
1949.....	64.7	65.1	60.9	79.4	69.8	59.0	47.1	49.2	72.3	71.6
1950.....	74.9	75.8	74.1	99.9	85.4	72.7	56.4	57.3	87.7	83.7
1951.....	81.3	81.9	83.5	108.7	91.2	83.0	65.7	62.9	92.0	80.2
1952.....	84.3	85.2	85.5	99.3	89.0	92.1	73.1	78.1	89.3	82.4
1953.....	91.3	92.7	99.9	112.5	100.3	100.5	91.7	85.3	92.7	89.7
1954.....	85.8	86.3	83.4	91.3	90.2	87.7	83.8	82.9	89.6	86.8
1955.....	96.6	97.3	101.9	118.4	98.3	96.5	102.0	88.7	100.7	97.9
1956.....	99.9	100.2	104.0	116.4	98.8	107.1	97.4	95.4	102.0	101.0
1957.....	100.7	100.8	104.0	112.2	101.5	104.2	106.4	98.0	97.5	97.6
1958.....	93.7	93.2	90.3	87.5	92.9	88.8	89.5	92.1	94.1	93.3
1959.....	105.6	106.0	105.6	100.4	105.5	107.1	104.0	109.9	108.5	109.0
1960.....	108.7	108.9	108.5	101.3	107.6	110.8	108.2	116.5	105.7	113.3
1961.....	109.8	109.7	107.0	98.9	106.5	110.4	103.6	115.8	104.5	114.1
1962.....	118.3	118.7	117.9	104.6	117.1	123.5	118.3	123.0	109.3	124.5
1963 ¹	124.3	124.8	124.5	113.2	123.5	129.2	126.8	130.3	114.5	129.1
Seasonally adjusted										
1962: January.....	114.6	114.7	113.6	111.9	111.0	116.7	111.7	119.5	103.9	117.6
February.....	116.3	116.6	115.9	117.5	113.0	118.2	112.9	119.0	108.9	118.8
March.....	117.3	117.7	117.1	116.6	114.8	120.7	113.5	119.6	108.9	121.5
April.....	117.8	118.4	118.3	112.4	116.9	122.5	116.8	121.1	108.6	124.8
May.....	118.3	118.9	118.1	101.3	118.3	124.2	119.4	123.2	109.3	127.3
June.....	118.4	118.8	117.6	97.7	119.7	125.3	116.6	124.1	109.8	127.0
July.....	119.4	119.7	118.7	96.6	119.7	125.2	122.3	124.9	109.2	127.7
August.....	119.4	119.9	118.9	98.1	119.6	125.5	121.4	125.0	110.4	126.1
September.....	119.8	120.4	119.2	99.6	119.6	125.7	121.5	124.3	110.8	126.8
October.....	119.2	119.7	118.8	98.9	117.8	126.1	121.8	124.2	108.5	125.3
November.....	119.5	119.9	119.2	100.7	117.9	125.9	121.5	125.0	110.4	125.5
December.....	119.1	119.7	118.9	99.7	117.2	125.5	121.7	125.4	111.5	124.6
1963: January.....	119.2	119.8	119.0	99.6	118.4	125.2	122.4	125.7	110.9	125.0
February.....	120.2	120.6	120.0	105.2	118.5	126.4	122.3	127.0	109.8	123.6
March.....	121.3	121.9	121.5	111.9	119.3	126.2	122.1	127.2	115.0	124.8
April.....	122.5	123.1	122.8	120.1	120.2	125.9	123.7	126.6	112.7	125.8
May.....	124.5	125.2	125.6	127.4	123.3	128.4	124.5	130.2	113.3	129.3
June.....	125.8	126.4	127.4	125.8	125.1	129.4	130.4	131.6	113.9	129.3
July.....	126.5	126.8	127.0	122.8	125.6	129.6	129.3	132.6	114.0	132.0
August.....	125.7	125.9	125.0	109.4	126.4	130.5	126.8	132.1	115.3	132.1
September.....	125.7	126.1	125.3	107.7	125.6	131.3	128.7	133.0	115.5	131.9
October.....	126.5	127.1	126.3	108.4	126.8	132.2	130.8	132.5	115.9	130.6
November.....	126.7	127.3	126.5	109.1	126.2	132.8	130.5	131.8	117.1	131.9
December ¹	127.2	127.8	127.1	111	126	133	130	133	120	132

See footnotes at end of table.

TABLE C-34.—*Industrial production indexes, industry groupings, 1947-63—Continued*

[1957-59=100]

Year or month	Manufacturing					Mining	Utilities
	Nondurable manufactures						
	Total	Textile, apparel, and leather products	Paper and printing	Chemical, petroleum, and rubber products	Foods, beverages, and tobacco		
1947.....	67.2	81.0	66.7	47.5	80.7	79.9	36.5
1948.....	69.5	84.5	69.4	50.8	80.0	84.0	40.8
1949.....	68.3	80.6	69.3	49.4	80.8	74.5	43.4
1950.....	76.0	89.1	76.7	60.7	83.6	83.2	49.5
1951.....	78.5	87.4	79.4	67.4	85.4	91.3	56.4
1952.....	80.0	89.5	77.7	69.9	87.3	90.5	61.2
1953.....	83.6	90.7	82.6	75.2	88.2	92.9	66.8
1954.....	83.6	86.9	85.0	74.7	89.8	90.2	71.8
1955.....	91.6	95.5	92.5	86.8	93.1	99.2	80.2
1956.....	95.4	98.0	97.1	91.4	96.6	104.8	87.9
1957.....	96.7	96.9	97.8	95.6	96.7	104.6	93.9
1958.....	96.8	95.0	97.0	95.5	99.4	95.6	98.1
1959.....	106.5	108.1	105.2	108.9	103.9	99.7	108.0
1960.....	109.5	107.5	109.0	113.9	106.6	101.6	115.6
1961.....	112.9	108.4	112.4	118.8	110.4	102.6	122.8
1962.....	119.8	115.1	116.7	131.2	113.4	105.0	131.3
1963 ¹	125.2	118.6	120.0	141.7	116.4	108.0	140.8
Seasonally adjusted							
1962: January.....	116.2	112.5	114.3	124.5	111.4	103.8	129.0
February.....	117.5	113.5	116.2	126.4	112.0	104.2	128.9
March.....	118.6	114.2	116.9	128.0	112.9	104.8	128.8
April.....	118.5	115.3	115.7	128.5	112.6	105.4	127.9
May.....	119.8	115.4	117.0	131.1	113.2	105.1	130.2
June.....	120.3	115.8	117.2	132.9	112.5	105.2	132.4
July.....	121.0	115.6	117.4	133.4	114.5	106.5	133.8
August.....	121.1	115.7	117.9	133.2	114.4	105.4	133.1
September.....	121.8	116.8	118.2	134.8	114.3	105.7	132.6
October.....	121.0	115.8	117.2	134.1	113.6	105.2	132.5
November.....	120.9	115.5	116.9	133.6	114.2	105.7	133.4
December.....	120.8	115.2	115.4	134.2	114.5	103.2	133.8
1963: January.....	120.7	115.2	114.5	134.2	115.0	103.0	135.9
February.....	121.4	115.6	115.8	135.3	115.0	104.7	138.2
March.....	122.5	115.9	115.7	138.2	115.6	105.4	136.4
April.....	123.4	116.2	119.2	139.7	114.7	107.4	135.7
May.....	124.8	116.5	120.5	141.3	116.4	108.5	139.1
June.....	125.2	118.0	121.6	141.3	116.1	109.4	141.3
July.....	126.4	118.9	122.3	143.3	116.9	111.3	145.3
August.....	127.2	120.2	122.4	144.4	117.5	111.3	144.6
September.....	127.1	121.1	122.0	144.8	116.5	110.3	142.8
October.....	128.2	121.7	122.4	145.7	118.2	109.5	143.3
November.....	128.3	123.1	122.5	145.9	117.9	108.2	144.5
December ¹	128.7	124	123	147	118	107.1	145.5

¹ Preliminary.

Source: Board of Governors of the Federal Reserve System.

TABLE C-35.—*Business expenditures for new plant and equipment, 1939 and 1945-64*

[Billions of dollars]

Year or quarter.	Total ¹	Manufacturing			Mining	Transportation		Public utilities	Commercial and other ²
		Total	Durable goods	Non-durable goods		Rail-road	Other		
1939.....	5.51	1.94	0.76	1.19	0.33	0.28	0.36	0.52	2.08
1945.....	8.69	3.98	1.59	2.39	.38	.55	.57	.50	2.70
1946.....	14.85	6.79	3.11	3.68	.43	.58	.92	.79	5.33
1947.....	20.61	8.70	3.41	5.30	.69	.89	1.30	1.54	7.49
1948.....	22.06	9.13	3.48	5.65	.88	1.32	1.28	2.54	6.90
1949.....	19.28	7.15	2.59	4.56	.79	1.35	.89	3.12	5.98
1950.....	20.60	7.49	3.14	4.36	.71	1.11	1.21	3.31	6.78
1951.....	25.64	10.85	5.17	5.68	.93	1.47	1.49	3.66	7.24
1952.....	26.49	11.63	5.61	6.02	.98	1.40	1.50	3.89	7.09
1953.....	28.32	11.91	5.65	6.26	.99	1.31	1.56	4.55	8.00
1954.....	26.83	11.04	5.09	5.95	.98	.85	1.51	4.22	8.23
1955.....	28.70	11.44	5.44	6.00	.96	.92	1.60	4.31	9.47
1956.....	35.08	14.95	7.62	7.33	1.24	1.23	1.71	4.90	11.05
1957.....	36.96	15.96	8.02	7.94	1.24	1.40	1.77	6.20	10.40
1958.....	30.53	11.43	5.47	5.96	.94	.75	1.50	6.09	9.81
1959.....	32.64	12.07	5.77	6.29	.99	.92	2.02	5.67	10.88
1960.....	35.68	14.48	7.18	7.30	.99	1.03	1.94	5.68	11.57
1961.....	34.37	13.68	6.27	7.40	.98	.67	1.85	5.52	11.68
1962.....	37.31	14.68	7.03	7.65	1.08	.85	2.07	5.48	13.15
1963 ³	39.05	15.62	7.77	7.85	1.04	1.08	1.91	6.64	13.75
Seasonally adjusted annual rates									
1961: I.....	33.85	13.75	6.50	7.25	.95	.70	1.75	5.35	11.30
II.....	32.50	13.50	6.20	7.30	1.00	.70	1.80	5.50	11.05
III.....	34.70	13.65	6.10	7.55	1.00	.65	1.90	5.65	11.85
IV.....	35.40	14.00	6.40	7.60	1.00	.60	1.95	5.55	12.35
1962: I.....	35.70	14.20	6.55	7.60	1.15	.70	2.05	5.15	12.45
II.....	36.95	14.45	6.95	7.50	1.05	.95	2.25	5.40	12.85
III.....	35.35	15.05	7.25	7.80	1.10	1.00	2.00	5.75	13.40
IV.....	37.95	15.00	7.30	7.70	1.00	.80	1.90	5.45	13.80
1963: I.....	36.95	14.85	7.35	7.50	1.05	.90	1.70	5.20	13.25
II.....	38.05	15.30	7.65	7.65	1.00	1.00	2.05	5.45	13.30
III.....	40.00	15.95	8.00	8.00	1.05	1.20	1.85	5.90	14.05
IV ⁴	40.75	16.25	8.05	8.20	1.05	1.30	2.05	5.80	14.30
1964: I ⁵	40.75	16.40	8.20	8.20	1.05	1.15	2.20	5.60	14.35
II ⁵	41.70	16.55							
25.15									

¹ Excludes agriculture.² Commercial and other includes trade, service, finance, communications, and construction.³ Estimates based on anticipated capital expenditures reported by business in November 1963. The quarterly anticipations include adjustments, when necessary, for systematic tendencies in anticipatory data.

NOTE.—Annual total is the sum of unadjusted expenditures; it does not necessarily coincide with the average of seasonally adjusted figures.

These figures do not agree precisely with the plant and equipment expenditures included in the gross national product estimates of the Department of Commerce. The main difference lies in the inclusion in the gross national product of investment by farmers, professionals, institutions, real estate firms, and of certain outlays charged to current account.

This series is not available for years prior to 1939 and for 1940 to 1944.

Sources: Securities and Exchange Commission and Department of Commerce.

TABLE C-36.—*New construction activity, 1929-63*

[Value put in place, millions of dollars]

Year or month	Total new construction	Private construction								Public construction	
		Total ¹	Residential building (nonfarm)			Nonresidential building and other construction					
			Total ²	New housing units	Additions and alterations	Total	Commercial ³	Industrial	Public utility		Other ⁴
1929.....	10,793	8,307	3,625	3,040	340	4,682	1,135	949	1,578	1,020	2,486
1930.....	8,741	5,883	2,075	1,570	305	3,808	893	532	1,527	856	2,858
1931.....	6,427	3,768	1,565	1,320	175	2,203	454	221	946	582	2,659
1932.....	3,538	1,676	630	485	105	1,046	223	74	467	282	1,862
1933.....	2,879	1,231	470	290	145	761	130	176	261	194	1,648
1934.....	3,720	1,509	625	380	200	884	173	191	326	194	2,211
1935.....	4,232	1,999	1,010	710	250	989	211	158	363	257	2,233
1936.....	6,497	2,981	1,565	1,210	295	1,416	290	266	518	342	3,516
1937.....	6,999	3,903	1,875	1,475	320	2,028	387	492	705	444	3,096
1938.....	6,980	3,560	1,990	1,620	295	1,570	285	232	605	448	3,420
1939.....	8,198	4,389	2,680	2,270	320	1,709	292	254	683	480	3,809
1940.....	8,682	5,054	2,985	2,560	335	2,069	348	442	771	508	3,628
1941.....	11,957	6,206	3,510	3,040	375	2,686	409	801	872	614	5,751
1942.....	14,075	3,415	1,715	1,440	225	1,700	155	346	786	413	10,660
1943.....	8,301	1,979	885	710	160	1,094	33	156	570	335	6,322
1944.....	5,259	2,186	815	570	220	1,371	56	208	725	382	3,073
1945.....	5,809	3,411	1,276	720	516	2,135	203	642	827	463	2,398
1946.....	12,627	10,396	4,752	3,300	1,307	5,644	1,153	1,689	1,374	1,428	2,231
1947.....	17,901	14,582	7,535	5,450	1,960	7,047	957	1,702	2,338	2,050	3,319
1948.....	23,243	18,539	10,122	7,500	2,467	8,417	1,397	1,397	3,043	2,580	4,704
1949.....	24,183	17,914	9,642	7,257	2,200	8,272	1,182	972	3,323	2,795	6,260
1950.....	29,947	23,081	14,100	11,525	2,400	8,981	1,415	1,062	3,330	3,174	6,866
1951.....	32,700	23,447	12,529	9,849	2,490	10,918	1,498	2,117	3,729	3,574	9,253
1952.....	34,670	23,889	12,842	9,870	2,787	11,047	1,137	2,320	4,043	3,547	10,781
1953.....	37,019	25,783	13,777	10,555	2,955	12,006	1,791	2,229	4,475	5,111	11,236
1954.....	39,234	27,556	15,379	12,070	3,013	12,177	2,212	2,030	4,161	3,774	11,678
1955.....	44,164	32,440	18,705	14,990	3,376	13,735	3,218	2,399	4,363	3,755	11,724
1956.....	45,815	33,067	17,677	13,535	3,695	15,390	3,631	3,084	4,893	3,782	12,748
1957.....	47,845	33,766	17,019	12,615	3,903	16,747	3,564	3,557	5,414	4,212	14,079
1958.....	48,950	33,493	18,047	13,552	3,862	15,446	3,589	2,382	5,087	4,388	15,457
1959.....	54,109	38,002	22,331	17,116	4,450	15,671	3,914	2,098	4,990	4,669	16,107
New series: ⁵											
1959.....	55,305	39,235	24,251	19,233	4,253	14,984	3,930	2,106	4,521	4,427	16,070
1960.....	53,941	38,078	21,706	16,410	---	16,372	4,180	2,851	4,621	4,720	15,863
1961.....	55,455	38,299	21,680	16,189	---	16,619	4,674	2,780	4,335	4,830	17,166
1962.....	59,036	41,478	24,174	18,638	---	17,304	5,023	2,857	4,371	5,053	17,558
1963 ⁶	62,757	43,759	25,690	20,043	---	18,069	5,110	3,118	4,641	5,200	18,998
Seasonally adjusted annual rates (New series ⁷)											
1962:											
January.....	57,405	39,295	22,833	17,388	---	16,462	4,746	2,603	4,211	4,902	18,110
February.....	55,976	39,242	22,868	17,401	---	16,374	4,637	2,636	4,136	4,965	16,734
March.....	56,960	39,685	23,002	17,526	---	16,833	4,754	2,678	4,221	5,030	17,275
April.....	57,245	40,447	23,532	18,038	---	16,915	4,822	2,780	4,231	5,082	16,798
May.....	58,707	41,435	24,320	18,798	---	17,115	4,888	2,882	4,279	5,066	17,272
June.....	59,373	41,899	24,551	18,991	---	17,348	5,032	2,972	4,285	5,059	17,474
July.....	59,637	42,399	24,714	19,127	---	17,685	5,244	3,012	4,344	5,085	17,238
August.....	60,537	43,114	25,169	19,582	---	17,945	5,355	3,028	4,447	5,115	17,423
September.....	60,192	42,766	24,967	19,392	---	17,799	5,265	2,989	4,416	5,129	17,426
October.....	60,806	42,137	24,386	18,804	---	17,751	5,166	2,939	4,559	5,087	18,669
November.....	59,970	41,736	24,185	18,611	---	17,551	5,120	2,905	4,481	5,045	18,234
December.....	59,271	41,823	24,357	18,812	---	17,466	5,107	2,880	4,467	5,012	17,448
1963:											
January.....	60,371	41,726	24,636	19,128	---	17,090	4,943	2,794	4,380	4,973	18,645
February.....	59,154	41,376	24,273	18,749	---	17,103	4,902	2,771	4,434	4,996	17,778
March.....	60,114	41,526	24,353	18,809	---	17,173	4,963	2,774	4,438	4,998	18,588
April.....	59,555	42,436	24,984	19,418	---	17,452	4,890	2,810	4,737	5,015	17,119
May.....	60,458	43,143	25,646	20,075	---	17,497	4,775	2,852	4,805	5,065	17,315
June.....	62,335	43,184	25,801	20,219	---	17,383	4,589	2,976	4,686	5,132	19,151
July.....	62,733	43,931	25,888	20,275	---	18,043	4,953	3,136	4,718	5,236	18,802
August.....	64,194	44,071	25,832	20,186	---	18,739	5,346	3,310	4,741	5,342	19,623
September.....	64,228	44,827	25,919	20,141	---	18,908	5,561	3,395	4,580	5,372	19,401
October.....	65,988	45,608	26,532	20,723	---	19,076	5,412	3,461	4,849	5,354	20,280
November ⁸	65,928	45,576	26,707	20,893	---	18,869	5,367	3,538	4,601	5,363	20,352
December ⁸	65,437	45,617	26,600	20,818	---	19,017	5,412	3,577	4,617	5,411	19,820

¹ Data in this table do not agree with the new construction expenditures included in the gross national product. The latter data include expenditures for crude petroleum and natural gas well drilling, and do not reflect revisions in the "new series" presented above. (See Table C-1.)

² Total includes nonhousekeeping units, not shown separately. Beginning with 1960, additions and alterations, also included in total, are not shown separately.

³ Office buildings, warehouses, stores, restaurants, and garages.

⁴ Farm, institutional, and all other.

⁵ New series beginning January 1959 not entirely comparable with prior data. In addition to major differences between old and new series, data for Alaska and Hawaii are included beginning January 1959. For details, see *Construction Activity*, C30-25 (Supplement), July 1961, C30-53 (Supplement), December 1963, and C30-54, January 1964, Bureau of the Census.

⁶ Preliminary.

Source: Department of Commerce.

TABLE C-37.—*New public construction activity, 1929-63*
 [Value put in place, millions of dollars]

Year	Total new public construction ¹				Major types of new public construction						
	All public sources	Federal		State and local	High-way	Educa-tional	Hos-pital and institu-tional	Sewer and water and miscel-laneous public service	Con-serva-tion and develop-ment	Mili-tary facili-ties	All other public ²
		Direct	Federal aid								
1929.....	2,486	155	80	2,251	1,266	389	101	404	115	19	192
1930.....	2,858	209	104	2,545	1,516	364	118	500	137	29	194
1931.....	2,659	271	235	2,153	1,355	285	110	479	156	40	234
1932.....	1,862	333	111	1,418	958	130	83	291	150	34	216
1933.....	1,648	516	286	846	847	52	49	160	359	36	145
1934.....	2,211	626	721	864	1,000	148	51	228	518	47	219
1935.....	2,233	814	567	852	845	153	38	246	700	37	214
1936.....	3,516	797	1,566	1,153	1,362	366	74	509	658	29	518
1937.....	3,096	776	1,117	1,203	1,226	253	73	445	605	37	457
1938.....	3,420	717	1,320	1,383	1,421	811	97	492	551	62	486
1939.....	3,809	759	1,377	1,673	1,381	468	127	507	570	125	631
1940.....	3,628	1,182	946	1,500	1,302	156	54	469	528	385	734
1941.....	5,751	3,751	607	1,303	1,066	158	42	393	500	1,620	1,972
1942.....	10,660	9,313	475	872	734	128	85	254	357	5,016	4,136
1943.....	6,322	5,609	268	445	446	63	44	156	285	2,560	2,778
1944.....	3,073	2,505	126	442	362	41	58	125	163	837	1,487
1945.....	2,398	1,737	99	562	398	59	85	152	130	690	884
1946.....	2,231	865	244	1,122	764	101	85	278	260	188	555
1947.....	3,319	840	409	2,070	1,344	287	77	492	424	204	491
1948.....	4,704	1,177	417	3,110	1,661	618	213	699	670	158	685
1949.....	6,269	1,488	461	4,320	2,015	934	458	803	852	137	1,070
1950.....	6,866	1,625	462	4,779	2,134	1,133	499	819	942	177	1,162
1951.....	9,253	2,981	481	5,791	2,353	1,513	527	959	912	887	2,102
1952.....	10,781	4,185	626	5,970	2,679	1,619	495	958	900	1,387	2,743
1953.....	11,236	4,134	667	6,415	3,015	1,714	369	1,050	892	1,290	2,906
1954.....	11,678	3,418	728	7,532	3,680	2,134	333	1,171	773	1,003	2,584
1955.....	11,724	2,777	790	8,157	3,861	2,442	300	1,318	701	1,287	1,815
1956.....	12,748	2,742	896	9,110	4,431	2,556	300	1,659	826	1,360	1,616
1957.....	14,079	2,993	1,314	9,772	4,954	2,825	354	1,737	971	1,287	1,951
1958.....	15,457	3,388	2,130	9,939	5,545	2,875	390	1,838	1,019	1,402	2,388
1959 ³	16,070	3,724	2,711	9,635	5,761	2,656	428	2,018	1,121	1,465	2,621
1960.....	15,863	3,622	2,269	9,972	5,437	2,818	401	2,136	1,175	1,366	2,530
1961.....	17,156	3,805	2,425	10,926	5,855	3,052	369	2,168	1,384	1,378	2,950
1962.....	17,558	3,818	2,553	11,187	6,156	2,984	397	2,232	1,465	1,269	3,055
1963 ⁴	18,998	4,262	2,923	11,813	6,737	3,046	456	2,431	1,573	1,560	3,195

¹ For expenditures classified by ownership, combine "Federal aid" and "State and local" columns to obtain State and local ownership. "Direct" column stands as it is for Federal ownership.

² Includes nonresidential buildings (other than educational and hospital and institutional), residential buildings, and miscellaneous public construction such as parks and playgrounds, memorials, etc.

³ Beginning with 1959, data include estimates for Alaska and Hawaii. Comparability with earlier data is not seriously affected since these two States accounted for less than two-thirds of one percent of total new public construction in 1959.

⁴ Preliminary; partly estimated by Council of Economic Advisers.

Source: Department of Commerce.

TABLE C-38.—*New housing starts and applications for financing, 1929–63*

[Thousands of units]

Year or month	Housing starts										New private housing units authorized	Proposed home construction ¹	
	Total private and public (including farm) ¹	Total private (including farm)	Private and public nonfarm	Private nonfarm			Total private (including farm)	Private nonfarm		Applications for FHA commitments		Requests for VA appraisals	
				Total ¹	One-family	Two or more families		Total	Government home programs				
									FHA				VA
1929.....	-----	-----	509.0	509.0	316.0	193.0	-----	509.0	-----	-----	-----	-----	
1930.....	-----	-----	330.0	330.0	227.0	103.0	-----	330.0	-----	-----	-----	-----	
1931.....	-----	-----	254.0	254.0	187.0	67.0	-----	254.0	-----	-----	-----	-----	
1932.....	-----	-----	134.0	134.0	118.0	16.0	-----	134.0	-----	-----	-----	-----	
1933.....	-----	-----	93.0	93.0	76.0	17.0	-----	93.0	-----	-----	-----	-----	
1934.....	-----	-----	126.0	126.0	109.0	17.0	-----	126.0	-----	-----	-----	-----	
1935.....	-----	-----	221.0	215.7	182.2	33.5	-----	215.7	13.2	-----	20.6	-----	
1936.....	-----	-----	319.0	304.2	238.5	65.7	-----	304.2	48.8	-----	47.8	-----	
1937.....	-----	-----	336.0	332.4	265.8	66.6	-----	332.4	57.0	-----	49.8	-----	
1938.....	-----	-----	406.0	399.3	316.4	82.9	-----	399.3	106.8	-----	131.1	-----	
1939.....	-----	-----	515.0	458.4	373.0	85.4	-----	458.4	144.7	-----	179.8	-----	
1940.....	-----	-----	602.6	529.6	447.6	82.0	-----	529.6	176.6	-----	231.2	-----	
1941.....	-----	-----	706.1	619.5	533.2	86.3	-----	619.5	217.1	-----	288.5	-----	
1942.....	-----	-----	356.0	301.2	252.3	48.9	-----	301.2	160.2	-----	238.5	-----	
1943.....	-----	-----	191.0	183.7	136.3	47.4	-----	183.7	126.1	-----	144.4	-----	
1944.....	-----	-----	141.8	138.7	114.6	24.1	-----	138.7	83.6	-----	62.9	-----	
1945.....	-----	-----	209.3	208.1	184.6	23.5	-----	208.1	38.9	8.8	56.6	(²)	
1946.....	-----	-----	670.5	662.5	590.0	72.5	-----	662.5	67.1	91.8	121.7	(²)	
1947.....	-----	-----	849.0	845.6	740.2	105.4	-----	845.6	178.3	160.3	286.4	(²)	
1948.....	-----	-----	931.6	913.5	763.2	150.3	-----	913.5	216.4	71.1	293.2	(²)	
1949.....	-----	-----	1,025.1	988.8	792.4	196.4	-----	988.8	252.6	90.8	327.0	(²)	
1950.....	-----	-----	1,396.0	1,352.2	1,150.7	201.5	-----	1,352.2	328.2	191.2	397.7	(²)	
1951.....	-----	-----	1,091.3	1,020.1	892.2	127.9	-----	1,020.1	186.9	148.6	192.8	164.4	
1952.....	-----	-----	1,127.0	1,068.5	939.1	129.4	-----	1,068.5	229.1	141.3	267.9	226.3	
1953.....	-----	-----	1,103.8	1,058.3	932.8	135.5	-----	1,058.3	216.5	156.5	253.7	251.4	
1954.....	-----	-----	1,220.4	1,201.7	1,077.3	124.4	-----	1,201.7	250.9	307.0	1,056.5	338.6	
1955.....	-----	-----	1,328.9	1,309.5	1,190.0	119.5	-----	1,309.5	268.7	392.9	1,152.6	306.2	
1956.....	-----	-----	1,118.1	1,093.9	980.7	113.2	-----	1,093.9	183.4	270.7	921.9	197.7	
1957.....	-----	-----	1,041.9	992.8	840.2	152.6	-----	992.8	150.1	128.3	820.3	196.8	
1958.....	-----	-----	1,209.4	1,141.5	932.5	209.0	-----	1,141.5	270.3	102.1	950.8	341.7	
1959.....	-----	-----	1,378.5	1,342.8	1,078.5	264.3	-----	1,342.8	307.0	109.3	1,081.1	369.7	
	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	
1959.....	1,553.5	1,516.8	1,531.3	1,494.6	1,211.9	282.7	1,516.8	1,494.6	307.0	109.3	1,208.3	369.7	234.0
1960.....	1,296.0	1,252.1	1,274.0	1,230.1	972.3	257.4	1,252.1	1,230.1	225.7	74.6	998.0	242.4	142.9
1961.....	1,365.0	1,313.0	1,336.8	1,284.8	946.4	338.6	1,313.0	1,284.8	198.8	83.3	1,064.2	243.8	177.8
1962.....	1,492.4	1,462.8	1,468.7	1,439.1	967.8	471.3	1,462.8	1,439.1	197.3	77.8	1,186.6	221.1	171.2
1963 ⁴	1,619.2	1,588.6	1,591.7	1,561.0	985.0	576.0	1,588.6	1,561.0	166.2	71.0	1,284.6	190.2	139.3

See footnotes at end of table.

TABLE C-38.—*New housing starts and applications for financing, 1929-63—Continued*

(Thousands of units)

Year or month	Housing starts										New private housing units authorized	Proposed home construction ²	
	Total private and public (including farm) ¹	Total private (including farm)	Private and public nonfarm	Private nonfarm			Total private (including farm)	Private nonfarm		Applications for FHA commitments		Requests for VA appraisals	
				Total ¹	One-family	Two or more families		Total	Government home programs				
									FHA				VA
Seasonally adjusted annual rates													
1962:													
January	83.6	81.2	82.3	79.9	53.0	26.8	1,423	1,392	214	69	1,122	233	196
February	78.5	77.1	77.4	76.0	52.1	23.9	1,272	1,253	228	95	1,198	239	169
March	118.1	116.2	116.5	114.6	78.5	36.3	1,483	1,460	214	87	1,146	246	208
April	152.5	147.8	150.3	145.6	99.0	46.6	1,511	1,489	228	94	1,216	240	167
May	157.6	155.2	156.2	153.8	106.5	47.2	1,514	1,501	204	87	1,131	229	172
June	140.2	136.8	137.7	134.3	93.3	40.9	1,392	1,366	189	77	1,168	216	147
July	140.0	136.5	138.1	134.6	93.1	41.6	1,442	1,423	205	74	1,185	221	184
August	149.5	147.7	146.4	144.6	98.7	46.0	1,486	1,459	190	72	1,160	195	148
September	117.0	114.3	114.4	111.7	73.0	38.7	1,356	1,328	178	70	1,202	191	158
October	138.0	135.2	134.1	131.3	88.1	43.2	1,537	1,491	173	70	1,195	207	176
November	122.5	120.9	121.4	119.8	77.6	42.2	1,579	1,564	183	72	1,254	207	168
December	94.9	93.9	93.9	92.9	54.9	37.9	1,562	1,541	176	75	1,248	199	172
1963:													
January	83.3	80.6	82.2	79.5	46.2	33.3	1,344	1,317	172	74	1,200	203	161
February	87.6	86.5	86.1	85.0	50.9	34.2	1,380	1,353	164	78	1,193	197	150
March	128.1	124.4	126.3	122.6	78.8	43.8	1,575	1,549	173	73	1,232	197	152
April	160.3	158.2	157.5	155.4	102.8	52.5	1,618	1,590	176	83	1,214	251	119
May	169.5	166.4	166.3	163.2	103.9	59.4	1,618	1,590	180	79	1,285	160	152
June	157.3	153.4	155.5	151.6	98.3	53.3	1,571	1,554	179	72	1,315	195	123
July	152.3	150.2	150.7	148.6	96.5	52.0	1,588	1,573	164	72	1,256	182	122
August	147.9	144.4	145.5	142.0	93.4	48.5	1,455	1,434	151	63	1,215	172	133
September	147.3	145.3	144.1	142.1	89.7	52.4	1,732	1,697	159	62	1,319	173	140
October	166.1	163.1	162.8	159.8	98.8	58.4	1,847	1,807	158	62	1,367	176	140
November	120.6	118.8	118.2	116.4	69.6	44.7	1,556	1,525	153	67	1,321	190	145
December	98.9	97.3	96.5	94.9	-----	-----	1,597	1,548	157	73	1,434	183	159

¹ Military housing starts, including those financed with mortgages insured by FHA under Section 803 of the National Housing Act, are included in publicly financed starts but excluded from total private starts and from FHA starts.

² Units in mortgage applications or appraisal requests for new home construction.

³ FHA program approved in June 1934; all 1934 activity included in 1935.

⁴ Monthly estimates for September 1945-May 1950 were prepared by Housing and Home Finance Agency.

⁵ Not available.

⁶ Preliminary; data for 1963 partly estimated by Council of Economic Advisers.

⁷ Preliminary data; not comparable with total.

*New series; see *Housing Starts*, C20-11 (Supplement), May 1960 and C20-50, August 1963, Bureau of the Census, for detailed description.

NOTE.—Census series beginning with the new series in 1959 include Alaska and Hawaii. FHA and VA data include Alaska, Hawaii, and Puerto Rico.

Sources: Department of Commerce, Federal Housing Administration (FHA), and Veterans Administration (VA), except as noted.

TABLE C-39.—Sales and inventories in manufacturing and trade, 1947-63

[Amounts in millions of dollars]

Year or month	Total manufacturing and trade ¹			Manufacturing			Merchant wholesalers ¹			Retail trade		
	Sales ²	Inventories ³	Ratio ⁴	Sales ²	Inventories ³	Ratio ⁴	Sales ²	Inventories ³	Ratio ⁴	Sales ²	Inventories ³	Ratio ⁴
1947-----				15,500	25,897	1.68				10,200	14,241	1.26
1948-----	35,411	51,995	1.41	18,105	28,543	1.50	6,171	7,445	1.18	11,135	16,007	1.39
1949-----	33,115	48,925	1.54	16,092	26,321	1.75	5,874	7,134	1.24	11,149	15,470	1.41
1950-----	37,853	59,022	1.37	18,620	31,078	1.48	6,965	8,484	1.07	12,268	19,460	1.38
1951-----	42,470	69,519	1.57	21,702	39,306	1.66	7,722	9,163	1.19	13,046	21,050	1.64
1952-----	43,953	71,488	1.59	22,581	41,136	1.78	7,843	9,321	1.16	13,529	21,031	1.52
1953-----	47,080	75,167	1.59	24,823	43,948	1.76	8,166	9,731	1.19	14,091	21,488	1.53
1954-----	45,570	72,066	1.61	23,351	41,612	1.81	8,124	9,528	1.19	14,095	20,926	1.51
1955-----	50,883	78,595	1.47	26,486	45,069	1.62	9,076	10,757	1.11	15,321	22,769	1.43
1956-----	53,240	86,018	1.55	27,740	50,642	1.73	9,689	11,974	1.18	15,811	23,402	1.47
1957-----	55,014	88,100	1.59	28,736	51,871	1.80	9,611	11,778	1.22	16,667	24,451	1.44
1958-----	53,404	85,940	1.60	27,280	50,070	1.84	9,428	11,757	1.23	16,696	24,113	1.43
1959-----	58,646	90,823	1.51	30,219	52,707	1.70	10,477	12,811	1.18	17,951	25,305	1.40
1960 ⁵ -----	59,557	93,512	1.57	30,796	53,814	1.76	10,466	12,885	1.25	18,294	26,813	1.45
1961 ⁶ -----	59,756	94,456	1.55	30,884	55,087	1.74	10,638	13,131	1.21	18,234	26,238	1.43
1962-----	64,107	99,272	1.51	33,308	57,753	1.70	11,187	13,581	1.18	19,613	27,938	1.38
1963 ⁷ -----	66,916	102,512	1.50	34,717	59,727	1.69	11,613	14,245	1.19	20,586	28,540	1.37
Seasonally adjusted												
1962:												
January-----	62,995	94,814	1.51	32,937	55,396	1.68	11,068	13,086	1.18	18,990	26,332	1.39
February-----	63,217	95,365	1.51	33,044	55,695	1.69	11,034	13,135	1.19	19,139	26,535	1.39
March-----	63,942	95,805	1.50	33,643	56,003	1.66	10,979	13,126	1.20	19,320	26,676	1.38
April-----	64,239	95,951	1.49	33,663	56,075	1.67	11,187	13,083	1.17	19,389	26,793	1.38
May-----	64,180	96,505	1.50	33,476	56,435	1.69	11,119	13,105	1.18	19,585	26,965	1.38
June-----	63,423	96,987	1.53	33,046	56,060	1.71	11,066	13,206	1.19	19,311	27,121	1.40
July-----	64,185	97,337	1.52	33,329	56,875	1.71	11,198	13,176	1.18	19,658	27,286	1.39
August-----	64,287	97,617	1.52	33,462	57,035	1.70	11,154	13,252	1.19	19,671	27,330	1.39
September-----	64,414	98,208	1.52	33,167	57,316	1.73	11,403	13,399	1.18	19,844	27,493	1.39
October-----	64,312	98,664	1.53	33,241	57,442	1.73	11,234	13,475	1.20	19,837	27,747	1.40
November-----	65,171	98,774	1.52	33,673	57,608	1.71	11,386	13,437	1.18	20,112	27,729	1.38
December-----	64,653	99,272	1.54	32,945	57,753	1.75	11,455	13,581	1.19	20,253	27,938	1.38
1963:												
January-----	65,212	99,378	1.52	33,542	57,883	1.73	11,283	13,493	1.20	20,387	28,002	1.37
February-----	66,036	99,588	1.51	34,114	58,021	1.70	11,548	13,542	1.17	20,374	28,025	1.38
March-----	66,213	99,765	1.51	34,244	58,126	1.70	11,619	13,573	1.17	20,350	28,066	1.38
April-----	66,326	99,963	1.51	34,578	58,309	1.69	11,472	13,593	1.18	20,276	28,061	1.38
May-----	66,511	100,295	1.51	34,836	58,507	1.68	11,475	13,726	1.20	20,200	28,062	1.39
June-----	67,090	100,610	1.50	34,942	58,706	1.68	11,662	13,780	1.18	20,486	28,124	1.37
July-----	68,066	100,974	1.48	35,641	58,884	1.65	11,706	13,831	1.18	20,719	28,259	1.36
August-----	67,072	101,017	1.51	34,736	58,917	1.70	11,670	13,952	1.20	20,666	28,148	1.36
September-----	67,048	101,356	1.51	34,672	59,087	1.70	11,950	14,122	1.18	20,426	28,147	1.38
October-----	67,921	101,897	1.50	35,214	59,322	1.68	11,991	14,202	1.18	20,716	28,373	1.37
November ⁸ -----	67,441	102,512	1.52	35,162	59,727	1.70	11,657	14,245	1.22	20,622	28,540	1.38
December ⁹ -----										21,548		

¹ Excludes merchant wholesalers of farm products, raw materials.² Monthly average shown for year and total for month.³ Seasonally adjusted, end of period.⁴ Inventory/sales ratio. For annual periods, ratio of weighted average inventories to average monthly sales; for monthly data, ratio of inventories at end of month to sales for month.⁵ Beginning January 1960, retail sales and inventories include data for Alaska and Hawaii.⁶ Beginning January 1961, wholesale sales and inventories include data for Alaska and Hawaii.⁷ Where December data not available, data for year calculated on basis of no change from November.⁸ Preliminary.

NOTE.—The inventory figures in this table do not agree with the estimates of change in business inventories included in the gross national product since these figures cover only manufacturing and trade rather than all business, and show inventories in terms of current book value without adjustment for revaluation.

Source: Department of Commerce.

TABLE C-40.—*Manufacturers' sales, inventories, and orders, 1947-63*
(Billions of dollars)

Year or month	Sales ¹		Inventories ²						New orders ¹			
	Durable goods industries	Non-durable goods industries	Durable goods industries			Nondurable goods industries			Total	Durable goods industries	Non-durable goods industries	Un-filled orders ³
			Materials and supplies	Work in process	Finished goods	Materials and supplies	Work in process	Finished goods				
1947	6,683	8,817	-----	-----	-----	-----	-----	-----	15,256	6,388	8,868	34,266
1948	8,337	9,768	-----	-----	-----	-----	-----	-----	17,692	8,126	9,566	30,552
1949	7,167	8,925	-----	-----	-----	-----	-----	-----	15,614	6,633	8,981	28,877
1950	8,835	9,785	-----	-----	-----	-----	-----	-----	20,110	10,165	9,945	41,166
1951	10,483	11,219	-----	-----	-----	-----	-----	-----	23,907	12,841	11,066	66,862
1952	11,338	11,243	-----	-----	-----	-----	-----	-----	23,203	12,061	11,142	75,478
1953	13,335	11,488	8,966	10,720	6,206	8,317	2,472	7,409	23,533	12,105	11,428	60,346
1954	11,827	11,524	7,894	9,721	6,040	8,167	2,440	7,415	22,313	10,743	11,570	48,195
1955	14,080	12,406	9,194	10,756	6,348	8,556	2,571	7,666	27,423	14,954	12,469	60,044
1956	14,715	13,025	10,417	12,317	7,565	8,971	2,721	8,622	28,383	15,381	13,002	67,473
1957	15,237	13,499	10,608	12,837	8,125	8,775	2,864	8,624	27,514	14,073	13,441	53,251
1958	13,572	13,708	9,847	12,294	7,749	8,671	2,800	8,498	26,901	13,170	13,731	48,785
1959	15,544	14,675	10,585	12,932	8,143	9,089	2,928	8,857	30,679	15,951	14,728	54,101
1960	15,817	14,979	10,286	12,780	9,190	9,113	2,935	9,353	30,115	15,223	14,892	45,820
1961	15,532	15,352	10,234	13,225	9,088	9,511	3,120	9,707	31,061	15,664	15,397	47,863
1962	17,184	16,124	10,571	14,129	9,593	9,770	3,304	10,246	33,167	17,085	16,082	46,242
1963 ⁴	18,065	16,652	10,881	14,623	10,156	9,794	3,456	10,817	35,049	18,349	16,700	49,688
Seasonally adjusted												
1962:												
January	17,027	15,910	10,319	13,352	9,194	9,587	3,122	9,790	33,558	17,699	15,859	48,951
February	17,123	15,921	10,485	13,555	9,203	9,668	3,163	9,870	33,597	17,703	15,894	49,546
March	17,578	16,065	10,642	13,652	9,257	9,735	3,221	9,892	33,204	17,150	16,054	48,880
April	17,505	16,158	10,728	13,664	9,307	9,712	3,213	9,869	33,167	17,019	16,148	48,538
May	17,401	16,075	10,773	13,697	9,308	9,745	3,225	9,993	33,297	17,215	16,082	48,064
June	16,937	16,109	10,787	13,742	9,340	9,754	3,242	10,034	32,586	16,648	15,938	47,596
July	17,167	16,162	10,719	13,786	9,397	9,623	3,249	10,105	32,997	16,910	16,087	47,291
August	17,325	16,137	10,665	13,868	9,420	9,649	3,284	10,102	32,809	16,592	16,217	46,730
September	16,993	16,174	10,696	13,955	9,457	9,765	3,303	10,196	32,633	16,547	16,096	46,338
October	17,119	16,122	10,636	14,055	9,507	9,806	3,312	10,212	33,400	17,288	16,112	46,479
November	17,162	16,511	10,603	14,126	9,558	9,877	3,291	10,201	33,165	16,732	16,433	45,972
December	16,832	16,113	10,571	14,129	9,593	9,770	3,304	10,246	33,355	17,330	16,025	46,784
1963:												
January	17,301	16,241	10,555	14,173	9,650	9,858	3,383	10,211	34,742	18,466	16,276	47,809
February	17,636	16,478	10,521	14,156	9,687	9,886	3,373	10,250	34,636	18,228	16,408	48,424
March	17,622	16,622	10,558	14,213	9,752	9,837	3,380	10,284	35,364	18,776	16,688	49,353
April	17,892	16,686	10,646	14,349	9,758	9,805	3,389	10,300	35,752	19,037	16,715	50,246
May	18,112	16,724	10,679	14,602	9,805	9,726	3,389	10,320	35,438	18,736	16,702	50,565
June	18,242	16,700	10,766	14,629	9,847	9,679	3,328	10,452	34,425	17,682	16,743	50,052
July	18,746	16,895	10,810	14,740	9,852	9,718	3,354	10,559	35,207	18,275	16,932	49,542
August	18,160	16,576	10,981	14,591	9,949	9,694	3,364	10,648	33,938	17,068	16,870	49,552
September	17,937	16,735	10,917	14,579	10,040	9,660	3,347	10,544	34,991	18,244	16,747	49,982
October	18,590	16,624	10,878	14,639	10,064	9,844	3,344	10,553	35,354	18,622	16,732	50,140
November ⁵	18,348	16,814	10,881	14,623	10,156	9,794	3,456	10,817	35,144	18,146	16,998	50,127

¹ Monthly average for year and total for month.

² Book value, seasonally adjusted, end of period.

³ End of period.

⁴ Based on data through November.

⁵ Preliminary.

NOTE.—See Table C-39 for total sales and inventories of manufacturers.

Source: Department of Commerce.

PRICES

TABLE C-41.—*Wholesale price indexes, 1929-63*

[1957-59=100]

Year or month,	All commodities	Farm products	Processed foods	All commodities other than farm products and foods (industrials)				
				Total	Textile products and apparel	Chemicals and allied products	Rubber and rubber products	Lumber and wood products
1929.....	52.1	63.9	54.3	51.7	67.8	(*)	57.6	26.4
1930.....	47.3	54.0	49.5	48.1	60.3	(*)	50.4	24.1
1931.....	39.9	39.6	41.6	42.4	49.8	(*)	42.8	19.6
1932.....	35.6	29.4	33.9	39.7	41.2	(*)	37.1	16.9
1933.....	36.1	31.3	33.7	40.2	48.6	46.6	39.0	20.0
1934.....	41.0	39.9	39.6	44.2	54.7	48.8	45.5	23.5
1935.....	43.8	48.0	48.3	44.0	53.3	50.9	45.8	22.6
1936.....	44.2	49.4	46.4	44.9	53.7	51.2	49.4	23.6
1937.....	47.2	52.7	48.6	48.1	57.3	53.6	58.1	27.9
1938.....	43.0	41.9	42.3	46.1	50.1	51.0	57.1	25.4
1939.....	42.2	39.9	40.2	46.0	52.3	50.7	59.3	26.1
1940.....	43.0	41.3	40.4	46.8	55.4	51.6	55.3	28.9
1941.....	47.8	50.1	46.7	50.3	63.7	56.1	59.6	34.5
1942.....	54.0	64.6	54.8	53.9	72.8	62.3	69.4	37.5
1943.....	56.5	74.8	57.2	54.7	73.1	63.1	71.3	39.7
1944.....	56.9	75.3	56.0	55.6	73.9	63.8	70.4	42.8
1945.....	57.9	78.3	56.4	56.3	75.1	64.2	68.3	43.4
1946.....	66.1	90.6	71.7	61.7	87.3	69.4	68.6	49.7
1947.....	81.2	109.1	91.1	75.3	105.7	92.2	68.3	77.4
1948.....	87.9	117.1	98.4	81.7	110.3	94.4	70.5	88.5
1949.....	83.5	101.3	88.8	80.0	100.9	86.2	68.3	81.9
1950.....	86.8	106.4	92.6	82.9	104.8	87.5	83.2	94.1
1951.....	96.7	123.8	103.3	91.5	116.9	100.1	102.1	102.5
1952.....	94.0	116.8	100.9	89.4	105.5	95.0	92.5	99.5
1953.....	92.7	105.9	97.0	90.1	102.8	96.1	86.3	99.4
1954.....	92.9	104.4	97.6	90.4	100.6	97.3	87.6	97.6
1955.....	93.2	97.9	94.3	92.4	100.7	96.9	99.2	102.3
1956.....	96.2	96.6	94.3	96.5	100.7	97.5	100.6	103.8
1957.....	99.0	99.2	97.9	99.2	100.8	99.6	100.2	98.5
1958.....	100.4	103.6	102.9	99.5	98.9	100.4	100.1	97.4
1959.....	100.6	97.2	99.2	101.3	100.4	100.0	99.7	104.1
1960.....	100.7	96.9	100.0	101.3	101.5	100.2	99.9	100.4
1961.....	100.3	96.0	100.7	100.8	99.7	99.1	96.1	95.9
1962.....	100.6	97.7	101.2	100.8	100.6	97.5	93.3	96.5
1963 ¹	100.3	95.7	101.1	100.7	100.5	96.3	93.8	98.6
1962: January.....	100.8	97.9	102.0	101.0	100.3	98.4	94.1	94.7
February.....	100.7	98.2	101.8	100.8	100.4	98.1	93.5	95.2
March.....	100.7	98.4	101.6	100.8	100.5	98.0	93.6	96.2
April.....	100.4	96.9	100.2	100.9	100.5	97.9	92.9	96.8
May.....	100.2	96.2	99.6	100.9	100.7	97.7	93.2	97.1
June.....	100.0	95.3	99.8	100.7	100.8	97.6	93.0	97.3
July.....	100.4	96.5	100.8	100.8	100.9	97.2	92.7	97.5
August.....	100.5	97.6	101.5	100.6	100.8	97.0	92.7	97.4
September.....	101.2	100.6	103.3	100.8	100.6	96.9	92.8	97.0
October.....	100.6	98.7	101.5	100.7	100.5	97.1	93.1	96.6
November.....	100.7	99.3	101.3	100.7	100.5	97.0	93.7	96.3
December.....	100.4	97.3	100.9	100.7	100.6	96.8	94.4	95.8
1963: January.....	100.5	98.5	100.8	100.7	100.4	96.9	94.3	95.9
February.....	100.2	96.5	100.5	100.6	100.3	96.7	94.2	96.1
March.....	99.9	95.4	99.0	100.6	100.2	96.8	94.1	96.5
April.....	99.7	95.4	99.3	100.4	100.1	96.3	94.1	97.0
May.....	100.0	94.4	101.7	100.5	100.2	96.4	93.2	97.5
June.....	100.3	94.9	102.4	100.7	100.3	96.3	93.1	98.3
July.....	100.6	96.8	102.2	100.8	100.4	96.0	93.0	101.6
August.....	100.4	96.3	100.9	100.8	100.4	96.0	93.7	102.6
September.....	100.3	95.5	100.9	100.7	100.5	96.0	93.4	99.9
October.....	100.5	95.1	102.2	100.9	100.7	96.2	94.2	99.2
November.....	100.7	96.2	102.5	100.9	101.1	96.3	94.2	99.2
December ¹	100.3	93.3	100.4	101.2	101.2	96.2	93.8	99.1

See footnotes at end of table.

TABLE C-41.—*Wholesale price indexes, 1929-63—Continued*

[1957-59=100]

Year or month	All commodities other than farm products and foods (industrials)— <i>continued</i>								
	Hides, skins, leather, and leather products	Fuels and related products, and power ¹	Pulp, paper, and allied products	Metals and metal products	Machinery and motive products	Furniture and other household durables	Nonmetallic mineral products ²	Tobacco products and bottled beverages ³	Miscellaneous products
1929.....	56.6	61.5	(⁴)	44.1	(⁴)	56.4	53.4	67.4	(⁴)
1930.....	52.0	58.2	(⁴)	39.7	(⁴)	55.5	53.2	67.8	(⁴)
1931.....	44.7	50.0	(⁴)	35.7	(⁴)	51.1	49.7	67.2	(⁴)
1932.....	38.0	52.1	(⁴)	32.8	(⁴)	45.0	46.5	63.3	(⁴)
1933.....	42.0	49.3	(⁴)	33.6	(⁴)	45.1	49.2	56.6	(⁴)
1934.....	44.9	54.3	(⁴)	37.1	(⁴)	49.0	52.6	59.2	(⁴)
1935.....	46.5	54.5	(⁴)	37.0	(⁴)	48.6	52.6	59.1	(⁴)
1936.....	49.5	56.5	(⁴)	37.8	(⁴)	49.3	52.7	59.0	(⁴)
1937.....	54.3	57.5	(⁴)	43.2	(⁴)	54.7	53.9	59.5	(⁴)
1938.....	48.2	56.6	(⁴)	41.6	(⁴)	53.4	52.2	59.4	(⁴)
1939.....	49.6	54.2	(⁴)	41.2	43.7	53.2	51.2	59.4	(⁴)
1940.....	52.3	53.2	(⁴)	41.4	44.2	54.4	51.2	60.1	(⁴)
1941.....	56.1	56.6	(⁴)	42.2	45.8	57.8	52.4	60.8	(⁴)
1942.....	61.1	58.2	(⁴)	42.8	47.7	62.5	54.5	61.5	(⁴)
1943.....	61.0	59.9	(⁴)	42.7	47.4	62.1	54.7	64.6	(⁴)
1944.....	60.5	61.6	(⁴)	42.7	47.4	63.8	55.8	64.9	(⁴)
1945.....	61.3	62.3	(⁴)	43.4	47.8	63.9	58.1	66.7	(⁴)
1946.....	70.7	66.7	(⁴)	48.5	53.6	67.8	61.8	69.8	(⁴)
1947.....	96.5	79.7	75.3	60.2	61.8	77.8	69.1	75.6	108.7
1948.....	97.5	93.8	78.6	68.5	67.5	82.5	74.7	78.2	111.2
1949.....	92.5	89.3	75.2	69.0	71.2	83.8	76.7	79.6	103.5
1950.....	99.9	90.2	77.1	72.7	72.6	85.6	78.6	80.5	104.1
1951.....	114.8	93.5	91.3	80.9	79.5	92.8	83.5	85.1	113.1
1952.....	92.8	93.3	89.0	81.0	81.2	91.1	83.5	87.0	116.7
1953.....	94.1	95.9	88.7	83.6	82.2	92.9	86.9	89.8	105.4
1954.....	89.9	94.6	88.8	84.3	83.2	93.9	88.8	93.8	110.5
1955.....	89.5	94.5	91.1	90.0	85.8	94.3	91.3	94.6	99.1
1956.....	94.8	97.4	97.2	97.8	92.1	96.9	95.2	95.1	98.1
1957.....	94.9	102.7	99.0	99.7	97.7	99.4	98.9	98.0	96.6
1958.....	96.0	98.7	100.1	99.1	100.1	100.2	99.9	99.7	101.5
1959.....	109.1	98.7	101.0	101.2	102.2	100.4	101.2	102.2	101.9
1960.....	105.2	99.6	101.8	101.3	102.4	100.1	101.4	102.5	99.3
1961.....	106.2	100.7	98.8	100.7	102.3	99.5	101.8	103.2	103.9
1962.....	107.4	100.2	100.0	100.0	102.3	98.8	101.8	104.1	107.3
1963.....	104.2	99.8	99.2	100.1	102.2	98.1	101.3	106.1	110.4
1962: January.....	108.2	101.0	99.9	100.7	102.3	99.3	101.9	103.8	106.7
February.....	107.7	100.4	99.9	100.6	102.3	99.1	102.1	103.8	105.6
March.....	107.4	98.9	101.0	100.4	102.3	99.0	102.2	104.0	105.6
April.....	106.9	100.2	101.3	100.3	102.3	98.9	102.4	104.0	106.0
May.....	107.2	99.7	100.8	100.2	102.3	99.0	102.1	104.1	106.0
June.....	108.0	99.6	100.5	99.8	102.4	98.9	101.9	104.1	105.4
July.....	107.5	100.0	100.0	99.7	102.3	98.8	101.6	104.0	107.6
August.....	107.0	99.5	99.7	99.8	102.3	98.7	101.6	104.2	107.2
September.....	107.5	100.8	99.5	99.7	102.3	98.6	101.5	104.2	109.1
October.....	107.4	100.8	99.3	99.4	102.4	98.5	101.6	104.5	108.7
November.....	107.3	100.7	99.1	99.3	102.2	98.6	101.6	104.5	109.8
December.....	106.9	100.8	99.0	99.3	102.3	98.4	101.5	104.3	110.2
1963: January.....	106.0	100.4	99.0	99.5	102.3	98.3	101.4	104.3	111.6
February.....	105.1	100.3	99.1	99.4	102.2	98.2	101.5	104.3	111.5
March.....	105.1	100.8	99.0	99.4	102.0	98.2	101.5	104.3	110.8
April.....	104.5	100.3	99.0	99.4	101.9	98.1	101.5	104.4	108.0
May.....	104.8	100.4	99.1	99.9	102.0	98.0	101.3	105.2	107.6
June.....	104.5	100.9	99.4	100.0	102.0	98.1	101.2	105.8	108.1
July.....	104.3	100.4	99.0	100.0	102.1	98.0	100.9	107.5	110.4
August.....	103.6	98.9	99.1	100.1	102.1	98.1	101.0	107.5	111.1
September.....	103.1	99.0	99.1	100.3	102.2	98.1	101.1	107.5	111.8
October.....	103.4	98.8	99.5	100.9	102.3	98.1	101.3	107.5	111.2
November.....	103.5	97.9	99.4	101.0	102.5	98.1	101.2	107.5	110.9
December.....	102.9	99.3	99.4	101.3	102.6	98.0	101.3	107.5	112.2

¹ Formerly titled "Fuel, power, and lighting materials."² Formerly titled "Nonmetallic minerals—structural."³ Formerly titled "Tobacco manufactures and bottled beverages."⁴ Not available.⁵ Preliminary.

Source: Department of Labor.

TABLE C-42.—Wholesale price indexes, by stage of processing, 1947-63

[1957-59=100]

Year or month	All commodities	Crude materials				Intermediate materials, supplies, and components ¹						
		Total	Food-stuffs and feed-stuffs	Non-food materials, except fuel	Fuel	Total	Materials and components for manufacturing					Materials and components for construction
							Total	Materials for food manufacturing	Materials for non-durable manufacturing	Materials for durable manufacturing	Components for manufacturing	
1947.....	81.2	100.8	113.0	86.5	73.6	76.5	75.5	102.6	94.0	58.8	63.0	69.6
1948.....	87.9	110.5	122.2	96.2	87.0	82.7	81.5	105.8	99.5	66.4	68.0	77.0
1949.....	83.5	95.6	101.5	87.5	86.5	79.4	78.0	91.0	90.7	68.2	69.3	77.2
1950.....	86.8	104.2	108.9	100.0	86.1	83.0	81.8	94.7	95.2	72.1	71.9	81.2
1951.....	96.7	119.6	126.0	115.3	87.7	93.0	92.7	105.5	110.3	80.1	81.6	88.8
1952.....	94.0	109.9	118.6	99.9	88.3	90.3	88.8	101.4	99.3	80.3	81.8	88.2
1953.....	92.7	101.5	106.2	95.6	91.4	90.8	90.2	101.6	98.5	83.9	83.3	89.7
1954.....	92.9	100.6	106.2	93.8	87.3	91.3	90.4	100.7	96.9	85.7	83.7	90.1
1955.....	93.2	96.7	96.2	99.1	87.1	93.0	92.6	97.5	97.3	90.0	87.4	93.7
1956.....	96.2	97.2	94.2	102.8	93.3	97.1	96.9	97.9	98.8	95.7	95.4	98.5
1957.....	99.0	99.4	98.4	101.4	98.6	99.4	99.3	99.7	100.1	98.8	99.1	99.1
1958.....	100.4	101.6	104.2	97.6	99.8	99.6	99.7	102.0	99.1	99.5	99.9	99.9
1959.....	100.6	99.0	97.4	101.0	101.6	101.0	101.0	98.3	100.8	101.8	101.1	101.8
1960.....	100.7	96.6	96.2	96.8	102.5	101.0	101.0	99.5	100.8	101.9	100.6	101.1
1961.....	100.3	96.1	94.9	97.9	102.3	100.3	99.8	102.6	98.6	100.5	99.6	99.7
1962.....	100.6	97.1	96.8	97.4	101.8	100.2	99.2	100.5	98.0	100.4	98.8	99.3
1963 *.....	100.3	95.0	94.0	96.2	103.0	100.5	99.4	105.5	97.1	100.5	98.8	99.5
1962:												
January.....	100.8	97.8	96.7	99.5	102.7	100.3	99.5	102.2	98.4	100.3	99.1	99.2
February.....	100.7	97.5	96.3	99.3	104.0	100.2	99.4	101.9	98.2	100.4	99.0	99.4
March.....	100.7	97.6	96.9	98.7	103.1	100.3	99.5	101.5	98.3	100.6	99.1	99.7
April.....	100.4	96.5	95.5	98.3	99.7	100.5	99.4	100.4	98.5	100.7	98.9	99.8
May.....	100.2	95.8	94.7	97.9	99.6	100.4	99.3	99.6	98.4	100.7	98.8	99.7
June.....	100.0	95.2	94.0	97.3	98.7	100.2	99.3	99.5	98.3	100.6	98.9	99.5
July.....	100.4	96.5	96.0	97.0	101.0	100.3	99.2	99.4	98.1	100.6	98.7	99.3
August.....	100.5	97.2	97.4	96.6	100.6	100.1	99.1	99.8	97.8	100.5	98.7	99.3
September.....	101.2	99.2	100.6	96.3	102.0	100.2	99.0	100.4	97.7	100.4	98.7	99.2
October.....	100.6	97.4	97.9	96.0	103.2	100.1	98.9	100.8	97.6	100.1	98.6	99.1
November.....	100.7	97.6	98.2	95.9	103.4	100.1	98.8	100.2	97.4	100.1	98.6	99.0
December.....	100.4	96.8	97.1	95.8	104.0	100.1	98.7	99.9	97.3	99.9	98.8	98.9
1963:												
January.....	100.5	96.8	97.1	95.8	103.3	100.2	98.8	101.0	97.3	100.0	98.6	98.8
February.....	100.2	95.6	94.7	96.4	105.6	100.1	98.7	101.2	97.2	99.8	98.5	98.9
March.....	99.9	94.5	92.8	96.7	105.4	100.0	98.6	101.2	97.1	99.7	98.2	98.9
April.....	99.7	95.0	93.9	96.5	102.3	99.9	98.8	103.5	97.1	99.6	98.2	99.0
May.....	100.0	94.2	92.8	96.6	100.5	100.5	99.7	110.2	97.1	100.1	98.6	99.2
June.....	100.3	94.8	93.7	96.4	101.0	100.6	99.7	109.8	97.0	100.4	98.7	99.4
July.....	100.6	96.1	96.1	95.9	101.9	100.6	99.4	106.4	96.8	100.8	98.6	100.1
August.....	100.4	95.7	95.4	95.6	102.0	100.5	99.1	102.9	96.6	101.0	98.7	100.4
September.....	100.3	94.8	94.0	95.6	102.9	100.5	99.1	103.7	96.6	100.8	99.0	99.8
October.....	100.5	94.8	93.8	96.1	103.3	100.9	100.1	108.8	97.2	101.3	99.2	100.0
November *.....	100.7	95.1	94.2	96.1	103.7	101.0	100.4	110.6	97.4	101.4	99.4	100.0
December *.....	100.3	92.6	90.1	96.3	104.5	101.1	100.2	107.1	97.5	101.6	99.6	100.1

See footnotes at end of table.

TABLE C-42.—Wholesale price indexes, by stage of processing, 1947-63—Continued

[1957-59=100]

Year or month	Finished goods						Special groups of industrial products		
	Total	Consumer finished goods				Pro- ducer finished goods	Crude mate- rials ¹	Inter- mediate materials, supplies, and com- ponents ²	Con- sumer finished goods ex- cluding foods
		Total	Foods	Other non- durable goods	Du- rable goods				
1947.....	80.1	86.1	90.7	86.5	75.9	61.8	79.2	73.4	83.1
1948.....	86.4	92.6	99.0	92.0	81.1	67.4	92.5	79.8	88.4
1949.....	84.0	88.3	91.0	88.2	83.2	70.7	84.0	77.8	86.5
1950.....	85.5	89.8	92.8	89.6	84.1	72.4	93.6	81.4	87.8
1951.....	93.6	98.2	104.2	96.5	89.7	79.5	102.9	91.2	94.2
1952.....	93.0	97.0	103.3	94.1	90.4	80.8	93.1	88.3	92.9
1953.....	92.1	95.4	97.9	95.0	91.1	82.1	92.4	89.4	93.7
1954.....	92.3	95.3	97.1	95.3	91.8	83.1	88.0	89.8	94.1
1955.....	92.5	94.7	94.7	95.8	92.8	85.6	96.6	92.5	94.8
1956.....	95.1	98.1	94.5	97.7	95.9	92.0	102.3	97.0	97.1
1957.....	98.6	98.9	97.8	99.9	98.7	97.7	100.9	99.6	99.5
1958.....	100.8	101.0	103.5	99.3	100.1	100.2	96.9	99.4	99.6
1959.....	100.6	100.1	98.7	100.8	101.3	102.1	102.3	101.0	100.9
1960.....	101.4	101.1	100.8	101.5	100.9	102.3	98.3	101.4	101.3
1961.....	101.4	100.9	100.4	101.5	100.5	102.5	97.2	100.1	101.2
1962.....	101.7	101.2	101.3	101.6	100.0	102.9	95.6	99.9	101.0
1963 ⁴	101.4	100.7	100.1	101.9	99.5	103.1	94.3	99.6	101.0
1962: January.....	102.1	101.7	101.9	102.0	100.2	102.8	98.5	100.0	101.3
February.....	102.1	101.7	102.3	101.8	100.1	102.8	98.2	99.9	101.1
March.....	101.8	101.3	101.9	101.3	100.0	102.8	97.1	100.0	100.8
April.....	101.4	100.7	100.1	101.6	99.9	102.9	95.8	100.3	101.0
May.....	101.2	100.5	99.5	101.5	100.0	102.9	95.3	100.2	101.0
June.....	101.1	100.4	99.3	101.4	100.0	102.8	94.4	100.1	101.0
July.....	101.5	100.8	100.3	101.5	100.2	103.0	94.4	100.0	101.0
August.....	101.7	101.1	101.3	101.4	100.1	103.0	94.8	99.8	100.9
September.....	102.6	102.3	103.9	101.7	100.1	102.9	95.1	99.8	101.1
October.....	101.9	101.5	101.9	101.8	99.9	102.8	94.8	99.7	101.1
November.....	102.0	101.5	102.1	101.7	100.0	102.9	94.6	99.6	101.1
December.....	101.6	101.0	100.7	101.8	99.9	103.0	94.8	99.5	101.1
1963: January.....	101.8	101.2	101.4	101.7	99.8	103.0	94.7	99.5	101.0
February.....	101.5	100.9	100.4	101.7	99.8	103.0	94.9	99.4	101.0
March.....	101.1	100.3	99.0	101.8	99.7	102.9	94.9	99.3	101.1
April.....	100.8	99.9	98.2	101.6	99.5	102.9	94.3	99.3	100.8
May.....	101.1	100.4	99.4	101.8	99.4	102.9	94.1	99.5	100.9
June.....	101.5	100.8	100.1	102.1	99.3	103.0	93.9	99.7	101.1
July.....	101.8	101.2	101.0	102.3	99.4	103.0	93.9	99.7	101.3
August.....	101.4	100.8	100.3	101.9	99.3	103.0	93.9	99.7	100.9
September.....	101.5	100.8	100.3	101.9	99.4	103.0	93.9	99.6	101.0
October.....	101.6	100.9	100.4	102.0	99.6	103.2	94.4	99.8	101.1
November.....	101.8	101.1	101.1	101.7	99.6	103.4	94.5	99.9	100.9
December ⁴	101.4	100.6	99.3	102.2	99.5	103.5	94.5	100.1	101.2

¹ Includes, in addition to subgroups shown, processed fuels and lubricants, containers, and supplies.² Excludes crude foodstuffs and feedstuffs, plant and animal fibers, oilseeds, and leaf tobacco.³ Excludes intermediate materials for food manufacturing and manufactured animal feeds.⁴ Preliminary.NOTE.—For a listing of the commodities included in each sector, see Table 7B, *Wholesale Prices and Price Indexes*, 1958 (BLS Bulletin 1257).

Source: Department of Labor.

TABLE C-43.—Consumer price indexes, by major groups, 1929-63

For city wage-earner and clerical-worker families

[1957-59 = 100]

Year or month	All items	Food	Housing		Apparel	Transportation	Medical care	Personal care	Reading and recreation	Other goods and services
			Total	Rent						
1929.....	59.7	55.6	(1)	85.4	56.2	(1)	(1)	(1)	(1)	(1)
1930.....	58.2	52.9	(1)	83.1	54.9	(1)	(1)	(1)	(1)	(1)
1931.....	53.0	43.6	(1)	78.7	50.0	(1)	(1)	(1)	(1)	(1)
1932.....	47.6	36.3	(1)	70.6	44.3	(1)	(1)	(1)	(1)	(1)
1933.....	45.1	35.3	(1)	60.8	42.8	(1)	(1)	(1)	(1)	(1)
1934.....	46.6	39.3	(1)	57.0	46.8	(1)	(1)	(1)	(1)	(1)
1935.....	47.8	42.1	56.3	56.9	47.2	49.4	49.4	42.6	50.2	52.7
1936.....	48.3	42.5	57.1	58.3	47.6	49.8	49.6	43.2	51.0	52.6
1937.....	50.0	44.2	59.1	60.9	50.1	50.6	50.0	45.7	52.5	54.0
1938.....	49.1	41.0	60.1	62.9	49.8	51.0	50.2	46.7	54.3	54.5
1939.....	48.4	39.9	59.7	63.0	49.0	49.8	50.2	46.5	54.4	55.4
1940.....	48.8	40.5	59.9	63.2	49.6	49.5	50.3	46.4	55.4	57.1
1941.....	51.3	44.2	61.4	64.3	51.9	51.2	50.6	47.6	57.3	58.2
1942.....	56.8	51.9	64.2	65.7	60.5	55.7	52.0	52.2	60.0	59.9
1943.....	60.3	57.9	64.9	65.7	63.2	55.5	54.5	57.6	65.0	63.0
1944.....	61.3	57.1	66.4	65.9	67.7	55.5	56.2	61.7	72.0	64.7
1945.....	62.7	58.4	67.5	66.1	71.2	55.4	57.5	63.6	75.0	67.3
1946.....	68.0	66.9	69.3	66.5	78.1	58.3	60.7	68.2	77.5	69.5
1947.....	77.8	81.3	74.5	68.7	90.6	64.3	65.7	76.2	82.5	75.4
1948.....	83.8	88.2	79.8	73.2	96.5	71.6	69.8	79.1	86.7	78.9
1949.....	83.0	84.7	81.0	76.4	92.7	77.0	72.0	78.9	89.9	81.2
1950.....	83.8	85.8	83.2	79.1	91.5	79.0	73.4	78.9	89.3	82.6
1951.....	90.5	95.4	88.2	82.3	99.7	84.0	76.9	86.3	92.0	86.1
1952.....	92.5	97.1	89.9	85.7	98.7	89.6	81.1	87.3	92.4	90.6
1953.....	93.2	95.6	92.3	90.3	97.8	92.1	83.9	88.1	93.3	92.8
1954.....	93.6	95.4	93.4	93.5	97.3	90.8	86.6	88.5	92.4	94.3
1955.....	93.3	94.0	94.1	94.8	96.7	89.7	88.6	90.0	92.1	94.3
1956.....	94.7	94.7	95.5	96.5	98.4	91.3	91.8	93.7	93.4	95.8
1957.....	98.0	97.8	98.5	98.3	99.7	96.5	95.5	97.1	96.9	98.5
1958.....	100.7	101.9	100.2	100.1	99.8	99.7	100.1	100.4	100.8	99.8
1959.....	101.5	100.3	101.3	101.6	100.7	103.8	104.4	102.4	102.4	101.8
1960.....	103.1	101.4	103.1	103.1	102.1	103.8	108.1	104.1	104.9	103.8
1961.....	104.2	102.6	103.9	104.4	102.8	105.0	111.3	104.6	107.2	104.6
1962.....	105.4	103.6	104.8	105.7	103.2	107.2	114.2	106.5	109.6	105.3
1963 ¹	106.7	105.0	105.9	106.7	104.1	107.7	116.6	107.8	111.3	107.0
1962: January.....	104.5	102.5	104.4	105.1	101.8	106.0	112.6	105.6	108.5	104.9
February.....	104.8	103.1	104.6	105.2	102.0	106.0	113.0	105.8	109.1	105.0
March.....	105.0	103.2	104.6	105.3	102.7	105.9	113.6	105.9	109.2	105.1
April.....	105.2	103.4	104.6	105.4	102.7	107.2	113.9	106.3	109.4	105.1
May.....	105.2	103.2	104.7	105.5	102.7	107.3	114.1	106.4	109.5	105.1
June.....	105.3	103.5	104.8	105.6	102.8	107.3	114.4	106.1	109.2	105.2
July.....	105.5	103.8	104.8	105.7	102.9	106.8	114.6	106.8	110.0	105.6
August.....	105.5	103.8	104.8	105.8	102.5	107.4	114.6	106.8	110.3	105.5
September.....	106.1	104.8	104.9	105.9	104.6	107.8	114.7	106.8	110.0	105.6
October.....	106.0	104.3	105.0	106.1	104.9	108.1	114.9	106.9	109.5	105.6
November.....	106.0	104.1	105.1	106.2	104.3	108.3	115.0	107.1	110.1	105.6
December.....	105.8	103.5	105.2	106.2	103.9	108.0	115.3	107.6	110.0	105.6
1963: January.....	106.0	104.7	105.4	106.3	103.0	106.6	115.5	107.4	110.2	105.7
February.....	106.1	105.0	105.4	106.4	103.3	106.8	115.6	107.3	110.0	105.7
March.....	106.2	104.6	105.7	106.4	103.6	107.0	115.8	107.3	110.1	105.7
April.....	106.2	104.3	105.8	106.5	103.8	107.0	116.1	107.6	111.0	105.8
May.....	106.2	104.2	105.7	106.6	103.7	107.4	116.4	107.8	110.7	106.0
June.....	106.6	105.0	105.9	106.7	103.9	107.4	116.8	107.8	110.9	107.6
July.....	107.1	106.2	106.0	106.7	103.9	107.8	116.9	108.0	111.5	108.0
August.....	107.1	106.0	106.0	106.8	104.0	108.3	117.1	108.0	112.1	108.0
September.....	107.1	105.4	106.2	107.0	104.8	107.9	117.2	108.2	112.3	108.0
October.....	107.2	104.9	106.3	107.1	105.4	109.0	117.4	108.4	112.7	108.2
November.....	107.4	105.1	106.6	107.2	105.6	109.1	117.5	108.4	112.8	108.3

¹ Not available.² January-November average.

Source: Department of Labor.

TABLE C-44.—Consumer price indexes, by special groups, 1935-63

For city wage-earner and clerical-worker families

[1957-59=100]

Year or month	All items	All items less food	All items less shelter	Commodities					Services		
				All commodities	Food	Commodities less food			All services	Rent	All services less rent
						All	Durables	Non-durables			
1935.....	47.8	52.5	46.1	45.0	42.1	50.4	48.1	48.8	53.2	56.9	50.7
1936.....	48.3	53.0	46.7	45.6	42.5	51.0	48.8	49.2	53.8	58.3	50.4
1937.....	50.0	54.9	48.2	47.4	44.2	53.2	51.9	51.2	55.4	60.9	50.9
1938.....	49.1	55.5	46.8	45.6	41.0	53.2	52.8	50.9	56.5	62.9	51.3
1939.....	48.4	55.1	46.0	44.7	39.9	52.3	51.7	50.1	56.6	63.0	51.3
1940.....	48.8	55.3	46.3	45.1	40.5	52.6	51.3	50.6	56.8	63.2	51.4
1941.....	51.3	56.9	49.1	48.2	44.2	55.2	54.8	52.8	57.5	64.3	52.0
1942.....	56.8	60.9	55.3	55.2	51.9	61.4	62.2	58.4	59.3	65.7	54.3
1943.....	60.3	62.6	59.5	60.1	57.9	64.0	64.3	60.0	60.4	65.7	56.7
1944.....	61.3	65.0	60.5	60.8	57.1	67.5	70.2	64.0	61.9	65.9	59.5
1945.....	62.7	66.5	62.1	62.6	58.4	70.2	75.5	66.3	62.7	66.1	60.7
1946.....	68.0	69.4	68.4	69.4	66.9	74.6	79.0	71.1	63.9	66.5	62.9
1947.....	77.8	75.8	79.4	83.4	81.3	84.2	85.6	81.7	66.5	68.7	66.1
1948.....	83.8	81.3	85.6	89.4	88.2	90.6	91.9	88.0	70.7	73.2	69.9
1949.....	83.0	82.1	84.1	87.1	84.7	89.3	93.2	86.3	74.0	76.4	73.4
1950.....	83.8	83.1	84.7	87.6	85.8	89.2	94.2	86.2	76.4	79.1	75.4
1951.....	90.5	88.4	91.8	95.5	95.4	95.9	101.4	92.7	80.4	82.3	80.0
1952.....	92.5	90.5	93.6	96.7	97.1	96.7	102.7	93.2	84.0	85.7	83.8
1953.....	93.2	92.3	93.9	96.4	95.6	96.8	101.6	94.0	87.5	90.3	87.0
1954.....	93.6	92.8	93.9	95.4	95.4	95.6	97.7	94.4	89.8	93.5	89.1
1955.....	93.3	93.1	93.4	94.4	94.0	94.6	94.9	94.4	91.4	94.8	90.8
1956.....	94.7	94.7	94.7	95.3	94.7	95.9	94.9	96.5	93.4	96.5	92.8
1957.....	98.0	97.9	97.8	98.4	97.8	98.9	98.2	99.1	97.0	98.3	96.7
1958.....	100.7	100.1	100.7	100.7	101.9	99.8	99.7	99.8	100.3	100.1	100.3
1959.....	101.5	102.0	101.5	101.0	100.3	101.3	102.0	101.0	102.7	101.6	102.9
1960.....	103.1	103.7	103.0	101.7	101.4	101.8	100.7	102.6	105.6	103.1	106.1
1961.....	104.2	104.8	104.2	102.4	102.6	102.1	100.5	103.2	107.6	104.4	108.3
1962.....	105.4	106.1	105.4	103.2	103.6	102.8	101.5	103.8	109.5	105.7	110.2
1963 ¹	106.7	107.3	106.6	104.2	105.0	103.4	101.3	104.7	111.3	106.7	112.2
1962: January.....	104.5	105.3	104.4	102.3	102.5	102.0	100.8	102.9	108.7	105.1	109.3
February.....	104.8	105.5	104.8	102.7	103.1	102.2	100.8	103.3	108.9	105.2	109.5
March.....	105.0	105.7	105.0	102.8	103.2	102.4	100.9	103.5	109.0	105.3	109.6
April.....	105.2	106.0	105.2	103.1	103.4	102.8	101.4	103.8	109.2	105.4	109.8
May.....	105.2	106.0	105.2	103.0	103.2	102.6	101.5	103.5	109.4	105.5	110.1
June.....	105.3	106.1	105.3	103.1	103.5	102.6	101.6	103.4	109.5	105.6	110.2
July.....	105.5	106.1	105.4	103.1	103.8	102.5	101.5	103.3	109.8	105.7	110.5
August.....	105.5	106.2	105.5	103.2	103.8	102.6	101.7	103.2	109.9	105.8	110.6
September.....	106.1	106.6	106.1	104.1	104.8	103.4	101.6	104.6	109.8	105.9	110.5
October.....	106.0	106.7	106.1	104.0	104.3	103.6	102.0	104.6	109.8	106.1	110.5
November.....	106.0	106.7	106.0	103.9	104.1	103.5	102.2	104.4	110.0	106.2	110.6
December.....	105.8	106.7	105.8	103.6	103.5	103.4	101.7	104.6	110.1	106.2	110.8
1963: January.....	106.0	106.5	105.9	103.6	104.7	102.6	100.4	104.0	110.5	106.3	111.2
February.....	106.1	106.6	106.1	103.8	105.0	102.7	100.6	104.1	110.5	106.4	111.2
March.....	106.2	106.8	106.1	103.7	104.6	102.9	100.8	104.2	110.8	106.4	111.6
April.....	106.2	107.0	106.1	103.6	104.3	103.0	100.9	104.3	111.1	106.5	111.9
May.....	106.2	107.0	106.1	103.6	104.2	103.0	101.0	104.2	111.1	106.6	111.9
June.....	106.6	107.3	106.6	104.1	105.0	103.3	101.3	104.5	111.3	106.7	112.2
July.....	107.1	107.5	107.1	104.7	106.2	103.5	101.3	104.8	111.5	106.7	112.4
August.....	107.1	107.6	107.2	104.7	106.0	103.6	101.4	105.0	111.7	106.8	112.6
September.....	107.1	107.8	107.1	104.6	105.4	103.8	101.5	105.2	111.9	107.0	112.8
October.....	107.2	108.1	107.2	104.7	104.9	104.3	102.2	105.6	112.1	107.1	112.9
November.....	107.4	108.4	107.4	104.8	105.1	104.5	102.5	105.8	112.3	107.2	113.2

¹ January-November average.

Source: Department of Labor.

MONEY SUPPLY, CREDIT, AND FINANCE

TABLE C-45.—*Money supply, 1947-63*

[Averages of daily figures, billions of dollars]

Year and month	Total money supply and time deposits adjusted	Money supply ¹				Total money supply and time deposits adjusted ²	Money supply ¹				Time deposits adjusted ³	U.S. Government demand deposits ³				
		Total	Currency component	Demand deposit component	Time deposits adjusted ³		Total	Currency component	Demand deposit component							
Seasonally adjusted												Unadjusted				
1947: December....	148.5	113.1	26.4	86.7	35.4	151.1	115.9	26.8	89.1	35.1	1.0					
1948: December....	147.5	111.5	25.8	85.8	36.0	150.0	114.3	26.2	88.1	35.7	1.8					
1949: December....	147.5	111.2	25.1	86.0	36.4	150.0	113.9	25.5	88.4	36.1	2.8					
1950: December....	152.9	116.2	25.0	91.2	36.7	155.6	119.2	25.4	93.8	36.4	2.4					
1951: December....	160.9	122.7	26.1	96.5	38.2	163.8	125.8	26.6	99.2	38.0	2.7					
1952: December....	168.6	127.4	27.3	100.1	41.2	171.7	130.8	27.8	103.0	40.9	4.9					
1953: December....	173.4	128.8	27.7	101.1	44.6	176.4	132.1	28.2	103.9	44.2	3.8					
1954: December....	180.7	132.3	27.4	104.9	48.4	183.6	135.6	27.9	107.7	48.0	5.0					
1955: December....	185.4	135.2	27.8	107.4	50.2	188.2	138.6	28.4	110.2	49.6	3.4					
1956: December....	189.0	136.9	28.2	108.7	52.1	191.7	140.3	28.8	111.5	51.4	3.4					
1957: December....	193.4	135.9	28.3	107.5	57.5	196.0	139.3	28.9	110.4	56.7	3.5					
1958: December....	206.7	141.2	28.6	112.6	65.5	209.3	144.7	29.2	115.5	64.6	3.9					
1959: December....	209.4	142.0	28.9	113.2	67.4	212.2	145.6	29.5	116.1	66.6	4.9					
1960: December....	213.9	141.2	28.9	112.2	72.7	216.8	144.7	29.6	115.2	72.1	4.7					
1961: December....	228.2	145.7	29.6	116.1	82.5	231.2	149.4	30.2	119.2	81.8	4.9					
1962: December....	245.3	147.9	30.6	117.3	97.5	248.2	151.6	31.2	120.4	96.6	5.6					
1963: December ⁴	265.0	153.3	32.4	120.9	111.7	267.9	157.2	33.1	124.0	110.7	5.3					
1962: January.....	230.0	145.9	29.7	116.3	84.1	232.5	149.0	29.5	119.5	83.5	3.8					
February.....	231.3	145.5	29.7	115.8	85.8	230.7	145.3	29.3	115.9	85.4	4.6					
March.....	233.1	145.7	29.9	115.8	87.5	231.6	144.2	29.6	114.6	87.4	5.1					
April.....	234.7	146.1	30.0	116.0	88.7	235.1	146.2	29.8	116.4	88.9	3.8					
May.....	235.2	145.7	30.0	115.7	89.6	233.5	143.6	29.8	113.8	89.9	7.0					
June.....	236.2	145.6	30.1	115.4	90.7	235.1	144.0	30.0	113.9	91.1	7.2					
July.....	237.4	145.7	30.2	115.5	91.8	236.6	144.3	30.3	114.0	92.2	7.1					
August.....	237.6	145.1	30.2	114.9	92.5	236.7	143.8	30.3	113.5	93.0	6.8					
September.....	238.7	145.3	30.2	115.1	93.4	238.8	145.0	30.3	114.6	93.8	7.2					
October.....	240.8	146.1	30.3	115.8	94.6	241.4	146.5	30.4	116.1	94.9	7.3					
November.....	242.9	146.9	30.5	116.4	96.0	243.6	148.2	30.8	117.5	95.4	6.0					
December.....	245.3	147.9	30.6	117.3	97.5	248.2	151.6	31.2	120.4	96.6	5.6					
1963: January.....	247.9	148.7	30.7	118.1	99.1	250.3	151.8	30.5	121.3	98.4	4.8					
February.....	248.9	148.6	30.9	117.7	100.3	248.3	148.3	30.5	117.8	99.9	5.6					
March.....	250.7	148.9	31.1	117.8	101.8	249.1	147.4	30.8	116.7	101.7	5.9					
April.....	252.0	149.4	31.2	118.2	102.6	252.4	149.5	30.9	118.6	102.9	4.2					
May.....	253.1	149.4	31.3	118.1	103.7	251.3	147.3	31.1	116.2	104.0	7.0					
June.....	254.3	149.8	31.6	118.2	104.5	253.2	148.2	31.4	116.7	105.0	7.4					
July.....	256.2	150.7	31.6	119.1	105.5	255.3	149.4	31.8	117.6	106.0	7.7					
August.....	257.3	150.5	31.8	118.8	106.7	256.4	149.1	31.9	117.2	107.3	6.2					
September.....	258.4	150.9	31.8	119.1	107.6	258.6	150.5	32.0	118.6	108.1	6.5					
October.....	260.9	152.0	32.0	120.1	108.9	261.7	152.4	32.1	120.3	109.3	5.3					
November.....	263.8	153.1	32.3	120.9	110.7	264.5	154.5	32.6	121.9	110.0	4.6					
December ⁴	265.0	153.3	32.4	120.9	111.7	267.9	157.2	33.1	124.0	110.7	5.3					

¹ Money supply consists of (1) currency outside the Treasury, the Federal Reserve, and vaults of all commercial banks; (2) demand deposits at all commercial banks, other than those due to domestic commercial banks and the U.S. Government, less cash items in process of collection and Federal Reserve float; and (3) foreign demand balances at Federal Reserve Banks.

² Time deposits adjusted are time deposits at all commercial banks other than those due to domestic commercial banks and the U.S. Government.

³ Deposits at all commercial banks.

⁴ Preliminary.

NOTE.—Between January and August 1959, the series were expanded to include data for all banks in Alaska and Hawaii.

Source: Board of Governors of the Federal Reserve System.

TABLE C-46.—*Bank loans and investments, 1929-63*
[Billions of dollars]

Year or month ¹	All commercial banks				Weekly re- porting mem- ber banks ³
	Total loans and invest- ments	Loans, excluding inter bank ²	Investments		Business loans ⁴
			U.S. Gov- ernment securities	Other securities	
1929: June ⁵	49.4	35.7	4.9	8.7	(⁶)
1930: June ⁵	48.9	34.5	5.0	9.4	(⁶)
1931: June ⁵	44.9	29.2	6.0	9.7	(⁶)
1932: June ⁵	36.1	21.8	6.2	8.1	(⁶)
1933: June ⁵	30.4	16.3	7.5	6.5	(⁶)
1934: June ⁵	32.7	15.7	10.3	6.7	(⁶)
1935.....	36.1	15.2	13.8	7.1	(⁶)
1936.....	39.6	16.4	15.3	7.9	(⁶)
1937.....	38.4	17.2	14.2	7.0	5.1
1938.....	38.7	16.4	15.1	7.2	4.2
1939.....	40.7	17.2	16.3	7.1	4.7
1940.....	43.9	18.8	17.8	7.4	5.3
1941.....	50.7	21.7	21.8	7.2	7.1
1942.....	67.4	19.2	41.4	6.8	6.3
1943.....	85.1	19.1	59.8	6.1	6.4
1944.....	105.5	21.6	77.6	6.3	6.5
1945.....	124.0	26.1	90.6	7.3	7.3
1946.....	114.0	31.1	74.8	8.1	11.3
1947.....	116.3	38.1	69.2	9.0	14.7
Seasonally adjusted					
1948.....	113.0	41.5	62.3	9.2	15.6
1949.....	118.7	42.0	66.4	10.2	13.9
1950.....	124.7	51.1	61.2	12.4	17.9
1951.....	130.2	56.5	60.4	13.4	21.6
1952.....	139.1	62.8	62.2	14.2	23.4
1953.....	143.1	66.1	62.3	14.7	23.4
1954.....	153.1	69.0	67.7	16.4	22.4
1955.....	157.6	80.5	60.4	16.7	26.7
1956.....	161.6	88.0	57.3	16.3	30.8
1957.....	166.4	91.4	57.0	17.9	31.8
1958.....	181.0	95.6	64.9	20.5	31.7
1959.....	185.7	107.8	57.6	20.4	30.7
1960.....	194.5	114.2	59.6	20.7	32.2
1961.....	209.6	121.1	64.7	23.8	32.9
1962.....	228.1	134.7	64.3	29.1	35.2
1963 ⁷	246.3	150.6	60.8	34.9	38.7
1962: January.....	210.7	120.8	65.7	24.2	32.0
February.....	213.3	122.6	66.1	24.6	32.2
March.....	215.2	123.8	66.1	25.3	33.0
April.....	215.0	124.5	64.6	25.9	32.8
May.....	216.4	124.8	65.5	26.1	32.9
June.....	220.3	126.6	66.6	27.1	33.4
July.....	217.8	126.1	64.1	27.6	33.0
August.....	220.3	127.3	65.0	28.0	33.4
September.....	222.0	129.7	64.3	28.0	34.1
October.....	224.4	131.6	64.2	28.6	34.3
November.....	225.9	132.2	64.6	29.1	34.7
December.....	228.1	134.7	64.3	29.1	35.2
1963: January.....	228.9	134.7	64.6	29.6	34.3
February.....	232.3	136.8	65.4	30.1	34.6
March.....	235.0	137.8	66.7	30.5	35.2
April.....	232.5	137.4	63.9	31.2	35.0
May.....	234.8	138.9	64.2	31.7	35.0
June.....	240.3	141.8	66.0	32.5	35.6
July ⁷	237.8	142.4	62.4	33.0	35.0
August ⁷	238.5	142.5	62.1	33.9	35.2
September ⁷	240.7	145.0	61.7	34.0	35.9
October ⁷	241.0	146.3	60.2	34.5	36.3
November ⁷	244.0	148.8	60.8	34.4	37.3
December ⁷	246.3	150.6	60.8	34.9	38.7

¹ Data are for last Wednesday of month (except June 30 and December 31 call dates) for all commercial banks and for last Wednesday for weekly reporting member banks.

² Include interbank loans prior to 1948.

³ Member banks are all national banks and those State banks which have taken membership in the Federal Reserve System. Weekly reporting member banks comprise about 350 large banks in over 100 leading cities.

⁴ Commercial and industrial loans and prior to 1956, agricultural loans. Beginning July 1959, loans to financial institutions excluded. Series revised beginning July 1946, October 1955, July 1958, and July 1959. Prior to 1944 published data adjusted to include open market paper.

⁵ June data are used because complete end-of-year data are not available prior to 1935 for U.S. Government obligations and other securities.

⁶ Not available.

⁷ Preliminary; data for December are estimates for December 31, 1962 and 1963.

NOTE.—Series for all commercial banks have been revised to show seasonally adjusted data.

Between January and August 1959, series for all commercial banks expanded to include data for all banks in Alaska and Hawaii. Data for all member banks include Alaska and Hawaii beginning 1954 and 1959, respectively.

Source: Board of Governors of the Federal Reserve System.

TABLE C-47.—Federal Reserve Bank credit and member bank reserves, 1929–63

[Averages of daily figures, millions of dollars]

Year and month	Reserve Bank credit outstanding				Member bank reserves			Member bank free reserves (excess reserves less borrowings)
	Total	U.S. Government securities	Member bank borrowings	All other, mainly float	Total	Required	Excess	
1929: December.....	1,643	446	801	396	2,395	2,347	48	-753
1930: December.....	1,273	644	337	292	2,415	2,342	73	-264
1931: December.....	1,950	777	763	410	2,069	2,010	60	-703
1932: December.....	2,192	1,854	281	67	2,435	1,909	526	245
1933: December.....	2,669	2,432	95	142	2,588	1,822	766	671
1934: December.....	2,472	2,430	10	32	4,037	2,290	1,748	1,738
1935: December.....	2,494	2,430	6	58	5,716	2,733	2,983	2,977
1936: December.....	2,496	2,434	7	57	6,665	4,619	2,046	2,039
1937: December.....	2,628	2,565	16	47	6,879	5,808	1,071	1,055
1938: December.....	2,618	2,564	7	47	8,745	5,520	3,226	3,219
1939: December.....	2,612	2,510	3	99	11,473	6,462	5,011	5,008
1940: December.....	2,805	2,188	3	114	14,049	7,403	6,646	6,643
1941: December.....	2,404	2,219	5	180	12,812	9,422	3,390	3,365
1942: December.....	6,035	5,549	4	483	13,152	10,776	2,376	2,372
1943: December.....	11,914	11,166	90	659	12,749	11,701	1,048	958
1944: December.....	19,612	18,693	265	654	14,168	12,884	1,284	1,019
1945: December.....	24,744	23,708	334	702	16,027	14,536	1,491	1,157
1946: December.....	24,746	23,767	157	821	16,517	15,617	900	743
1947: December.....	22,858	21,905	224	729	17,261	16,275	986	762
1948: December.....	23,978	23,002	134	842	19,090	19,193	797	663
1949: December.....	19,012	18,287	118	607	16,291	15,488	803	685
1950: December.....	21,606	20,345	142	1,119	17,391	16,364	1,027	885
1951: December.....	25,446	23,409	657	1,380	20,310	19,484	826	169
1952: December.....	27,299	24,400	1,593	1,306	21,180	20,457	723	-870
1953: December.....	27,107	25,639	441	1,027	19,920	19,227	693	252
1954: December.....	26,317	24,917	246	1,154	19,279	18,576	703	457
1955: December.....	26,853	24,602	839	1,412	19,240	18,646	594	-245
1956: December.....	27,156	24,765	688	1,703	19,535	18,883	652	-36
1957: December.....	26,186	23,982	710	1,494	19,420	18,843	577	-133
1958: December.....	28,412	26,312	557	1,543	18,899	18,353	546	-41
1959: December.....	29,435	27,036	906	1,493	18,932	18,450	482	-424
1960: December.....	29,060	27,248	87	1,725	19,283	18,514	769	682
1961: December.....	31,217	29,098	149	1,970	20,118	19,550	568	419
1962: December.....	33,218	30,546	304	2,368	20,040	19,468	572	268
1963: December ¹	36,610	33,729	327	2,554	20,699	20,194	505	178
1962: January.....	30,468	28,519	70	1,879	20,089	19,464	625	555
February.....	29,839	28,384	68	1,387	19,571	19,069	502	434
March.....	30,063	28,570	91	1,402	19,550	19,077	473	382
April.....	30,634	29,143	69	1,422	19,723	19,213	510	441
May.....	30,991	29,503	63	1,425	19,823	19,320	503	440
June.....	31,265	29,568	100	1,597	19,924	19,433	491	391
July.....	31,475	29,581	89	1,805	20,043	19,514	529	440
August.....	31,600	30,088	127	1,385	19,924	19,358	566	439
September.....	31,807	29,921	80	1,806	20,034	19,579	455	375
October.....	32,057	30,241	65	1,751	20,205	19,721	484	419
November.....	32,053	30,195	119	1,739	19,604	19,012	592	473
December.....	33,218	30,546	304	2,368	20,040	19,468	572	268
1963: January.....	32,663	30,198	99	2,366	20,035	19,552	483	384
February.....	32,287	30,541	172	1,574	19,581	19,109	472	300
March.....	32,477	30,613	155	1,709	19,516	19,090	426	271
April.....	32,692	30,897	121	1,674	19,574	19,140	434	313
May.....	32,972	31,138	209	1,625	19,676	19,219	457	248
June.....	33,464	31,540	236	1,678	19,735	19,358	377	141
July.....	34,262	32,158	322	1,782	20,017	19,537	480	158
August.....	34,080	32,233	330	1,517	19,721	19,254	467	137
September.....	34,440	32,341	321	1,778	19,945	19,532	413	92
October.....	34,628	32,648	313	1,667	20,004	19,596	408	95
November.....	35,353	33,126	376	1,851	20,119	19,704	415	39
December ²	36,610	33,729	327	2,554	20,699	20,194	505	178

¹ Data from March 1933 through April 1934 are for licensed banks only.² Beginning December 1959, total reserves held include vault cash allowed.³ Preliminary.

NOTE.—Data for member banks in Alaska and Hawaii included beginning 1954 and 1959, respectively.

Source: Board of Governors of the Federal Reserve System.

TABLE C-48.—Bond yields and interest rates, 1929-63

[Percent per annum]

Year or month	U.S. Government securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	Average rate on short-term bank loans to business—selected cities	Prime commercial paper, 4-6 months	Federal Reserve Bank discount rate
	3-month Treasury bills ¹	9-12 month issues ²	3-5 year issues ³	Taxable bonds ⁴	Aaa	Baa				
1929.....	(⁵)	(⁶)	-----	-----	4.73	5.90	4.27	(⁷)	5.85	5.16
1930.....	(⁸)	(⁹)	-----	-----	4.55	5.90	4.07	(⁷)	3.59	3.04
1931.....	1.402	(⁹)	-----	-----	4.58	7.62	4.01	(⁷)	2.64	2.11
1932.....	.879	(⁹)	-----	-----	5.01	9.30	4.65	(⁷)	2.73	2.82
1933.....	.515	(⁹)	2.66	-----	4.49	7.76	4.71	(⁷)	1.73	2.56
1934.....	.256	(⁹)	2.12	-----	4.00	6.32	4.03	(⁷)	1.02	1.54
1935.....	.137	(⁹)	1.29	-----	3.60	5.75	3.40	(⁷)	.75	1.50
1936.....	.143	(⁹)	1.11	-----	3.24	4.77	3.07	(⁷)	.75	1.50
1937.....	.447	(⁹)	1.40	-----	3.26	5.03	3.10	(⁷)	.94	1.33
1938.....	.053	(⁹)	.83	-----	3.19	5.80	2.91	(⁷)	.81	1.00
1939.....	.023	(⁹)	.59	-----	3.01	4.96	2.76	2.1	.59	1.00
1940.....	.014	(⁹)	.50	-----	2.84	4.75	2.50	2.1	.56	1.00
1941.....	.103	(⁹)	.73	-----	2.77	4.33	2.10	2.0	.53	1.00
1942.....	.326	(⁹)	1.46	2.46	2.83	4.28	2.36	2.2	.66	⁹ 1.00
1943.....	.373	0.75	1.34	2.47	2.73	3.91	2.06	2.6	.69	⁹ 1.00
1944.....	.375	.79	1.33	2.48	2.72	3.61	1.86	2.4	.73	⁹ 1.00
1945.....	.375	.81	1.18	2.37	2.62	3.29	1.67	2.2	.75	⁹ 1.00
1946.....	.375	.82	1.16	2.19	2.53	3.05	1.64	2.1	.81	⁹ 1.00
1947.....	.594	.88	1.32	2.25	2.61	3.24	2.01	2.1	1.03	1.00
1948.....	1.040	1.14	1.62	2.44	2.82	3.47	2.40	2.5	1.44	1.34
1949.....	1.102	1.14	1.43	2.31	2.66	3.42	2.21	2.7	1.49	1.50
1950.....	1.218	1.26	1.50	2.32	2.62	3.24	1.98	2.7	1.45	1.59
1951.....	1.552	1.73	1.93	2.57	2.86	3.41	2.00	3.1	2.16	1.75
1952.....	1.766	1.81	2.13	2.68	2.96	3.52	2.19	3.5	2.33	1.75
1953.....	1.931	2.07	2.56	2.94	3.20	3.74	2.72	3.7	2.52	1.99
1954.....	.953	.92	1.82	2.55	2.90	3.51	2.37	3.6	1.58	1.60
1955.....	1.753	1.89	2.50	2.84	3.06	3.53	2.53	3.7	2.19	1.89
1956.....	2.658	2.83	3.12	3.08	3.36	3.88	2.93	4.2	3.31	2.77
1957.....	3.267	3.53	3.62	3.47	3.89	4.71	3.60	4.6	3.81	3.12
1958.....	1.839	2.09	2.90	3.43	3.79	4.73	3.56	4.3	2.46	2.16
1959.....	3.405	4.11	4.33	4.08	4.38	5.05	3.95	⁹ 5.0	3.97	3.36
1960.....	2.928	3.55	3.99	4.02	4.41	5.19	3.73	5.2	3.85	3.53
1961.....	2.378	2.91	3.60	3.90	4.35	5.08	3.46	5.0	2.97	3.00
1962.....	2.778	3.02	3.57	3.95	4.33	5.02	3.18	5.0	3.26	3.00
1963.....	3.219	3.28	3.72	4.00	4.26	4.86	3.24	5.0	3.55	3.23
1961: January.....	2.302	2.70	3.53	3.89	4.32	5.10	3.44	-----	2.98	3.00
February.....	2.408	2.84	3.54	3.81	4.27	5.07	3.33	-----	3.03	3.00
March.....	2.420	2.86	3.43	3.78	4.22	5.02	3.38	4.97	3.03	3.00
April.....	2.327	2.83	3.39	3.80	4.25	5.01	3.44	-----	2.91	3.00
May.....	2.288	2.82	3.28	3.73	4.27	5.01	3.38	-----	2.76	3.00
June.....	2.359	3.02	3.70	3.88	4.33	5.03	3.53	4.97	2.91	3.00
July.....	2.268	2.87	3.69	3.90	4.41	5.09	3.53	-----	2.72	3.00
August.....	2.402	3.03	3.80	4.00	4.45	5.11	3.55	-----	2.92	3.00
September.....	2.304	3.03	3.77	4.02	4.45	5.12	3.54	4.99	3.05	3.00
October.....	2.350	2.97	3.64	3.98	4.42	5.13	3.46	-----	3.00	3.00
November.....	2.458	2.95	3.68	3.98	4.39	5.11	3.44	-----	2.98	3.00
December.....	2.617	3.03	3.82	4.06	4.42	5.10	3.49	4.96	3.19	3.00

See footnotes at end of table.

TABLE C-48.—*Bond yields and interest rates, 1929-63—Continued*

[Percent per annum]

Year or month	U.S. Government securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	Average rate on short-term bank loans to business—selected cities	Prime commercial paper, 4-6 months	Federal Reserve Bank discount rate
	3-month Treasury bills ¹	9-12 month issues ²	3-5 year issues ²	Taxable bonds ³	Aaa	Baa				
1962: January.....	2.746	3.08	3.84	4.08	4.42	5.08	3.32	-----	3.26	3.00
February.....	2.752	3.11	3.77	4.09	4.42	5.07	3.28	-----	3.22	3.00
March.....	2.719	2.99	3.55	4.01	4.39	5.04	3.19	4.98	3.25	3.00
April.....	2.735	2.94	3.48	3.89	4.33	5.02	3.08	-----	3.20	3.00
May.....	2.694	2.98	3.53	3.88	4.28	5.00	3.09	-----	3.16	3.00
June.....	2.719	3.02	3.51	3.90	4.28	5.02	3.24	5.01	3.25	3.00
July.....	2.945	3.23	3.71	4.02	4.34	5.05	3.30	-----	3.36	3.00
August.....	2.837	3.13	3.57	3.98	4.35	5.06	3.31	-----	3.30	3.00
September.....	2.792	3.00	3.56	3.94	4.32	5.03	3.18	4.99	3.34	3.00
October.....	2.751	2.90	3.46	3.89	4.28	4.99	3.03	-----	3.27	3.00
November.....	2.803	2.92	3.46	3.87	4.25	4.96	3.03	-----	3.23	3.00
December.....	2.856	2.95	3.44	3.87	4.24	4.92	3.12	5.02	3.29	3.00
1963: January.....	2.914	2.97	3.47	3.89	4.21	4.91	3.12	-----	3.34	3.00
February.....	2.916	2.89	3.48	3.92	4.19	4.89	3.18	-----	3.25	3.00
March.....	2.897	2.99	3.50	3.93	4.19	4.88	3.11	5.00	3.34	3.00
April.....	2.909	3.02	3.56	3.97	4.21	4.87	3.11	-----	3.32	3.00
May.....	2.920	3.06	3.57	3.97	4.22	4.86	3.15	-----	3.25	3.00
June.....	2.995	3.17	3.67	4.00	4.23	4.84	3.27	5.01	3.38	3.00
July.....	3.143	3.33	3.78	4.01	4.26	4.84	3.31	-----	3.49	3.24
August.....	3.320	3.41	3.81	3.99	4.29	4.83	3.22	-----	3.72	3.50
September.....	3.379	3.54	3.88	4.04	4.31	4.84	3.27	5.01	3.68	3.50
October.....	3.453	3.59	3.91	4.07	4.32	4.83	3.32	-----	3.88	3.50
November.....	3.522	3.70	3.97	4.11	4.33	4.84	3.41	-----	3.88	3.50
December.....	3.523	3.77	4.04	4.14	4.35	4.85	3.41	5.00	3.96	3.50

¹ Rate on new issues within period. Issues were tax exempt prior to March 1, 1941, and fully taxable thereafter. For the period 1934-37, series includes issues with maturities of more than 3 months.

² Includes certificates of indebtedness and selected note and bond issues (fully taxable).

³ Selected note and bond issues. Issues were partially tax exempt prior to 1941, and fully taxable thereafter.

⁴ First issued in 1941. Series includes bonds which are neither due nor callable before a given number of years as follows: April 1953 to date, 10 years; April 1952-March 1953, 12 years; October 1941-March 1952, 15 years.

⁵ Treasury bills were first issued in December 1929 and were issued irregularly in 1930.

⁶ Not available before August 1942.

⁷ Not available on same basis as for 1939 and subsequent years.

⁸ From October 30, 1942, to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing or callable in 1 year or less.

⁹ Series revised to exclude loans to nonbank financial institutions.

NOTE.—Yields and rates computed for New York City, except for short-term bank loans.

Sources: Treasury Department, Board of Governors of the Federal Reserve System, Moody's Investors Service, and Standard & Poor's Corporation.

TABLE C-49.—Short- and intermediate-term consumer credit outstanding, 1929-63

[Millions of dollars]

End of year or month	Total	Installment credit					Noninstallment credit		
		Total	Auto- mobile paper ¹	Other con- sumer goods paper ¹	Repair and modern- ization loans ²	Per- sonal loans	Total	Charge ac- counts	Other ³
1929.....	7,116	3,524	1,384	1,544	27	569	3,592	1,996	1,596
1930.....	6,351	3,022	986	1,432	25	579	3,329	1,833	1,496
1931.....	5,315	2,463	684	1,214	22	543	2,852	1,635	1,217
1932.....	4,026	1,672	356	1,334	18	464	2,354	1,374	980
1933.....	3,885	1,723	493	799	15	416	2,162	1,286	876
1934.....	4,218	1,999	614	889	37	459	2,219	1,306	913
1935.....	5,190	2,817	992	1,000	253	572	2,373	1,354	1,019
1936.....	6,375	3,747	1,372	1,290	364	721	2,628	1,428	1,200
1937.....	6,948	4,118	1,494	1,505	219	900	2,830	1,504	1,326
1938.....	6,370	3,686	1,099	1,442	218	927	2,684	1,403	1,281
1939.....	7,222	4,503	1,497	1,620	298	1,088	2,719	1,414	1,305
1940.....	8,338	5,514	2,071	1,827	371	1,245	2,824	1,471	1,353
1941.....	9,172	6,085	2,458	1,929	376	1,322	3,087	1,645	1,442
1942.....	5,983	3,166	742	1,195	255	974	2,817	1,444	1,373
1943.....	4,901	2,136	355	819	130	832	2,765	1,440	1,325
1944.....	5,111	2,176	397	791	119	869	2,935	1,517	1,418
1945.....	5,665	2,462	455	816	182	1,009	3,203	1,612	1,591
1946.....	8,384	4,172	981	1,290	405	1,496	4,212	2,076	2,136
1947.....	11,598	6,695	1,924	2,143	718	1,910	4,903	2,381	2,522
1948.....	14,447	8,996	3,018	2,901	853	2,224	5,451	2,722	2,729
1949.....	17,364	11,590	4,555	3,706	898	2,431	6,774	2,854	2,920
1950.....	21,471	14,703	6,074	4,799	1,016	2,814	6,788	3,367	3,401
1951.....	22,712	15,294	5,972	4,880	1,085	3,357	7,418	3,700	3,718
1952.....	27,520	19,403	7,733	6,174	1,385	4,111	8,117	4,130	3,987
1953.....	31,393	23,005	9,835	6,779	1,610	4,781	8,388	4,274	4,114
1954.....	32,464	23,568	9,809	6,751	1,616	5,592	8,896	4,485	4,411
1955.....	38,830	28,906	13,460	7,641	1,693	6,112	9,924	4,795	5,129
1956.....	42,334	31,720	14,420	8,606	1,905	6,789	10,614	4,995	5,619
1957.....	44,970	33,867	15,340	8,844	2,101	7,582	11,103	5,146	5,957
1958.....	45,129	33,642	14,152	9,028	2,346	8,116	11,487	5,080	6,427
1959.....	51,542	39,245	16,420	10,630	2,809	9,386	12,297	5,104	7,193
1960.....	56,028	42,832	17,688	11,525	3,139	10,480	13,196	5,329	7,867
1961.....	57,678	43,527	17,223	11,857	3,191	11,256	14,151	5,324	8,827
1962.....	63,164	48,034	19,540	12,605	3,246	12,643	15,130	5,684	9,446
1963 ⁴	69,775	53,675	22,125	13,725	3,400	14,425	16,100	5,800	10,300
1962: January.....	56,689	43,188	17,128	11,681	3,148	11,231	13,501	4,846	8,656
February.....	56,084	42,979	17,157	11,456	3,112	11,254	13,105	4,292	8,813
March.....	56,210	43,075	17,339	11,308	3,099	11,329	13,135	4,168	8,967
April.....	57,215	43,711	17,710	11,373	3,106	11,522	13,504	4,375	9,129
May.....	58,173	44,338	18,075	11,450	3,143	11,670	13,835	4,596	9,239
June.....	58,959	45,056	18,479	11,567	3,171	11,839	13,903	4,644	9,259
July.....	59,205	45,490	18,770	11,574	3,193	11,953	13,715	4,511	9,204
August.....	59,837	46,020	19,018	11,637	3,226	12,139	13,817	4,580	9,237
September.....	60,030	46,145	18,972	11,691	3,239	12,243	13,885	4,642	9,243
October.....	60,441	46,526	19,193	11,777	3,250	12,306	13,915	4,768	9,147
November.....	61,203	47,052	19,416	11,960	3,259	12,417	14,151	4,884	9,267
December.....	63,164	48,034	19,540	12,605	3,246	12,643	15,130	5,684	9,446
1963: January.....	62,462	47,920	19,582	12,453	3,211	12,674	14,542	5,071	9,471
February.....	61,989	47,852	19,678	12,250	3,185	12,739	14,137	4,511	9,626
March.....	62,149	48,075	19,930	12,149	3,177	12,819	14,074	4,374	9,700
April.....	63,167	48,806	20,376	12,197	3,200	13,083	14,361	4,581	9,780
May.....	64,135	49,484	20,794	12,272	3,245	13,173	14,651	4,793	9,858
June.....	64,987	50,307	21,236	12,422	3,281	13,368	14,680	4,783	9,897
July.....	65,491	50,894	21,593	12,459	3,316	13,526	14,597	4,760	9,837
August.....	66,308	51,526	21,819	12,607	3,357	13,743	14,782	4,839	9,943
September.....	66,538	51,718	21,725	12,702	3,377	13,914	14,820	4,833	9,987
October.....	67,088	52,257	21,971	12,845	3,400	14,041	14,831	4,898	9,933
November.....	67,746	52,695	22,107	13,046	3,407	14,135	15,051	4,999	10,052
December ⁴	69,775	53,675	22,125	13,725	3,400	14,425	16,100	5,800	10,300

¹ Includes all consumer credit extended for the purpose of purchasing automobiles and other consumer goods.² Includes only such loans held by financial institutions; those held by retail outlets are included in "other consumer goods paper."³ Single-payment loans and service credit.⁴ Preliminary; December by Council of Economic Advisers.NOTE.—Series revised beginning 1962. For details, see *Federal Reserve Bulletin*, November 1963.

Data for Alaska and Hawaii included beginning January and August 1959, respectively.

Source: Board of Governors of the Federal Reserve System (except as noted).

TABLE C-50.—*Instalment credit extended and repaid, 1946-63*

[Millions of dollars]

Year or month	Total		Automobile paper		Other consumer goods paper		Repair and modernization loans		Personal loans	
	Ex- tended	Re- paid	Ex- tended	Re- paid	Ex- tended	Re- paid	Ex- tended	Re- paid	Ex- tended	Re- paid
1946.....	8,495	6,785	1,969	1,443	3,077	2,603	423	200	3,026	2,539
1947.....	12,713	10,190	3,692	2,749	4,498	3,645	704	391	3,819	3,405
1948.....	15,585	13,284	5,217	4,123	5,383	4,625	714	579	4,271	3,957
1949.....	18,108	15,514	6,967	5,430	5,865	5,060	734	689	4,542	4,335
1950.....	21,558	18,445	8,530	7,011	7,150	6,057	835	717	5,043	4,660
1951.....	23,576	22,985	8,956	9,058	7,485	7,404	841	772	6,294	5,751
1952.....	29,514	25,405	11,764	10,003	9,186	7,892	1,217	917	7,347	6,593
1953.....	31,558	27,956	12,981	10,879	9,227	8,622	1,344	1,119	8,006	7,336
1954.....	31,051	30,488	11,807	11,833	9,117	9,145	1,261	1,255	8,866	8,255
1955.....	38,972	33,634	16,734	13,082	10,642	9,752	1,393	1,316	10,203	9,484
1956.....	39,868	37,054	15,515	14,555	11,721	10,756	1,582	1,370	11,051	10,373
1957.....	42,016	39,868	16,465	15,545	11,807	11,569	1,674	1,477	12,069	11,276
1958.....	40,119	40,344	14,226	15,415	11,747	11,563	1,871	1,626	12,275	11,741
1959.....	48,052	42,603	17,779	15,579	13,982	12,402	2,222	1,765	14,070	12,857
1960.....	49,560	45,972	17,654	16,384	14,470	13,574	2,213	1,883	15,223	14,130
1961.....	48,396	47,700	16,007	16,472	14,578	14,246	2,068	2,015	15,744	14,967
1962.....	55,126	50,620	19,796	17,478	15,685	14,939	2,051	1,996	17,594	16,206
1963 ¹	60,575	54,900	21,925	19,300	16,900	15,800	2,175	2,025	19,575	17,775
Seasonally adjusted										
1962: January.....	4,278	4,092	1,511	1,436	1,229	1,195	160	166	1,378	1,295
February.....	4,357	4,097	1,553	1,408	1,279	1,238	157	167	1,368	1,284
March.....	4,418	4,106	1,592	1,405	1,238	1,220	170	167	1,418	1,314
April.....	4,604	4,119	1,645	1,397	1,335	1,232	170	166	1,454	1,324
May.....	4,644	4,224	1,657	1,460	1,314	1,248	182	171	1,481	1,345
June.....	4,579	4,190	1,638	1,435	1,299	1,246	179	168	1,463	1,341
July.....	4,640	4,266	1,671	1,464	1,309	1,271	177	169	1,483	1,362
August.....	4,651	4,263	1,691	1,480	1,292	1,258	179	168	1,489	1,357
September.....	4,543	4,293	1,566	1,467	1,306	1,276	165	164	1,506	1,386
October.....	4,639	4,271	1,700	1,494	1,280	1,238	169	163	1,490	1,376
November.....	4,855	4,372	1,776	1,523	1,364	1,268	167	165	1,548	1,416
December.....	4,826	4,341	1,739	1,509	1,415	1,262	164	166	1,508	1,404
1963: January.....	4,899	4,414	1,807	1,564	1,360	1,277	172	167	1,560	1,406
February.....	4,957	4,462	1,809	1,566	1,395	1,289	169	165	1,584	1,442
March.....	4,973	4,496	1,811	1,546	1,406	1,324	180	170	1,576	1,456
April.....	5,008	4,487	1,870	1,585	1,359	1,276	187	170	1,592	1,456
May.....	4,985	4,544	1,847	1,611	1,357	1,294	188	170	1,593	1,469
June.....	5,054	4,568	1,820	1,588	1,408	1,317	186	167	1,640	1,496
July.....	5,100	4,591	1,854	1,603	1,409	1,330	191	171	1,646	1,487
August.....	5,100	4,619	1,802	1,607	1,441	1,326	185	170	1,672	1,516
September.....	5,093	4,752	1,736	1,659	1,425	1,347	181	174	1,757	1,572
October.....	5,311	4,780	1,910	1,676	1,457	1,362	188	170	1,756	1,572
November.....	4,979	4,596	1,792	1,638	1,432	1,324	168	167	1,587	1,467
December ¹	5,095	4,670	1,800	1,675	1,475	1,325	170	170	1,650	1,500

¹ Preliminary; December by Council of Economic Advisers.NOTE.—Series revised beginning 1962. For details, see *Federal Reserve Bulletin*, November 1963.

Data for Alaska and Hawaii included beginning January and August 1959, respectively. Therefore, the difference between extensions and repayments for January and August 1959 and for the year 1959 does not equal the net change in credit outstanding.

Source: Board of Governors of the Federal Reserve System (except as noted).

TABLE C-51.—*Mortgage debt outstanding, by type of property and of financing, 1939-63*

[Billions of dollars]

End of year or quarter	All prop- erties	Nonfarm properties						Multi- family and com- mer- cial prop- erties ²	Farm prop- erties
		Total	1- to 4-family houses				Con- ven- tional ¹		
			Total	Government under- written					
				Total	FHA in- sured	VA guar- anteed			
1939.....	35.5	28.9	16.3	1.8	1.8	-----	14.5	12.5	6.6
1940.....	36.5	30.0	17.4	2.3	2.3	-----	15.1	12.6	6.5
1941.....	37.6	31.2	18.4	3.0	3.0	-----	15.4	12.9	6.4
1942.....	36.7	30.8	18.2	3.7	3.7	-----	14.5	12.5	6.0
1943.....	35.3	29.9	17.8	4.1	4.1	-----	13.7	12.1	5.4
1944.....	34.7	29.7	17.9	4.2	4.2	-----	13.7	11.8	4.9
1945.....	35.5	30.8	18.6	4.3	4.1	0.2	14.3	12.2	4.8
1946.....	41.8	36.9	23.0	6.1	3.7	2.4	16.9	13.8	4.9
1947.....	48.9	43.9	28.2	9.3	3.8	5.5	18.9	15.7	5.1
1948.....	56.2	50.9	33.3	12.5	5.3	7.2	20.8	17.6	5.3
1949.....	62.7	57.1	37.6	15.0	6.9	8.1	22.6	19.5	5.6
1950.....	72.8	66.7	45.2	18.9	8.6	10.3	26.3	21.6	6.1
1951.....	82.3	75.6	51.7	22.9	9.7	13.2	28.8	23.9	6.7
1952.....	91.4	84.2	58.5	25.4	10.8	14.6	33.1	25.7	7.2
1953.....	101.3	93.6	66.1	28.1	12.0	16.1	38.0	27.5	7.7
1954.....	113.7	105.4	76.7	32.1	12.8	19.3	43.6	29.7	8.2
1955.....	129.9	120.9	88.2	38.9	14.3	24.6	49.3	32.6	9.0
1956.....	144.5	134.6	99.0	43.9	15.5	28.4	55.1	35.6	9.8
1957.....	156.5	146.1	107.6	47.2	16.5	30.7	60.4	38.5	10.4
1958.....	171.8	160.7	117.7	50.1	19.7	30.4	67.6	43.0	11.1
1959.....	190.8	178.7	130.9	53.8	23.8	30.0	77.0	47.9	12.1
1960.....	206.8	194.0	141.3	56.4	26.7	29.7	84.8	52.7	12.8
1961 ³	226.3	212.4	153.1	59.1	29.5	29.6	93.9	59.3	13.9
1962 ³	251.6	236.4	166.5	62.0	32.3	29.7	104.5	69.9	15.2
1963 ³	281.3	264.4	182.4	(4)	(4)	(4)	(4)	82.1	16.8
1962: I ³	231.1	216.8	155.3	59.9	30.3	29.6	95.4	61.5	14.2
II ³	237.8	223.1	159.1	60.4	30.9	29.5	98.7	64.0	14.7
III ³	244.5	229.6	162.9	61.0	31.5	29.5	101.9	66.7	14.9
IV ³	251.6	236.4	166.5	62.0	32.3	29.7	104.5	69.9	15.2
1963: I ³	257.1	241.6	169.2	62.8	33.0	29.8	106.4	72.4	15.5
II ³	265.2	249.1	173.7	63.5	33.5	30.0	110.2	75.4	16.1
III ³	273.3	256.8	178.3	64.3	34.3	30.0	114.1	78.5	16.6
IV ³	281.3	264.4	182.4	(4)	(4)	(4)	(4)	82.1	16.8

¹ Derived figures.² Includes negligible amount of farm loans held by savings and loan associations.³ Preliminary.⁴ Not available.

Source: Board of Governors of the Federal Reserve System, estimated and compiled from data supplied by various Government and private organizations.

TABLE C-52.—*Net public and private debt, 1929-63*¹

[Billions of dollars]

End of year ²	Total	Federal Government and agency	State and local government ³	Private									
				Total	Corporate			Individual and noncorporate					
					Total	Long-term	Short-term	Total	Farm ⁴	Nonfarm			
										Total	Mortgage	Commercial and financial ⁴	Consumer
1929----	190.9	16.5	13.2	161.2	88.9	47.5	41.6	72.3	12.2	60.1	31.2	22.4	6.4
1930----	191.0	16.5	14.1	160.4	89.3	51.1	38.2	71.1	11.8	59.3	32.0	21.6	5.8
1931----	181.9	18.5	15.6	147.9	83.5	50.3	33.2	64.4	11.1	53.3	30.9	17.6	4.8
1932----	174.6	21.3	16.6	136.7	80.0	49.2	30.8	56.7	10.1	46.6	29.0	14.0	3.6
1933----	168.5	24.3	16.7	127.5	76.9	47.9	29.1	50.6	9.1	41.5	26.3	11.7	3.5
1934----	171.4	30.4	15.9	125.1	75.5	44.6	30.9	49.6	8.9	40.6	25.5	11.2	3.9
1935----	174.7	34.4	16.0	124.2	74.8	43.6	31.2	49.4	9.1	40.5	24.8	10.8	4.9
1936----	180.3	37.7	16.2	126.4	76.1	42.5	33.5	50.3	8.6	41.7	24.4	11.2	6.1
1937----	182.0	39.2	16.1	126.7	75.8	43.5	32.3	50.9	8.6	42.3	24.3	11.3	6.7
1938----	179.6	40.5	16.0	123.1	73.3	44.8	28.4	49.8	9.0	40.9	24.5	10.1	6.3
1939----	183.2	42.6	16.3	124.3	73.5	44.4	29.2	50.8	8.8	42.0	25.0	9.8	7.2
1940----	189.9	44.8	16.5	128.6	75.6	43.7	31.9	53.0	9.1	43.9	26.1	9.5	8.3
1941----	211.6	56.3	16.3	139.0	83.4	43.6	39.8	55.6	9.3	46.3	27.1	10.0	9.2
1942----	259.0	101.7	15.8	141.5	91.6	42.7	49.0	49.9	9.0	40.9	26.8	8.1	6.0
1943----	313.6	154.4	14.9	144.3	95.5	41.0	54.5	48.8	8.2	40.5	26.1	9.5	4.9
1944----	370.8	211.9	14.1	144.8	94.1	39.8	54.3	50.7	7.7	42.9	26.0	11.8	5.1
1945----	406.3	252.7	13.7	139.9	85.3	38.3	47.0	54.6	7.3	47.4	27.0	14.7	5.7
1946----	397.4	229.7	13.6	164.1	93.5	41.3	52.2	60.6	7.6	53.0	32.5	12.1	8.4
1947----	417.4	223.3	14.4	179.7	108.9	46.1	62.8	70.8	8.6	62.3	38.8	11.9	11.6
1948----	433.6	216.5	16.2	200.9	117.8	52.5	65.3	83.1	10.8	72.4	45.1	12.9	14.4
1949----	448.4	218.6	18.1	211.7	118.0	56.5	61.5	93.7	12.0	81.8	50.6	13.9	17.3
1950----	490.3	218.7	20.7	250.9	142.1	60.1	81.9	108.8	12.3	96.6	59.4	15.8	21.4
1951----	524.0	218.5	23.3	282.2	162.5	66.6	95.9	119.7	13.6	106.2	67.4	16.2	22.6
1952----	555.2	222.9	25.8	306.5	171.0	73.3	97.7	135.5	15.2	120.4	75.2	17.8	27.4
1953----	586.5	228.1	28.6	329.8	179.5	78.3	101.2	150.3	16.9	133.6	83.8	18.4	31.4
1954----	612.0	230.2	33.4	348.4	182.8	82.9	100.0	165.6	17.6	147.9	94.6	20.8	32.5
1955----	672.3	231.5	38.4	402.5	212.1	90.0	122.2	190.4	18.8	171.6	108.7	24.0	38.9
1956----	707.5	225.4	42.7	439.4	231.7	100.1	131.7	207.7	19.5	188.2	121.3	24.4	42.5
1957----	738.9	224.4	46.7	467.8	246.7	112.1	134.6	221.1	20.3	200.8	131.6	24.3	44.8
1958----	782.6	232.7	50.9	499.1	259.5	121.2	138.4	239.5	23.3	216.2	144.6	26.5	45.1
1959----	846.2	243.2	55.6	547.4	283.3	129.3	154.0	264.1	23.0	241.1	160.8	28.7	51.5
1960----	889.4	241.0	60.0	588.4	301.7	139.1	162.7	286.6	25.3	261.3	174.5	30.8	56.0
1961----	944.1	248.1	65.0	631.0	321.5	149.1	172.4	309.5	27.8	281.7	190.1	33.9	57.7
1962----	1,017.3	255.9	73.7	687.6	346.0	161.2	184.8	341.7	30.5	311.2	210.9	36.8	63.5
1963 ⁵ ----	1,095.9	260.9	82.1	752.9	371.6	175.5	196.1	381.3	32.8	348.5	237.6	41.1	69.8

¹ Net public and private debt outstanding is a comprehensive aggregate of the indebtedness of borrowers after elimination of certain types of duplicating governmental and corporate debt. For a further explanation of the concept, see *Survey of Current Business*, October 1950.

² Data for State and local government debt are for June 30.

³ Farm mortgages and farm production loans. Farmers' financial and consumer debt is included in the nonfarm categories.

⁴ Financial debt is debt owed to banks for purchasing or carrying securities, customers' debt to brokers, and debt owed to life insurance companies by policyholders.

⁵ Preliminary estimates by Council of Economic Advisers.

NOTE.—Revisions for 1929-39 and 1955-63 in the consumer credit data of the Board of Governors of the Federal Reserve System have not yet been fully incorporated into this series.

Sources: Department of Commerce, Treasury Department, Board of Governors of the Federal Reserve System, and Federal Home Loan Bank Board (except as noted).

GOVERNMENT FINANCE

TABLE C-53.—U.S. Government debt, by kind of obligation, 1929-63
(Billions of dollars)

End of year or month	Gross public debt and guaranteed issues ¹	Interest-bearing public debt					Special issues ⁴
		Marketable public issues		Nonmarketable public issues			
		Short-term issues ²	Treasury bonds	United States savings bonds	Treasury tax and savings notes	Investment bonds ³	
1929.....	16.3	3.3	11.3	-----	-----	-----	0.6
1930.....	16.0	2.9	11.3	-----	-----	-----	.8
1931.....	17.8	2.8	13.5	-----	-----	-----	.4
1932.....	20.8	5.9	13.4	-----	-----	-----	.4
1933.....	24.0	7.5	14.7	-----	-----	-----	.4
1934.....	31.5	11.1	15.4	-----	-----	-----	.6
1935.....	35.1	14.2	14.3	0.2	-----	-----	.7
1936.....	39.1	12.5	19.5	.5	-----	-----	.6
1937.....	41.9	12.5	20.5	1.0	-----	-----	2.2
1938.....	44.4	9.8	24.0	1.4	-----	-----	3.2
1939.....	47.6	7.7	26.9	2.2	-----	-----	4.2
1940.....	50.9	7.5	28.0	3.2	-----	-----	5.4
1941.....	64.3	8.0	33.4	6.1	2.5	-----	7.0
1942.....	112.5	27.0	49.3	15.0	6.4	-----	9.0
1943.....	170.1	47.1	67.9	27.4	8.6	-----	12.7
1944.....	232.1	69.9	91.6	40.4	9.8	-----	16.3
1945.....	278.7	78.2	120.4	48.2	8.2	-----	20.0
1946.....	259.5	57.1	119.3	49.8	5.7	-----	24.6
1947.....	257.0	47.7	117.9	52.1	5.4	1.0	29.0
1948.....	252.9	45.9	111.4	55.1	4.6	1.0	31.7
1949.....	257.2	50.2	104.8	56.7	7.6	1.0	33.9
1950.....	256.7	58.3	94.0	58.0	8.6	1.0	33.7
1951.....	259.5	65.6	76.9	57.6	7.5	13.0	35.9
1952.....	267.4	68.7	79.8	57.9	5.8	13.4	39.2
1953.....	275.2	77.3	77.2	57.7	6.0	12.9	41.2
1954.....	278.8	76.0	81.8	57.7	4.5	12.7	42.6
1955.....	280.8	81.3	81.9	57.9	(⁵)	12.3	48.9
1956.....	276.7	79.5	80.8	56.3	(⁵)	11.6	45.6
1957.....	275.0	82.1	82.1	52.5	(⁵)	10.3	45.8
1958.....	283.0	92.2	83.4	51.2	(⁵)	9.0	44.8
1959.....	290.9	103.5	84.8	48.2	(⁵)	7.6	43.5
1960.....	290.4	109.2	79.8	47.2	(⁵)	6.2	44.3
1961.....	296.5	120.5	75.5	47.5	(⁵)	5.1	43.5
1962.....	304.0	124.6	78.4	47.5	(⁵)	4.4	43.4
1963.....	310.1	121.2	86.4	48.8	(⁵)	3.7	43.7
1962: January.....	296.9	121.0	76.6	47.5	(⁵)	5.0	42.3
February.....	297.4	121.0	76.6	47.5	(⁵)	5.0	42.8
March.....	296.5	120.0	76.6	47.6	(⁵)	4.8	42.8
April.....	297.4	120.3	77.8	47.6	(⁵)	4.8	42.1
May.....	299.6	122.7	75.5	47.6	(⁵)	4.8	44.3
June.....	298.6	121.0	75.0	47.6	(⁵)	4.7	44.9
July.....	298.3	121.9	75.0	47.7	(⁵)	4.7	43.8
August.....	302.3	122.1	77.2	47.7	(⁵)	4.6	45.4
September.....	300.0	118.2	79.8	47.7	(⁵)	4.6	44.6
October.....	302.6	121.6	79.7	47.7	(⁵)	4.5	43.9
November.....	305.9	124.2	80.0	47.7	(⁵)	4.5	44.2
December.....	304.0	124.6	78.4	47.5	(⁵)	4.4	43.4
1963: January.....	303.9	125.4	78.6	47.7	(⁵)	4.4	42.2
February.....	305.2	123.7	81.1	47.9	(⁵)	4.4	42.5
March.....	303.5	123.7	79.8	48.0	(⁵)	4.2	42.2
April.....	303.7	124.2	80.1	48.1	(⁵)	4.0	41.6
May.....	305.8	124.0	80.1	48.2	(⁵)	3.9	43.6
June.....	306.5	121.5	82.0	48.3	(⁵)	3.9	44.8
July.....	305.5	121.5	81.9	48.4	(⁵)	3.9	43.7
August.....	307.2	122.8	80.5	48.5	(⁵)	3.9	45.5
September.....	307.3	117.8	86.5	48.6	(⁵)	3.8	44.7
October.....	307.1	118.9	86.4	48.7	(⁵)	3.7	43.3
November.....	308.9	120.1	86.4	48.8	(⁵)	3.7	43.6
December.....	310.1	121.2	86.4	48.8	(⁵)	3.7	43.7

¹ Total includes non-interest-bearing debt, fully guaranteed securities (except those held by the Treasury), Postal Savings bonds, prewar bonds, adjusted service bonds, depository bonds, armed forces leave bonds, Rural Electrification Administration series bonds, foreign series certificates and notes, foreign currency certificates and bonds, Treasury certificates, and U.S. retirement plan bonds, not shown separately. Not all of total shown is subject to statutory debt limitation.

² Bills, certificates of indebtedness, and notes.

³ Series A bonds and, beginning April 1951, series B convertible bonds.

⁴ Issued to U.S. Government investment accounts. These accounts also held \$14.4 billion of public marketable and nonmarketable issues on December 31, 1963.

⁵ Less than \$50 million.

⁶ The last series of Treasury savings notes matured in April 1956.

Source: Treasury Department.

TABLE C-54.—*Estimated ownership of U.S. Government obligations, 1939-63*[Par values,¹ billions of dollars]

End of year or month	Gross public debt and guaranteed issues ²								
	Total	Held by U.S. Gov- ernment invest- ment ac- counts	Held by Federal Reserve banks	Held by "the public"					
				Total	Com- mercial banks ³	Mutual savings banks and in- surance com- panies	Other corpora- tions ⁴	State and local govern- ments ⁵	Miscel- laneous inves- tors ⁷
1939.....	47.6	6.5	2.5	38.6	15.9	9.4	2.2	0.4	10.1
1940.....	50.9	7.6	2.2	41.1	17.3	10.1	2.0	.5	10.6
1941.....	64.3	9.5	2.3	52.5	21.4	11.9	4.0	.7	13.6
1942.....	112.5	12.2	6.2	94.0	41.1	15.8	10.1	1.0	23.7
1943.....	170.1	16.9	11.5	141.6	59.9	21.2	16.4	2.1	37.6
1944.....	232.1	21.7	18.8	191.6	77.7	28.0	21.4	4.3	53.3
1945.....	278.7	27.0	24.3	227.4	90.8	34.7	22.2	6.5	64.1
1946.....	259.5	30.9	23.3	205.2	74.5	36.7	15.3	6.3	64.2
1947.....	257.0	34.4	22.6	200.1	68.7	35.9	14.1	7.3	65.7
1948.....	252.9	37.3	23.3	192.2	62.5	32.7	14.8	7.9	65.5
1949.....	257.2	39.4	18.9	198.9	66.8	31.5	16.8	8.1	66.3
1950.....	256.7	39.2	20.8	196.8	61.8	29.6	19.7	8.8	66.3
1951.....	259.5	42.3	23.8	193.4	61.6	26.3	20.7	9.6	64.6
1952.....	267.4	45.9	24.7	196.9	63.4	25.5	19.9	11.1	65.2
1953.....	275.2	48.3	25.9	201.0	63.7	25.1	21.5	12.7	64.8
1954.....	278.8	49.6	24.9	204.2	60.2	24.1	19.2	14.4	63.4
1955.....	280.8	51.7	24.8	204.3	62.0	23.1	23.5	15.3	64.7
1956.....	276.7	54.0	24.9	197.8	59.5	21.3	19.1	16.3	65.5
1957.....	275.0	56.2	24.2	195.5	59.5	20.2	18.6	16.6	64.0
1958.....	283.0	54.4	26.3	202.2	67.5	19.9	18.8	16.5	63.0
1959.....	290.9	53.7	26.6	210.6	60.3	19.5	22.8	18.0	68.0
1960.....	290.4	55.1	27.4	207.9	62.1	18.1	20.1	18.7	64.7
1961.....	296.5	54.5	28.9	213.1	67.2	17.5	19.7	18.7	65.0
1962.....	304.0	55.6	30.8	217.6	67.2	17.5	20.1	19.5	65.2
1963 ⁸	310.1	58.1	33.6	218.4	63.5	16.7	20.8	20.6	67.1
1962: January.....	296.9	53.8	28.5	214.6	67.8	17.8	20.6	19.0	65.1
February.....	297.4	54.2	28.4	214.8	66.6	17.8	21.6	19.1	65.1
March.....	296.5	54.5	29.1	213.0	64.1	18.0	20.4	19.5	65.4
April.....	297.4	53.7	29.2	214.4	65.4	17.8	20.6	19.6	65.2
May.....	299.6	55.9	29.6	214.1	65.4	17.8	21.1	19.7	64.7
June.....	298.6	56.5	29.7	212.5	65.2	17.6	19.6	19.7	64.7
July.....	298.3	55.5	29.8	213.0	64.8	17.8	20.0	19.9	65.1
August.....	302.3	57.1	30.4	214.9	65.0	17.8	21.1	19.9	65.0
September.....	300.0	56.4	29.8	213.7	65.2	17.7	19.0	19.8	65.1
October.....	302.6	56.1	30.2	216.3	66.5	17.6	19.9	19.6	64.9
November.....	305.9	57.9	30.5	217.5	66.1	17.6	21.8	19.3	65.0
December.....	304.0	55.6	30.8	217.6	67.2	17.5	20.1	19.5	65.2
1963: January.....	303.9	54.5	30.3	219.1	66.7	17.6	21.0	19.9	65.6
February.....	305.2	55.1	30.6	219.5	65.8	17.5	21.6	19.9	65.8
March.....	303.5	55.1	31.0	217.4	64.7	17.5	20.7	20.1	66.3
April.....	303.7	54.3	31.2	218.2	65.1	17.2	21.0	20.5	65.8
May.....	305.8	57.1	31.3	217.4	63.9	17.1	22.2	20.5	65.4
June.....	306.5	58.4	32.0	216.1	64.4	16.9	20.2	20.7	65.5
July.....	305.5	57.1	32.5	215.9	63.3	17.1	20.5	20.9	66.0
August.....	307.2	58.9	32.4	215.9	61.7	17.0	21.3	21.2	66.1
September.....	307.3	58.3	32.6	216.4	63.0	17.0	19.6	20.9	66.5
October.....	307.1	57.2	32.8	217.2	63.1	16.8	20.4	20.7	66.6
November.....	308.9	57.7	33.7	217.5	62.7	16.8	21.5	20.3	66.8
December.....	310.1	58.1	33.6	218.4	63.5	16.7	20.8	20.6	67.1

¹ United States savings bonds, series A-F and J, are included at current redemption value.² Excludes guaranteed securities held by the Treasury. Not all of total shown is subject to statutory debt limitation.³ Includes commercial banks, trust companies, and stock savings banks in the United States and Territories and island possessions; figures exclude securities held in trust departments. Since the estimates in this table are on the basis of par values and include holdings of banks in United States Territories and possessions, they do not agree with the estimates in Table C-46, which are based on book values and relate only to banks within the United States.⁴ Exclusive of banks and insurance companies.⁵ Includes trust, sinking, and investment funds of State and local governments and their agencies, and of Territories and possessions.⁶ Includes partnerships and personal trust accounts.⁷ Includes savings and loan associations, nonprofit institutions, corporate pension trust funds, dealers and brokers, and investments of foreign balances and international accounts in this country. Beginning with December 1946, the international accounts include investments by the International Bank for Reconstruction and Development, the International Monetary Fund, the International Development Association, the Inter-American Development Bank, and various U.N. funds, in special non-interest-bearing notes issued by the U.S. Government. Beginning with June 30, 1947, includes holdings of Federal land banks.⁸ Preliminary estimates by Council of Economic Advisers.

Source: Treasury Department (except as noted).

TABLE C-55.—Average length and maturity distribution of marketable interest-bearing public debt, 1946-63

End of year or month	Amount out- standing	Maturity class					Average length	
		Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over	Years	Months
Millions of dollars								
Fiscal year:								
1946.....	189,606	61,974	24,763	41,807	17,461	43,599	9	1
1947.....	168,702	51,211	21,851	35,562	18,597	41,481	9	5
1948.....	160,346	48,742	21,630	32,264	16,229	41,481	9	2
1949.....	155,147	48,130	32,562	16,746	22,821	34,888	8	9
1950.....	155,310	42,338	51,292	7,792	28,035	25,853	8	2
1951.....	137,917	43,908	46,526	8,707	29,979	8,797	6	7
1952.....	140,407	46,367	47,814	13,933	25,700	6,594	5	8
1953.....	147,335	65,270	36,161	15,651	28,662	1,592	5	4
1954.....	150,354	62,734	29,866	27,515	28,634	1,606	5	6
1955.....	155,206	49,703	39,107	34,253	28,613	3,530	5	10
1956.....	154,953	58,714	34,401	28,908	28,578	4,351	5	4
1957.....	155,705	71,952	40,669	12,328	26,407	4,349	4	9
1958.....	166,675	67,782	42,557	21,476	27,652	7,208	5	3
1959.....	178,027	72,958	58,304	17,052	21,625	8,088	4	7
1960.....	183,845	70,467	72,844	20,246	12,630	7,658	4	4
1961.....	187,148	81,120	58,400	26,435	10,233	10,960	4	6
1962.....	196,072	88,442	57,041	26,049	9,319	15,221	4	11
1963.....	203,508	85,294	58,026	37,385	8,360	14,444	5	1
1962: January.....	197,628	86,416	64,921	20,918	11,959	13,414	4	6
February.....	197,609	88,417	62,910	20,916	11,954	13,411	4	7
March.....	196,524	87,209	59,679	23,720	10,677	15,239	4	11
April.....	198,138	88,055	59,206	24,976	10,670	15,232	4	10
May.....	198,193	90,577	55,549	26,178	10,664	15,225	4	11
June.....	196,072	88,442	57,041	26,049	9,319	15,221	4	11
July.....	196,870	89,244	57,055	26,045	9,313	15,213	4	10
August.....	199,295	93,728	52,806	27,885	9,309	15,567	4	10
September.....	197,951	84,467	58,158	32,411	7,353	15,562	5	0
October.....	201,311	88,284	57,728	32,403	7,348	15,548	4	11
November.....	204,222	88,580	61,614	31,140	7,342	15,545	4	11
December.....	203,011	87,284	61,640	33,983	4,565	15,539	4	11
1963: January.....	203,959	87,978	61,657	33,975	4,566	15,782	4	10
February.....	204,751	88,951	59,003	36,458	4,566	15,774	4	10
March.....	203,472	81,647	61,328	37,962	6,770	15,764	5	1
April.....	204,323	82,469	61,079	37,952	6,770	16,054	5	1
May.....	204,101	87,797	58,007	35,485	6,769	16,043	5	1
June.....	203,508	85,294	58,026	37,385	8,360	14,444	5	1
July.....	203,491	85,286	58,035	37,376	8,359	14,435	5	0
August.....	203,233	85,976	60,856	33,622	8,359	14,420	5	0
September.....	204,282	83,070	58,085	39,100	8,358	15,669	5	3
October.....	205,347	84,556	57,678	39,097	8,358	15,658	5	2
November.....	206,551	88,385	66,660	37,500	8,358	15,648	5	2
December.....	207,571	89,403	58,487	35,682	8,357	15,642	5	1

NOTE.—All issues classified to final maturity except partially tax-exempt bonds, which are classified to earliest call date.

Source: Treasury Department.

TABLE C-56.—Federal budget receipts and expenditures and the public debt, 1929-65

[Millions of dollars]

Fiscal or calendar year	Net budget receipts ¹	Budget expendi- tures	Surplus or deficit (-)	Public debt at end of year ²
Fiscal year:				
1929.....	3,861	3,127	734	16,931
1930.....	4,058	3,320	738	16,185
1931.....	3,116	3,577	-462	16,801
1932.....	1,924	4,659	-2,735	19,487
1933.....	1,997	4,598	-2,602	22,539
1934.....	3,015	6,645	-3,630	27,053
1935.....	3,706	6,497	-2,791	28,701
1936.....	3,997	8,422	-4,425	33,779
1937.....	4,956	7,733	-2,777	36,425
1938.....	5,588	6,765	-1,177	37,165
1939.....	4,979	8,841	-3,862	40,440
1940.....	5,137	9,055	-3,918	42,968
1941.....	7,096	13,255	-6,159	48,961
1942.....	12,547	34,037	-21,490	72,422
1943.....	21,947	79,368	-57,420	136,696
1944.....	43,563	94,986	-51,423	201,003
1945.....	44,362	98,303	-53,941	258,682
1946.....	39,650	80,326	-40,676	269,422
1947.....	39,677	39,923	754	258,286
1948.....	41,375	32,955	8,419	252,292
1949.....	37,663	39,474	-1,811	252,770
1950.....	36,422	39,544	-3,122	257,357
1951.....	47,490	43,970	3,510	255,222
1952.....	61,287	65,303	-4,017	259,105
1953.....	64,671	74,120	-9,449	266,071
1954.....	64,420	67,537	-3,117	271,260
1955.....	60,209	64,389	-4,180	274,374
1956.....	67,850	66,224	1,626	272,751
1957.....	70,562	68,966	1,596	270,527
1958.....	68,550	71,369	-2,819	276,343
1959.....	67,915	80,342	-12,427	284,706
1960.....	77,763	76,539	1,224	286,331
1961.....	77,659	81,515	-3,856	288,971
1962.....	81,409	87,787	-6,378	298,201
1963.....	86,376	92,642	-6,266	305,860
1964 ³	88,400	98,405	-10,005	311,800
1965 ⁴	93,000	97,900	-4,900	317,000
Calendar year:				
1948.....	40,800	35,559	5,241	252,800
1949.....	37,464	41,056	-3,592	257,130
1950.....	37,235	37,657	-422	256,708
1951.....	52,877	56,236	-3,358	259,419
1952.....	64,705	70,547	-5,842	267,391
1953.....	63,654	72,811	-9,157	275,168
1954.....	60,938	64,622	-3,683	278,750
1955.....	63,119	65,891	-2,771	280,769
1956.....	70,616	66,838	3,779	276,628
1957.....	71,749	71,157	592	274,898
1958.....	68,262	75,349	-7,088	282,922
1959.....	72,738	79,778	-7,040	290,798
1960.....	79,518	77,565	1,953	290,217
1961.....	78,157	84,463	-6,306	296,169
1962.....	84,709	91,907	-7,199	303,470
1963 ⁴	87,516	94,188	-6,672	309,347

¹ Gross receipts less refunds of receipts and transfers of tax receipts to the old-age and survivors insurance trust fund, the disability insurance trust fund, the railroad retirement account, the unemployment trust fund, and the highway trust fund.

² Excludes guaranteed issues; therefore, differs from total shown in Tables C-53 and C-54. The change in the public debt from year to year reflects not only the budget surplus or deficit but also changes in the Government's cash on hand, and the use of corporate debt and investment transactions by certain Government enterprises.

³ Estimate.

⁴ Preliminary.

NOTE.—Certain interfund transactions are excluded from budget receipts and expenditures beginning fiscal year 1952. For years prior to 1952, the amounts of such transactions are not significant.

Sources: Treasury Department and Bureau of the Budget.

TABLE C-57.—Federal budget receipts by source and expenditures by function, fiscal years 1946-65

(Millions of dollars)

Fiscal year	Budget receipts by source					Budget expenditures by function						Budget surplus or deficit (—)
	Total	Individual income taxes	Corporation income taxes	Excise taxes	All other receipts ¹	Total	National defense	Veterans' services and benefits	Agriculture and agricultural resources	Interest	All other expenditures ²	
1946..	39,650	16,157	11,833	6,999	4,661	60,326	43,176	4,415	747	4,816	7,173	-20,676
1947..	39,677	17,835	8,569	7,207	6,066	38,923	14,368	7,381	1,243	5,012	10,917	764
1948..	41,375	19,305	9,678	7,356	5,037	32,955	11,771	6,653	575	5,248	8,708	8,419
1949..	37,663	15,548	11,195	7,502	3,418	39,474	12,908	6,725	2,512	5,445	11,884	-1,811
1950..	36,422	15,745	10,448	7,549	2,679	39,544	13,009	6,646	2,783	5,817	11,288	-3,122
1951..	47,480	21,643	14,106	8,648	3,083	43,970	22,444	5,342	650	5,714	9,819	3,510
1952..	61,287	27,913	21,225	8,851	3,298	65,303	43,976	4,863	1,045	5,934	9,486	-4,017
1953..	64,671	30,108	21,238	9,868	3,456	74,120	50,442	4,368	2,955	6,578	9,777	-9,449
1954..	64,420	29,542	21,101	9,945	3,833	67,537	46,986	4,341	2,573	6,470	7,167	-3,117
1955..	60,209	28,747	17,861	9,131	4,469	64,389	40,695	4,522	4,388	6,438	8,346	-4,180
1956..	67,850	32,188	20,880	9,929	4,854	66,224	40,723	4,810	4,868	6,846	8,977	1,626
1957..	70,562	35,620	21,167	9,055	4,721	68,966	43,360	4,870	4,546	7,307	8,883	1,596
1958..	68,550	34,724	20,074	8,612	5,141	71,369	44,234	5,184	4,419	7,689	9,843	-2,819
1959..	67,915	36,719	17,309	8,504	5,384	80,342	46,491	5,287	6,590	7,671	14,303	-12,427
1960..	77,763	40,715	21,494	9,137	6,418	76,539	45,691	5,266	4,882	9,266	11,434	1,224
1961..	77,659	41,338	20,954	9,063	6,304	81,515	47,494	5,414	5,173	9,050	14,384	-3,856
1962 ³ ..	81,409	45,571	20,523	9,585	5,731	87,787	51,103	5,403	5,895	9,198	16,186	-6,378
1963 ³ ..	86,376	47,588	21,579	9,915	7,294	92,642	52,755	5,186	6,948	9,980	17,773	-6,266
1964 ^{3,4} ..	88,400	-----	-----	-----	-----	98,405	-----	-----	-----	-----	-----	-10,005
1965 ^{3,4} ..	93,000	-----	-----	-----	-----	97,900	-----	-----	-----	-----	-----	-4,900

¹ Includes employment taxes, estate and gift taxes, customs revenues, and miscellaneous receipts. See also Note below.

² Includes expenditures for international affairs and finance; space research and technology; natural resources; commerce and transportation; housing and community development; health, labor, and welfare; education; and general government. Annual expenditures (millions of dollars) for space research and technology, 1954-1964 are, respectively: 90, 74, 71, 76, 89, 145, 401, 744, 1,257, 2,400, and 4,200. Also includes adjustment to daily Treasury statement (for actuals) and allowance for contingencies (for estimates). See also Note below.

³ Receipts reflect new depreciation guidelines and investment tax credit.

⁴ Estimate.

NOTE.—Total budget receipts and total budget expenditures and the "all other" categories exclude certain interfund transactions.

Sources: Treasury Department and Bureau of the Budget.

TABLE C-58.—Government cash receipts from and payments to the public, 1946-65

[Billions of dollars]

Fiscal or calendar year	Total			Federal ¹			State and local ²		
	Cash receipts	Cash payments	Excess of receipts or of payments (—)	Cash receipts	Cash payments	Excess of receipts or of payments (—)	Cash receipts	Cash payments	Excess of receipts or of payments (—)
Fiscal year:									
1946.....	54.2	70.2	-16.0	43.5	61.7	-18.2	10.7	8.5	2.2
1947.....	55.6	47.5	8.1	43.5	36.9	6.6	12.1	10.6	1.5
1948.....	59.6	50.2	9.4	45.4	36.5	8.9	14.2	13.7	.5
1949.....	57.6	56.3	1.3	41.6	40.6	1.0	16.0	15.7	.3
1950.....	58.2	61.5	-3.3	40.9	43.1	-2.2	17.3	18.4	-1.1
1951.....	72.5	65.2	7.3	53.4	45.8	7.6	19.1	19.4	-.3
1952.....	88.7	88.9	-.2	68.0	68.0	(³)	20.7	20.9	-.2
1953.....	93.9	99.1	-5.2	71.5	76.8	-5.3	22.4	22.3	.1
1954.....	95.6	96.1	-.4	71.6	71.9	-.2	24.0	24.2	-.2
1955.....	93.5	97.5	-4.0	67.8	70.5	-2.7	25.7	27.0	-1.3
1956.....	105.8	101.5	4.2	77.1	72.5	4.5	28.7	29.0	-.3
1957.....	113.5	111.8	1.7	82.1	80.0	2.1	31.4	31.8	-.4
1958.....	115.0	118.3	-3.3	81.9	83.5	-1.6	33.1	34.8	-1.7
1959.....	117.0	132.3	-15.3	81.7	94.8	-13.1	35.3	37.5	-2.2
1960.....	134.5	132.9	1.6	95.1	94.3	.8	39.4	38.6	.8
1961.....	139.4	141.7	-2.3	97.2	99.5	-2.3	42.2	42.2	(⁴)
1962.....	148.0	153.5	-5.5	101.9	107.7	-5.8	46.1	45.8	.3
1963.....	159.3	162.7	-3.3	109.7	113.8	-4.0	49.6	48.9	.7
1964 ⁵				114.4	122.7	-8.3			
1965 ⁵				119.7	122.7	-2.9			
Calendar year:									
1946.....	52.9	50.9	2.0	41.4	41.4	.1	11.4	9.5	1.9
1947.....	57.4 ⁶	50.7	6.7	44.3	38.6	5.7	13.1	12.1	1.0
1948.....	60.0	51.8	8.2	44.9	36.9	8.0	15.1	14.9	.2
1949.....	57.9	59.8	-1.8	41.3	42.6	-1.3	16.6	17.1	-.5
1950.....	60.4	61.1	-.6	42.4	42.0	.5	18.0	19.1	-1.1
1951.....	79.1	78.3	.9	59.3	58.0	1.2	19.9	20.2	-.4
1952.....	93.0	93.6	-.6	71.3	72.0	-.6	21.7	21.6	.1
1953.....	93.5	100.4	-6.9	70.2	77.4	-7.2	23.2	23.0	.3
1954.....	93.3	95.3	-2.0	68.6	69.7	-1.1	24.7	25.6	-.9
1955.....	98.4	100.2	-1.8	71.4	72.2	-.7	26.9	28.0	-1.1
1956.....	110.2	105.2	5.0	80.3	74.8	5.5	29.9	30.4	-.5
1957.....	116.8	116.6	.2	84.5	83.3	1.2	32.3	33.3	-1.0
1958.....	115.9	125.2	-9.3	81.7	89.0	-7.3	34.1	36.2	-2.1
1959.....	124.6	133.1	-8.5	87.6	95.6	-8.0	37.1	37.5	-.5
1960.....	139.3	135.4	3.9	98.3	94.7	3.6	41.1	40.7	.3
1961.....	141.8	148.8	-7.0	97.8	104.6	-6.8	44.0	44.2	-.2
1962.....	154.0	159.3	-5.3	106.2	111.9	-5.7	47.8	47.5	.4

¹ For derivation of Federal cash receipts and payments, see *Budget of the United States Government for the Fiscal Year ending June 30, 1965*, and Table C-61.

² Estimated by Council of Economic Advisers from receipts and expenditures in the national income accounts. Cash receipts consist of personal tax and nontax receipts, indirect business tax and nontax accruals, and corporate tax accruals adjusted to a collection basis. Cash payments are total expenditures less Federal grants-in-aid and less contributions for social insurance. (Federal grants-in-aid are therefore excluded from State and local receipts and payments and included only in Federal payments.) See Table C-59.

³ Surplus of \$49 million.

⁴ Less than \$50 million.

⁵ Estimate.

Sources: Treasury Department, Bureau of the Budget, Department of Commerce, and Council of Economic Advisers.

TABLE C-59.—Government receipts and expenditures in the national income accounts, 1929-63

[Billions of dollars]

Calendar year or quarter	Total government			Federal Government ¹			State and local government		
	Re- ceipts	Ex- pendi- tures	Sur- plus or deficit (-) on income and prod- uct ac- count	Re- ceipts	Ex- pendi- tures	Sur- plus or deficit (-) on income and prod- uct ac- count	Re- ceipts	Ex- pendi- tures	Sur- plus or deficit (-) on income and prod- uct ac- count
1929.....	11.3	10.2	1.0	3.8	2.6	1.2	7.6	7.7	-0.1
1930.....	10.8	11.0	- .3	3.0	2.8	.3	7.8	8.4	-.5
1931.....	9.5	12.3	-2.8	2.0	4.2	-2.1	7.7	8.4	-.7
1932.....	8.9	10.6	-1.7	1.7	3.2	-1.5	7.3	7.6	-.2
1933.....	9.3	10.7	-1.4	2.7	4.0	-1.3	7.2	7.2	(²)
1934.....	10.5	12.8	-2.4	3.5	6.4	-2.9	8.6	8.1	.5
1935.....	11.4	13.3	-2.0	4.0	6.5	-2.6	9.1	8.5	.6
1936.....	12.9	15.9	-3.0	5.0	8.5	-3.5	8.6	8.1	.5
1937.....	15.4	14.8	.6	7.0	7.2	-.2	9.1	8.4	.7
1938.....	15.0	16.6	-1.6	6.5	8.5	-2.0	9.3	8.9	.4
1939.....	15.4	17.5	-2.1	6.7	9.0	-2.2	9.6	9.6	.1
1940.....	17.7	18.5	-.7	8.6	10.1	-1.4	10.0	9.2	.7
1941.....	25.0	28.8	-3.8	15.4	20.5	-5.1	10.4	9.0	1.3
1942.....	32.6	64.0	-31.4	22.9	56.1	-33.2	10.6	8.8	1.8
1943.....	49.2	93.4	-44.2	39.3	86.0	-46.7	10.9	8.4	2.5
1944.....	51.2	103.1	-51.9	41.0	95.6	-54.6	11.1	8.4	2.7
1945.....	53.2	92.9	-39.7	42.5	84.8	-42.3	11.6	9.0	2.6
1946.....	51.1	47.0	4.1	39.2	37.0	2.2	13.0	11.1	1.9
1947.....	57.1	43.8	13.3	43.3	31.1	12.2	15.5	14.4	1.1
1948.....	59.2	51.0	8.2	43.4	35.4	8.0	17.8	17.6	.3
1949.....	56.4	59.5	-3.1	39.1	41.6	-2.5	19.6	20.2	-.6
1950.....	69.3	61.1	8.2	50.2	41.0	9.2	21.4	22.4	-1.0
1951.....	85.5	79.4	6.1	64.5	58.0	6.4	23.5	23.8	-.3
1952.....	90.6	94.4	-3.9	67.7	71.6	-3.9	25.5	25.4	.1
1953.....	94.9	102.0	-7.1	70.3	77.7	-7.4	27.4	27.1	.3
1954.....	90.0	96.7	-6.7	63.8	69.6	-5.8	29.1	30.1	-.9
1955.....	101.4	98.6	2.9	72.8	68.9	3.8	31.7	32.7	-1.0
1956.....	109.5	104.3	5.2	77.5	71.8	5.7	35.2	35.7	-.5
1957.....	116.3	115.3	1.0	81.7	79.7	2.0	38.6	39.6	-1.0
1958.....	115.1	126.6	-11.4	78.5	87.9	-9.4	42.0	44.1	-2.1
1959.....	130.2	131.6	-1.5	90.3	91.4	-1.1	46.6	47.0	-.3
1960.....	140.6	136.7	3.9	96.6	93.1	3.5	50.4	50.0	.4
1961.....	145.5	150.2	-4.7	98.2	102.8	-4.5	54.3	54.4	-.1
1962.....	156.8	160.7	-3.9	105.4	109.8	-4.3	59.0	58.7	.4
1963 ³	168.8	170.5	-1.7	113.3	116.1	-2.8	64.3	63.2	1.1
Seasonally adjusted annual rates									
1961: I.....	138.7	145.1	-6.4	93.0	99.0	-6.0	52.6	53.0	-0.4
II.....	144.0	149.4	-5.4	97.3	102.7	-5.4	53.6	53.6	(⁴)
III.....	146.6	150.6	-4.0	98.9	102.9	-4.0	54.7	54.7	(⁵)
IV.....	152.6	155.4	-2.8	103.7	106.2	-2.5	56.1	56.4	-.3
1962: I.....	153.5	159.0	-5.4	103.4	109.0	-5.6	57.6	57.4	.2
II.....	156.7	158.6	-1.9	105.6	108.6	-3.0	58.7	57.6	1.1
III.....	157.3	160.2	-3.0	105.6	109.1	-3.6	59.2	58.6	.6
IV.....	159.7	165.1	-5.4	107.1	112.4	-5.3	60.7	60.8	-.1
1963: I.....	164.0	168.2	-4.2	110.0	114.5	-4.6	62.2	61.8	.4
II.....	167.2	168.5	-1.3	112.3	115.3	-3.0	63.4	61.7	1.7
III.....	170.1	170.7	-.6	114.3	116.1	-1.8	65.0	63.8	1.2
IV ⁴	(⁴)	174.5	(⁴)	(⁴)	118.4	(⁴)	(⁴)	65.5	(⁴)

¹ See Note, Table C-60.² Deficit of \$35 million.³ Preliminary estimates by Council of Economic Advisers.⁴ Not available.⁵ Less than \$50 million.

NOTE.—Federal grants-in-aid to State and local governments are reflected in Federal expenditures and State and local receipts and expenditures. Total government receipts and expenditures have been adjusted to eliminate this duplication.

Data for Alaska and Hawaii included beginning 1960.

Source: Department of Commerce (except as noted).

TABLE C-60.—Federal Government receipts and expenditures in the national income accounts, 1946-65
[Billions of dollars]

Year or quarter	Receipts					Expenditures							Surplus or deficit (-) on income and product account
	Total	Personal tax and non-tax receipts	Corporate profits tax accruals	Indirect business tax and non-tax accruals	Contributions for social insurance	Total	Purchases of goods and services	Transfer payments		Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises	
								To persons	Foreign (net)				
Fiscal year:													
1946.....	37.3	16.9	7.2	7.4	5.8	56.6	41.4	(1)	(1)	0.9	3.9	2.3	-19.3
1947.....	42.9	18.8	10.7	7.9	5.5	31.7	16.9	8.3	0.2	1.5	4.2	.7	11.2
1948.....	43.7	20.0	11.2	8.0	4.6	32.3	16.6	8.7	.6	1.8	4.2	.4	11.4
1949.....	40.1	16.3	10.9	8.1	4.8	40.0	21.8	8.1	2.9	2.1	4.3	.8	.2
1950.....	42.0	16.5	11.7	8.3	5.5	42.2	20.0	11.3	3.1	2.4	4.4	1.0	—
1951.....	61.7	23.5	21.8	9.6	6.6	45.3	26.5	8.2	2.3	2.4	4.6	1.3	16.3
1952.....	65.5	29.0	19.3	9.9	7.3	66.6	47.7	8.7	1.8	2.5	4.8	1.1	-1.1
1953.....	69.9	31.5	19.8	11.0	7.6	76.2	56.8	9.4	1.7	2.8	4.8	.9	-6.3
1954.....	65.9	30.4	17.1	10.7	7.7	74.5	53.9	10.6	1.3	2.8	4.9	1.0	-8.6
1955.....	67.0	29.9	18.4	10.4	8.3	68.1	45.0	12.2	1.6	2.9	4.9	1.4	-1.1
1956.....	76.3	33.5	21.0	11.2	10.5	69.5	45.2	12.9	1.3	3.1	5.0	1.9	6.8
1957.....	80.9	36.7	20.4	12.1	11.7	76.5	48.3	14.6	1.5	3.6	5.5	3.1	4.4
1958.....	77.8	36.3	17.3	12.0	12.3	82.8	50.5	18.1	1.3	4.5	5.6	2.7	-4.9
1959.....	85.9	38.7	21.1	12.3	13.8	90.3	53.9	20.4	1.4	6.0	5.8	2.7	-4.4
1960.....	94.5	42.3	21.7	13.9	16.7	92.1	53.0	21.3	1.6	6.7	6.9	2.7	2.4
1961.....	95.2	44.0	19.5	13.6	18.0	97.8	54.9	24.3	1.6	6.6	7.0	3.4	-2.7
1962.....	103.6	47.6	21.3	14.9	19.7	106.4	60.1	26.2	1.6	7.3	7.0	4.2	-2.7
1963.....	109.3	50.1	21.6	15.6	21.9	112.6	64.4	27.7	1.6	7.9	7.6	3.5	-3.3
1964 ¹	113.6	50.1	23.3	16.5	23.7	119.1	67.8	30.5		9.4	8.0	3.5	-5.5
1965 ¹	118.8	52.3	24.9	17.3	24.2	121.5	69.1	31.8		9.7	8.5	2.5	-2.8
Calendar year:													
1946.....	39.2	17.2	8.6	7.9	5.5	37.0	20.6	9.2	.3	1.1	4.2	1.6	2.2
1947.....	43.3	19.6	10.7	7.9	5.1	31.1	15.6	8.9	.1	1.7	4.2	.6	12.2
1948.....	43.4	19.0	11.8	8.1	4.5	35.4	19.3	7.7	1.6	2.0	4.3	.6	8.0
1949.....	39.1	16.2	9.8	8.2	4.9	41.6	22.2	8.8	3.2	2.2	4.4	.7	-2.5
1950.....	50.2	18.2	17.1	9.0	5.9	41.0	19.3	10.9	2.8	2.3	4.5	1.2	9.2
1951.....	64.5	26.3	21.6	9.5	7.1	58.0	38.8	8.7	2.1	2.5	4.7	1.3	6.4
1952.....	67.7	31.2	18.0	10.5	7.4	71.6	62.9	8.9	1.5	2.6	4.7	1.0	-3.9
1953.....	70.3	32.4	19.4	11.2	7.4	77.7	58.0	9.7	1.6	2.8	4.8	.8	-7.4
1954.....	63.8	29.2	16.5	10.1	8.1	69.6	47.5	11.6	1.4	2.9	5.0	1.2	-5.8
1955.....	72.8	31.5	20.9	11.0	9.3	68.9	45.3	12.5	1.5	3.0	4.9	1.6	3.8
1956.....	77.5	35.2	20.2	11.6	10.6	71.8	45.7	13.5	1.5	3.3	5.2	2.7	5.7
1957.....	81.7	37.3	19.9	12.2	12.2	79.7	49.7	16.0	1.5	4.1	5.7	2.8	2.0
1958.....	78.5	36.6	17.7	11.9	12.4	87.9	52.6	20.0	1.3	5.4	5.6	3.0	-9.4
1959.....	90.3	40.4	22.0	13.0	14.9	91.4	53.6	20.6	1.5	6.7	6.4	2.5	-1.1
1960.....	96.6	44.0	21.0	14.0	17.6	93.1	53.1	22.2	1.6	6.3	7.1	2.8	3.5
1961.....	98.2	45.1	20.7	14.2	18.2	102.8	57.4	25.9	1.6	7.0	6.9	4.1	-4.5
1962.....	105.4	49.0	20.8	15.2	20.4	109.8	62.4	26.7	1.6	7.7	7.2	4.2	-4.3
1963 ¹	113.3	50.8	23.0	16.2	23.4	116.1	66.4	28.4	1.7	8.8	7.5	3.3	-2.8
Seasonally adjusted annual rates													
Calendar quarter:													
1961: I.....	93.0	43.7	18.2	13.3	17.8	99.0	55.4	25.0	1.6	7.0	7.0	3.0	-6.0
II.....	97.3	44.8	20.5	13.9	18.1	102.7	57.1	25.8	1.5	6.8	6.9	4.5	-5.4
III.....	98.9	45.1	20.9	14.5	18.4	102.9	57.1	26.2	1.5	7.0	6.8	4.3	-4.0
IV.....	103.7	47.0	23.1	15.0	18.6	106.2	59.8	26.2	1.6	7.2	6.9	4.5	-2.5
1962: I.....	103.4	47.7	20.4	15.1	20.1	109.0	61.8	26.4	1.8	7.4	7.0	4.6	-5.6
II.....	105.6	49.3	20.7	15.2	20.4	108.6	61.9	26.3	1.5	7.7	7.1	4.2	-3.0
III.....	105.6	49.4	20.5	15.2	20.5	109.1	62.4	26.6	1.5	7.5	7.2	3.9	-3.6
IV.....	107.1	49.7	21.5	15.4	20.5	112.4	63.6	27.6	1.5	8.1	7.3	4.2	-5.3
1963: I.....	110.0	50.0	21.5	15.7	22.8	114.5	65.5	28.6	1.5	8.2	7.4	3.4	-4.6
II.....	112.3	50.4	22.6	16.0	23.3	115.3	66.5	28.0	1.8	8.5	7.5	3.0	-3.0
III.....	114.3	51.1	23.2	16.4	23.6	116.1	66.4	28.1	1.7	9.2	7.6	3.2	-1.8
IV ¹	(1)	51.8	(1)	16.5	23.9	118.4	67.0	28.8	2.0	9.4	7.6	3.6	(1)

¹ Not available.

² Estimate.

³ Preliminary estimates by Council of Economic Advisers.

NOTE.—These accounts, like the cash budget, include the transactions of the trust accounts. Unlike both the conventional budget and the cash statement, they exclude certain capital and lending transactions. In general, they do not use the cash basis for transactions with business. Instead, corporate profits taxes are included in receipts on an accrual instead of a cash basis; expenditures are timed with the delivery instead of the payment for goods and services; and CCC guaranteed price-support crop loans financed by banks are counted as expenditures when the loans are made, not when CCC redeems them.

Data for Alaska and Hawaii included beginning 1960.

Sources: Department of Commerce and Bureau of the Budget (except as noted).

TABLE C-61.—*Reconciliation of Federal Government receipts and expenditures in the conventional budget and the consolidated cash statement with receipts and expenditures in the national income accounts, fiscal years 1961-65*

[Billions of dollars]

Receipts or expenditures	Fiscal years				
	1961	1962	1963	1964 ¹	1965 ¹
RECEIPTS					
Budget receipts	77.7	81.4	86.4	88.4	93.0
Less: Intragovernmental transactions.....	3.9	3.8	4.3	4.1	4.1
Receipts from exercise of monetary authority.....	.1	.1	(2)	.1	.1
Plus: Trust fund receipts.....	23.6	24.3	27.7	30.2	30.9
Equals: Federal receipts from the public (consolidated cash receipts)	97.2	101.9	109.7	114.4	119.7
Adjustments for agency coverage:					
Less: District of Columbia revenues.....	.2	.2	.3	.4	.4
Adjustments for netting and consolidation:					
Less: Interest, dividends, and other earnings.....	1.1	1.0	1.1	1.2	1.3
Plus: Contributions to Federal employees' retirement funds, etc.....	1.7	1.8	1.9	1.9	1.9
Adjustments for timing:					
Plus: Excess of corporate tax accruals over collections; personal taxes, social insurance contributions, etc.....	-1.0	2.0	.6	-.1	-.2
Adjustments for capital transactions: ³					
Less: Realization upon loans and investments, sale of Government property, etc.....	1.5	.9	1.5	1.1	1.0
Equals: Receipts—National Income accounts	95.2	103.6	109.3	113.6	118.8
EXPENDITURES					
Budget expenditures	81.5	87.8	92.6	98.4	97.9
Less: Intragovernmental transactions.....	3.9	3.8	4.3	4.1	4.1
Accrued interest and other non-cash expenditures (net).....	.8	1.5	1.1	.9	.5
Plus: Trust fund expenditures (including Government-sponsored enterprise expenditures net).....	23.0	25.2	26.5	29.3	29.4
Equals: Federal payments to the public (consolidated cash expenditures)	99.5	107.7	113.8	122.7	122.7
Adjustments for agency coverage:					
Less: District of Columbia expenditures.....	.3	.3	.3	.4	.4
Adjustments for netting and consolidation:					
Less: Interest received and proceeds of Government sales.....	.6	.8	.6	.6	.9
Plus: Contributions to Federal employees' retirement funds, etc.....	1.7	1.8	1.9	1.9	1.9
Adjustments for timing:					
Plus: Excess of interest accruals over payments on savings bonds and Treasury bills.....	.2	.7	.9	.8	.6
Excess of deliveries over expenditures and miscellaneous items ⁴	.1	2.1	(2)	-.4	.6
Less: Commodity Credit Corporation foreign currency exchanges.....	1.0	1.1	.3	.3	.1
Adjustments for capital transactions: ³					
Less: Loans—Federal National Mortgage Association secondary market mortgage purchases, redemption of International Monetary Fund notes, etc.....	-.2	2.7	.7	1.1	.2
Trust and deposit fund items.....	.6	.8	1.9	3.4	2.6
Purchase of land and existing assets.....	.1	.1	.1	.1	.1
Other ⁵	1.3				
Equals: Expenditures—National Income accounts	97.8	106.4	112.6	119.1	121.5

¹ Data for 1964 and 1965 are estimates.

² Less than \$50 million.

³ Consist of transactions in financial assets and liabilities, land and secondhand assets. Acquisition of newly produced tangible assets are included in expenditures for goods and services as defined in the national income and product accounts.

⁴ Includes net change in Commodity Credit Corporation guaranteed non-recourse loans and increase in clearing account.

⁵ Commodity Credit Corporation inventory valuation adjustment.

Sources: Bureau of the Budget and Department of Commerce.

TABLE C-62.—State and local government revenues and expenditures, selected fiscal years, 1927-62

(Millions of dollars)

Fiscal year ¹	Revenues by source ²							Expenditures by function ³				
	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corporation net income taxes	Revenue from Federal Government	All other revenue ⁴	Total	Education	Highways	Public welfare	All other ⁴
1927-----	7,271	4,730	470	70	92	116	1,793	7,210	2,235	1,809	151	3,015
1932-----	7,267	4,487	752	74	79	232	1,643	7,765	2,311	1,741	444	3,269
1934-----	7,678	4,076	1,008	80	49	1,016	1,449	7,181	1,831	1,509	889	2,952
1936-----	8,395	4,093	1,484	153	113	948	1,604	7,644	2,177	1,425	827	3,215
1938-----	9,228	4,440	1,794	218	165	800	1,811	8,757	2,491	1,650	1,069	3,547
1940-----	9,609	4,430	1,982	224	156	945	1,872	9,229	2,638	1,573	1,156	3,862
1942-----	10,418	4,537	2,351	276	272	858	2,123	9,190	2,586	1,490	1,225	3,889
1944-----	10,908	4,604	2,289	342	451	954	2,269	8,863	2,793	1,200	1,133	3,737
1946-----	12,356	4,986	2,986	422	447	855	2,661	11,028	3,356	1,672	1,409	4,591
1948-----	17,250	6,126	4,442	543	592	1,861	3,685	17,684	5,379	3,036	2,099	7,170
1950-----	20,911	7,349	5,154	788	593	2,486	4,541	22,787	7,177	3,803	2,940	8,867
1952-----	25,181	8,652	6,357	998	846	2,566	5,763	26,098	8,318	4,650	2,788	10,342
1953-----	27,307	9,375	6,927	1,065	817	2,870	6,252	27,910	9,390	4,987	2,914	10,619
1954-----	29,012	9,967	7,276	1,127	778	2,966	6,897	30,701	10,557	5,527	3,060	11,557
1955-----	31,073	10,735	7,643	1,237	744	3,131	7,584	33,724	11,907	6,452	3,168	12,197
1956-----	34,667	11,749	8,691	1,538	890	3,335	8,465	36,711	13,220	6,953	3,139	13,399
1957-----	38,164	12,864	9,467	1,754	984	3,843	9,250	40,375	14,134	7,816	3,485	14,940
1958-----	41,219	14,047	9,829	1,759	1,018	4,865	9,699	44,851	15,919	8,567	3,818	16,547
1959-----	45,306	14,983	10,437	1,994	1,001	6,377	10,516	48,887	17,283	9,592	4,136	17,876
1960-----	50,505	16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,324
1961-----	54,037	18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,061
1962-----	58,214	19,056	13,510	3,036	1,308	7,857	13,447	59,714	21,921	10,341	5,097	22,355

¹Fiscal years not the same for all governments.²Excludes revenues or expenditures of publicly owned utilities and liquor stores, and of insurance-trust activities. Intergovernmental receipts and payments between governments in these categories are also excluded.³Includes licenses and other taxes and charges and miscellaneous revenues.⁴Includes expenditures for health, hospitals, police, local fire protection, natural resources, sanitation, housing and community redevelopment, local recreation, general control, interest on general debt, and other and unallocable expenditures.

NOTE.—Data are not available for intervening years.

Data for Alaska and Hawaii included beginning 1959 and 1960, respectively.

See Table C-52 for net debt of State and local governments.

Source: Department of Commerce (Bureau of the Census).

CORPORATE PROFITS AND FINANCE

TABLE C-63.—*Profits before and after taxes, all private corporations, 1929-63*

[Billions of dollars]

Year or quarter	Corporate profits (before taxes) and inventory valuation adjustment						Corporate profits before taxes	Corporate tax liability ¹	Corporate profits after taxes		
	All industries	Manufacturing			Transportation, communication, and public utilities	All other industries			Total	Dividend payments	Undistributed profits
		Total	Durable goods industries	Non-durable goods industries							
1929.....	10.1	5.1	2.6	2.5	2.0	3.0	9.6	1.4	8.3	5.8	2.4
1930.....	6.6	3.9	1.5	2.4	1.2	1.5	3.3	.8	2.5	5.5	-3.0
1931.....	1.6	1.3	(2)	1.3	.6	-2	-8	.5	-1.3	4.1	-5.4
1932.....	-2.0	-6	-1.1	4	.2	-1.5	-3.0	.4	-3.4	2.6	-6.0
1933.....	-2.0	-5	-5	(2)	.1	-1.5	.2	.5	-4	2.1	-2.4
1934.....	1.1	.9	.2	.7	.4	-2	1.7	.7	1.0	2.6	-1.6
1935.....	2.9	2.0	.9	1.1	.5	.5	3.1	1.0	2.2	2.9	-.7
1936.....	5.0	3.1	1.7	1.4	.7	1.2	5.7	1.4	4.3	4.5	-.2
1937.....	6.2	3.6	1.7	2.0	.8	1.8	6.2	1.5	4.7	4.7	(2)
1938.....	4.3	2.2	.7	1.4	.6	1.5	3.3	1.0	2.3	3.2	-.9
1939.....	5.7	3.2	1.6	1.5	1.0	1.5	6.4	1.4	5.0	3.8	1.2
1940.....	9.1	5.4	3.0	2.3	1.3	2.4	9.3	2.8	6.5	4.0	2.4
1941.....	14.5	9.3	6.3	3.0	2.0	3.2	17.0	7.6	9.4	4.5	4.9
1942.....	19.7	11.7	7.1	4.5	3.5	4.5	20.9	11.4	9.5	4.3	5.2
1943.....	23.8	13.7	8.0	5.6	4.4	5.7	24.6	14.1	10.5	4.5	6.0
1944.....	23.0	13.0	7.3	5.7	3.9	6.1	23.3	12.9	10.4	4.7	5.7
1945.....	18.4	9.5	4.5	5.0	2.8	6.1	19.0	10.7	8.3	4.7	3.6
1946.....	17.3	8.4	2.1	6.3	1.8	7.1	22.6	9.1	13.4	5.8	7.7
1947.....	23.6	12.8	5.3	7.4	2.1	8.7	29.5	11.3	18.2	6.5	11.7
1948.....	30.8	16.8	7.4	9.4	2.9	11.2	33.0	12.5	20.5	7.2	13.3
1949.....	28.2	15.3	7.9	7.4	2.9	10.1	26.4	10.4	16.0	7.5	8.5
1950.....	35.7	20.4	12.0	8.4	4.0	11.3	40.6	17.9	22.8	9.2	13.6
1951.....	41.0	24.4	13.5	10.9	4.5	12.0	42.2	22.4	19.7	9.0	10.7
1952.....	37.7	21.1	11.8	9.3	4.8	11.8	36.7	19.5	17.2	9.0	8.3
1953.....	37.3	21.4	12.1	9.3	4.9	11.0	38.3	20.2	18.1	9.2	8.9
1954.....	33.7	18.4	10.1	8.3	4.4	11.0	34.1	17.2	16.8	9.8	7.0
1955.....	43.1	25.0	14.2	10.8	5.4	12.8	44.9	21.8	23.0	11.2	11.8
1956.....	42.0	23.5	12.6	10.9	5.6	12.9	44.7	21.2	23.5	12.1	11.3
1957.....	41.7	22.9	13.1	9.8	5.5	13.3	43.2	20.9	22.3	12.6	9.7
1958.....	37.2	18.3	9.0	9.3	5.6	13.3	37.4	18.6	18.8	12.4	6.4
1959.....	47.2	25.4	13.4	11.9	6.7	15.1	47.7	23.2	24.5	13.7	10.8
1960.....	44.5	23.0	11.6	11.4	7.0	14.4	44.3	22.3	22.0	14.5	7.5
1961.....	43.8	22.0	11.1	10.9	7.2	14.6	43.8	22.0	21.8	15.3	6.5
1962 ²	47.0	24.5	13.2	11.3	7.6	14.9	46.8	22.2	24.6	16.6	8.1
1963 ^{3,4}	51.3	26.4	14.5	11.9	8.3	16.6	51.7	24.5	27.2	17.8	9.4
Seasonally adjusted annual rates											
1961: I.....	38.8	18.6	8.4	10.2	6.7	13.5	38.5	19.4	19.2	15.0	4.2
II.....	43.6	21.5	10.6	10.9	7.1	15.0	43.4	21.8	21.6	15.1	6.5
III.....	44.0	22.4	11.4	11.0	7.2	14.4	44.3	22.3	22.0	15.2	6.8
IV.....	48.6	25.3	14.0	11.3	7.8	15.6	48.9	24.6	24.3	15.8	8.5
1962: I.....	46.1	24.0	13.0	11.0	7.4	14.7	45.9	21.7	24.2	16.2	8.0
II.....	46.5	24.1	12.7	11.3	7.5	15.0	46.7	22.1	24.6	16.4	8.2
III.....	46.1	24.7	13.5	11.3	7.6	13.8	46.2	21.9	24.3	16.5	7.8
IV.....	49.3	25.2	13.7	11.6	7.9	16.2	48.4	22.9	25.5	17.1	8.4
1963: I.....	48.8	24.2	13.2	11.0	8.1	16.4	48.3	22.9	25.4	17.1	8.3
II.....	50.1	26.0	14.5	11.5	7.9	16.2	51.0	24.2	26.8	17.6	9.2
III.....	52.2	27.6	15.0	12.6	8.3	16.4	52.2	24.7	27.5	17.6	9.8
IV ⁵	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	18.8	(2)

¹ Federal and State corporate income and excess profits taxes.

² Less than \$50 million.

³ The new figures for 1962 and 1963 reflect the new depreciation guidelines issued by the Treasury Department July 11, 1962, and the investment tax credit provided in the Revenue Act of 1962.

⁴ Preliminary estimates by Council of Economic Advisers.

⁵ Data for corporate profits are approximations for the year as a whole; data for fourth quarter are not available. All other data incorporating or derived from these figures are correspondingly approximate.

⁶ Not available.

Source: Department of Commerce (except as noted).

TABLE C-64.—*Relation of profits after taxes to stockholders' equity and to sales, private manufacturing corporations, by industry group, 1959-63*

Quarter	All private manufacturing corporations	Durable goods industries												
		Total durable	Lumber and wood products (except furniture)	Furniture and fixtures	Stone, clay, and glass products	Primary iron and steel industries	Primary non-ferrous metal industries	Fabricated metal products	Machinery (except electrical)	Electrical machinery, equipment, and supplies	Motor vehicles and equipment	Aircraft and parts	Instruments and related products	Miscellaneous manufacturing (including ordinance)
Ratio of profits after Federal taxes (annual rate) to stockholders' equity—percent														
BASED ON 1957 SIC ¹														
1959: I.....	10.0	10.2	6.1	6.2	8.0	11.7	8.2	5.9	7.1	10.7	19.1	8.8	10.8	7.2
II.....	12.4	14.0	11.3	9.1	17.4	16.7	10.3	9.7	12.5	12.7	20.5	9.0	12.0	7.1
III.....	9.6	8.3	12.9	11.7	15.7	-2.7	6.7	10.9	10.7	12.1	8.0	6.8	14.5	12.4
IV.....	9.6	9.0	7.0	8.3	9.8	6.3	6.7	5.6	8.5	14.3	10.8	8.0	14.8	10.2
1960: I.....	9.8	10.0	3.3	5.5	6.7	12.1	8.0	5.3	8.1	10.4	18.5	7.2	11.6	5.7
II.....	9.9	10.1	6.2	5.8	13.1	8.0	8.2	6.9	9.7	10.0	16.1	7.3	12.1	7.9
III.....	8.7	7.1	4.6	8.2	11.9	4.0	6.8	7.2	6.9	9.1	6.1	6.4	11.9	11.5
IV.....	8.4	7.0	.3	6.5	7.8	4.6	5.5	3.0	5.6	8.6	13.2	8.5	10.8	11.6
1961: I.....	6.8	5.2	-6	-1.1	2.9	3.2	6.1	2.5	5.7	7.3	8.0	7.2	7.1	5.9
II.....	9.2	8.9	6.2	4.0	10.9	7.0	8.0	7.3	9.1	8.2	13.2	10.2	9.9	7.2
III.....	8.8	7.8	6.8	7.0	11.7	6.4	6.1	7.7	7.8	8.1	6.3	10.9	11.6	12.6
IV.....	10.5	10.4	3.7	9.6	9.7	8.0	8.1	6.2	8.5	12.0	18.1	10.8	13.5	13.7
1962: I.....	9.0	8.9	1.4	4.6	3.7	7.6	8.2	6.3	8.1	9.2	16.8	12.3	9.8	6.8
II.....	10.3	10.8	7.6	7.2	11.8	5.8	8.8	9.8	10.8	10.4	18.3	12.7	12.6	7.1
III.....	9.3	8.5	8.4	10.6	11.9	3.4	5.8	8.6	9.2	9.2	9.3	11.8	12.0	12.1
IV.....	10.5	10.2	4.9	9.1	8.0	5.0	7.3	6.9	8.2	11.0	20.6	13.9	13.5	11.3
1963: I.....	8.6	8.2	3.7	3.5	1.5	5.1	6.9	5.9	7.9	9.2	17.3	10.3	8.8	4.6
II.....	11.0	11.7	9.1	7.9	12.9	9.6	8.1	8.9	11.1	10.2	19.6	12.9	11.5	8.6
III.....	10.0	9.3	12.6	12.0	11.8	5.5	6.9	10.0	9.7	9.6	9.4	11.5	12.8	11.0
Profits after taxes per dollar of sales—cents														
BASED ON 1957 SIC ¹														
1959: I.....	4.7	4.8	3.0	2.0	5.7	7.1	6.0	2.6	3.8	4.0	7.4	1.8	5.7	2.9
II.....	5.5	5.9	4.7	2.8	9.8	8.1	7.0	3.8	5.8	4.5	7.8	1.7	6.0	2.6
III.....	4.6	4.1	5.4	3.4	9.1	-3.1	5.1	4.1	5.3	4.4	4.2	1.3	7.3	4.6
IV.....	4.5	4.2	3.2	2.4	6.4	4.8	5.0	2.3	4.3	4.8	5.0	1.5	6.8	3.7
1960: I.....	4.7	4.6	1.7	1.9	5.0	7.0	5.9	2.4	4.1	3.9	6.9	1.4	6.0	2.4
II.....	4.6	4.6	2.7	1.9	8.2	5.3	6.0	2.9	4.5	3.6	6.6	1.4	6.2	3.1
III.....	4.3	3.6	2.1	2.6	7.4	3.2	5.2	3.0	3.6	3.5	3.5	1.3	6.2	4.1
IV.....	4.0	3.4	.1	2.1	5.4	3.9	4.3	1.3	3.0	3.2	5.8	1.6	5.3	4.1
1961: I.....	3.5	2.7	-3	-4	2.4	2.7	4.8	1.2	3.2	2.9	4.1	1.4	4.0	2.5
II.....	4.4	4.2	2.9	1.3	6.8	5.0	5.9	3.0	4.6	3.2	5.8	1.9	5.3	2.8
III.....	4.3	3.8	3.0	2.1	7.0	4.6	4.8	3.1	4.2	3.3	3.8	2.0	6.0	4.2
IV.....	4.8	4.7	1.7	2.9	6.2	5.7	5.8	2.4	4.4	4.3	7.5	2.0	6.2	4.7
1962: I.....	4.3	4.2	.7	1.5	2.8	4.9	5.8	2.7	4.3	3.5	7.1	2.3	5.1	2.7
II.....	4.7	4.8	3.2	2.1	6.9	4.0	6.2	3.8	5.1	3.8	7.4	2.3	6.1	2.8
III.....	4.4	4.0	3.4	3.1	6.8	2.6	4.5	3.3	4.6	3.6	4.9	2.2	6.0	4.3
IV.....	4.8	4.5	2.1	2.6	4.9	3.8	5.4	2.7	4.1	4.0	7.8	2.6	6.3	3.8
1963: I.....	4.2	3.9	1.7	1.1	1.2	3.7	5.0	2.5	4.1	3.5	7.0	2.1	4.6	1.9
II.....	5.0	5.0	3.5	2.3	7.2	5.8	5.6	3.4	5.1	3.8	7.6	2.6	5.8	3.3
III.....	4.6	4.3	4.6	3.3	6.5	4.0	5.0	3.7	4.8	3.7	4.9	2.3	6.5	4.1

See footnotes at end of table.

TABLE C-64.—*Relation of profits after taxes to stockholders' equity and to sales, private manufacturing corporations, by industry group, 1959-63—Continued*

Quarter	Nondurable goods industries										
	Total non-durable	Food and kindred products	Tobacco manufactures	Textile mill products	Apparel and related products	Paper and allied products	Printing and publishing (except newspapers)	Chemicals and allied products	Petroleum refining	Rubber and miscellaneous plastic products	Leather and leather products
Ratio of profits after Federal taxes (annual rate) to stockholders' equity—percent											
BASED ON 1957 SIC ¹											
1959: I.....	9.8	7.8	12.0	5.9	8.6	8.5	9.8	13.0	10.1	10.0	6.9
II.....	11.0	9.5	14.2	8.1	7.5	10.2	12.0	15.6	9.4	13.1	8.9
III.....	10.9	10.4	14.4	7.6	10.1	9.6	14.9	14.1	9.7	11.1	8.7
IV.....	10.1	9.4	12.8	8.6	8.1	9.6	8.8	11.9	10.1	9.9	9.2
1960: I.....	9.6	7.6	12.0	6.6	5.2	8.5	11.3	12.5	9.8	9.8	10.4
II.....	9.8	8.8	13.6	6.1	6.9	9.3	10.2	13.6	8.8	10.5	6.2
III.....	10.2	9.8	13.7	5.7	11.9	8.2	11.8	12.1	10.3	8.2	3.6
IV.....	9.8	8.7	14.2	5.0	6.8	8.1	9.0	10.6	11.5	7.9	5.0
1961: I.....	8.5	7.2	12.0	2.6	2.1	6.6	7.5	9.8	10.6	6.7	3.3
II.....	9.6	9.2	14.1	4.3	2.6	8.3	6.8	13.2	9.6	10.6	2.6
III.....	9.9	10.0	14.3	6.0	11.2	7.3	11.2	11.8	9.6	9.2	4.7
IV.....	10.6	9.1	14.2	7.1	12.3	9.1	8.4	12.2	11.3	10.7	6.9
1962: I.....	9.1	7.1	11.7	5.3	6.7	7.4	7.7	11.5	10.0	9.1	6.3
II.....	9.8	8.9	12.9	6.3	7.9	8.7	11.1	13.5	8.8	10.9	5.2
III.....	10.0	10.2	13.7	6.0	11.3	8.0	11.6	12.2	9.7	8.5	6.4
IV.....	10.8	9.1	14.0	7.3	11.4	8.3	10.6	12.5	11.8	9.8	9.6
1963: I.....	9.1	7.1	11.1	4.4	6.4	6.3	6.3	11.1	11.0	8.2	5.8
II.....	10.4	8.9	13.6	6.2	6.7	8.4	9.9	14.3	10.3	10.2	4.4
III.....	10.7	10.2	14.4	6.6	8.7	7.9	12.7	12.7	11.0	8.8	8.0
Profits after taxes per dollar of sales—cents											
BASED ON 1957 SIC ¹											
1959: I.....	4.7	2.1	5.2	2.5	1.6	5.0	3.6	7.7	9.3	3.9	1.9
II.....	5.1	2.5	5.5	3.2	1.4	5.5	4.2	8.5	9.4	4.4	2.4
III.....	5.1	2.7	5.6	3.0	1.8	5.2	5.1	8.1	9.5	4.1	2.2
IV.....	4.8	2.5	5.2	3.3	1.4	5.2	2.9	7.2	9.9	3.7	2.4
1960: I.....	4.7	2.1	5.2	2.8	1.0	4.9	4.0	7.6	9.4	3.8	2.7
II.....	4.7	2.4	5.4	2.5	1.3	5.4	3.6	7.8	8.9	3.9	1.6
III.....	4.9	2.6	5.5	2.5	2.0	4.8	3.9	7.4	10.2	3.3	.9
IV.....	4.7	2.2	5.8	2.1	1.1	4.8	2.9	6.9	11.0	3.2	1.4
1961: I.....	4.2	1.9	5.3	1.2	.4	4.1	2.6	6.5	10.4	2.9	.9
II.....	4.6	2.4	5.7	1.8	.5	4.8	2.3	7.8	9.9	4.2	.7
III.....	4.8	2.6	5.9	2.5	1.8	4.3	3.7	7.4	9.8	3.8	1.2
IV.....	5.0	2.3	5.9	2.7	2.1	5.2	2.7	7.6	11.1	4.2	1.6
1962: I.....	4.4	1.9	5.4	2.2	1.3	4.4	2.6	7.2	9.5	3.7	1.6
II.....	4.6	2.3	5.5	2.5	1.4	4.9	3.6	7.6	8.8	4.1	1.4
III.....	4.8	2.7	5.8	2.4	1.9	4.5	3.9	7.3	9.5	3.4	1.6
IV.....	5.0	2.3	6.1	2.8	1.9	4.5	3.4	7.5	11.0	3.7	2.4
1963: I.....	4.4	1.9	5.3	1.8	1.2	3.7	2.2	6.8	10.2	3.4	1.5
II.....	4.9	2.3	5.8	2.4	1.2	4.7	3.4	8.0	10.0	3.9	1.2
III.....	5.0	2.7	6.1	2.5	1.5	4.4	4.5	7.4	10.6	3.5	2.1

¹ Standard Industrial Classification.

NOTE.—Data on a comparable basis are not available for earlier periods. For explanatory notes concerning compilation of the series, see *Quarterly Financial Reports for U. S. Manufacturing Corporations*, Federal Trade Commission and Securities and Exchange Commission.

Data for Alaska and Hawaii included for all periods.

Sources: Federal Trade Commission and Securities and Exchange Commission.

TABLE C-65.—*Relation of profits before and after taxes to stockholders' equity and to sales, private manufacturing corporations, by asset size class, 1959-63*

Quarter	Asset size class (millions of dollars)											
	All asset sizes		Under 1		1 to 10		10 to 100		100 to 1,000		1,000 and over	
	Ratio of profits (annual rate) to stockholders' equity—percent											
	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes
BASED ON 1957 SIC ¹												
1959: I.....	18.7	10.0	12.5	5.7	15.1	6.9	17.5	8.7	19.2	10.1	21.7	12.9
II.....	23.1	12.4	20.4	11.7	20.2	10.1	22.4	11.4	23.8	12.5	24.5	14.3
III.....	17.1	9.6	21.1	12.4	19.8	9.9	20.7	10.5	17.6	9.4	12.1	8.6
IV.....	16.8	9.6	8.8	3.3	14.6	7.0	19.0	10.0	18.4	10.4	15.9	10.7
1960: I.....	18.4	9.8	11.7	5.0	14.1	6.3	17.1	8.4	18.5	9.8	21.9	13.0
II.....	18.0	9.9	15.2	8.0	16.4	7.6	17.9	9.0	18.3	10.1	19.0	11.5
III.....	15.4	8.7	16.7	9.0	14.6	6.9	16.3	8.2	16.9	9.1	13.3	9.1
IV.....	14.8	8.4	5.0	.5	9.2	3.6	14.5	7.4	16.2	9.2	17.4	11.4
1961: I.....	12.6	6.8	6.3	.9	8.3	2.6	11.8	5.6	13.9	7.5	14.4	9.5
II.....	16.8	9.2	13.7	6.8	14.7	6.9	16.3	8.3	17.1	9.1	18.0	11.2
III.....	15.8	8.8	15.8	8.4	16.8	8.2	16.3	8.1	17.1	9.2	13.6	9.2
IV.....	18.5	10.5	12.5	6.3	16.1	7.7	17.3	8.9	18.3	10.3	21.4	13.5
1962: I.....	16.7	9.0	10.6	4.6	14.0	5.9	14.6	7.1	16.3	8.6	20.1	12.1
II.....	18.9	10.3	19.8	11.7	18.1	8.8	17.8	9.0	18.1	9.7	20.2	11.8
III.....	16.6	9.3	19.4	11.3	18.1	8.8	17.1	8.6	16.4	8.7	15.6	9.9
IV.....	18.1	10.5	10.6	5.4	15.1	7.4	17.0	8.9	17.5	9.9	21.5	13.8
1963: I.....	16.0	8.6	8.2	2.5	12.2	5.1	13.7	6.6	15.6	8.3	20.0	12.1
II.....	19.9	11.0	20.0	11.9	17.7	8.6	18.0	9.1	19.1	10.3	22.4	13.3
III.....	17.8	10.0	19.9	11.5	18.3	9.0	17.8	9.0	18.1	9.8	17.0	10.8
	Profits per dollar of sales—cents											
	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes	Before taxes	After taxes
BASED ON 1957 SIC ¹												
1959: I.....	8.9	4.7	2.8	1.3	5.4	2.5	8.4	4.2	9.6	5.0	15.2	9.0
II.....	10.2	5.5	4.2	2.4	6.6	3.3	9.9	5.0	10.9	5.7	16.4	9.6
III.....	8.2	4.6	4.3	2.5	6.7	3.4	9.5	4.8	8.8	4.7	10.2	7.3
IV.....	7.9	4.5	1.8	.7	4.9	2.4	8.7	4.5	9.1	5.1	12.2	8.2
1960: I.....	8.7	4.7	2.6	1.1	5.0	2.2	8.1	4.0	9.3	4.9	14.5	8.6
II.....	8.4	4.6	3.2	1.6	5.6	2.6	8.2	4.1	9.0	5.0	13.2	8.0
III.....	7.6	4.3	3.5	1.9	5.1	2.4	7.7	3.9	8.7	4.7	10.6	7.3
IV.....	7.1	4.0	1.1	.1	3.2	1.3	6.9	3.5	8.3	4.7	12.7	8.3
1961: I.....	6.5	3.5	1.4	.2	3.0	.9	6.0	2.8	7.4	4.0	11.6	7.7
II.....	8.0	4.4	2.9	1.5	4.8	2.3	7.6	3.9	8.4	4.5	13.6	8.5
III.....	7.7	4.3	3.4	1.8	5.5	2.7	7.7	3.8	8.5	4.6	11.4	7.7
IV.....	8.5	4.8	2.6	1.3	5.1	2.5	7.9	4.1	8.9	5.0	15.2	9.5
1962: I.....	8.0	4.3	2.3	1.0	4.7	2.0	7.0	3.4	8.0	4.3	14.2	8.5
II.....	8.6	4.7	4.1	2.4	5.6	2.7	8.0	4.0	8.6	4.6	14.0	8.2
III.....	7.9	4.4	4.1	2.4	5.7	2.8	7.8	3.9	8.1	4.3	12.0	7.6
IV.....	8.2	4.8	2.2	1.1	4.7	2.3	7.6	4.0	8.3	4.7	14.4	9.2
1963: I.....	7.7	4.2	1.8	.6	4.0	1.7	6.5	3.1	7.8	4.2	14.0	8.5
II.....	9.0	5.0	4.0	2.4	5.5	2.7	8.0	4.1	9.0	4.8	14.8	8.8
III.....	8.3	4.6	4.0	2.3	5.7	2.8	8.0	4.0	8.6	4.6	12.7	8.1

¹ Standard Industrial Classification.

NOTE.—Data on a comparable basis are not available for earlier periods. For explanatory notes concerning compilation of the series, see *Quarterly Financial Reports for U.S. Manufacturing Corporations*, Federal Trade Commission and Securities and Exchange Commission.

Data for Alaska and Hawaii included for all periods.

Sources: Federal Trade Commission and Securities and Exchange Commission.

TABLE C-66.—*Sources and uses of corporate funds, 1952-63*¹

[Billions of dollars]

Source or use of funds	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963 ²
Total uses	27.3	28.2	24.0	45.1	39.5	37.9	31.5	46.8	39.3	42.3	48.1	51.1
Plant and equipment outlays.....	22.4	23.9	22.4	24.2	29.9	32.7	26.4	27.7	30.8	29.6	32.0	33.5
Inventories (book value).....	1.3	1.8	-1.6	6.7	7.6	2.1	-2.4	6.6	2.5	1.8	3.8	4.0
Customer net receivables ³	3.1	.7	2.4	6.4	3.3	2.1	2.9	5.6	4.2	3.5	5.8	5.2
Cash and U.S. Government securities.....	.1	1.8	(⁴)	5.0	-4.3	-.3	2.7	2.9	-1.7	2.5	1.2	1.8
Other assets.....	.4	(⁴)	.8	2.8	3.0	1.3	1.9	4.1	3.5	4.9	5.3	6.6
Total sources	28.1	30.0	22.4	44.8	42.4	40.1	35.7	51.9	41.7	43.6	52.3	54.4
Internal sources	17.8	19.7	19.8	26.6	27.8	28.0	26.0	31.1	29.1	29.6	34.9	37.6
Retained profits and depletion allowances.....	7.4	7.9	6.3	10.9	10.5	8.9	5.7	9.5	6.2	5.6	7.0	8.2
Depreciation and amortization allowances.....	10.4	11.8	13.5	15.7	17.3	19.1	20.3	21.6	22.9	24.0	27.8	29.4
External sources	10.3	10.3	2.6	18.2	14.6	12.1	9.7	20.8	12.6	13.9	17.4	16.8
Federal income tax liability.....	-3.1	.6	-3.1	3.8	-1.7	-2.2	-2.5	2.1	-1.6	.6	.9	1.5
Other liabilities.....	2.4	2.2	.4	2.1	3.0	2.1	1.7	3.7	3.2	1.8	3.2	2.6
Bank loans and mortgage loans.....	3.1	.4	-.6	5.4	5.4	1.7	1.0	7.1	3.0	2.0	6.1	6.4
Net new issues.....	7.9	7.1	5.9	6.9	7.9	10.5	9.5	7.8	8.0	9.6	7.1	6.3
Discrepancy (uses less sources)	- .8	-1.8	1.6	.3	-2.9	-2.2	-4.2	-5.0	-2.4	-1.3	-4.1	-3.3

¹ Excludes banks and insurance companies.² Preliminary estimates.³ Receivables are net of payables, which are therefore not shown separately.⁴ Less than \$50 million.

Source: Department of Commerce based on Securities and Exchange Commission and other financial data.

TABLE C-67.—Current assets and liabilities of United States corporations, 1939–63¹

[Billions of dollars]

End of year or quarter	Current assets						Current liabilities						Net working capital
	Total	Cash on hand and in banks	U.S. Government securities	Receivables from U.S. Government ²	Other notes and accounts receivable	Inventories	Other current assets ³	Total	Advances and prepayments, U.S. Government ²	Other notes and accounts payable	Federal income tax liabilities	Other current liabilities	
1939.....	54.5	10.8	2.2	-----	22.1	18.0	1.4	30.0	-----	21.9	1.2	6.9	24.5
1940.....	60.3	13.1	2.0	0.1	23.9	19.8	1.5	32.8	0.6	22.6	2.5	7.1	27.5
1941.....	72.9	13.9	4.0	.6	27.4	25.6	1.4	40.7	.8	25.6	7.1	7.2	32.3
1942.....	83.6	17.6	10.1	4.0	23.3	27.3	1.3	47.3	2.0	24.0	12.6	8.7	36.3
1943.....	93.8	21.6	16.4	5.0	21.9	27.6	1.3	51.6	2.2	24.1	16.6	8.7	42.1
1944.....	97.2	21.6	20.9	4.7	21.8	26.8	1.4	51.7	1.8	25.0	15.5	9.4	45.6
1945.....	97.4	21.7	21.1	2.7	23.2	26.3	2.4	45.8	.9	24.8	10.4	9.7	51.6
1946.....	108.1	22.8	15.3	.7	30.0	37.6	1.7	51.9	.1	31.5	8.5	11.8	56.2
1947.....	123.6	25.0	14.1	38.3	44.6	1.6	61.5	37.6	10.7	13.2	62.1	62.1	62.1
1948.....	133.0	25.3	14.8	42.4	48.9	1.6	64.4	39.3	11.5	13.5	68.6	68.6	68.6
1949.....	133.1	26.5	16.8	43.0	45.3	1.4	60.7	37.5	9.3	14.0	72.4	72.4	72.4
1950.....	161.5	28.1	19.7	1.1	55.7	55.1	1.7	79.8	.4	47.9	16.7	14.9	81.6
1951.....	179.1	30.0	20.7	2.7	58.8	64.9	2.1	92.6	1.3	53.6	21.3	16.5	88.5
1952.....	186.2	30.8	19.9	2.8	64.6	65.8	2.4	96.1	2.3	57.0	18.1	18.7	90.1
1953.....	190.6	31.1	21.5	2.6	65.9	67.2	2.4	98.9	2.2	57.3	18.7	20.7	91.8
1954.....	194.6	33.4	19.2	2.4	71.2	65.3	3.1	99.7	2.4	59.3	15.5	22.5	94.9
1955.....	224.0	34.6	23.5	2.3	86.6	72.8	4.2	121.0	2.3	73.8	19.3	25.7	103.0
1956.....	237.9	34.8	19.1	2.6	95.1	80.4	5.9	130.5	2.4	81.5	17.6	29.0	107.4
1957.....	244.7	34.9	18.6	2.8	99.4	82.2	6.7	133.1	2.3	84.3	15.4	31.1	111.6
1958.....	255.3	37.4	18.8	2.8	106.9	81.9	7.5	136.6	1.7	88.7	12.9	33.3	118.7
1959.....	277.3	36.3	22.8	2.9	117.7	88.4	9.1	153.1	1.7	99.3	15.0	37.0	124.2
1960.....	289.0	37.2	20.1	3.1	126.1	91.8	10.6	160.4	1.8	105.0	13.5	40.1	128.6
1961.....	306.0	40.3	19.7	3.4	135.5	95.2	12.0	169.3	1.8	111.6	14.0	41.9	136.8
1962.....	325.9	41.0	20.1	3.6	146.5	100.9	13.7	181.9	2.0	119.8	14.9	45.1	144.0
1961: I.....	288.3	35.1	19.9	3.2	125.2	93.4	11.5	157.6	1.8	103.3	11.7	40.8	130.7
II.....	293.2	36.4	20.0	3.1	128.9	92.7	12.2	158.9	1.7	104.8	11.3	41.1	134.3
III.....	298.0	37.2	18.8	3.2	132.5	93.6	12.7	162.5	1.8	106.5	12.3	41.8	135.5
IV.....	306.0	40.3	19.7	3.4	135.5	95.2	12.0	169.3	1.8	111.6	14.0	41.9	136.8
1962: I.....	308.6	36.9	20.4	3.4	137.0	97.8	13.1	170.2	1.8	111.4	13.5	43.5	138.4
II.....	313.3	37.2	19.6	3.3	141.0	98.7	13.5	172.9	1.8	113.4	13.6	44.1	140.4
III.....	320.5	37.5	19.0	3.4	146.4	100.5	13.7	179.2	1.9	117.7	14.6	45.0	141.3
IV.....	325.9	41.0	20.1	3.6	146.5	100.9	13.7	181.9	2.0	119.8	14.9	45.1	144.0
1963: I.....	327.7	36.9	20.7	3.5	148.7	102.7	15.2	182.8	2.3	120.2	14.1	46.2	144.9
II.....	334.7	38.0	20.2	3.3	153.1	104.0	16.0	187.6	2.5	123.8	14.2	47.1	147.1
III.....	341.6	38.5	19.6	3.4	157.8	105.8	16.6	192.0	2.5	126.6	15.1	47.7	149.7

¹ All United States corporations, excluding banks, savings and loan associations, and insurance companies. Year-end data through 1960 are based on *Statistics of Income* (Treasury Department), covering virtually all corporations in the United States. *Statistics of Income* data may not be strictly comparable from year to year because of changes in the tax laws, basis for filing returns, and processing of data for compilation purposes. All other figures shown are estimates based on data compiled from many different sources, including data on corporations registered with the Securities and Exchange Commission. As more complete information becomes available, estimates are revised.

² Receivables from and payables to U.S. Government do not include amounts offset against each other on the corporation's books or amounts arising from subcontracting which are not directly due from or to the U.S. Government. Wherever possible, adjustments have been made to include U.S. Government advances offset against inventories on the corporation's books.

³ Includes marketable securities other than U.S. Government.

Source: Securities and Exchange Commission.

TABLE C-68.—State and municipal and corporate securities offered, 1934-63¹

(Millions of dollars)

Year or quarter	State and municipal securities offered for cash (principal amounts)	Corporate securities offered for cash ²									
		Gross proceeds ³				Proposed uses of net proceeds ⁴					
		Total	Common stock	Preferred stock	Bonds and notes	Total	New money			Retirement of securities	Other purposes
							Total	Plant and equipment	Working capital		
1934.....	939	397	19	6	371	384	57	32	26	231	95
1935.....	1,232	2,332	22	86	2,224	2,266	208	111	96	1,865	193
1936.....	1,121	4,572	272	271	4,028	4,431	858	380	478	3,368	204
1937.....	908	2,310	285	406	1,618	2,239	991	574	417	1,100	148
1938.....	1,108	2,155	25	86	2,044	2,110	681	504	177	1,206	222
1939.....	1,128	2,164	87	98	1,980	2,115	325	170	155	1,695	95
1940.....	1,238	2,677	108	183	2,386	2,615	569	424	145	1,854	192
1941.....	956	2,667	110	167	2,390	2,623	868	661	207	1,583	172
1942.....	524	1,062	34	112	917	1,043	474	287	187	396	173
1943.....	435	1,170	56	124	990	1,147	308	141	167	739	100
1944.....	661	3,202	163	369	2,670	3,142	657	252	405	2,389	96
1945.....	795	6,011	397	758	4,855	5,902	1,080	638	442	4,555	267
1946.....	1,157	6,900	891	1,127	4,882	6,757	3,279	2,115	1,164	2,368	610
1947.....	2,324	6,577	779	762	5,036	6,466	4,591	3,409	1,182	1,352	524
1948.....	2,690	7,078	614	492	5,973	6,959	5,929	4,221	1,708	307	722
1949.....	2,907	6,052	736	425	4,890	5,959	4,606	3,724	882	401	952
1950.....	3,532	6,361	811	631	4,920	6,261	4,006	2,966	1,041	1,271	984
1951.....	3,189	7,741	1,212	838	5,691	7,607	6,531	5,110	1,421	496	589
1952.....	4,401	9,534	1,369	564	7,601	9,380	8,180	6,312	1,868	664	537
1953.....	5,558	8,898	1,326	489	7,083	8,755	7,960	5,647	2,313	260	535
1954.....	6,969	9,516	1,213	816	7,488	9,365	6,780	5,110	1,670	1,875	709
1955.....	5,977	10,240	2,185	635	7,420	10,049	7,957	5,333	2,624	1,227	864
1956.....	5,446	10,939	2,301	636	8,002	10,749	9,663	6,709	2,954	364	721
1957.....	6,958	12,884	2,516	411	9,957	12,661	11,784	9,040	2,744	214	663
1958.....	7,449	11,558	1,334	571	9,653	11,372	9,907	7,792	2,115	549	915
1959.....	7,681	9,748	2,027	531	7,190	9,527	8,578	6,084	2,494	135	814
1960.....	7,230	10,154	1,664	409	8,081	9,924	8,758	5,662	3,097	271	895
1961.....	8,360	13,147	3,273	449	9,425	12,874	10,829	7,539	3,290	895	1,150
1962.....	8,558	10,770	1,318	436	9,016	10,572	8,323	5,701	2,622	757	1,491
1963 ⁵	10,055	12,221	1,025	334	10,862	12,047	8,987	5,319	3,668	1,537	1,524
1961: I.....	2,122	1,992	354	96	1,543	1,951	1,648	952	695	142	161
II.....	2,370	5,352	1,582	192	3,578	5,261	4,272	3,373	899	566	423
III.....	1,766	2,566	571	82	1,913	2,501	2,120	1,396	723	63	318
IV.....	2,101	3,237	765	80	2,392	3,161	2,790	1,818	972	123	248
1962: I.....	2,610	2,378	490	16	1,871	2,320	2,009	1,426	582	62	250
II.....	2,534	3,251	460	180	2,611	3,184	2,607	1,901	705	179	399
III.....	1,627	2,184	200	107	1,877	2,146	1,565	1,028	539	236	345
IV.....	1,788	2,957	168	132	2,657	2,921	2,143	1,347	796	280	498
1963: I.....	2,798	2,700	222	65	2,414	2,665	2,067	1,453	614	314	285
II.....	2,889	3,634	344	81	3,209	3,587	2,425	1,538	887	740	422
III.....	1,967	2,466	208	79	2,179	2,434	1,914	1,016	897	295	225
IV ⁵	2,401	3,421	251	109	3,060	3,361	2,581	1,312	1,270	188	592

¹ These data cover substantially all new issues of State, municipal, and corporate securities offered for cash sale in the United States in amounts over \$100,000 and with terms to maturity of more than 1 year.

² Excludes notes issued exclusively to commercial banks, intercorporate transactions, sales of investment company issues, and issues to be sold over an extended period, such as offerings under employee-purchase plans.

³ Number of units multiplied by offering price.

⁴ Net proceeds represents the amount received by the issuer after payment of compensation to distributors and other costs of flotation.

⁵ Preliminary.

NOTE.—Data for Alaska and Hawaii included for all periods.

Sources: Securities and Exchange Commission, *The Commercial and Financial Chronicle*, and *The Bond Buyer*.

TABLE C-69.—Common stock prices, earnings, and yields and stock market credit, 1939-63

Year or month	Common stock prices index, 1957-59=100 (SEC) ¹	Standard and Poor's common stock data				Stock market credit				
		Price index ²		Dividend yield ³ (per cent)	Price/earnings ratio ⁴	Customer credit (excluding U.S. Government securities)			Bank loans to brokers and dealers ⁷	
		Total	Industrial			Total	Net debit balances ⁵	Bank loans to "others" ⁶		
		1941-43=10		Millions of dollars						
1939.....	26.8	12.06	11.77	4.05	13.80	(9)	(9)	(9)	715	
1940.....	25.3	11.02	10.69	5.59	10.24	(9)	(9)	(9)	584	
1941.....	23.0	9.82	9.72	6.82	8.26	(9)	(9)	(9)	535	
1942.....	20.1	8.67	8.78	7.24	8.80	(9)	(9)	(9)	850	
1943.....	26.6	11.50	11.49	4.93	12.84	(9)	(9)	(9)	1,328	
1944.....	29.0	12.47	12.34	4.86	13.66	(9)	(9)	353	2,137	
1945.....	35.2	15.16	14.72	4.17	16.33	1,374	942	432	2,782	
1946.....	40.1	17.08	16.48	3.85	17.69	976	473	503	1,471	
1947.....	35.1	15.17	14.85	4.93	9.36	1,032	517	515	784	
1948.....	35.6	15.53	15.34	5.54	6.90	968	499	469	1,331	
1949.....	34.3	15.23	15.00	6.59	6.64	1,249	821	428	1,608	
1950.....	41.4	18.40	18.33	6.57	6.63	1,798	1,237	561	1,742	
1951.....	49.6	22.34	22.68	6.13	9.27	1,826	1,253	573	1,419	
1952.....	52.3	24.50	24.78	5.80	10.47	1,980	1,332	648	2,002	
1953.....	51.9	24.73	24.84	5.80	9.69	2,445	1,665	780	2,248	
1954.....	61.7	29.69	30.25	4.95	11.25	3,436	2,388	1,048	2,688	
1955.....	81.8	40.49	42.40	4.08	11.50	4,030	2,791	1,239	2,852	
1956.....	92.6	46.62	49.80	4.09	14.05	3,984	2,823	1,161	2,214	
1957.....	89.8	44.38	47.63	4.35	12.89	3,576	2,482	1,094	2,190	
1958.....	93.2	46.24	49.36	3.97	16.64	4,537	3,285	1,252	2,569	
1959.....	116.7	57.38	61.45	3.23	17.04	4,461	3,280	1,181	2,554	
1960.....	113.9	55.85	59.43	3.47	17.08	4,415	3,222	1,193	2,614	
1961.....	134.2	66.27	69.99	2.97	21.18	5,602	4,259	1,343	3,398	
1962.....	127.1	62.38	65.54	3.37	16.73	5,494	4,125	1,369	4,352	
1963.....	142.3	69.87	73.39	3.17	-----	7,202	5,475	1,727	4,822	
1962: January.....	140.4	69.07	72.99	2.97	-----	5,464	4,111	1,353	2,340	
February.....	142.8	70.22	74.22	2.95	-----	5,426	4,066	1,360	2,985	
March.....	142.9	70.29	74.22	2.95	19.98	5,457	4,083	1,374	3,040	
April.....	138.0	68.05	71.64	3.05	-----	5,491	4,079	1,412	3,174	
May.....	128.3	62.99	66.32	3.32	-----	5,408	4,000	1,408	2,610	
June.....	114.3	55.63	58.32	3.78	15.63	4,938	3,605	1,333	2,533	
July.....	116.0	56.97	59.61	3.68	-----	4,876	3,562	1,314	2,044	
August.....	119.5	58.52	61.29	3.57	-----	5,073	3,773	1,300	2,224	
September.....	117.9	58.00	60.67	3.60	16.09	5,156	3,887	1,269	3,366	
October.....	114.3	56.17	58.66	3.71	-----	5,165	3,864	1,301	3,382	
November.....	122.7	60.04	62.90	3.50	-----	5,285	3,951	1,334	2,738	
December.....	128.0	62.64	65.59	3.40	15.23	5,494	4,125	1,369	4,352	
1963: January.....	132.6	65.06	68.00	3.31	-----	5,595	4,208	1,387	3,068	
February.....	135.0	65.92	68.91	3.27	-----	5,717	4,332	1,385	3,856	
March.....	133.7	65.67	68.71	3.28	18.18	5,754	4,331	1,423	3,376	
April.....	140.7	68.76	72.17	3.15	-----	5,978	4,526	1,452	3,194	
May.....	143.2	70.14	73.60	3.13	-----	6,229	4,737	1,492	3,364	
June.....	142.5	70.11	73.61	3.16	17.52	6,420	4,898	1,522	4,068	
July.....	140.7	69.07	72.45	3.20	-----	6,511	4,895	1,616	3,631	
August.....	144.6	70.98	74.43	3.13	-----	6,660	5,034	1,626	3,331	
September.....	148.2	72.85	76.63	3.06	18.20	6,971	5,316	1,655	4,530	
October.....	148.7	73.03	77.09	3.05	-----	7,180	5,495	1,685	3,635	
November.....	147.3	72.62	76.69	3.14	-----	7,298	5,586	1,712	4,050	
December.....	151.1	74.17	78.38	3.14	-----	7,202	5,475	1,727	4,822	

¹ Includes 300 common stocks: manufacturing, 193; transportation, 18; utilities, 34; trade, finance, and service, 45; and mining, 10; averages of weekly figures.

² Includes 500 common stocks, 425 are Industrials; averages of daily figures.

³ Aggregate cash dividends (based on latest known annual rate) divided by the aggregate monthly market value of the stocks in the group. Annual yields are averages of monthly data.

⁴ Ratio of quarterly earnings (seasonally adjusted annual rate) to price index for last day in quarter. Annual ratios are averages of quarterly data.

⁵ As reported by member firms of the New York Stock Exchange carrying margin accounts. Includes net debit balances of all customers (other than general partners in the reporting firm and member firms of national exchanges) whose combined accounts net to a debit. Balances secured by U.S. Government obligations are excluded. Data are for end of period.

⁶ Loans by weekly reporting member banks to others than brokers and dealers for purchasing or carrying securities except U.S. Government obligations. From 1953 through June 1959, loans for purchasing or carrying U.S. Government securities were reported separately only by New York and Chicago banks. Accordingly, for that period any loans for purchasing or carrying such securities at other reporting banks are included. Series also revised beginning July 1946, March 1953, July 1958, and April 1961. Data are for last Wednesday of period. For details, see *Federal Reserve Bulletin*, June 1961.

⁷ Loans by weekly reporting member banks for purchasing or carrying securities, including U.S. Government obligations. Series revised beginning July 1946, January 1952, July 1958, July 1959, and April 1961. Data are for last Wednesday of period. For details, see *Federal Reserve Bulletin*, June 1961.

⁸ Not available.

Sources: Securities and Exchange Commission, Board of Governors of the Federal Reserve System, Standard & Poor's Corporation, Moody's Investors Service, and New York Stock Exchange.

TABLE C-70.—Business population and business failures, 1929–63

Year or month	Operating businesses and business turnover (thousands of firms) ¹			New business incorporations (number) ²	Business failures ^{3,4}							Amount of current liabilities (millions of dollars)		
	Operating businesses ⁵	New businesses ⁶	Discontinued businesses ⁷		Business failure rate ⁸	Number of failures			Total	Liability size class				
						Total	Liability size class			Total	Liability size class			
							Under \$100,000	\$100,000 and over			Under \$100,000	\$100,000 and over		
1929	3,029	(⁹)	(⁹)	(⁹)	103.9	22,909	22,165	744	483.3	261.5	221.8			
1930	2,904	(⁹)	(⁹)	(⁹)	121.6	26,355	25,408	947	668.3	803.5	364.8			
1931	2,916	(⁹)	(⁹)	(⁹)	133.4	28,285	27,230	1,055	736.3	354.2	382.2			
1932	2,828	(⁹)	(⁹)	(⁹)	154.1	31,822	30,197	1,625	928.3	432.6	495.7			
1933	2,782	(⁹)	(⁹)	(⁹)	100.3	19,859	18,880	979	457.5	215.5	242.0			
1934	2,884	(⁹)	(⁹)	(⁹)	61.1	12,091	11,421	670	334.0	138.5	195.4			
1935	2,992	(⁹)	(⁹)	(⁹)	61.7	12,244	11,691	553	310.6	135.5	175.1			
1936	3,070	(⁹)	(⁹)	(⁹)	47.8	9,607	9,285	322	203.2	102.8	100.4			
1937	3,136	(⁹)	(⁹)	(⁹)	45.9	9,490	9,203	287	183.3	101.9	81.4			
1938	3,074	(⁹)	(⁹)	(⁹)	61.1	12,836	12,553	283	246.5	140.1	106.4			
1939	3,222	(⁹)	(⁹)	(⁹)	69.6	14,768	14,541	227	182.5	132.9	49.7			
1940	3,319	275	318	(⁹)	63.0	13,619	13,400	219	166.7	119.9	46.8			
1941	3,276	290	271	(⁹)	54.5	11,848	11,685	163	136.1	100.7	35.4			
1942	3,295	121	386	(⁹)	44.6	9,405	9,282	123	100.8	80.3	20.5			
1943	3,080	146	337	(⁹)	16.4	3,221	3,155	66	45.3	30.2	15.1			
1944	2,839	331	175	(⁹)	6.5	1,222	1,176	46	31.7	14.5	17.1			
1945	2,995	423	176	(⁹)	4.2	809	759	50	30.2	11.4	18.8			
1946	3,242	617	209	132,916	5.2	1,129	1,002	127	67.3	15.7	51.6			
1947	3,651	461	239	112,638	14.3	3,474	3,103	371	204.6	63.7	140.9			
1948	3,873	393	282	96,101	20.4	5,250	4,853	397	234.6	93.9	140.7			
1949	3,984	331	306	85,491	34.4	9,246	8,708	538	308.1	161.4	146.7			
1950	4,009	348	290	92,925	34.3	9,162	8,746	416	248.3	151.2	97.1			
1951	4,067	327	276	83,649	30.7	8,058	7,626	432	259.5	131.6	128.0			
1952	4,118	346	276	92,819	28.7	7,611	7,081	530	283.3	131.9	151.4			
1953	4,188	362	299	102,545	33.2	8,862	8,075	787	394.2	167.5	226.6			
1954	4,240	366	319	117,164	42.0	11,086	10,226	860	462.6	211.4	251.2			
1955	4,287	408	314	139,651	41.6	10,969	10,113	856	449.4	206.4	243.0			
1956	4,381	431	342	140,775	48.0	12,686	11,615	1,071	562.7	239.8	322.9			
1957	4,471	398	335	136,697	51.7	13,739	12,547	1,192	615.3	267.1	348.2			
1958	4,533	397	347	150,280	55.9	14,964	13,499	1,465	728.3	297.6	430.7			
1959	4,583	422	346	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9			
1960	4,658	438	384	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4			
1961	4,713	431	389	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0			
1962	4,755	430	387	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1			
1963	4,797			185,739	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6			
1962: January	4,770			18,343	62.9	1,447	1,249	198	106.6	30.1	76.5			
February				14,365	61.1	1,353	1,205	148	90.5	30.4	60.1			
March				17,196	59.4	1,490	1,321	169	80.9	32.5	48.3			
April	4,780			15,653	65.0	1,504	1,346	158	121.8	31.0	90.8			
May				16,408	58.7	1,378	1,195	183	91.5	29.9	61.6			
June				15,234	57.3	1,281	1,110	171	88.5	27.7	60.8			
July	4,790			14,957	58.3	1,165	1,042	123	91.6	27.1	64.4			
August				14,955	62.6	1,319	1,109	210	146.8	27.9	118.9			
September				12,777	62.2	1,118	970	148	96.2	26.9	69.3			
October	4,800			15,318	66.3	1,410	1,207	203	119.1	30.3	88.8			
November				12,926	59.4	1,216	1,059	157	98.8	27.5	71.3			
December				13,925	56.0	1,101	959	142	81.3	25.3	56.0			
1963: January	4,815			17,348	56.2	1,258	1,001	257	161.0	25.5	135.4			
February				14,012	60.7	1,304	1,109	195	94.7	29.6	65.2			
March				16,259	54.4	1,296	1,107	189	100.5	28.8	71.7			
April	4,825			16,294	54.2	1,287	1,116	171	100.8	29.5	71.3			
May				16,812	56.4	1,303	1,062	241	118.3	28.0	90.3			
June				15,016	57.3	1,211	1,042	169	86.2	27.6	58.5			
July	4,835			15,893	57.1	1,155	984	171	120.5	25.8	94.7			
August				15,197	54.6	1,135	982	153	65.2	26.9	38.3			
September				13,753	59.4	1,051	905	146	85.9	23.9	62.0			
October	4,850			16,741	59.6	1,262	1,056	206	91.8	27.5	64.3			
November				12,904	55.1	1,115	970	145	262.1	24.6	237.5			
December				15,510	51.2	998	858	140	68.4	23.1	45.3			

¹ Excludes firms in the fields of agriculture and professional services. Includes self-employed person only if he has either an established place of business or at least one paid employee.

² Data through 1939 are averages of end-of-quarter estimates centered at June 30. Beginning 1940, data are for beginning of period. Quarterly data shown here are seasonally adjusted.

³ Total for period.

⁴ Commercial and industrial failures only. Excludes failures of banks and railroads and, beginning 1933, of real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc.

⁵ Failure rate per 10,000 listed enterprises. Monthly data are seasonally adjusted.

⁶ Not available.

⁷ Series revised; not strictly comparable with earlier data.

⁸ Includes data for Hawaii beginning 1959 and Alaska beginning 1960. (Data for 1958 comparable to 1959 are 150,781; data for 1960 comparable to 1959 are 182,374.)

⁹ Preliminary.

Sources: Department of Commerce and Dun & Bradstreet, Inc.

AGRICULTURE

TABLE C-71.—*Income from agriculture, 1929-63*

Year or quarter	Personal income received by total farm population			Income received from farming					Net income per farm, including net inventory change ⁴		
				Realized gross		Production expenses	Net to farm operators				
	From all sources	From farm sources	From non-farm sources ¹	Total ²	Cash receipts from marketings		Excluding net inventory change	Including net inventory change ³	Current prices	1963 prices ⁵	
Billions of dollars										Dollars	
1929-----				13.9	11.3	7.6	6.3	6.1	943	1,813	
1930-----				11.4	9.1	6.9	4.5	4.3	650	1,354	
1931-----				8.4	6.4	5.5	2.9	3.3	506	1,234	
1932-----				6.4	4.7	4.4	1.9	2.0	305	847	
1933-----				7.1	5.3	4.3	2.8	2.6	382	1,032	
1934-----	5.4	3.2	2.2	8.5	6.4	4.7	3.9	2.9	434	1,059	
1935-----	7.7	5.4	2.3	9.7	7.1	5.1	4.6	5.3	778	1,898	
1936-----	7.2	4.6	2.6	10.7	8.4	5.6	5.1	4.3	643	1,568	
1937-----	9.0	6.3	2.7	11.3	8.9	6.1	5.2	6.0	911	2,119	
1938-----	7.2	4.7	2.4	10.1	7.7	5.8	4.3	4.4	675	1,646	
1939-----	7.4	4.8	2.6	10.6	7.9	6.2	4.4	4.5	697	1,742	
1940-----	7.6	4.9	2.7	11.0	8.4	6.7	4.3	4.6	720	1,800	
1941-----	10.1	6.9	3.2	13.8	11.1	7.7	6.2	6.6	1,044	2,428	
1942-----	14.0	10.2	3.8	18.8	15.6	9.9	8.8	9.9	1,600	3,200	
1943-----	16.3	12.2	4.1	23.4	19.6	11.5	11.9	11.8	1,942	3,468	
1944-----	16.5	12.3	4.2	24.4	20.5	12.2	12.2	11.8	1,967	3,334	
1945-----	17.1	12.9	4.2	25.8	21.7	12.9	12.8	12.4	2,080	3,355	
1946-----	20.1	15.7	4.4	29.7	24.8	14.5	15.2	15.3	2,574	3,785	
1947-----	21.0	16.0	5.0	34.4	29.6	17.0	17.3	15.5	2,648	3,310	
1948-----	23.5	18.1	5.4	34.9	30.2	18.9	16.1	17.8	3,065	3,606	
1949-----	19.0	13.5	5.6	31.8	27.8	18.0	13.8	12.9	2,259	2,755	
1950-----	20.4	14.3	6.0	32.5	28.5	19.3	13.2	14.0	2,479	2,987	
1951-----	22.8	16.5	6.3	37.3	33.0	22.2	15.2	16.3	3,009	3,343	
1952-----	22.3	15.7	6.6	37.0	32.6	22.6	14.4	15.3	2,951	3,243	
1953-----	20.0	13.8	6.3	35.3	31.1	21.4	13.9	13.3	2,664	2,960	
1954-----	19.0	13.2	5.8	33.9	30.0	21.7	12.2	12.7	2,645	2,939	
1955-----	18.3	12.2	6.1	33.3	29.6	21.9	11.5	11.8	2,529	2,810	
1956-----	18.6	12.0	6.6	34.6	30.6	22.6	12.0	11.6	2,574	2,798	
1957-----	18.8	12.2	6.6	34.4	29.8	23.4	11.0	11.8	2,685	2,837	
1958-----	20.5	13.8	6.7	37.9	33.4	25.3	12.6	13.5	3,201	3,334	
1959-----	19.0	11.8	7.1	37.5	33.5	26.2	11.3	11.4	2,775	2,861	
1960-----	19.6	12.3	7.2	37.9	34.0	26.2	11.7	12.0	3,044	3,138	
1961-----	20.1	13.0	7.0	39.6	34.9	27.1	12.5	12.8	3,359	3,428	
1962-----	20.5	13.4	7.1	40.8	35.9	28.2	12.6	13.3	3,602	3,638	
1963 ⁶ -----	19.8	13.0	6.8	41.1	36.2	28.8	12.3	12.8	3,575	3,575	
Seasonally adjusted annual rates											
1962: I-----				41.0	36.1	28.0	13.0	13.5	3,660	3,700	
II-----				40.5	35.6	28.1	12.4	13.1	3,550	3,580	
III-----				40.7	35.8	28.3	12.4	13.2	3,580	3,610	
IV-----				41.0	36.2	28.4	12.6	13.4	3,630	3,670	
1963: I ⁶ -----				41.3	36.4	28.6	12.7	13.5	3,770	3,770	
II ⁶ -----				40.6	35.6	28.6	12.0	12.6	3,520	3,520	
III ⁶ -----				41.1	36.1	28.9	12.2	12.7	3,550	3,550	
IV ⁶ -----				41.4	36.7	29.1	12.3	12.6	3,520	3,520	

¹ Includes all income received by farm residents from nonfarm sources such as wages and salaries from nonfarm employment, nonfarm business and professional income, rents from nonfarm real estate, dividends, interest, royalties, unemployment compensation and social security payments.

² Cash receipts from marketings, Government payments, and nonmoney income furnished by farms.

³ Includes net change in inventory of crops and livestock valued at the average price for the year. Data prior to 1946 differ from farm proprietors' income shown in Tables C-11 and C-14 because of revisions by the Department of Agriculture not yet incorporated into the national income accounts of the Department of Commerce.

⁴ Estimates of number of farms revised from 1951 according to new 1959 Census of Agriculture definition.

⁵ Income in current prices divided by the index of prices paid by farmers for family living items on a 1963 base.

⁶ Preliminary.

Source: Department of Agriculture.

TABLE C-72.—Indexes of prices received and prices paid by farmers, and parity ratio, 1929–63

[1957–59=100]

Year or month	Prices received by farmers											
	All farm products ¹	Crops							Livestock and products			
		All crops ¹	Food grains	Feed grains and hay		Cotton	Tobacco	Oil-bearing crops	All live-stock and prod-ucts ¹	Meat ani-mals	Dairy prod-ucts	Poul-try and eggs
				Total	Feed grains							
1929.....	61	61	55	74	77	57	35	62	62	50	65	102
1930.....	52	52	44	67	68	40	29	48	52	43	55	81
1931.....	36	34	27	46	44	24	20	32	38	30	43	62
1932.....	27	26	21	31	28	19	18	19	28	20	33	51
1933.....	29	32	31	36	36	26	22	25	27	19	34	47
1934.....	37	44	43	60	60	39	32	45	32	22	40	56
1935.....	45	46	46	68	70	38	35	55	44	38	45	74
1936.....	47	49	51	65	68	38	33	52	46	38	49	73
1937.....	51	53	57	79	84	36	41	56	49	42	51	70
1938.....	40	36	35	45	45	27	36	42	43	37	45	69
1939.....	39	37	34	46	44	28	31	42	41	36	43	61
1940.....	42	41	40	54	54	32	28	45	42	35	47	62
1941.....	51	48	46	58	58	43	32	60	53	46	55	77
1942.....	66	65	57	72	73	60	51	80	66	60	63	96
1943.....	*80	84	70	96	97	64	66	88	77	66	*77	121
1944.....	*82	89	78	108	109	66	72	97	76	62	*86	112
1945.....	*86	91	81	106	104	69	74	100	82	*67	*89	126
1946.....	*98	102	95	127	131	91	78	114	94	*81	*104	127
1947.....	114	118	128	161	171	105	77	158	111	107	106	141
1948.....	119	114	118	162	170	104	78	153	122	117	117	153
1949.....	103	100	103	112	109	94	82	106	106	101	98	140
1950.....	107	104	106	122	123	108	83	120	108	110	97	118
1951.....	125	119	115	143	147	129	90	148	130	133	112	144
1952.....	119	120	116	147	150	119	89	129	119	115	118	130
1953.....	105	108	111	130	132	102	89	122	104	94	104	140
1954.....	102	108	110	128	130	105	91	133	97	92	96	113
1955.....	96	104	107	116	116	104	90	109	90	80	96	121
1956.....	95	105	106	115	116	103	93	111	88	76	99	112
1957.....	97	101	106	105	105	101	96	106	94	89	101	102
1958.....	104	100	98	97	97	97	100	98	106	109	99	108
1959.....	99	99	96	98	98	102	104	96	100	102	100	90
1960.....	98	99	96	95	93	97	103	93	98	96	101	101
1961.....	99	102	99	95	94	100	109	112	98	97	101	92
1962.....	101	103	107	97	95	104	109	109	99	101	98	92
1963.....	100	107	106	103	101	103	102	113	95	94	98	92
1962: January.....	101	101	103	96	93	99	111	109	100	99	104	96
February.....	101	102	104	96	93	95	112	111	100	99	103	99
March.....	101	106	105	96	94	99	112	110	99	99	100	93
April.....	100	105	106	98	95	104	112	111	96	99	94	89
May.....	100	107	109	100	98	109	112	111	94	99	91	82
June.....	99	105	109	99	98	108	112	111	94	99	90	81
July.....	99	103	107	98	98	108	111	110	97	101	93	85
August.....	101	102	107	95	94	105	105	107	100	104	97	91
September.....	103	104	107	97	96	107	108	104	103	106	101	97
October.....	101	102	107	96	94	105	107	104	102	102	103	96
November.....	101	100	109	93	90	103	105	107	101	101	104	96
December.....	101	100	109	96	94	100	104	108	100	100	102	97
1963: January.....	101	103	109	99	96	97	101	110	100	100	101	96
February.....	100	104	110	101	98	96	103	113	97	95	100	99
March.....	99	107	110	101	98	103	103	113	94	91	97	98
April.....	100	109	113	101	99	106	103	111	93	94	94	91
May.....	99	110	110	102	101	105	103	113	91	93	91	85
June.....	100	109	102	106	106	106	103	113	93	95	90	84
July.....	101	107	97	106	107	103	103	112	97	100	93	87
August.....	100	105	97	106	104	104	102	111	97	98	97	89
September.....	100	104	101	108	106	106	103	111	97	95	101	94
October.....	100	105	105	102	99	106	102	115	96	93	104	92
November.....	100	108	106	100	96	105	100	118	94	88	106	95
December.....	98	108	107	103	99	101	101	116	91	84	104	91

See footnotes at end of table.

TABLE C-72.—Indexes of prices received and prices paid by farmers, and parity ratio, 1929-63—
Continued
[1957-59=100]

Year or month	Prices paid by farmers											Parity ratio ¹
	All items, interest, taxes, and wage rates (parity index)	Commodities and services							Inter-est ²	Taxes ³	Wage rates ⁴	
		All items	Family living items	Production items								
				All production items ⁵	Feed	Motor vehicles	Farm machinery	Fertilizer				
1929.....	55	55	54	56	68	36	43	85	120	58	32	92
1930.....	52	51	50	52	61	35	43	83	116	59	30	83
1931.....	44	44	43	43	43	35	42	75	111	58	24	67
1932.....	38	38	37	38	32	34	40	66	104	53	18	58
1933.....	37	38	38	38	37	34	39	61	92	46	15	64
1934.....	41	43	43	44	52	36	40	69	83	39	17	75
1935.....	42	45	43	46	53	37	41	68	76	37	18	88
1936.....	42	45	43	46	55	38	42	64	70	38	20	92
1937.....	45	48	45	50	62	39	43	67	66	38	22	93
1938.....	42	45	43	47	47	42	44	67	62	39	22	78
1939.....	42	44	42	46	47	40	43	66	60	39	22	77
1940.....	42	45	42	47	50	40	43	64	57	40	22	81
1941.....	45	48	45	50	54	42	43	64	55	39	26	93
1942.....	52	55	52	57	66	45	46	71	53	40	34	105
1943.....	58	61	58	63	78	47	48	76	47	39	45	113
1944.....	62	64	61	66	87	51	49	77	44	39	54	108
1945.....	65	66	64	67	86	53	49	79	42	40	62	109
1946.....	71	72	71	73	100	55	51	79	42	45	66	113
1947.....	82	85	83	85	118	63	58	88	43	50	72	115
1948.....	89	92	88	95	125	71	67	96	44	58	76	110
1949.....	86	88	85	91	103	78	76	98	46	62	74	100
1950.....	88	90	86	94	105	78	78	94	50	67	73	101
1951.....	97	100	94	104	118	83	83	100	55	70	81	107
1952.....	98	100	95	104	126	87	86	102	61	73	87	100
1953.....	95	96	94	97	114	86	87	103	66	77	88	92
1954.....	95	96	94	97	113	86	87	102	71	80	88	89
1955.....	94	95	94	96	106	87	87	102	76	83	89	84
1956.....	95	96	96	95	103	89	91	100	84	89	92	83
1957.....	98	98	99	99	101	96	96	100	92	94	96	82
1958.....	101	101	100	101	99	100	100	100	99	100	99	85
1959.....	102	101	101	101	100	104	104	100	109	106	105	81
1960.....	102	101	101	101	97	102	107	100	120	114	109	80
1961.....	103	101	102	101	98	101	110	100	130	123	110	80
1962.....	105	103	103	103	100	106	111	100	145	131	114	79
1963 ⁷	106	104	104	103	104	108	114	100	161	137	116	78
1962: January.....	104	102	102	102	99	105	-----	-----	135	131	112	80
February.....	104	103	103	102	99	-----	-----	-----	135	131	112	80
March.....	105	103	103	103	99	106	110	-----	135	131	112	80
April.....	105	103	103	103	99	-----	-----	100	135	131	115	79
May.....	105	103	103	103	99	105	-----	-----	135	131	115	79
June.....	105	103	103	102	99	106	111	-----	135	131	115	78
July.....	104	103	103	102	99	105	-----	-----	135	131	114	79
August.....	104	103	103	102	99	-----	-----	-----	135	131	114	80
September.....	105	103	103	103	100	105	112	100	135	131	114	81
October.....	105	103	103	103	100	105	-----	-----	135	131	113	80
November.....	105	103	103	103	100	108	-----	-----	135	131	113	79
December.....	106	104	103	104	102	108	112	-----	135	131	113	79
1963: January.....	106	104	104	104	103	109	-----	-----	155	137	114	79
February.....	106	104	104	104	104	-----	-----	-----	155	137	114	78
March.....	106	104	104	104	104	109	113	-----	155	137	114	77
April.....	106	104	104	104	103	-----	-----	100	155	137	117	78
May.....	106	104	104	104	102	109	-----	-----	155	137	117	77
June.....	106	104	104	104	103	109	114	100	155	137	117	77
July.....	107	104	105	104	104	-----	-----	-----	155	137	117	79
August.....	106	104	104	104	104	-----	-----	-----	170	138	117	78
September.....	106	104	104	104	105	108	114	100	170	138	117	77
October.....	106	104	104	104	104	108	-----	-----	170	138	117	77
November.....	106	104	104	103	103	108	-----	-----	170	138	117	77
December.....	106	104	104	103	105	-----	-----	-----	170	138	117	76

¹ Includes items not shown separately.

² Interest payable per acre on farm real estate debt.

³ Farm real estate taxes payable per acre (levied in preceding year).

⁴ Monthly data are seasonally adjusted.

⁵ Percentage ratio of prices received for all farm products to parity index, on a 1910-14=100 base.

⁶ Includes wartime subsidy payments.

⁷ Preliminary.

Source: Department of Agriculture.

TABLE C-73.—Farm production indexes, 1929-63

[1957-59=100]

Year	Farm out- put ¹	Crops									Livestock and products			
		Total ²	Feed grains	Hay and forage	Food grains	Vege- tables	Fruits and nuts	Cot- ton	To- bacco	Oil crops	Total ³	Meat ani- mals	Dairy prod- ucts	Poul- try and eggs
1929...	62	73	62	79	68	73	75	120	88	13	63	62	75	44
1930...	61	69	56	66	74	74	73	113	95	14	64	63	76	45
1931...	66	77	63	72	79	75	92	138	89	14	65	66	78	44
1932...	64	73	73	74	63	76	75	105	58	13	66	67	79	44
1933...	59	65	56	69	47	73	76	105	80	11	67	70	79	44
1934...	51	54	33	64	45	80	71	78	63	13	61	59	78	41
1935...	61	70	60	82	55	81	90	86	76	21	59	53	78	41
1936...	55	59	38	66	54	75	70	101	68	16	63	60	79	44
1937...	69	81	67	75	74	82	93	154	91	18	62	58	79	44
1938...	67	76	65	81	77	81	84	97	80	22	65	63	81	45
1939...	68	75	65	75	63	81	96	96	110	29	70	71	82	48
1940...	70	78	66	86	69	83	93	102	84	34	71	72	84	49
1941...	73	79	71	86	79	84	99	88	73	37	75	76	89	54
1942...	82	89	81	93	83	89	98	105	81	56	84	87	92	62
1943...	80	83	74	91	72	97	84	93	81	60	91	97	91	71
1944...	83	88	78	90	88	92	98	100	113	50	86	88	92	71
1945...	81	85	75	93	92	94	89	74	114	54	86	84	95	74
1946...	84	89	82	87	95	105	106	71	134	52	83	82	94	69
1947...	81	85	63	84	111	91	101	97	122	55	82	81	93	68
1948...	88	97	91	84	107	97	92	122	115	67	80	79	90	67
1949...	87	92	80	83	92	94	98	131	114	61	85	83	93	74
1950...	86	89	81	89	86	96	98	82	117	71	88	89	93	78
1951...	89	91	75	92	85	89	100	124	135	65	92	95	92	81
1952...	92	95	79	90	109	90	97	124	130	63	92	95	92	82
1953...	93	94	77	92	100	95	98	134	119	63	93	94	97	84
1954...	93	93	81	92	88	93	99	111	130	71	96	98	98	87
1955...	96	96	86	98	83	96	99	120	127	78	99	103	99	86
1956...	97	95	85	94	87	102	103	108	126	92	99	100	101	94
1957...	95	93	93	101	82	98	94	89	96	91	97	96	101	95
1958...	102	104	101	102	121	102	102	93	100	111	99	98	100	101
1959...	103	103	106	97	97	100	104	118	104	98	104	106	99	104
1960...	106	108	109	103	115	103	98	116	112	105	102	103	101	104
1961...	107	107	99	102	106	110	109	116	119	122	106	106	103	112
1962...	108	107	101	107	98	109	98	120	134	122	107	108	104	111
1963 ⁴ ...	112	112	110	105	102	109	101	126	131	129	109	111	103	114

¹ Farm output measures the annual volume of farm production available for eventual human use through sales from farms or consumption in farm households. Total excludes production of feed for horses and mules.

² Includes production of feed for horses and mules and certain items not shown separately.

³ Includes certain items not shown separately.

⁴ Preliminary.

Source: Department of Agriculture.

TABLE C-74.—Selected measures of farm resources and inputs, 1929-63

Year	Crops harvested (millions of acres) ¹		Live-stock breeding units (1957-59=100) ²	Man-hours of farm work (billions)	Index numbers of inputs (1957-59=100)						
	Total	Exclusive of use for feed for horses and mules			Total	Farm labor	Farm real estate ³	Mechanical power and machinery	Fertilizer and lime	Feed, seed, and live-stock purchases ⁴	Miscellaneous
1929.....	365	298	92	23.2	98	218	92	38	21	27	76
1930.....	369	304	92	22.9	97	216	91	40	21	26	76
1931.....	365	303	93	23.4	96	220	89	38	16	23	78
1932.....	371	311	95	22.6	93	213	86	35	11	24	79
1933.....	340	281	98	22.6	91	213	87	32	12	24	76
1934.....	304	247	98	20.2	86	190	86	32	14	24	69
1935.....	345	289	86	21.1	88	198	88	33	17	23	66
1936.....	323	269	90	20.4	89	192	89	35	20	31	68
1937.....	347	295	87	22.1	94	208	90	38	24	29	68
1938.....	349	301	87	20.6	91	193	91	40	23	30	70
1939.....	331	286	93	20.7	94	194	92	40	24	37	72
1940.....	341	298	95	20.5	97	192	92	42	28	45	73
1941.....	344	304	94	20.0	97	188	92	44	30	46	74
1942.....	348	309	104	20.6	100	194	91	48	34	57	75
1943.....	357	320	117	20.3	101	191	89	50	38	63	76
1944.....	362	326	114	20.2	101	190	88	51	43	64	76
1945.....	354	322	109	18.8	99	177	88	54	45	72	76
1946.....	352	323	107	18.1	99	170	91	58	53	69	77
1947.....	355	329	104	17.2	99	162	92	64	56	73	78
1948.....	356	332	98	16.8	100	158	95	72	57	72	74
1949.....	360	338	99	16.2	101	152	95	80	61	69	82
1950.....	345	326	102	15.1	101	142	97	86	68	72	85
1951.....	344	326	103	15.2	104	143	98	92	73	80	88
1952.....	349	334	103	14.5	103	136	99	96	80	81	88
1953.....	348	335	100	14.0	103	131	99	97	83	80	91
1954.....	346	335	104	13.3	102	125	100	98	88	82	91
1955.....	340	330	106	12.8	102	120	100	99	90	86	94
1956.....	324	315	104	12.0	101	113	99	99	91	91	98
1957.....	324	316	101	11.1	99	104	100	100	94	93	95
1958.....	324	317	99	10.5	99	99	100	99	97	101	100
1959.....	324	318	100	10.3	102	97	100	101	109	106	105
1960.....	324	319	97	9.8	101	92	100	100	110	109	106
1961.....	304	300	98	9.5	101	89	100	99	114	116	109
1962 ⁵	295	291	99	9.1	101	85	100	96	123	120	111
1963 ⁵	300	296	101	8.9	102	83	101	99	132	124	115

¹ Acreage harvested (excluding duplication) plus acreages in fruits, tree nuts, and farm gardens.² Animal units of breeding livestock, excluding horses and mules.³ Includes buildings and improvements on land.⁴ Nonfarm inputs associated with farmers' purchases.⁵ Preliminary.

Source: Department of Agriculture.

TABLE C-75.—Farm population, employment, and productivity, 1929-63

Year	Farm population (April 1) ¹		Farm employment (thousands) ²			Farm output			Crop pro- duc- tion per acre ⁴	Live- stock pro- duc- tion per breed- ing unit	
	Num- ber (thou- sands)	As per- cent of total popu- lation ³	Total	Family workers	Hired workers	Per unit of total input	Per man-hour				
							Total	Crops			Live- stock
							Index, 1957-59=100				
1929	30,580	25.1	12,763	9,360	3,403	63	28	28	48	69	68
1930	30,529	24.8	12,497	9,307	3,190	63	28	27	47	64	70
1931	30,845	24.8	12,745	9,642	3,103	69	30	30	47	72	70
1932	31,388	25.1	12,816	9,922	2,894	69	30	30	47	68	69
1933	32,393	25.8	12,739	9,874	2,865	65	28	27	46	61	68
1934	32,305	25.6	12,627	9,765	2,862	59	27	27	43	51	62
1935	32,161	25.3	12,733	9,855	2,878	69	31	31	44	66	69
1936	31,737	24.8	12,331	9,350	2,981	62	29	28	46	56	70
1937	31,266	24.3	11,978	9,054	2,924	73	33	33	46	76	71
1938	30,980	23.9	11,622	8,815	2,807	74	35	35	48	73	75
1939	30,840	23.6	11,338	8,611	2,727	72	35	34	50	74	75
1940	30,547	23.1	10,979	8,300	2,679	72	36	37	50	76	75
1941	30,118	22.6	10,669	8,017	2,652	75	39	39	51	77	80
1942	28,914	21.4	10,504	7,949	2,555	82	42	43	56	86	81
1943	26,186	19.2	10,446	8,010	2,436	79	42	41	58	78	78
1944	24,815	17.9	10,219	7,988	2,231	82	44	44	56	83	75
1945	24,420	17.5	10,000	7,881	2,119	82	46	46	58	82	79
1946	25,403	18.0	10,295	8,106	2,189	85	49	50	59	86	78
1947	25,829	17.9	10,382	8,115	2,267	82	50	50	61	82	79
1948	24,383	16.6	10,363	8,026	2,337	88	56	57	62	92	82
1949	24,194	16.2	9,964	7,712	2,252	86	57	57	66	85	86
1950	23,048	15.2	9,928	7,597	2,329	85	61	63	68	84	86
1951	21,890	14.2	9,546	7,310	2,236	86	62	61	72	85	89
1952	21,748	13.8	9,149	7,005	2,144	89	68	67	74	90	89
1953	19,874	12.4	8,864	6,775	2,089	90	71	69	76	89	93
1954	19,019	11.7	8,651	6,570	2,081	91	74	73	80	88	92
1955	19,078	11.5	8,381	6,345	2,036	94	80	77	85	91	93
1956	18,712	11.1	7,852	5,900	1,952	96	86	83	89	92	95
1957	17,656	10.3	7,600	5,660	1,940	96	91	90	92	93	96
1958	17,128	9.8	7,503	5,521	1,982	103	103	105	100	105	100
1959	16,592	9.4	7,342	5,390	1,952	101	106	105	108	102	104
1960	15,635	8.7	7,057	5,172	1,885	105	115	114	113	109	105
1961	14,803	8.1	6,919	5,029	1,890	106	120	119	120	113	108
1962 ⁵	14,313	7.7	6,700	4,873	1,827	107	127	124	127	116	108
1963 ⁵	13,400	7.1	6,680	4,809	1,871	110	135	132	133	119	108

¹ Farm population as defined by Department of Agriculture and Department of Commerce, i.e., civilian population living on farms, regardless of occupation.

² Total population of United States as of July 1 includes armed forces abroad and Alaska and Hawaii after they achieved statehood.

³ Includes persons doing farm work on all farms. These data, published by the Department of Agriculture, Statistical Reporting Service, differ from those on agricultural employment by the Department of Labor (see Table C-19) because of differences in the method of approach, in concepts of employment, and in time of month for which the data are collected. For further explanation, see monthly report on *Farm Labor*, September 10, 1958.

⁴ Computed from variable weights for individual crops produced each year.

⁵ Preliminary.

Sources: Department of Agriculture and Department of Commerce.

TABLE C-76.—Comparative balance sheet of agriculture, 1929-64

[Billions of dollars]

Beginning of year	Assets									Claims			
	Total	Real estate	Other physical assets				Financial assets			Total	Real estate debt	Other debt	Proprietors' equities
			Livestock	Machinery and motor vehicles	Crops ¹	Household furnishings and equipment ²	Deposits and currency	U.S. savings bonds	Investment in co-operatives				
1929.....	(³)	48.0	6.6	3.2	(³)	(³)	(³)	(³)	(³)	(³)	9.8	(³)	(³)
1930.....	68.5	47.9	6.5	3.4	2.5	4.0	3.6	(³)	0.6	68.5	9.6	5.0	53.9
1931.....	(³)	43.7	4.9	3.3	(³)	(³)	(³)	(³)	(³)	(³)	9.4	(³)	(³)
1932.....	(³)	37.2	3.6	3.0	(³)	(³)	(³)	(³)	(³)	(³)	9.1	(³)	(³)
1933.....	(³)	30.8	3.0	2.5	(³)	(³)	(³)	(³)	(³)	(³)	8.5	(³)	(³)
1934.....	(³)	32.2	3.2	2.2	(³)	(³)	(³)	(³)	(³)	(³)	7.7	(³)	(³)
1935.....	(³)	33.3	3.5	2.2	(³)	(³)	(³)	(³)	(³)	(³)	7.6	(³)	(³)
1936.....	(³)	34.3	5.2	2.4	(³)	(³)	(³)	(³)	(³)	(³)	7.4	(³)	(³)
1937.....	(³)	35.2	5.1	2.6	(³)	(³)	(³)	(³)	(³)	(³)	7.2	(³)	(³)
1938.....	(³)	35.2	5.0	3.0	(³)	(³)	(³)	(³)	(³)	(³)	7.0	(³)	(³)
1939.....	(³)	34.1	5.1	3.2	(³)	(³)	(³)	(³)	(³)	(³)	6.8	(³)	(³)
1940.....	53.0	33.6	5.1	3.1	2.7	4.3	3.2	0.2	.8	53.0	6.6	3.4	43.0
1941.....	55.0	34.4	5.3	3.3	3.0	4.2	3.5	.4	.9	55.0	6.5	3.9	44.6
1942.....	62.9	37.5	7.1	4.0	3.8	4.9	4.2	.5	.9	62.9	6.4	4.1	52.4
1943.....	73.7	41.6	9.6	4.9	5.1	5.0	5.4	1.1	1.0	73.7	6.0	4.0	63.7
1944.....	84.5	48.2	9.7	5.3	6.1	5.3	6.6	2.2	1.1	84.5	5.4	3.5	75.6
1945.....	94.0	53.9	9.0	6.3	6.7	5.6	7.9	3.4	1.2	94.0	4.9	3.4	85.7
1946.....	103.3	61.0	9.7	5.2	6.3	6.1	9.4	4.2	1.4	103.3	4.8	3.2	95.3
1947.....	116.2	68.5	11.9	5.1	7.1	7.7	10.2	4.2	1.5	116.2	4.9	3.6	107.7
1948.....	127.5	73.7	13.3	7.0	9.0	8.5	9.9	4.4	1.7	127.5	5.1	4.2	118.2
1949.....	134.2	76.6	14.4	9.4	8.6	9.1	9.6	4.6	1.9	134.2	5.3	6.1	122.8
1950.....	131.6	75.3	12.9	11.3	7.6	8.6	9.1	4.7	2.1	131.6	5.6	6.9	119.1
1951.....	150.4	86.6	17.1	13.0	7.9	9.7	9.1	4.7	2.3	150.4	6.1	7.0	137.3
1952.....	165.5	95.1	19.5	15.2	8.8	10.3	9.4	4.7	2.5	165.5	6.7	7.9	150.9
1953.....	162.5	96.5	14.8	15.6	9.0	9.9	9.4	4.6	2.7	162.5	7.2	8.8	146.5
1954.....	159.1	95.0	11.7	16.3	9.2	9.9	9.4	4.7	2.9	159.1	7.7	9.3	142.1
1955.....	162.7	98.2	11.2	16.2	9.6	10.0	9.4	5.0	3.1	162.7	8.2	9.5	145.0
1956.....	166.8	102.9	10.6	16.5	8.3	10.5	9.5	5.2	3.3	166.8	9.0	9.8	148.0
1957.....	174.7	110.4	11.0	17.1	8.3	10.0	9.4	5.1	3.4	174.7	9.8	9.6	155.3
1958.....	182.5	115.4	13.9	17.0	7.6	9.9	9.5	5.1	3.6	182.5	10.4	9.7	162.4
1959.....	198.7	124.4	17.7	18.5	9.3	9.8	10.0	5.2	3.8	198.7	11.1	12.0	175.6
1960.....	199.5	129.9	15.6	18.6	7.8	9.6	9.2	4.7	4.1	199.5	12.1	11.8	175.6
1961.....	199.6	131.4	15.5	18.2	8.0	8.9	8.7	4.6	4.3	199.6	12.8	12.4	174.4
1962.....	208.0	137.4	16.4	18.6	8.7	9.1	8.8	4.5	4.5	208.0	13.9	13.5	180.6
1963.....	216.5	143.6	17.2	19.3	9.1	8.9	9.2	4.4	4.8	216.5	15.2	14.8	186.5
1964 ⁴	226.2	152.0	(³)	(³)	(³)	(³)	(³)	(³)	(³)	226.2	16.7	16.1	193.4

¹ Includes all crops held on farms for whatever purpose and crops held off farms as security for Commodity Credit Corporation loans. The latter on January 1, 1963, totaled \$1,129 million.

² Revised to reflect farm population estimates based on definition of a farm in 1959 Census of Agriculture. For further details of revision, see *Agricultural Information Bulletin No. 270*.

³ Not available.

⁴ Preliminary.

Source: Department of Agriculture.

INTERNATIONAL STATISTICS

TABLE C-77.—United States balance of payments, 1947-63

[Millions of dollars]

Year or quarter	Total	Exports of goods and service					Imports of goods and services				Balance on goods and services
		Merchandise ¹	Military sales	Income on investments		Other services	Total	Merchandise ¹	Military expenditures	Other services	
				Private	Government						
1947.....	19,737	16,015	(7)	1,036	66	2,620	8,208	5,979	455	1,774	11,529
1948.....	16,789	13,193	(7)	1,238	102	2,256	10,349	7,563	799	1,987	6,440
1949.....	15,770	12,149	(7)	1,297	98	2,226	9,621	6,879	621	2,121	6,149
1950.....	13,807	10,117	(7)	1,484	109	2,097	12,028	9,108	576	2,344	1,779
1951.....	18,744	14,123	(7)	1,684	198	2,739	15,073	11,202	1,270	2,601	3,671
1952.....	17,992	13,319	(7)	1,624	204	2,845	15,766	10,838	2,054	2,874	2,226
1953.....	16,947	12,281	192	1,658	252	2,564	16,561	10,990	2,615	2,956	386
1954.....	17,759	12,799	182	1,955	272	2,551	15,931	10,354	2,642	2,935	1,828
1955.....	19,804	14,280	200	2,170	274	2,880	17,795	11,527	2,901	3,367	2,009
1956.....	23,595	17,379	161	2,468	194	3,393	19,628	12,804	2,949	3,875	3,967
1957.....	26,481	19,390	375	2,612	205	3,899	20,752	13,291	3,216	4,245	5,729
1958.....	23,067	16,264	300	2,538	307	3,658	20,861	12,952	3,435	4,474	2,206
1959.....	23,476	16,282	302	2,694	349	3,849	23,342	15,310	3,107	4,925	134
1960.....	26,974	19,459	335	2,873	349	3,958	23,205	14,723	3,048	5,434	3,769
1961.....	28,311	19,913	402	3,464	380	4,152	22,867	14,497	2,934	5,436	5,444
1962.....	29,790	20,479	660	3,850	472	4,329	24,964	16,145	3,028	5,791	4,826
1963 ²	31,106	21,357	747	4,040	499	4,463	25,831	16,768	2,907	6,156	5,275
Seasonally adjusted annual rates											
1961: I.....	28,352	20,200	352	3,432	380	3,988	21,908	13,544	3,092	5,272	6,444
II.....	27,372	19,020	448	3,324	480	4,100	22,024	13,616	3,056	5,352	5,348
III.....	28,428	19,948	408	3,616	280	4,176	23,484	15,304	2,720	5,460	4,944
IV.....	29,092	20,484	400	3,484	380	4,344	24,052	15,524	2,868	5,660	5,040
1962: I.....	28,824	20,088	452	3,616	436	4,232	24,476	15,768	3,016	5,692	4,348
II.....	30,440	21,048	760	3,780	576	4,296	24,888	16,120	2,992	5,776	5,552
III.....	30,200	21,080	664	3,784	420	4,352	25,128	16,508	2,928	5,692	5,072
IV.....	29,696	19,700	864	4,240	456	4,436	25,364	16,184	3,176	6,004	4,332
1963: I.....	29,788	19,992	724	4,252	496	4,324	25,028	16,008	2,992	6,028	4,760
II.....	31,564	21,924	812	3,856	500	4,472	25,740	16,680	2,900	6,160	5,824
III ¹⁰	31,964	22,156	704	4,012	500	4,592	26,724	17,616	2,828	6,280	5,240

See footnotes at end of table.

TABLE C-77.—United States balance of payments, 1947-63—Continued

[Millions of dollars]

Year or quarter	Remittances and pensions	Government grants and capital		U.S. private capital, net			Foreign capital ¹	Unrecorded transactions	Over-all balance (surplus or deficit (-))				
		Grants and capital out-flow	Re-payments on U.S. loans	Direct investments	Long-term portfolio	Short-term			Total ²	Total	Gold and convertible currencies	Liquid liabilities ³	
												To money authorities and institutions ⁴	To other foreign holders ⁵
1947.....	-715	-6,415	294	-749	-49	-189	-75	936	4,567	4,567	2,850	1,717	
1948.....	-617	-5,361	443	-721	-69	-116	-173	1,179	1,005	1,005	1,530	-525	
1949.....	-630	-5,854	205	-660	-80	187	83	775	176	176	164	11	
1950.....	-523	-3,935	295	-621	-495	-149	90	-21	-3,580	-3,580	-1,743	-1,837	
1951.....	-457	-3,496	305	-508	-437	-103	243	477	-305	-305	53	-358	
1952.....	-545	-2,809	429	-852	-214	-94	212	601	-1,046	-1,046	379	-1,425	
1953.....	-617	-2,542	487	-735	185	167	178	339	-2,152	-2,152	-1,161	-991	
1954.....	-615	-2,061	507	-667	-320	-635	240	173	-1,550	-1,550	-298	-1,252	
1955.....	-585	-2,627	416	-823	-241	-191	394	503	-1,145	-1,145	-41	-1,104	
1956.....	-665	-2,841	479	-1,951	-603	-517	653	543	-935	-935	306	-1,241	
1957.....	-702	-3,233	659	-2,442	-859	-276	487	1,157	520	520	798	-278	
1958.....	-722	-3,131	544	-1,181	-1,444	-311	22	488	-3,529	-3,529	-2,275	-1,254	
1959.....	-791	-3,040	1,054	-1,372	-926	-77	863	412	-3,743	-3,743	-731	-3,012	
1960.....	-672	-3,405	636	-1,694	-850	-1,348	366	-683	-3,881	-3,881	-1,702	-1,890	-289
1961.....	-705	-4,056	1,274	-1,598	-1,011	-1,541	728	-905	-2,370	-2,370	-741	-546	-1,083
1962.....	-736	-4,281	1,283	-1,557	-1,209	-507	1,020	-1,025	-2,186	-2,186	-907	-1,079	-200
1963 ⁶	-819	-4,503	1,048	-1,687	-1,889	-677	524	-419	-3,147	(⁷)	(⁷)	(⁷)	(⁷)
Seasonally adjusted annual rates										Quarterly totals, unadjusted			
1961:													
I.....	-748	-3,940	512	-1,832	-376	-1,888	848	-908	-1,888	-331	-346	-69	84
II.....	-684	-3,424	3,404	-1,376	-876	-1,756	1,048	-1,560	124	73	331	307	-565
III.....	-692	-4,116	396	-1,596	-936	-844	164	60	-2,620	-912	-270	-417	-225
IV.....	-696	-4,744	784	-1,588	-1,856	-1,676	852	-1,212	-5,096	-1,200	-456	-367	-377
1962:													
I.....	-764	-4,300	620	-796	-1,428	-1,220	1,308	-108	-2,340	-472	-189	416	-699
II.....	-728	-4,312	948	-2,024	-1,316	-4	216	-148	-1,808	-323	207	-506	-24
III.....	-704	-4,180	2,404	-1,436	-752	-656	704	-1,876	-1,424	-693	-550	-601	458
IV.....	-748	-4,332	1,160	-1,972	-1,340	-156	1,852	-1,968	-3,172	-698	-375	-388	65
1963:													
I.....	-848	-4,232	704	-2,004	-2,048	348	348	-488	-3,460	-689	-78	-217	-394
II.....	-836	-5,368	760	-1,952	-2,464	-2,492	1,004	568	-4,956	-1,173	-122	-909	-142
III ¹⁰	-772	-3,908	1,680	-1,104	-1,156	112	220	-1,336	-1,024	-593	-167	-382	-44

¹ Adjusted from customs data for differences in timing and coverage.² Other than liquid funds.³ Equals changes in U.S. gold and convertible currencies and liquid liabilities to foreigners.⁴ Minus indicates increase in liabilities.⁵ To International Monetary Fund (IMF) and foreign central banks and governments.⁶ To foreign commercial banks and other international and regional institutions not listed in footnote 5 and to other foreigners.⁷ Not reported separately.⁸ Average of the first three quarters based on seasonally adjusted annual rates.⁹ Not available.¹⁰ Preliminary.

NOTE.—Data exclude military aid and U.S. subscriptions to IMF.

Source: Department of Commerce.

TABLE C-78.—Major U.S. Government foreign assistance, by type and by area, total postwar period and fiscal years 1959–63

[Fiscal years, billions of dollars]

Fiscal year	Total	Western Europe (excluding Greece and Turkey)	Near East (including Greece and Turkey) and South Asia	Other Africa	Far East and Pacific	American Republics	International organiza- tions and unspeci- fied areas
Total, net							
Total postwar ¹	94.7	39.6	16.3	1.5	23.0	5.1	9.1
1959	6.0	.7	1.5	.1	1.5	.6	1.6
1960	4.2	.4	1.5	.2	1.5	.3	.3
1961	4.0	— .1	1.6	.2	1.5	.4	.4
1962	5.2	.4	1.6	.4	1.5	1.0	.4
1963	4.9	— .1	2.1	.3	1.5	.7	.4
Investment in five interna- tional financial institutions ²							
Total postwar ¹	5.2						5.2
1959	1.4						1.4
1960	.1						.1
1961	.1						.1
1962	.2						.2
1963	.1						.1
Under assistance programs, net							
Total postwar ¹	89.5	39.6	16.3	1.5	23.0	5.1	3.9
1959	4.7	.7	1.5	.1	1.5	.6	.2
1960	4.1	.4	1.5	.2	1.5	.3	.2
1961	3.9	— .1	1.6	.2	1.5	.4	.3
1962	5.1	.4	1.6	.4	1.5	1.0	.2
1963	4.8	— .1	2.1	.3	1.5	.7	.3
Net grants of military supplies and services							
Total postwar ¹	32.1	15.5	5.2	.1	10.1	.8	.4
1959	2.2	.7	.5	(³)	.8	.1	(³)
1960	2.0	.8	.4	(³)	.7	.1	(³)
1961	1.7	.6	.3	(³)	.7	.1	(³)
1962	1.6	.3	.3	(³)	.8	.1	(³)
1963	1.7	.5	.4	(³)	.7	.1	(³)
Other aid, net							
Total postwar ¹	57.4	24.1	11.1	1.4	12.9	4.3	3.6
1959	2.4	(³)	.9	.1	.7	.6	.2
1960	2.1	— .3	1.1	.2	.7	.2	.2
1961	2.2	— .6	1.3	.2	.8	.3	.3
1962	3.4	(³)	1.3	.3	.7	.9	.2
1963	3.0	— .6	1.6	.3	.8	.6	.3
Net grants (less conversions)							
Total postwar ¹	39.1	17.2	6.1	.9	11.0	1.2	2.7
1959	1.6	.1	.5	.1	.7	.1	.1
1960	1.6	.2	.4	.1	.7	.1	.1
1961	1.8	.1	.6	.2	.7	.1	.2
1962	1.9	.1	.7	.3	.6	.1	.2
1963	1.4	(³)	.6	.3	.1	.2	.2
Net credits (including conver- sions)							
Total postwar ¹	15.0	6.4	3.4	.4	1.6	2.8	.4
1959	.7	— .1	.2	(³)	.1	.5	(³)
1960	.1	— .4	.3	(³)	(³)	.1	(³)
1961	(³)	— .7	.4	(³)	.1	.2	(³)
1962	1.4	— .1	.6	.1	.1	.6	(³)
1963	1.4	— .7	1.0	.1	.6	.4	.1
Other assistance (through net accumulation of foreign cur- rency claims) ⁴							
Total postwar ¹	3.3	.5	1.6	.1	.4	.3	.4
1959	.2	(³)	.2	(³)	(³)	(³)	.1
1960	.4	— .1	.3	(³)	(³)	.1	.1
1961	.4	(³)	.3	(³)	(³)	(³)	.1
1962	.2	(³)	(³)	(³)	(³)	.1	.1
1963	.2	(³)	(³)	(³)	.1	.1	(³)

¹ Fiscal years 1946–63.

² Inter-American Development Bank, International Bank for Reconstruction and Development, International Development Association, International Finance Corporation, and International Monetary Fund.

³ Less than \$50 million.

⁴ Other assistance (net) represents the transfer of United States farm products in exchange for foreign currencies, less the U.S. Government's disbursements of the currencies as grants, credits, or for purchases. Also includes the foreign currency claims acquired by the Government as principal and interest collections; since enactment of Public Law 87–128, they are available for the same purpose as farm sales proceeds.

Source: Department of Commerce.

TABLE C-79.—United States merchandise exports and imports, by economic category, 1949 and 1958-63

[Millions of dollars]

Category	1949	1958	1959	1960	1961	1962	January-June	
							1962	1963
Domestic exports: Total ¹	11,789	16,202	16,211	19,401	19,907	20,632	10,560	10,707
Agricultural.....	3,578	3,854	3,955	4,831	5,024	5,031	2,572	2,623
Nonagricultural.....	8,211	12,348	12,256	14,570	14,883	15,601	7,988	8,084
Food and beverages.....	2,302	2,549	2,796	3,103	3,346	3,692	1,921	1,973
Agricultural foodstuffs.....	2,254	2,511	2,751	3,060	3,308	3,652	1,903	1,951
Nonagricultural foodstuffs.....	48	38	45	43	38	40	18	22
Industrial supplies and materials.....	4,870	6,404	6,110	7,802	7,572	7,000	3,473	3,593
Cotton, tobacco, and other agricultural.....	1,273	1,262	1,088	1,654	1,593	1,198	588	554
Nonagricultural industrial materials.....	3,597	5,142	5,022	6,148	5,979	5,802	2,885	3,039
Materials used in farming.....	167	263	300	331	346	447	234	235
Capital equipment.....	3,378	5,328	5,363	6,392	6,716	7,405	3,829	3,797
Machinery and related items.....	2,296	3,667	3,706	4,141	4,530	4,921	2,519	2,581
Commercial transportation equipment.....	918	1,423	1,369	1,792	1,539	1,571	854	787
Special category equipment ²	164	238	288	459	647	913	456	429
Consumer goods, nonfood.....	913	1,271	1,274	1,327	1,357	1,380	710	723
Government military sales and unclassified.....	159	387	368	446	570	708	393	386
General imports: Total ³	6,638	13,255	15,627	15,017	14,713	16,396	8,105	8,248
Industrial supplies and materials ⁴	3,743	7,007	8,441	7,956	7,681	8,456	4,284	4,246
Petroleum and products.....	485	1,610	1,536	1,548	1,682	1,814	913	942
Newsprint and paper base stocks.....	670	988	1,089	1,098	1,093	1,144	563	533
Materials associated with non-durable goods output.....	991	1,161	1,556	1,489	1,451	1,613	857	867
Selected building materials (excluding metals).....	143	435	603	541	538	617	299	306
All other industrial supplies and materials ⁵ (associated mainly with durable goods output).....	1,454	2,813	3,657	3,280	2,917	3,268	1,652	1,598
Food and beverages.....	2,004	3,354	3,364	3,209	3,253	3,520	1,685	1,708
Materials used in farming.....	286	366	366	353	395	418	228	267
Consumer goods, nonfood.....	410	1,710	2,424	2,459	2,200	2,707	1,243	1,322
Capital equipment (including agricultural machinery).....	107	481	618	602	720	843	443	458
All other and unclassified.....	88	370	414	438	464	452	222	247

¹ Excludes military aid shipments of supplies and equipment under the Military Assistance Program, 1957-63; in 1949, excludes military shipments under the Greek-Turkey and the China military aid programs. Also excludes uranium exports prior to 1961 (about \$10 million a year).

² Excludes Government military cash sales.

³ Adjusted to include imports of uranium ores and concentrates.

⁴ Total adjusted to exclude \$33 million of the value reported by economic category.

Source: Department of Commerce.

TABLE C-80.—United States merchandise exports and imports, by area, 1949 and 1958-63¹

[Millions of dollars]

Area	1949	1958	1959	1960	1961	1962	January-October	
							1962	1963
Exports (including reexports):								
Total²	11,560	15,925	15,926	18,892	19,143	19,474	16,061	17,088
Canada.....	1,928	3,439	3,748	3,709	3,643	3,830	3,206	3,398
Other Western Hemisphere.....	2,820	4,334	3,777	3,770	3,720	3,560	2,939	2,896
Western Europe.....	3,980	4,514	4,535	6,318	6,287	6,371	5,243	5,593
Soviet bloc ³	62	113	89	194	133	125	114	121
Other Europe.....	3	5	7	13	15	16	14	9
Asia.....	1,997	2,658	2,766	3,646	4,111	4,124	3,351	3,854
Australia and Oceania.....	175	245	323	475	403	469	391	415
Africa.....	594	618	691	766	831	980	803	801
General imports: Total	6,638	13,255	15,627	15,017	14,713	16,396	13,578	14,211
Canada.....	1,558	2,965	3,352	3,153	3,270	3,657	3,022	3,166
Other Western Hemisphere.....	2,444	4,049	4,029	3,964	3,725	3,926	3,269	3,351
Western Europe.....	909	3,297	4,523	4,185	4,058	4,542	3,745	3,867
Soviet bloc ³	67	63	81	81	81	79	68	69
Other Europe.....	4	5	4	2	2	2	2	2
Asia.....	1,184	1,997	2,603	2,721	2,582	2,965	2,466	2,679
Australia and Oceania.....	125	209	338	266	320	440	353	427
Africa.....	338	668	679	627	672	758	631	644
Unidentified countries ⁵	8	34	20	19	4	25	22	5

¹ Data for all periods have been adjusted to include imports of uranium ore and exports of uranium and other nuclear materials. Imports from Canada and the Republic of South Africa have been adjusted for all periods for such imports. Data on imports of uranium ore from other countries are not available prior to 1961.

² Excludes special category items.

³ U.S.S.R., Poland, Bulgaria, Rumania, Czechoslovakia, East Germany, Hungary, Albania, Estonia, Latvia, Lithuania.

⁴ Total adjusted to exclude \$33 million of the value reported by area.

⁵ Consists of certain low-valued shipments and uranium and thorium imports, not identifiable by country.

Source: Department of Commerce.

TABLE C-81.—*Gold reserves and dollar holdings of foreign countries and international organizations, 1949, 1953, and 1958-63*

[Millions of dollars; end of period]

Area and country	1949	1953	1958	1959	1960	1961	1962	1963
								Sep- tember ¹
Total.....	18,668	26,935	36,501	42,245	46,297	49,528	52,508	54,795
Continental Western Europe....	6,098	9,920	17,244	19,248	21,059	23,797	25,058	26,247
Austria.....	92	249	612	630	539	561	783	905
Belgium.....	818	915	1,391	1,279	1,314	1,582	1,539	1,667
France.....	733	1,204	1,294	1,980	2,165	3,114	3,747	4,500
Germany.....	149	1,224	4,407	4,640	6,450	6,509	6,412	6,637
Italy.....	570	821	2,209	3,119	3,080	3,459	3,627	3,541
Netherlands.....	370	981	1,399	1,634	1,783	1,800	1,830	1,911
Scandinavian countries (Sweden, Norway, Den- mark, and Finland).....	394	710	1,121	1,113	942	1,193	1,256	1,326
Spain.....	132	169	96	157	328	470	624	752
Switzerland.....	2,067	2,174	2,853	2,991	2,957	3,518	3,658	3,409
Other.....	773	1,473	1,862	1,705	1,501	1,591	1,582	1,599
United Kingdom.....	2,027	3,241	3,875	3,827	4,887	4,930	4,561	4,565
Canada.....	1,516	2,509	3,438	3,610	3,770	4,163	4,446	4,578
Latin America.....	3,072	3,679	4,123	4,014	3,533	3,556	3,411	3,876
Argentina.....	412	504	210	393	420	426	272	454
Brazil.....	510	425	464	479	483	514	430	361
Chile.....	101	122	140	228	180	153	178	176
Colombia.....	138	236	241	288	237	236	206	217
Cuba.....	463	570	452	296	79	44	16	14
Mexico.....	270	345	565	587	541	612	630	764
Peru.....	82	104	96	111	114	132	152	198
Uruguay.....	236	333	262	242	232	238	282	264
Venezuela.....	517	597	1,215	932	800	820	907	934
Other.....	343	438	478	458	447	381	438	494
Asia.....	2,008	2,865	3,251	4,008	4,448	4,385	5,005	5,355
Japan.....	356	953	1,095	1,566	2,169	1,979	2,502	2,682
Other.....	1,652	1,912	2,156	2,442	2,277	2,406	2,503	2,663
All other countries.....	679	1,105	1,199	1,313	1,251	1,436	1,764	1,919
International and regional.....	3,268	3,616	3,371	6,225	7,351	7,261	8,263	8,265

¹ Preliminary.

² Total dollar holdings include \$82 million reported by banks initially included as of December 31, 1961, of which \$81 million reported for Japan.

NOTE.—Includes gold reserves and dollar holdings of all foreign countries (with the exception of gold reserves of U.S.S.R., other Eastern European countries, and Communist China), and of international and regional organizations (International Bank for Reconstruction and Development, International Monetary Fund, Inter-American Development Bank, European Investment Bank and others). Holdings of the Bank for International Settlements and the European Payments Union/European Fund and the Tripartite Commission for the Restitution of Monetary Gold are included under "other" Continental Western Europe.

Source: Board of Governors of the Federal Reserve System;

TABLE C-82.—United States gold stock and holdings of convertible foreign currencies by U.S. monetary authorities, 1949–63

[Millions of dollars]

End of year or month	Total	Gold stock ¹		Foreign currency holdings
		Total ²	Treasury	
1949	24, 563	24, 563	24, 427	-----
1950	22, 820	22, 820	22, 706	-----
1951	22, 873	22, 873	22, 695	-----
1952	23, 252	23, 252	23, 187	-----
1953	22, 091	22, 091	22, 030	-----
1954	21, 793	21, 793	21, 713	-----
1955	21, 753	21, 753	21, 690	-----
1956	22, 058	22, 058	21, 949	-----
1957	22, 857	22, 857	22, 781	-----
1958	20, 582	20, 582	20, 534	-----
1959	19, 507	19, 507	19, 456	-----
1960	17, 804	17, 804	17, 767	-----
1961	17, 063	16, 947	16, 889	116
1962	16, 156	16, 057	15, 978	99
1963 ³	15, 808	15, 596	15, 513	212
1962: January	16, 963	16, 847	16, 815	116
February	16, 948	16, 795	16, 790	153
March	16, 873	16, 643	16, 608	230
April	16, 762	16, 519	16, 495	243
May	16, 718	16, 453	16, 434	260
June	17, 081	16, 527	16, 435	554
July	16, 678	16, 182	16, 147	496
August	16, 562	16, 139	16, 098	423
September	16, 531	16, 081	16, 067	450
October	16, 364	16, 026	15, 978	338
November	16, 216	16, 014	15, 977	202
December	16, 156	16, 057	15, 978	99
1963: January	16, 102	15, 974	15, 928	128
February	16, 023	15, 891	15, 878	132
March	16, 078	15, 946	15, 878	132
April	16, 046	15, 914	15, 877	132
May	16, 009	15, 854	15, 797	155
June	15, 956	15, 830	15, 733	126
July	15, 764	15, 677	15, 633	87
August	15, 725	15, 633	15, 582	92
September	15, 788	15, 634	15, 582	154
October	15, 910	15, 640	15, 583	270
November	15, 780	15, 609	15, 582	171
December ³	15, 808	15, 596	15, 513	212

¹ Includes gold sold to the United States by the International Monetary Fund with the right of repurchase which amounted to \$800 million on December 31, 1963.

² Includes gold in Exchange Stabilization Fund.

³ Preliminary.

Sources: Treasury Department and Board of Governors of the Federal Reserve System.

TABLE C-83.—Price changes in international trade, 1955-63

[1958=100]

Area or commodity class	1955	1956	1957	1958	1959	1960	1961	1962	1963
									Third quarter
Area:									
Developed areas:									
Exports.....	97	100	103	100	99	100	101	101	101
Terms of trade ¹	96	97	96	100	102	103	104	105	105
United States:									
Exports.....	94	97	101	100	101	101	104	104	103
Terms of trade ¹	92	93	96	100	102	101	105	108	106
Undeveloped areas:									
Exports.....	105	104	104	100	97	98	95	93	95
Terms of trade ¹	108	104	100	100	99	99	97	95	98
Latin America:									
Exports.....	111	111	107	100	95	95	93	91	² 93
Terms of trade ¹	115	111	105	100	95	96	96	94	² 97
Latin America excluding petroleum:									
Exports.....	116	115	111	100	94	95	93	91	² 92
Terms of trade ¹	120	116	109	100	94	96	95	93	² 96
Commodity class: ³									
Manufactured goods.....	94	98	101	100	99	101	102	103	102
Nonferrous base metals.....	133	138	111	100	111	114	110	109	110
Primary commodities: Total.....	104	105	106	100	97	97	95	94	99
Foodstuffs.....	102	101	103	100	93	91	90	90	102
Coffee, tea, cocoa.....	109	106	103	100	83	77	72	70	72
Cereals.....	105	102	100	100	97	96	98	103	101
Other agricultural commodities.....	115	114	113	100	105	107	103	99	101
Fats, oils, oilseeds.....	101	109	105	100	100	94	97	89	95
Textiles.....	125	123	126	100	98	104	105	101	112
Wool.....	125	129	144	100	106	108	107	106	126
Minerals.....	95	99	103	100	94	93	92	92	92
Metal ores.....	98	105	107	100	97	98	100	99	95

¹ Terms of trade indexes are unit value indexes of exports divided by unit value indexes of imports.² Data are for second quarter.³ Commodity price indexes relate to exports.

NOTE.—Data shown for area groups and for manufactured goods are unit value indexes. All others are price indexes.

Data exclude trade of Soviet area and Communist China.

Source: United Nations.

