

MONTHLY REVIEW



After six years of uninterrupted economic growth, the European Common Market remains a major source of newspaper headlines.



COMMON MARKET GROWTH

Now closing out its sixth year, the European Common Market remains among the most newsworthy subjects in the world economy. Over the past year, news stories from this strategic area of the world have been marked increasingly by strong political undertones, suggesting a growing European awareness of the continent's importance in world affairs. They have featured, for example, a changed Common Market attitude toward Great Britain and a surprisingly bitter tariff controversy with the United States, Western Europe's closest ally.

The political flavor of these stories contrasts strikingly with earlier Common Market news, most of which focused attention on the narrower economic implications of European union. But the apparently growing European consciousness of political strength may itself reflect little more than increasing economic strength, representing, so to speak, a sort of political flexing of economic muscles. Accordingly, it may be appropriate at this juncture to return to the earlier economic emphasis and to re-examine the Common Market's rationale and its recent and prospective economic development.

Economic Goals The European Common Market, or more properly the European Economic Community, was established under the provisions of the Treaty of Rome, which became operative at the beginning of 1958. This agreement formally bound together the economic destinies of six of the most advanced countries of Western Europe: France, Italy, the German Federal Republic, the Netherlands, Belgium, and Luxemburg. It envisages the eventual integration of the already highly developed economies of these countries to a degree comparable to that linking the several states of this country. Similarly, it

prescribes a parallel movement in the political development of the area, although the precise degree of political integration aimed at remains a matter of some uncertainty.

The immediate economic objective is to weld the member countries into a vast free market area of some 180,000,000 relatively high income individuals. The most conspicuous portion of the detailed program to achieve this end is perhaps the predetermined series of steps designed to establish, by 1970, a customs union—an arrangement to remove all tariffs and other frontier barriers to trade among the member countries and to institute a common commercial policy vis-à-vis nonmember countries. The degree of economic unity sought, however, transcends that represented in the classic customs union. Rather the progressive achievement of customs union will be paralleled by steps leading eventually to free movement of labor, capital, and enterprise, as well as goods, between members. Moreover, parallel measures will be directed toward achieving coordinated monetary and fiscal action and common internal policies with respect to agriculture, transportation, monopoly, social security, and atomic energy.

The theoretical underpinning of this revolutionary development in Western Europe's economic organization is the classical economic principle of comparative advantage. According to this principle, expansion of market areas over which free, competitive trade is possible will be accompanied by increasing specialization of production and more efficient use of productive resources. The mass-market potential of the six member countries combined allows economies of scale in production hitherto unrealizable in the more limited market areas represented by the individual members.

According to the Treaty of Rome, either full or associate membership in the Common Market is open to other European countries which are willing to undertake the obligations spelled out in the Treaty. Thus far no other European country has joined the original six in full membership. In November 1962 Greece became the first European associate member. Entry as associate members of 18 African nations, all former dependents of the original six, had been effected earlier. Over the past two years applications for full or associate membership have been made by Turkey and Israel as well as by most non-Communist European countries. Negotiations with a number of these countries proceeded apace in 1962 but tapered off after the dramatic rejection of Great Britain's application early this year. The latter episode leaves some doubt concerning likely changes in the national composition of the Common Market in the years immediately ahead.

Present Status Original Community plans set up a fairly definite timetable for the achievement of economic unity. These plans called for a transitional period of some 12 years, divided into three stages. In the initial stage, which was completed at the end of 1961, emphasis was placed on reducing barriers to trade in industrial goods. Attention in the second stage, currently about half completed, has been focused chiefly on trade in agricultural goods and on the establishment of a common agricultural policy. In addition, further tariff reductions for industrial goods have been made.

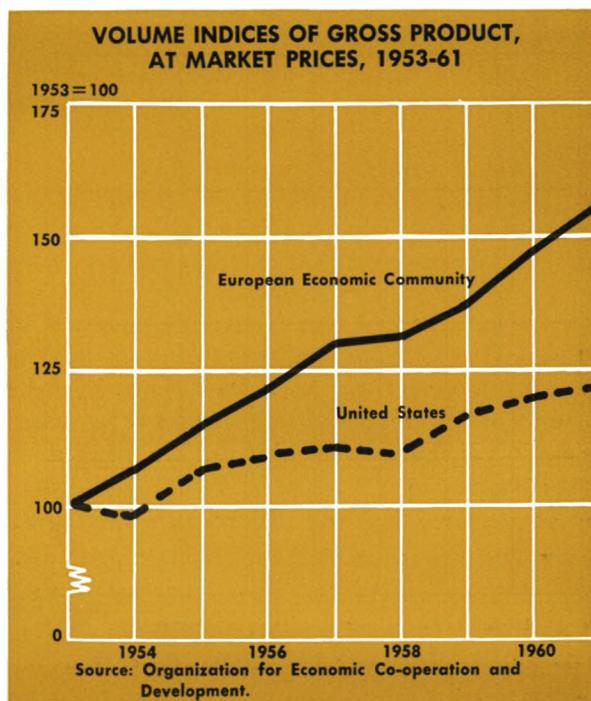
To date, progress has also been made toward common internal policies in monopoly control, transportation, and social security. Activities in the areas of aid to underdeveloped countries, investment in underdeveloped areas of the Community, and labor force training and mobility have been coordinated. In addition, beginning efforts toward unified money, credit, and fiscal policies are under way. At the present writing, however, the term Common Market is a misnomer. While tariffs have been reduced by about 60% from 1957 levels, the customs union is not yet a reality and other measures toward more definitive economic integration are perhaps less than half complete. Nonetheless, the transitional program has proceeded ahead of schedule and may well be completed before the 1970 target date.

Recent Production Growth The uninterrupted prosperity of Western Europe since the establishment of the Common Market has been one of the Free World's most spectacular success stories. To what extent this prosperity is attributable to the formation of the Common Market is problematical.

Economic statistics from this area of the world began rising at a rapid pace after 1950 and it is reasonably clear that this trend would have continued beyond 1958 even if the new arrangement had not come into being. The rapid rate of advance in the early 1950's was due, at least in part, to the relatively low levels to which these economies had been reduced in World War II. Maintenance of rapid rates of growth after 1958, when high production levels had once again been restored, may well be related to the establishment of the Common Market. In any event, the Common Market countries themselves have consistently demonstrated better rates of economic expansion than most other Western countries.

Data published by the Organization for Economic Cooperation and Development (OECD) show that the combined Gross National Products of the six Common Market countries, expressed in current prices and converted to U. S. dollars at current exchange rates, amounted to approximately \$155 billion in 1957. In 1961, the Common Market's fourth year, this figure had risen to \$201 billion, an increase over the period of about 30%. This compares with an increase of 17% in the GNP of the United States over the same period.

In part, the high rate of growth in the value of gross production in the Common Market countries is accounted for by price increases. Rapid industrial expansion has been accompanied by heavy demands for labor, and wages, especially, have been bid steadily upward. This helps account for the



fact that much of the increased production has been in consumer goods, but the correspondingly large demand for such goods has pressed prices upward in this area as well. Allowing for increases in the general price level between 1957 and 1961 the rise in gross product is still impressive, amounting to about 22%. This compares with an increase of under 10% in real GNP in the United States over the same period.

Industrial output in the Common Market's first four years grew even more rapidly than real gross product. The OECD's industrial production figures for the six member countries combined show a rise from 143 (1953=100) in the fourth quarter of 1957 to 187 in the final quarter of 1961. This increase amounts to 30%, and compares with a gain of about 19% in the United States over the same period.

The rate of increase in both real gross product and industrial production tapered off somewhat in 1962 and so far this year. Figures published by the European Economic Community Commission show a gain in combined gross product of just under 5% in 1962 and a projected increase of 4% in 1963. Industrial production increased about 6% in 1962, then fell off somewhat early this year owing chiefly to the severe winter. It recovered smartly in the second quarter, however, and official expectations are that this year's expansion will be about 5%.

Trade Expansion As indicated earlier, the underlying rationale of the Common Market is the encouragement of specialized production through trade expansion. It is to this end that tariff and other frontier barriers to trade among the member countries have been reduced or eliminated. Accordingly, a large expansion in intra-Community trade in the first years of the Common Market would be a normal expectation. But while such expansion may, at first glance, seem to imply a diminution of trade between the Community and the rest of the world, this has not in fact been the case. Trade with the outside world has expanded almost as remarkably as trade among the six member countries.

The movement of goods between Common Market countries began to increase rapidly immediately after institution of the new arrangement. Trade among the six is estimated to have grown by no less than 85% in the first five years. The increase in 1962 amounted to 13%, as against a 15% gain in the preceding year. The rate of increase slowed down in the first quarter of 1963 but this is officially attributed to transportation tie-ups occasioned by the unusually severe winter. Even so, intra-Community trade in that quarter was 9% ahead of the corresponding 1962 period.

Long one of the principal segments of the world market, the six Common Market countries combined increased their imports from nonmember countries by 25% in value and 48% in volume between 1957 and 1962. Imports from the rest of the world rose 9% last year, as against 5% in 1961. Community statistics show that the chief beneficiaries of last year's increase were the United States, the United Kingdom, and Latin America. In the first three quarters of 1962 imports from these three areas rose, respectively, 10%, 16%, and 20%. Quarterly economic reports published by the Community indicate that the vigorous rise in imports, especially from these three areas, has continued through 1963.

International Economic Position The rapid increase in the Community's trade and production since 1957 has been paralleled by a significant strengthening of its relative position in the world economy and in the sphere of international finance. The Community's sustained surpluses in its economic and financial transactions with the rest of the world have been the mechanism of this relative improvement. These surpluses reflect not only the Common Market's capacity to sell its goods and services abroad but also its remarkable success to date in attracting foreign investment capital. Because of these surpluses, the combined monetary reserves of these six countries, in the form of gold and foreign currencies, have skyrocketed in recent years. As a result of these increases, the currencies of these countries, which were so weak as to require official sheltering over most of the postwar period, are now generally interconvertible with any of the world's currencies and are among the world's strongest.

The chart on page 5 records the sharp increases in the gold and foreign exchange reserves of the Common Market countries. These holdings began to rise in the early 1950's and have shown an increase in every year but 1957 since that time. In 1953, when recovery from World War II was fairly complete, they totaled \$4.7 billion, of which \$2.8 billion was in the form of gold. At the beginning of 1958, the Common Market's first year, they totaled \$7.7 billion, including \$5.2 billion of gold. Five years later, at the close of 1962, gold reserves had more than doubled, reaching \$11.5 billion, while added foreign currency holdings brought total reserves to \$16.9 billion. The buildup has continued in 1963 and now the total combined monetary reserves of these countries exceed those of the United States.

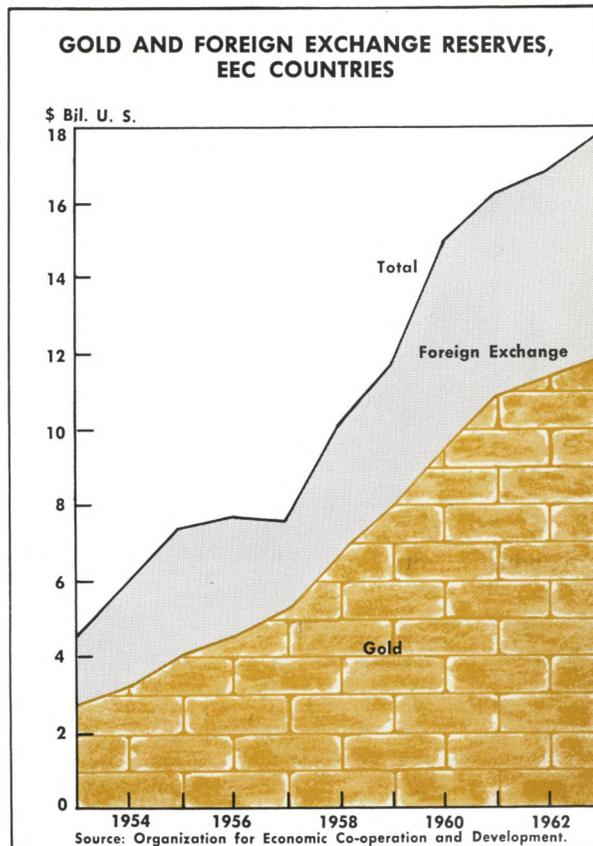
Distribution of Gains The Common Market represents an association of countries which, given their

common basic cultural heritage, possess many important economic similarities. Their populations, for example, are among the most economically advanced and industrially sophisticated in the world. Yet, within the new Community they represent, there is also considerable economic diversity. Belgium and Luxemburg, for instance, are almost entirely industrialized, with little in the way of an agricultural economy. A large part of southern Italy has never developed the economic characteristics of most of the remainder of the Community. Some of the members, notably France, Belgium, and the Netherlands, have inherited from an earlier age of colonialism foreign economic connections which other members do not share. Among the individual countries, there are substantial differences in per capita income and wealth, in industrial composition, and in labor force attributes. It is not surprising, therefore, that while economic growth has been general in the Community, it has not proceeded at a uniform rate in the area as a whole.

In the last two years, growth has proceeded most rapidly in Italy. This is in part a statistical phenomenon associated with the relatively low income base from which that country's growth is calculated. For a time, Belgium's rate of advance was held back by its colonial disengagement in Africa, although similar experience seems to have had little effect on France. Balance of payments surpluses have been especially large, and reserve buildups correspondingly faster, in France, Italy, and Germany. Improved farm productivity has benefited chiefly the Netherlands, France, and Germany.

Future Prospects If only as a matter of arithmetic, it is not likely that the remarkable rate of growth shown recently in the Common Market countries can be sustained in the future. As the statistical base against which growth rates are calculated becomes larger, it becomes increasingly difficult to produce large annual percentage gains. Already, expansion in statistical measures of gross product, industrial production, and internal and external trade have begun to taper off for this reason. Moreover, in the face of rising external trade deficits in recent years, the rate of reserve accumulation has slowed appreciably.

Nonetheless, it is clear that economic growth will continue and that the Community will probably become an increasingly important factor in the world economy. An assessment of growth prospects for the remainder of this decade, made recently by a team of Community experts, indicates a growth rate only slightly below that in the late 1950's and early 1960's.



According to this study, the gross product of the Community countries, which increased 28% between 1955 and 1960, will show a rise of between 24% and 27% in the five years 1960-65 and a gain of 23% to 25% in the decade's last five years. Per capita productivity of the working population is expected to increase by nearly 50% over the decade, but it is anticipated that shorter hours of work and more years of schooling will hold total production gains well below this figure.

Regarding other aspects of the Community's immediate future, the study's projections anticipate further rapid improvements in agricultural efficiency accompanied by a substantial annual reduction in farm employment. Expansion in industry and especially in services, however, is expected to be more than sufficient to absorb resources released from agriculture. Public spending is expected to decline relative to other kinds of expenditures, while private consumption spending is projected well in advance of total production gains. In brief, the study anticipates that by the end of this decade the Community will have taken a giant step toward establishing the kind of mass production, mass consumption economy of which the United States is the world's prototype.

Seasonal Adjustment

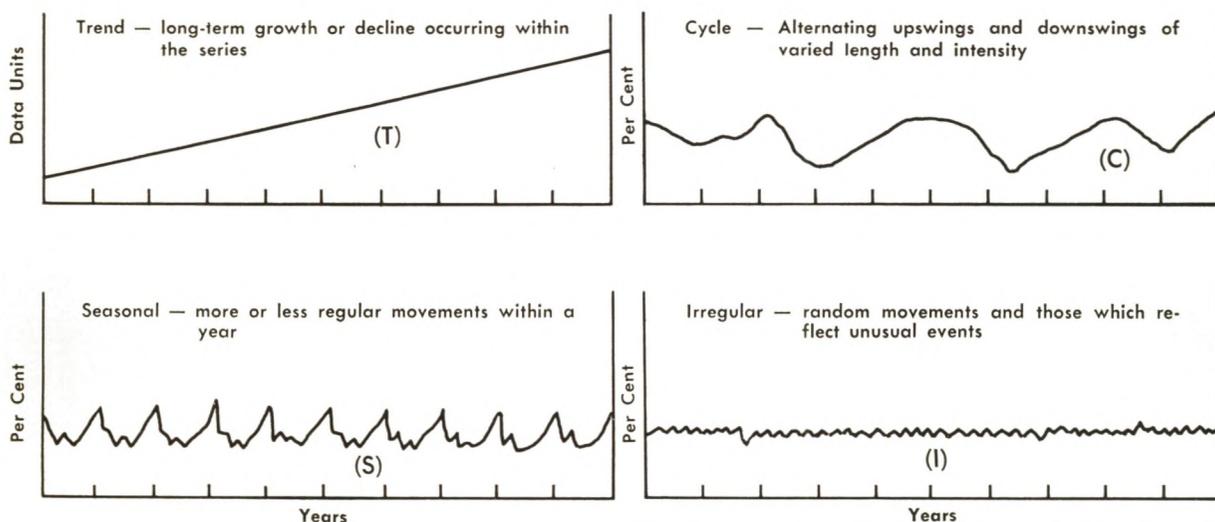
Thus far, this series of articles has focused on descriptions of key economic time series. The remaining articles will discuss the vocabulary and techniques of analysts who use statistical series to appraise current business fluctuations.

This article considers the whys and hows of seasonal adjustment to an economic time series, or data arranged in chronological sequence. Through seasonal adjustment, movements that recur year after year in approximately the same calendar order are removed from a series. These more or less repetitive movements within a year reflect primarily changes in weather conditions, social customs, and business practices. Seasonally adjusted series are used more and more in articles discussing the nation's economy since such series are easier to interpret for many purposes. For example, an increase in the money supply from one month to the next may be due entirely to a normal seasonal upswing rather than to any more basic change.

COMPONENTS OF A TIME SERIES To understand the significance and methods of computing seasonals, it is necessary to know about the other causes of movement in a time series. The total movement in a time series from one period to another is usually a composite of four kinds of change—secular trend, cyclical swings, seasonal variations, and irregular random movements. These four sources of change are briefly defined and illustrated in the first chart. Since each component varies in importance, the analyst must study the relationships among these forces to understand period-to-period fluctuations in an individual series. If his interest is primarily in the trend-cycle component, he will want to remove the seasonal and irregular effects.

COMPONENTS OF A TIME SERIES

A TYPICAL TIME SERIES IS INFLUENCED BY FOUR TYPES OF MOVEMENT.



SEASONAL ADJUSTMENT A statistical series as compiled—termed an original series—is usually represented as a product of the four forces. To remove the effect of seasonality, the original series is divided by a measurement of seasonal. As shown in the second chart, the secular and cyclical movements are more clearly discernible after seasonal adjustment.

Conversely, to obtain a measurement of the seasonal movement, trend, cycle, and irregular effects are removed from the original series. The most commonly used method for calculating the seasonal adjustment factors—the values assigned to each time period to represent its typical position within the year—is the ratio-to-moving-average method. The computational details of this method are described in most textbooks on economic statistics. Basically this method uses a 12-month moving average as a measure of the trend-cycle component, which is divided into the original series. The resulting seasonal-irregular ratios for each month (all Januarys, all Februarys, and so forth) are smoothed by means of various types of moving averages to eliminate the irregular factor. With the advent of large-scale computers, the tedious task of isolating the seasonal from other components has been considerably lightened, although professional review is still needed. The two most generally used computer programs are the Bureau of the Census II method, including the X-9 and X-10 versions, and the Bureau of Labor Statistics method.

Seasonal patterns vary in amplitude from series to series. Also the seasonal pattern of a given series may change over time as social customs or business habits alter underlying conditions. The change may be gradual, as in the case of summer electricity sales adjusting to the spread of air conditioning. Or it may be abrupt, as in the case of a change in the timing of new auto model introductions.

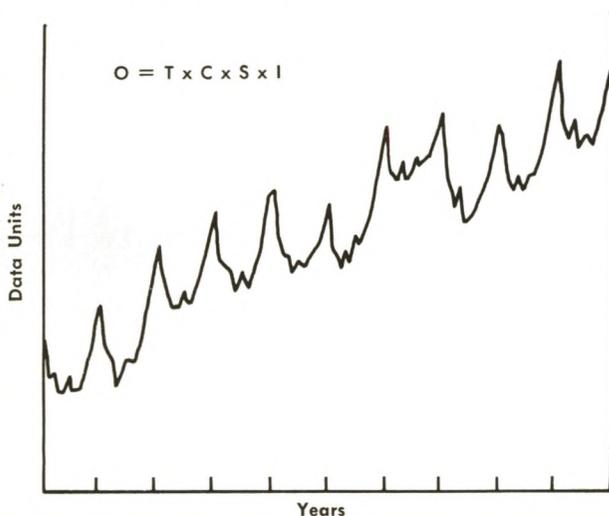
ADJUSTMENT FOR CALENDAR VARIATION Sometimes irregular factors affecting a series can be identified and corrected for before computing seasonals. Irregularities associated with calendar variation are a case in point. Adjustments are often made for the number of working or trading days since a given month may contain either four or five Sundays or Saturdays. It is also possible to adjust a series for the greater relative importance of some days of the week. For instance, apparel sales tend to show larger increases in months with five Saturdays than in months with only four, although the number of actual trading days may be the same. The effect of holidays may also vary from year to year. For example, special adjustments are made in retail sales series for the shifting date of Easter, a season of increased shopping activity.

To aid the analyst's interpretation, publishers of economic time series are careful to state what statistical adjustments have been made.

SEASONAL ADJUSTMENT

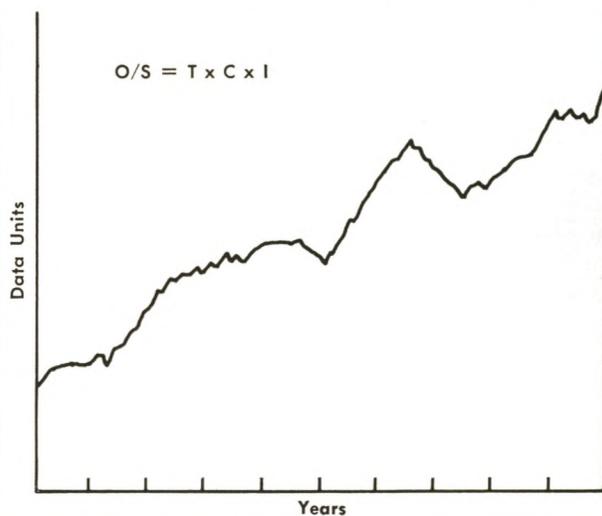
An original series (O) is usually considered the product of the four characteristic movements.

$$O = T \times C \times S \times I$$



To adjust for seasonal variation, the original series is usually divided by the seasonal factors.

$$O/S = T \times C \times I$$





COLLEGES and UNIVERSITIES

Sources of Labor Skills

Great advances in research and technology in recent years have paved the way for new jobs, many of which are in occupations requiring high degrees of training and education. Partially in response to the rising labor market requirements, more and more young men and women are going to college each year. Consequently the nation's colleges and universities are playing an increasingly crucial role in upgrading general labor force skills and educational achievement.

Schooling of the Labor Force The level of educational attainment reached by the labor force has risen rapidly since 1940, as younger and better educated workers have replaced retired employees. This trend has, if anything, accelerated in recent years. Between 1952 and 1962, for example, the number of employed persons who had completed at least one year of college increased 48%.

During these ten years, median years of school completed by the civilian labor force 18 years old and over rose from 10.9 to 12.1. Among the various occupation groups, shown in the chart on this page, service workers experienced the largest increase, 1.4 years. Median years of school completed rose 1.2 years for craftsmen, operatives, and laborers, excluding those engaged in agriculture and mining. Professional and managerial occupations showed an increase of 1 year, and farmers, farm managers, laborers, and foremen gained four-tenths of a year. The smallest gain was in the education levels of clerical and sales workers, which moved up by only one-tenth of a year.

Changes in the occupational structure of the civilian labor force in recent years provide a clue to the source of the increased demand for more schooling. Proportions of professional, managerial, and clerical workers have risen significantly while the number of blue-collar and farm workers has declined relative to the total labor force.

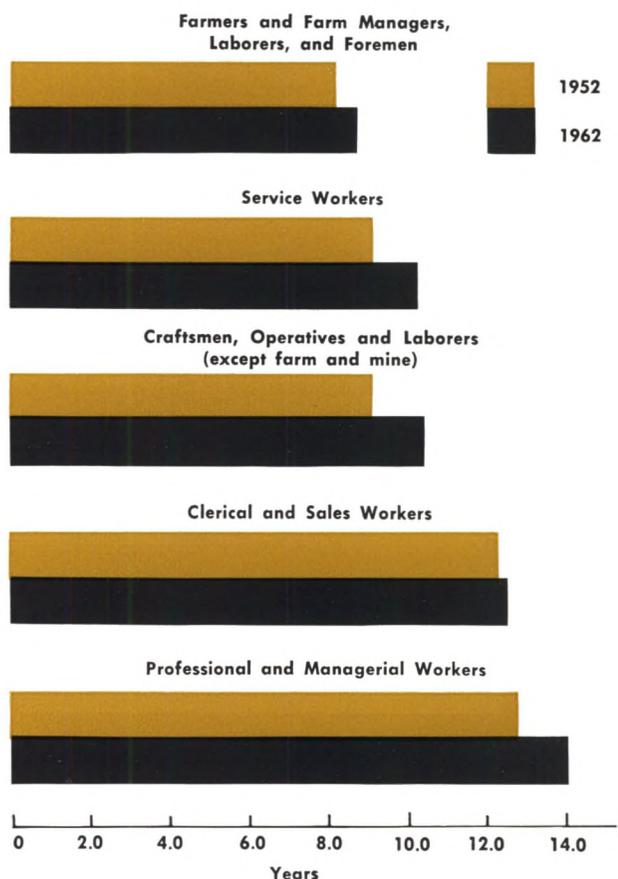
The percentage of the civilian labor force having completed four or more years of college rose from 7.9% in 1952 to 11.0% in 1962. As a proportion of all workers this group is still small, but it has nearly doubled since 1940. The fraction of the labor force with one to three years of college rose from 8.3% to 10.7% over the ten years. Some 32% had com-

pleted four years of high school in 1962 as compared with under 27% in 1952. A 7.8% decline occurred in the group of workers with only five to eight years of elementary school training.

A Big Business Last year the 2,000-odd institutions of higher learning in the United States—public and private institutions, small colleges and large universities, two- and four-year colleges, liberal arts and technical schools—enrolled some 4.2 million students. This figure represented nearly 9% of all school enrollments from kindergarten through graduate school and was 83% greater than in 1950.

First-year students accounted for about one-fourth of total college enrollments. As the chart on page 9 shows, the number of 18-21 year olds

MEDIAN YEARS OF SCHOOL COMPLETED BY EMPLOYED PERSONS 18 YEARS OLD AND OVER



going to college has risen substantially during the 1952-62 decade. About half of the 1,850,000 high school graduates of June 1962 were enrolled in institutions of higher learning the following fall. Each year brings a larger number of applicants for admission to colleges or universities, a trend that began after World War II with the G. I. Bill of Rights. During the sixties, nearly 50% more students are expected to enter college, reflecting an estimated five million increase in the 18-21 year old population.

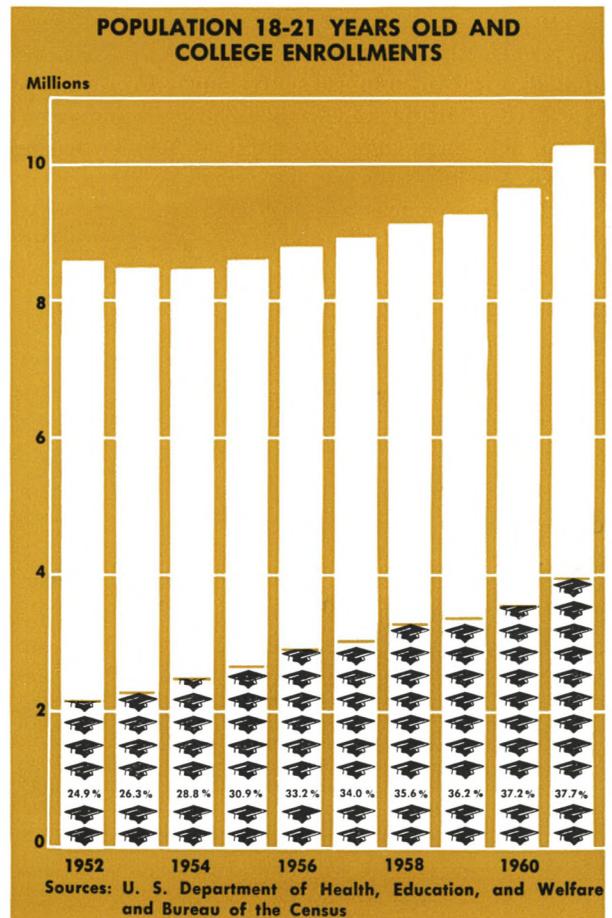
As a result of increasing emphasis on schooling, higher education has become big business in the United States, employing some 381,000 faculty members in 1960. College buildings and equipment and the funds to maintain them were valued at \$14.6 billion that year. Total current income of colleges and universities amounted to \$5.8 billion. The public's expenditures for higher education amounted to \$5.5 billion, or nearly 1.5% of total personal income.

Education In the District In the Fifth Federal Reserve District there were 216 colleges and universities with 335,000 students enrolled in the fall of 1962. Fifty-nine of the colleges and 25.2% of the students were in North Carolina. Maryland and Virginia each had 43 colleges with, respectively, 19.4% and 19.6% of total District enrollment. South Carolina claimed 29 institutions of higher learning and 10.5% of the District's enrollment. The 22 colleges in the District of Columbia enrolled 15.3% of the students and West Virginia, with 20 colleges and universities, accounted for the remaining 10% of the Fifth District college population.

Data for 1960 show that more than 15% of the Fifth District's population 25 years old and over had completed one or more years of college. Percentages for the individual states ranged from 26% in the District of Columbia to 11% in West Virginia. For the Carolinas the figure was slightly above 13% and for Maryland and Virginia, a little over 17%.

Total expenditures for current operations of institutions of higher education in the District states were as follows: North Carolina, \$129.8 million; Maryland, \$115.4 million; Virginia, \$94.2 million; District of Columbia, \$65.3 million; South Carolina, \$43.1 million; and West Virginia, \$30.8 million.

Preparing for the Labor Force Available jobs in professional and technical occupations have increased dramatically in recent years. Currently these groups absorb nearly two-thirds of all college graduates, and are providing major impetus to the growth in the number of degree candidates at American colleges and universities.



In 1961, institutions in the United States conferred a total of 491,000 degrees. Bachelor's Degrees numbered some 401,000, a 21% increase over the number awarded in 1952 and almost 15 times the number in 1900. At the graduate level, 79,000 Master's Degrees and 11,000 Doctorates were conferred. Men accounted for about 64% of the conferrals and women for the remaining 36%. In 1900, when education was considered chiefly a masculine undertaking, men accounted for 81% of degrees conferred.

Education, biological sciences, business and commerce, engineering, English and journalism, the health professions, physical sciences, and social sciences were the principal major fields, accounting for almost 80% of all degrees conferred. Education was the largest single field, with 26.2% of all degrees. Social sciences accounted for 12.6%, business and commerce for 11.3%, and engineering for 9.1%. Choices of these major fields of study reflect growing demand for additional teachers, engineers, doctors, metallurgists, and physicists, among others.

A look at the occupational distribution of college graduates in the work force in 1962 shows 64% in

professional and technical jobs. Managers, officials, and proprietors claimed 16%, clerical workers accounted for 8%, and sales personnel for 6%. At the other end of the scale, only 12% of workers completing less than eight years of elementary school were in the professional and technical, managerial, clerical, and sales occupations combined. Some 14% were craftsmen and foremen, 27% were operatives, and 11% were laborers employed outside of farming and mining. Farm occupations accounted for 16%, and 20% were service workers.

Unemployment and Education Among labor force groups, unemployment rates decline notably as the level of educational achievement rises. This is due in part to the fact that jobs requiring higher education are less vulnerable to cyclical swings in the economy. Bureau of Labor Statistics breakdowns of unemployment in March 1962 show an unemployment rate of only 2.2% for labor force participants with at least one year of college. This compares with a rate of 3.9% for high school graduates and 8.8% for labor force members of less than 8 years schooling.

Educational attainment appears to be an especially important factor in unemployment in the younger age groups. As of March 1962, for example, the unemployment rate among 18-24 year olds with less than eight years of schooling was 20.4%. Within the same age group, the comparable rate for high school graduates was 9.8%, and only 5.5% for labor force members with at least one year of college.

Young female workers of low educational attainment appear to be under a special handicap. Bureau of Labor Statistics data for March 1962 show an unemployment rate of 27.4% among female labor force participants 18-24 years of age and with less than eight years of schooling. For males in the same age group and the same level of educational attainment,

the rate was 18.4%. On the other hand, the unemployment rate for women in this age group with at least one year of college training was lower than for the comparable group of men.

Money Value of Education It is reasonably clear that earning capacity and educational attainment are closely correlated. The Bureau of the Census has estimated that college graduates, in 1961, could expect to earn a lifetime income of \$360,604. This is 114% more than the estimated lifetime income of the elementary school graduate and 61% above that for the high school graduate. While gains have occurred in the lifetime earnings for each education level since 1949, the absolute increase for college graduates far surpasses that for elementary and high school graduates.

The table at the foot of this page shows changes in mean incomes for males 25 years old and over, by levels of educational attainment, between 1949 and 1961. The figures point up the superior earning capacity of the college graduate. Increases over the period were greatest, in absolute terms, for the college trained groups and the absolute gap between these groups and the others widened considerably.

In the determination of individual incomes, the emphasis continues to shift from experience to education. A high school diploma or a college degree may outweigh many years of experience. From 1958 to 1961, for example, male high school graduates often earned more money for comparable type work than men who were 20 years their senior but who had less formal schooling. At the college graduate level, however, average incomes of men 45-54 years old were 79% higher than those of men 20 years younger with the same amount of schooling, indicating the higher value of a formal education when it is combined with work experience.

MEAN INCOME BY EDUCATIONAL ATTAINMENT*

	1949	1956	1961	Increase 1949-61
Elementary School:				
less than 8 years	\$2,232	\$2,979	\$3,483	\$1,251
8 years	2,988	4,079	4,750	1,762
High School:				
1 to 3 years	3,279	4,634	5,305	2,026
4 years	3,820	5,553	6,102	2,282
College:				
1 to 3 years	4,489	6,505	7,392	2,903
4 years or more	6,236	8,716	9,530	3,294

*Males 25-64 years old.

Source: United States Bureau of the Census.

THE FIFTH DISTRICT



Halfway through the fall season, business statistics continue to show rising levels of activity in the Fifth District. As always, there are some departures from the prevailing trend. Toward the end of October, gross income from flue-cured tobacco, a significant source of spending in some parts of the District, was about 14% behind last year. According to recent indications, the final figure will probably be some \$70 million, or 9%, lower than last year. Seasonally adjusted department store sales dropped rather sharply in October. The series reached a record level in August and declined only slightly in September. Signs of weakness other than these, however, are hard to find. In fact, the evidence is clearly weighted in the other direction.

On High Ground With the exceptions noted above, virtually all important sectors of District business show strength. Seasonal adjustments, which reflect average timing and magnitude of seasonal variations over several years, do not always provide the correction appropriate for a particular year. But even taking this into account, the improvement in business indicators this fall is too extensive to be the result of seasonal influences only. With Federal employees accounting for one-tenth of the District's nonfarm workers, military pay increases in effect since October 1 and the civil service pay hike scheduled for January 1 represent important additions to income in the District. If these are not offset by declines elsewhere, the resulting gains in personal income will tend to brighten already favorable prospects for retail trade over the holiday season.

In the District, seasonally adjusted bank debits, a broad but volatile indicator, reached an all-time high in July, dropped rather sharply in August but rose again in September almost to the July level. The cumulative rise since the April 1961 recession low now amounts to 27%, slightly larger than the increase between the 1958 low and the early 1960 high, and distinctly larger than any gain achieved in three consecutive calendar years since the period from 1954 to 1957.

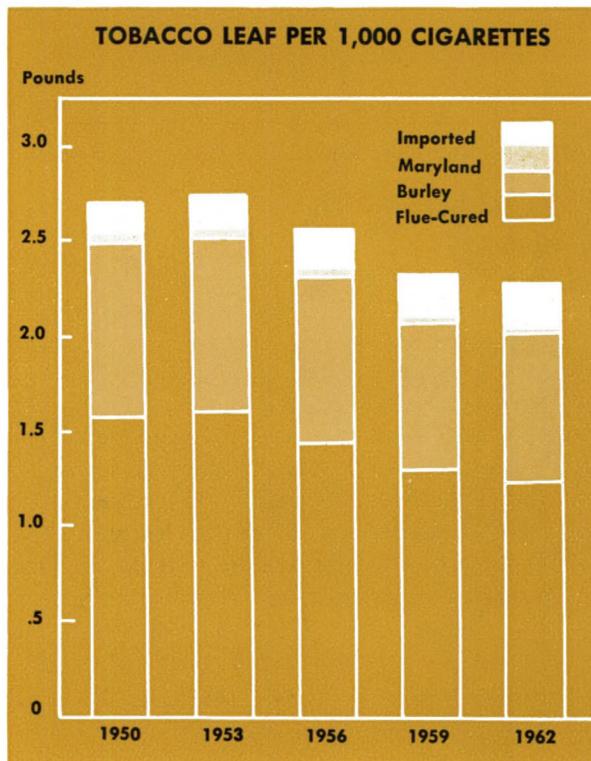
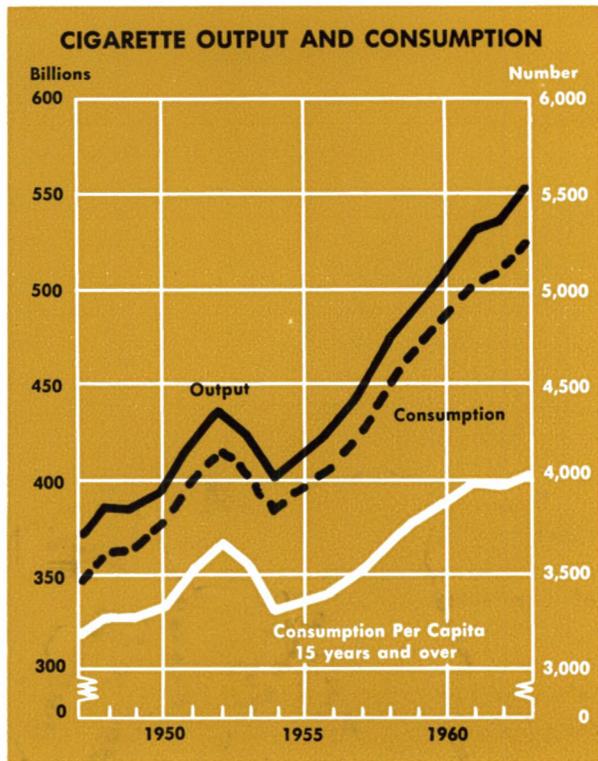
In contrast to bank debits, increases in seasonally adjusted nonfarm employment have been for the most part slow but steady. A barely measurable net de-

cline in September marked the first dip in District employment since April 1961. In the interim, monthly increases ranged from 0.1% to 0.5% except for November and December of 1962 and March of the current year, when no significant change occurred. August improvements in nonfarm employment were marked by 0.3% gains across the board, but mixed conditions reappeared in September with small declines in nondurable goods manufacturing, mining, construction, trade, and services. District nonfarm employment is currently more than 8% above the early 1961 recession low. During the previous cyclical upswing, April 1958 through May 1960, the gain in nonfarm employment amounted to 7%. Prior to the present period of growth, no three consecutive calendar years have produced a gain in nonfarm employment as large as 8% since 1954-1957.

Over 380,000 workers have been added to Fifth District nonfarm payrolls since February 1961: 100,000 in Maryland, 49,000 in the District of Columbia, 104,000 in Virginia, 4,000 in West Virginia, 82,000 in North Carolina, and 41,000 in South Carolina. Relative gains in the various states so far come to 12% in Maryland, 9% in the District of Columbia, 10% in Virginia, 1% in West Virginia, and 7% in both North Carolina and South Carolina.

Man-Hours Recently Unchanged Seasonally adjusted factory man-hours reached an all-time high for the District in May of this year, declined slightly in June and have since remained almost unchanged. A further slight decline occurred in September largely because of a sharp cutback in tobacco manufacturing and smaller reductions in some metals and machinery, transportation equipment, paper, and printing. Temporary declines have occurred several times since early 1961, but the trend has remained generally upward and the over-all gains are significant: 10% for the District as a whole, 14% in Virginia, 13% in South Carolina, 11% in North Carolina, 8% in the District of Columbia, 7% in West Virginia, and 6% in Maryland.

Builders Busy The construction business continues to contribute strength and stability to the District economy. Seasonally adjusted construction employment rose almost without interruption after the



February 1961 low, reached a new high in August with a cumulative gain of more than 17%, then receded slightly in September. Contract awards approached record levels in May and have remained close to these levels ever since. Strength has been uniformly distributed among commercial, industrial, and residential categories. Seasonally adjusted building permits advanced to a new high in September, rising sharply from already high levels.

Uncertainties Mark Tobacco Business Despite uncertainties generated by unfavorable publicity, cigarette sales continue to climb. Last year's decline in per capita consumption was widely regarded as a possible turning point in this steadily rising trend, but preliminary 1963 figures suggest a resumption of the uptrend strong enough to set new records. This year's domestic purchases of cigarettes are now expected to equal 4,005 for every citizen 15 years of age or over, or 11 cigarettes per person per day. Post-war trends in total production and in total and per capita consumption are shown in the chart at the head of this column. Growth in the total figures has been steady at about 3.4% per year since the early 1950's. This year's gains are a bit below the average, 2.7% in production and 2.9% in consumption. The consumption data include shipments to armed forces overseas. Other exports account for the margin of production over consumption.

Recent statistics indicate that Fifth District producers account for 83% of the nation's cigarette output, and yet cigarette manufacturing accounts for less than 2% of total Fifth District factory man-hours. Random fluctuations in cigarette production are frequently so large from month to month that growth and the effects of the business cycle are difficult to recognize over short periods of time. Rising with the national trend, Fifth District cigarette production reached an all-time high in May, declined in June, returned almost to the May level in July, and has continued close to these high levels ever since. This year's District cigarette production so far exceeds last year's by 2.8%.

The amount of leaf tobacco to make a given number of cigarettes has declined since 1953, as shown in the chart above. About nine-tenths of the tobacco used in domestic cigarettes originates in this country and only one-tenth abroad. The use of domestic leaf tobacco in cigarettes has been declining, however, while imported varieties have increased. Cigarettes require less leaf tobacco than formerly because filters and new processes permit the cigarette filler to include stems and tobacco particles not formerly used and because the column of tobacco is shorter in a filter cigarette than in a nonfilter type. More of the aromatic foreign varieties are used to maintain the flavor of the filtered smoke.