# 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,

WALTER W. HELLER,
*Chairman.*

GARDNER ACKLEY

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.

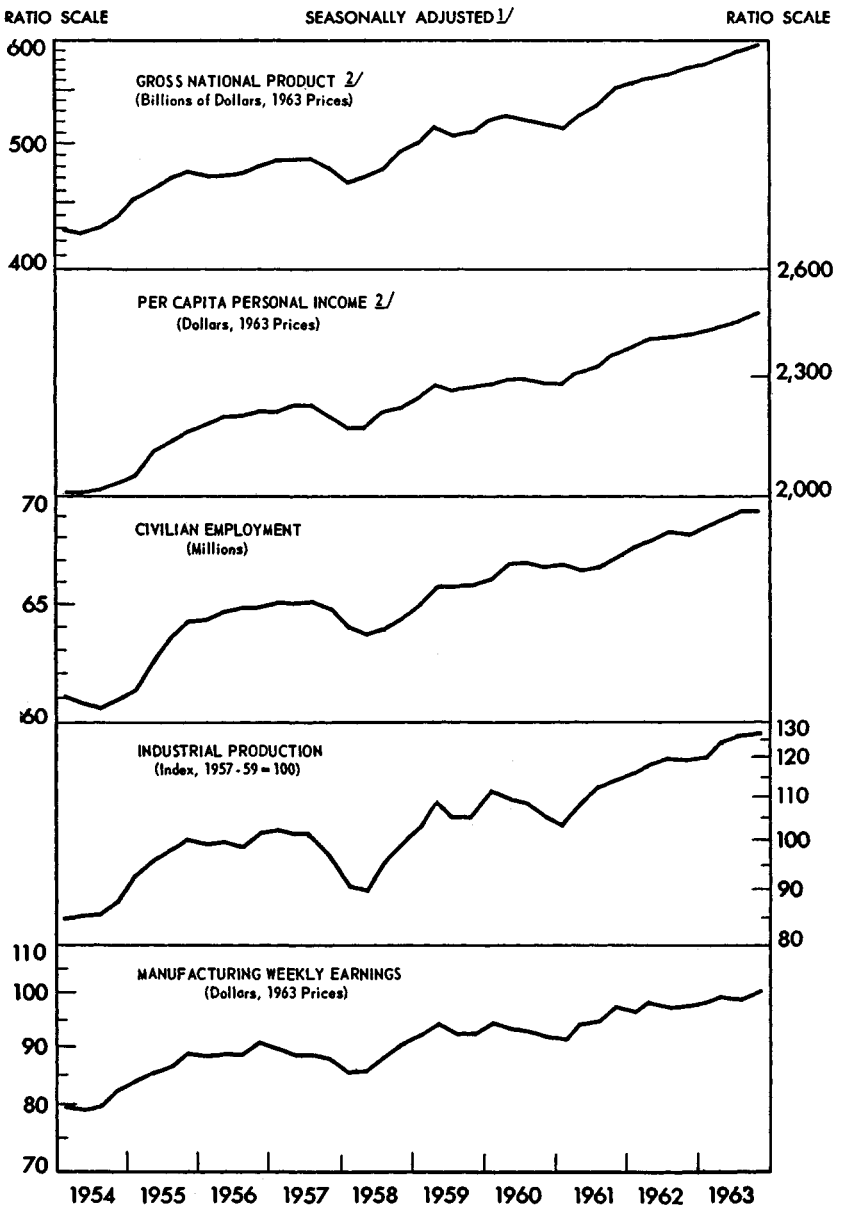
As Chart 1 shows, the economy has made a strong and sustained advance beyond the records of earlier years. The expansion has demonstrated the vitality of the private economy in an environment of progressive Federal policy. But the Nation's performance must be measured against its potential levels of 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.

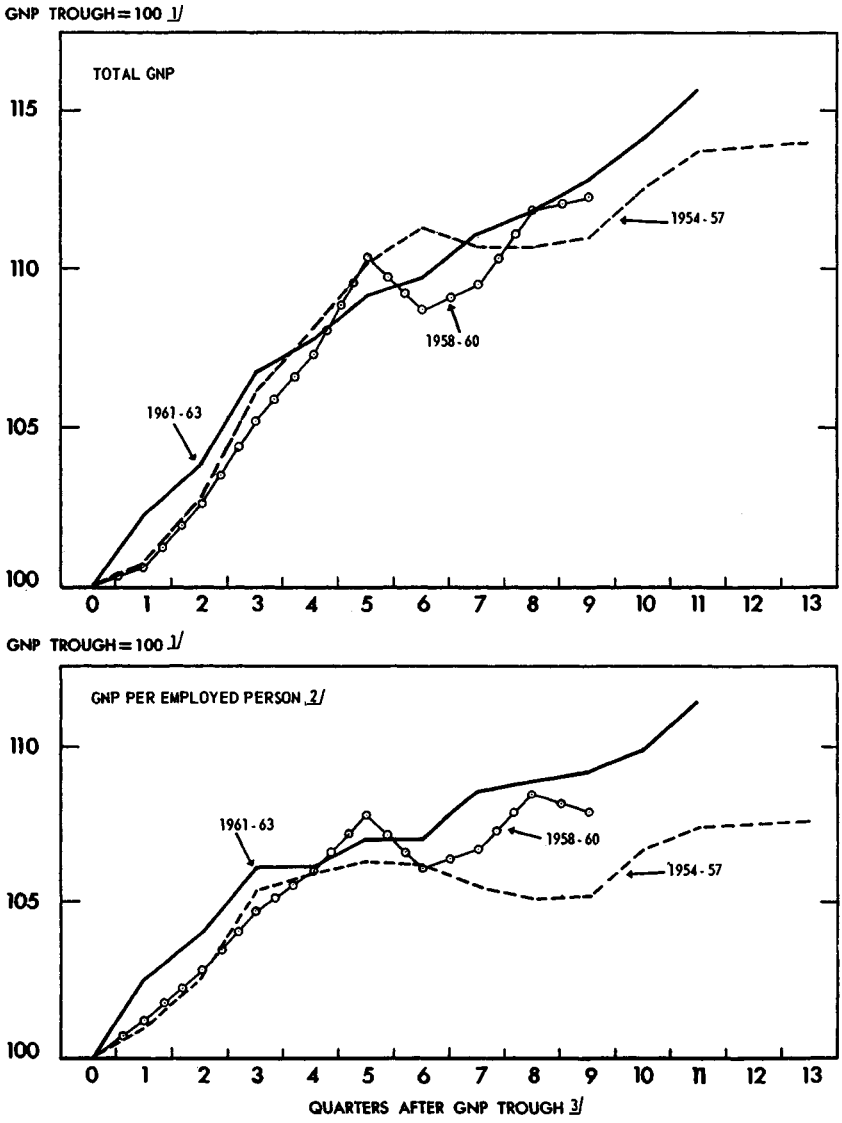
#### EXPANSION OF DEMAND

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




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.

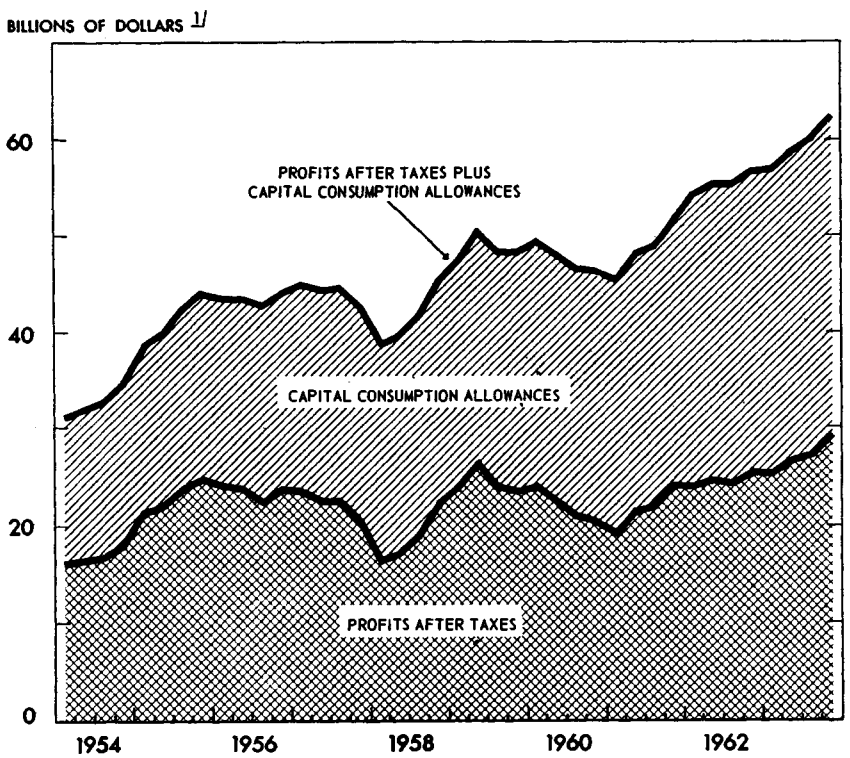
These continued gains in both labor and profit incomes could not have been consistent with price stability without the excellent productivity record during the past 3 years. A high rate of productivity increase is the surest means of reconciling the aspirations of all for higher incomes with the maintenance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




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 3½ 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 3½ 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.

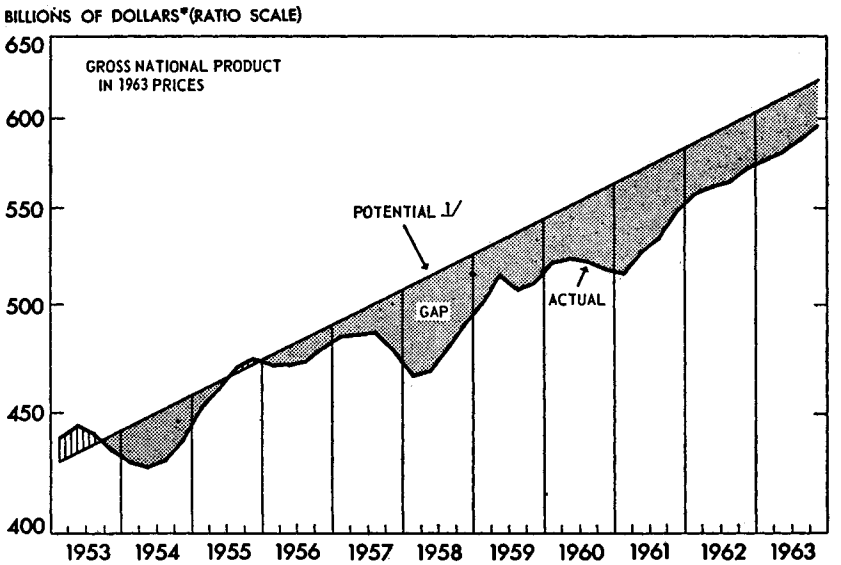
Merely avoiding recession or even maintaining a rate of expansion comparable to that of the last 8 quarters will not close the gap or eliminate excessive unemployment. Only a significant acceleration of expansion can enable the Nation to make full use of its growing labor force and productive potential.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

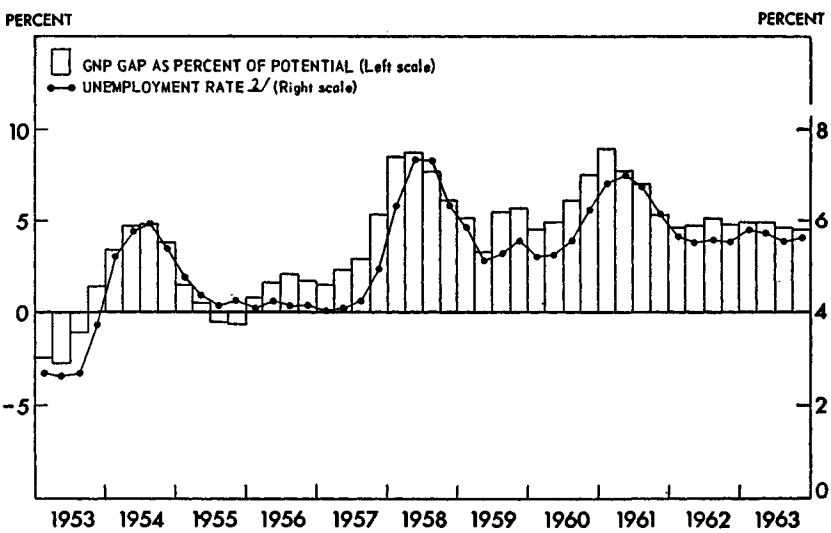
## MAINTENANCE OF THE EXPANSION

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




* SEASONALLY ADJUSTED ANNUAL RATES.

1/ 3½% 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.

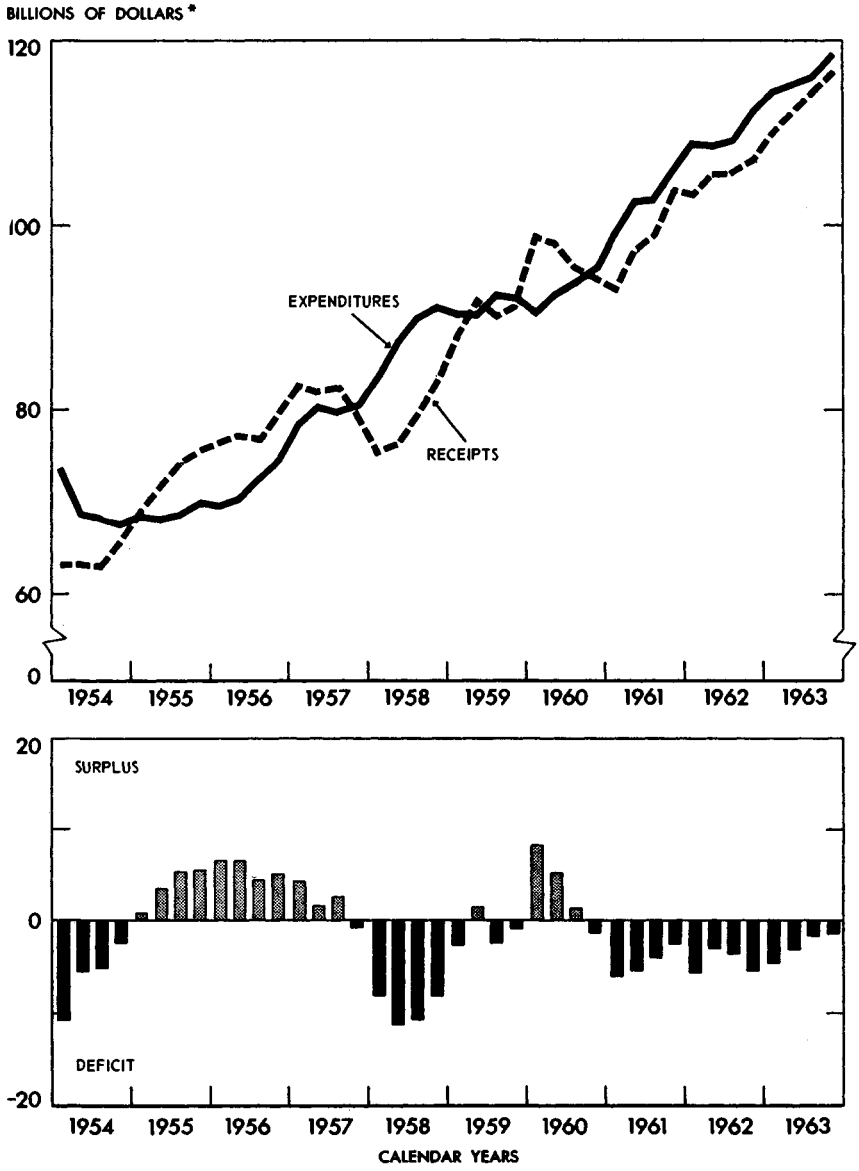
The instruments of fiscal policy—Federal taxes, transfer payments, subsidies, grants-in-aid, and purchases of goods and services—are the Government's most powerful tools for promoting expansion. Federal purchases of goods and services are themselves a component of demand, and indirectly they affect the 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.

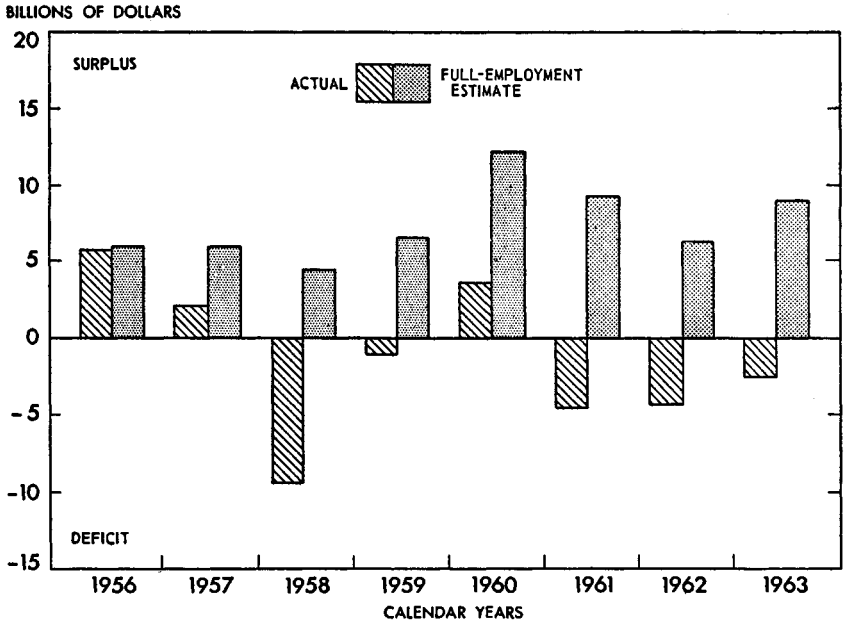
### THE ROLE OF MONETARY POLICY

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

Chart 6

## 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



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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.

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.

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 postwar 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.[illegible] | 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 instalment 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 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 nonwhites 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 nonmoney 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 nonfamily 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



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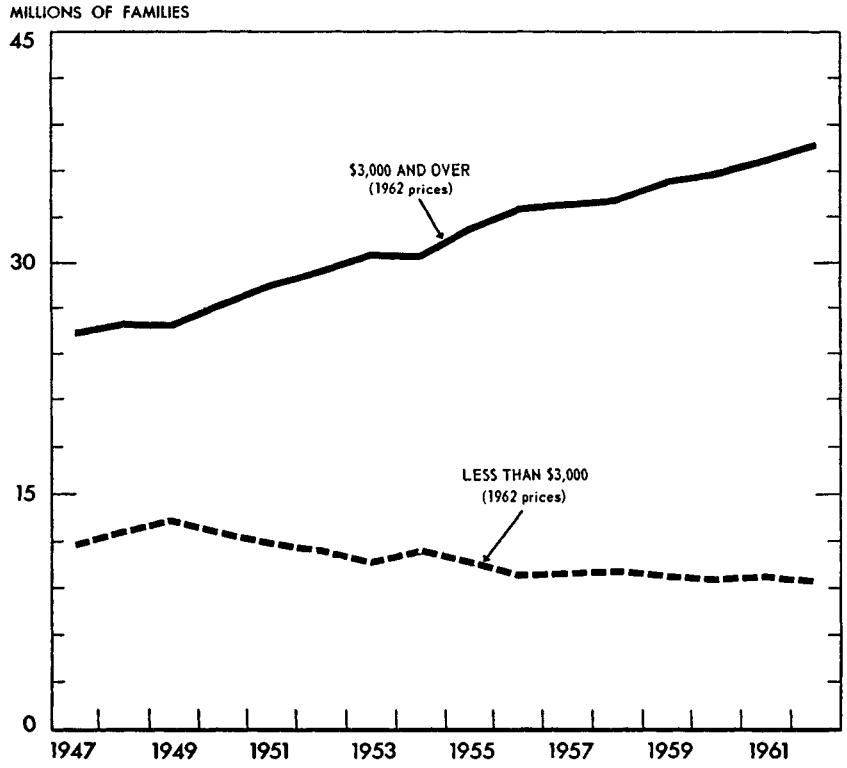
23 percent of all families. But in the period from 1957 through 1962, when total growth was slower and unemployment substantially higher, the number of families living in poverty fell less rapidly, to 9.3 million, or 20 percent of all families.

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 2½ 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: nonwhite 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.

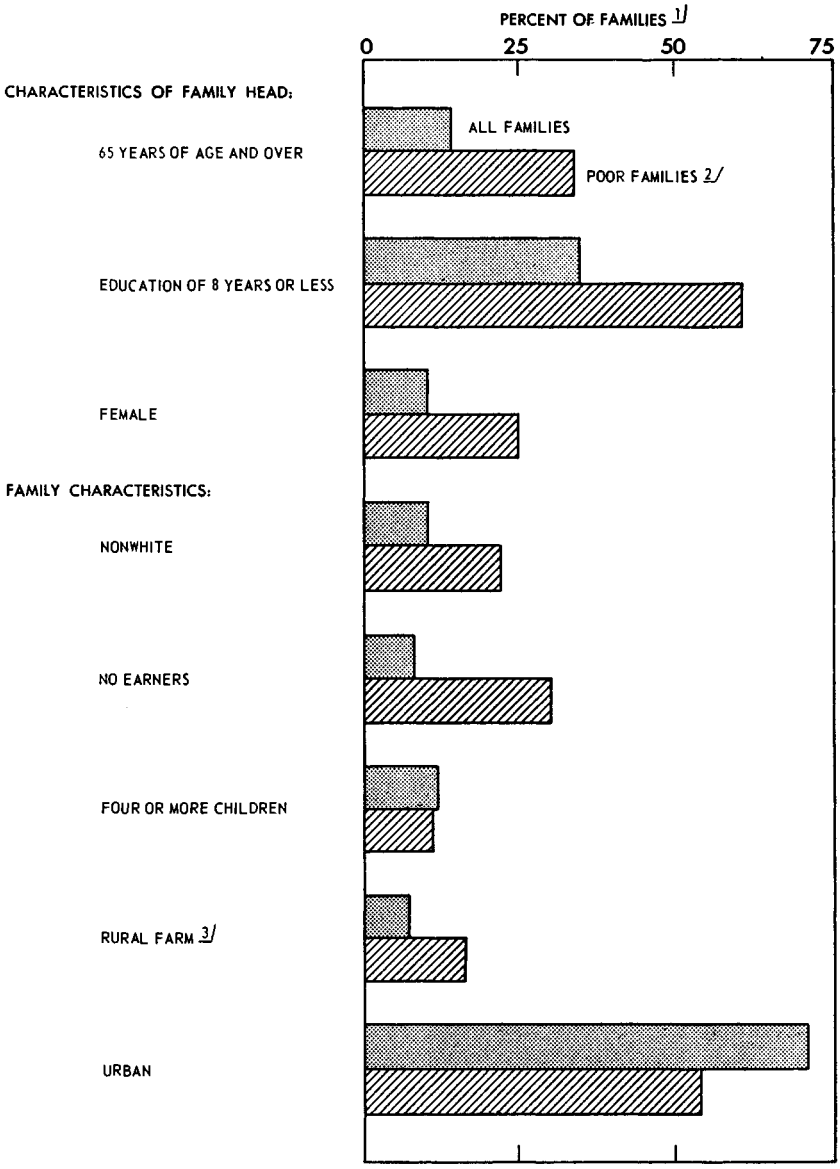
### EARNED INCOME

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.

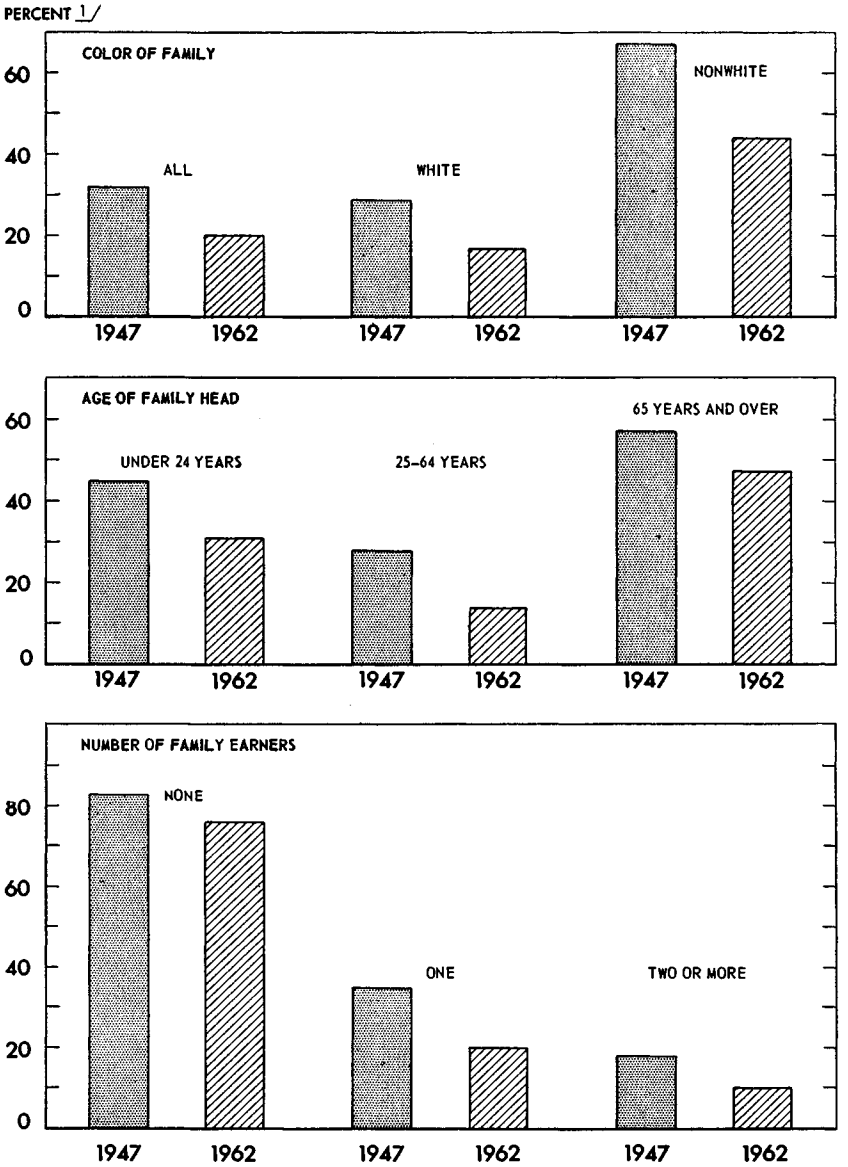
Sources: Department of Commerce and Council of Economic Advisers.

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




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 nonwhite 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 | 25.0 | 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 | 8.5 | 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 | −31 |
| 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.

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



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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 synonomous.

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 3½ 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

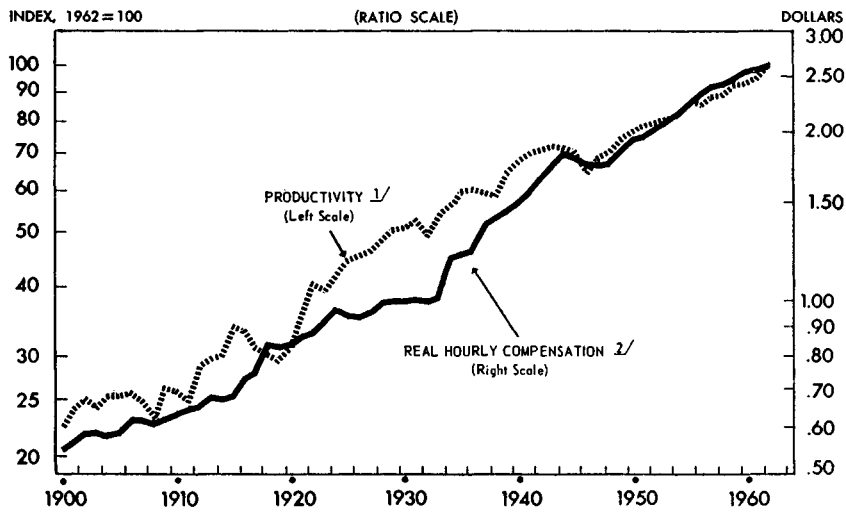
Every technological advance is an opportunity to raise the average standard of living of the whole community. But we are not concerned with the average standard of living alone. Rather, we are interested as well in how the fruits of technological progress are shared by the various sectors of the economy. 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



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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 ordinarly 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-

troduction of automation is a case in point. In many applications, automated facilities—which control productive processes through servomechanical ("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] 3.0 | (3) |
| 1947 to 1963 | 3.2 | 6.1 | 2.6 | 2.7 | 2.5 |
| 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.

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.

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.

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 Longshoremen's 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, 1961*

| Industry and size | Millions of dollars | | Percent of sales [1] | |
|---|---|---|---|---|
| | Total | Company financed | Total | Company financed |
| *By industry:* | | | | |
| 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 | (2) |
| Lumber, wood products, and furniture | 9 | (2) | .5 | (2) |
| Other industries | [3] 348 | [3] 127 | 1.4 | .5 |
| *By size of company:* | | | | |
| Less than 1,000 employees | 596 | (2) | 2.0 | (2) |
| 1,000 to 4,999 employees | 935 | 591 | 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



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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.

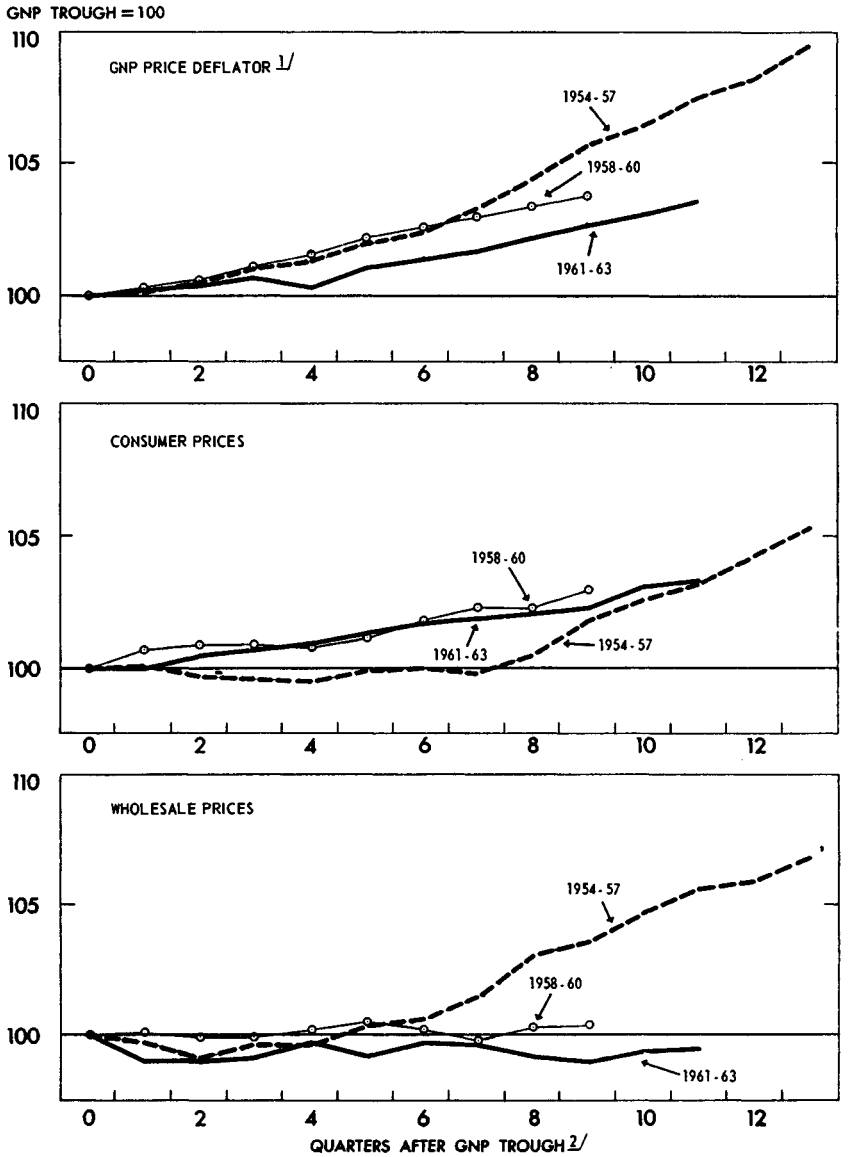
### THE PRICE-WAGE SITUATION AND THE PROSPECTS

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 | [7] 3.1 | [7] 3.7 | [7] 6.8 |
| 1963 | 3.2 | 3.6 | .6 | [7] 3.2 | [7] 3.8 | [7] 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 | [5] 16.5 | [6] 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.



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TABLE 23.—*United States balance of payments, 1958–63* [1]

[Billions of dollars]

| Line | Type of transaction | 1958–60 average | 1961 | 1962 | 1963 | | |
|---|---|---|---|---|---|---|---|
| | | | | | I | II | III |
| | | | | | Seasonally adjusted annual rates | | |
| | *Regular transactions:* | | | | | | |
| 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 [2] | −.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 [3] | −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 [4] | −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. Government 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 securities, net | −.4 | −.4 | −.1 | −.2 | −.3 | .2 |
| 19 | Other [5] | −.1 | −.1 | −.1 | (6) | −.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 nonconvertible securities | ------- | ------- | .3 | .3 | ------- | −.4 |
| 26 | Sale of special nonmarketable convertible 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 transactions* | −3.7 | −2.4 | −2.2 | −2.1 | −4.3 | −.3 |
| 29 | *Balance after all special Government transactions (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 international holders | −2.1 | −.5 | −1.1 | −.9 | −3.6 | −1.5 |
| 32 | Liquid liabilities to others | | −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 equilibrum 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.

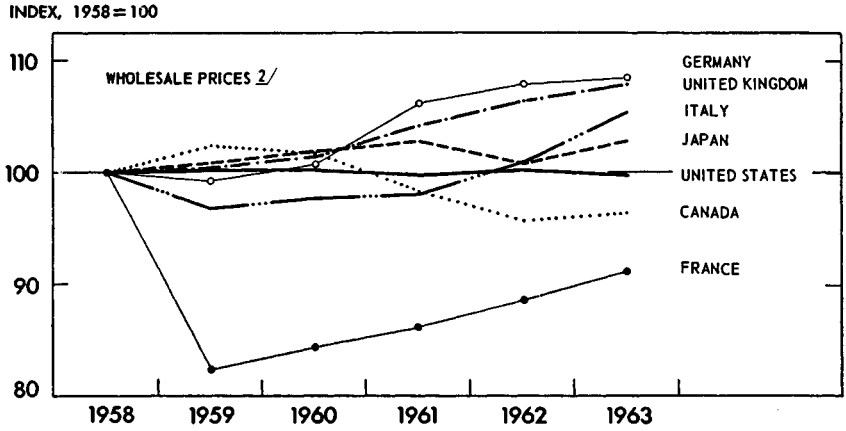
*Prices and costs in the United States and abroad.* The international competitive position of any country is determined by many factors besides the movement of its prices relative to prices in other countries. But relative prices are, of course, an important influence. Chart 12 presents the movements 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).

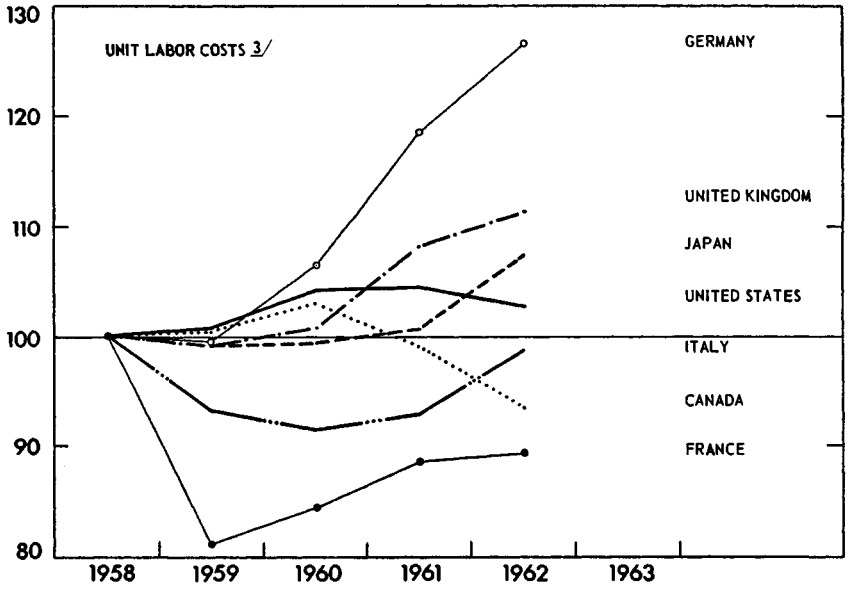
The picture presented by relative changes in wholesale prices is supplemented in the lower panel by a comparison of movements in labor costs per unit of output in manufacturing (again adjusted for exchange rate varia-

Chart 12

# Comparative Prices and Unit Labor Costs

SEVEN INDUSTRIAL COUNTRIES 1/




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 membrs 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



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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 cooperative 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 holding 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 instititions 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 expension 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 | 100.5 | 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.

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-



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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 noncolonial 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 | [2] 70 | .55 | 13 | 3.3 | 1,381 |
| Canada | 58 | .16 | 13 | 4.5 | 2,009 |
| Denmark | [3] 1 | [3] .01 | [3] 1 | 3.1 | 1,559 |
| France [4] | [2] 901 | [2] 1.26 | [2] 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 [5] | 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.

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 capita* [1]

| 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 Grece 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.