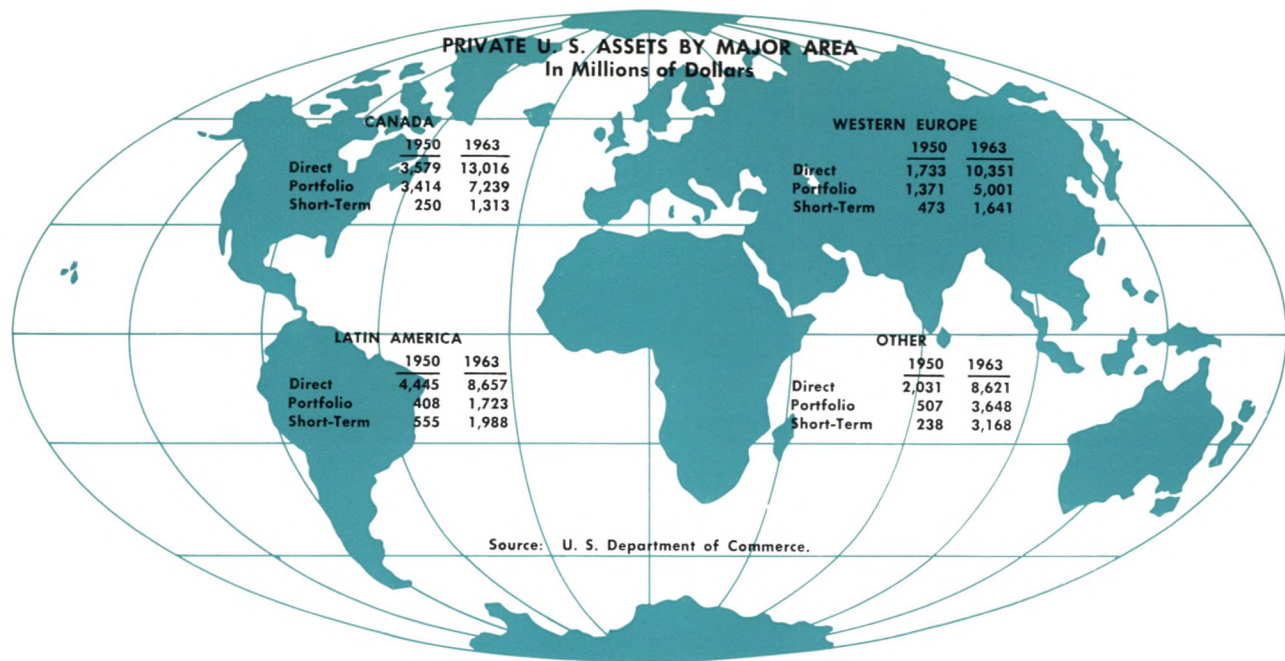


# MONTHLY REVIEW



United States investments abroad have grown rapidly since 1950.



## UNITED STATES FOREIGN INVESTMENT

United States foreign investment over the past decade and a half has been a major factor in the international economy and has contributed significantly to the rapid economic expansion of the Free World. Between 1950 and 1963 United States interests acquired foreign business enterprises and financial claims against foreigners in the impressive amount of \$56 billion. The value of United States capital claims on foreigners in this period more than doubled, rising to a total of \$88 billion. This figure exceeded the total of all foreign claims on this country by almost \$37 billion.

Despite its generally recognized contributions to economic recovery and development in the postwar period, the growing international flow of United States capital has left some problems in its wake. Perhaps the most immediate of these, from the standpoint of the United States position in the world economy, has to do with the effects of this flow on this country's balance of payments, which has been in serious deficit since 1958. In addition, the growing United States ownership and control of business enterprises in foreign countries has created resentment in some quarters.

This brief article traces the growth of American foreign investment in recent years and discusses some of its effects on the international financial position and the balance of payments of the United States. Attention is focused mainly on private investment.

**Kinds of Foreign Investment** For statistical purposes private foreign investment is divided into three categories: long-term direct, long-term portfolio,

and short-term. It is not always easy to distinguish between direct and portfolio investment, but the basic distinction is in the degree of management or control of a foreign business enterprise. Generally, direct investment includes the establishment or acquisition by United States corporations of foreign branches and business offices and of foreign subsidiaries and affiliates where holdings of United States residents represent an important voice in management.

Portfolio investment includes the purchase of new and seasoned foreign stocks and bonds by United States residents, not for the purpose of gaining control over a foreign business, but to acquire earning assets in the form of financial claims. A large part of portfolio investment is in the form of debt claims against foreign governments and business organizations, including intermediate and long-term loans.

Short-term investment denotes claims of maturity of one year or less held by United States residents against foreign obligors. Included in this category are loans, deposits, bankers' acceptances, and trade credits. Problems of classification are found here also, for loans of United States firms to foreign affiliates are classified as direct rather than short-term investment, and many loans classified as short-term may turn out to be intermediate or long-term extensions of credit.

**Growth of Foreign Investment** As the chart on page 4 shows, total United States foreign investment has grown at a fairly steady rate since 1950, but growth rates for the various kinds of investments have not been uniform. Over the entire period, direct

investment grew at about the same rate as the total, but portfolio investment increased at a somewhat slower pace and the rate of increase in short-term investment was almost twice that of the total.

Direct investment grew at a fairly steady pace throughout the period, although it leveled off somewhat after 1957. Portfolio investment expanded slowly between 1950 and 1957, but since that year it has grown much more rapidly than total investment. Like portfolio investment, short-term claims on foreigners grew little between 1950 and 1953, but after 1953 they advanced at a rate more than double that of the other two categories. In the four years between 1959 and 1963, total short-term investment more than doubled.

Canada has been by far the most important outlet for United States investment funds, although its share of total United States private investment holdings abroad dropped from 38% in 1950 to 32.5% in 1963. Still, in the latter year the value of all United States investment claims on Canada amounted to \$21.6 billion, with direct investment holdings accounting for almost two thirds of the total. Ranking second to Canada in 1963 were the Western European countries as a group. At the end of 1963, these countries accounted for more than 25% of direct United States holdings abroad as compared with 15% in 1950. A large part of United States direct investment in Western Europe has been concentrated in the Common Market countries, especially France and Germany, and in the United Kingdom. Investment in manufacturing enterprises is of paramount importance in these countries.

Investment in Latin America, which is preponderantly of the direct type, has shown little growth in recent years. In 1950 almost 38% of the foreign direct investment holdings of United States firms were in Latin American countries but by 1963 this fraction had fallen to 21%. Investments in the petroleum industry, primarily in Venezuela, account for over a third of direct investment holdings in these countries. Also important are holdings in Brazilian manufacturing and public utilities, and in Mexican manufacturing and mining.

United States investment claims against "other countries" (including international organizations) showed the greatest percentage increase between 1950 and 1963, with the total exceeding that for Latin America in the latter year. Investments in shipping companies registered under foreign flags account for a sizable share of the direct investment holdings in these countries. Australia also is an important outlet for direct investment funds. Portfolio and short-term investment holdings expanded sharply between

1950 and 1963, with Japan providing an outlet for a substantial share of both kinds. Security issues of the International Bank for Reconstruction and Development constitute an important share of total portfolio holdings for this group.

**Factors Underlying Growth** The rapid expansion in the volume of international capital flows in recent years is due in large measure to the progressive relaxation by the major Free World countries of the extreme restrictions on foreign trade and payments employed in the 1930's and the 1940's. Perhaps the most important single step in this direction was the return to substantial currency convertibility by the principal countries of the world in the late 1950's and early 1960's. This meant that for the first time in a generation investors were relatively free to move their holdings from one country to another.

The remarkable recovery of Western Europe and Japan from the economic chaos of World War II and its aftermath set the stage for a number of other developments that have served to stimulate international investment. Among the more important of these were the emergence of new trading blocs, like the European Economic Community and the European Free Trade Association, and concerted international efforts to develop the world's economically underdeveloped areas. At the same time, the establishment of an effective international payments system provided the basic mechanism required for large-scale international transfers.

These underlying factors created the environment essential to the expansion of foreign investment, but a number of related developments contributed to the tremendous growth in United States foreign investment. Economic growth rates in many countries substantially in excess of that in the United States encouraged American businessmen to try to capture a share of the new markets or to maintain and expand their share of old ones. For a variety of reasons, many firms chose to do this by establishing facilities abroad. Savings on transportation costs were an important consideration in some instances, while in others favorable labor costs were the chief factor. Some businesses located part of their production facilities abroad because foreign customers demanded a different kind of product than that produced for the American market. Moreover, the creation of dynamic, rapidly growing protected trading areas, such as the Common Market, provided a strong incentive to locate production within the protected areas. About 40% of American direct investment abroad is in mining and petroleum, and here the stimulus was the need to develop foreign sources

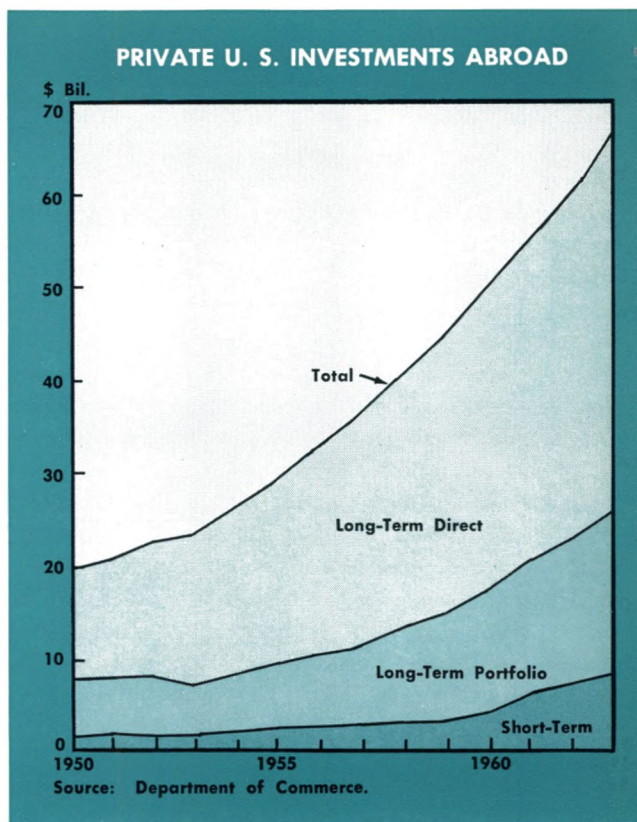
of supply, either because the materials were not available in the United States in the desired volume or because production costs were much lower overseas.

The flow of funds into foreign portfolio investments was stimulated by the large flow of savings in the United States and the existence of a highly organized capital market capable of channeling funds quickly and efficiently from savers to borrowers. Consequently, funds are available in much larger amounts and at lower costs than in foreign markets. In recent years, for example, long-term interest rates in the United States have averaged from 1% to 2% lower than in most other major countries, and such other costs as legal fees, underwriting costs, and taxes are also usually lower. Foreign borrowers in the United States market generally pay somewhat higher rates than comparable American borrowers, however, so the ability of the United States capital market to accommodate a tremendous volume of financing and large individual issues may be more important to the flow of portfolio investment than cost differentials.

Moreover, since 1960 the absence of inflationary pressures permitted the United States to pursue a relatively easy monetary policy in an effort to stimulate economic expansion. This kept funds readily available at low rates of interest. In contrast, high rates of economic growth in Western Europe and Japan created a strong demand for capital, and the continued presence of inflationary pressures caused monetary authorities to keep money tight and interest rates relatively high.

Not only are foreign capital markets smaller and less efficient than the United States market, but in most instances they are subject to strict controls, especially where borrowing by nonresidents is concerned. This means that foreign borrowers who are unable to obtain financing in their own markets may have little alternative to using the United States market. There is some evidence, however, that a number of countries have improved foreign access to their capital markets, and the integration of national economies in the Common Market and EFTA promises to bring about further expansion and integration of capital markets as well.

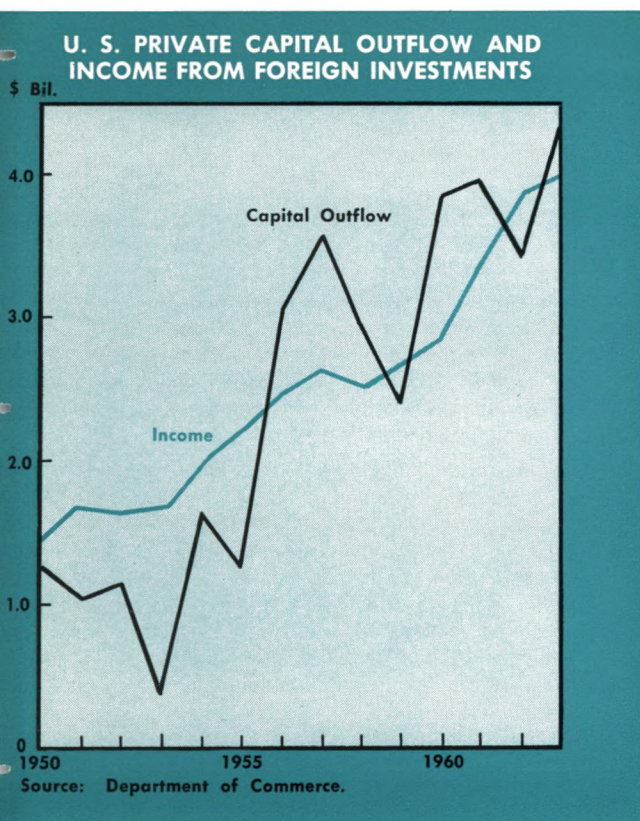
The proposal in July 1963 of a tax on American purchases of foreign securities and the enactment of this proposal into law in September 1964 greatly influenced United States portfolio investment. American purchases of foreign securities dropped sharply in the second half of 1963 and the first quarter of 1964, but enactment of the legislation eliminated some of the uncertainties concerning its provisions and portfolio investment subsequently rebounded. In the



original legislation, new issues of Canadian securities and the securities of a number of less developed countries were exempted from the tax, as were intermediate and long-term bank loans. As a result, the effect of the legislation in discouraging the issuance of securities subject to the tax appears to have been more than offset by an increase in Canadian borrowing and in long-term bank loans. Action was taken recently to make the tax applicable to bank loans with maturities in excess of one year, and Congress was asked for legislation to extend it to long-term loans of nonbank institutions.

The use of the dollar as a key international currency together with the very large expansion in world trade since 1950 accounts for part of the growth in private short-term investment. In addition, the relaxation of restrictions on international flows of funds, together with relatively low interest rates in the United States, encouraged short-term capital to seek higher yields in foreign markets.

**Effects on the Balance of Payments** Large balance of payments deficits have been a major cause of the greatly increased interest in United States foreign investment. This is evidenced by action designed to stem the outflow of dollars through portfolio investment.



As a practical matter, it is extremely difficult to measure the precise effect of foreign investment on the United States balance of payments position. Unfortunately, because of the way international accounts are arranged, it is easy to misinterpret the balance of payments effects of a particular type of expenditure or receipt. Various types of transactions are grouped into major categories, and there is a tendency to consider each category as independent of the others and to look for balance within each sector. The fact is, however, that expenditures of a particular type may give rise to a series of feed-back effects which may be reflected in various accounts on both sides of the balance of payments.

A comparison of capital outflows with the flow of income from foreign investment is sometimes taken as a first approximation of the balance of payments effects of foreign investment. Such a comparison is made in the chart on this page, which shows that income consistently exceeded capital outflows in the early 1950's. Since 1956, however, capital outflows have exceeded income in all but two years, and the total outflow exceeded total income in the 1956-1963 period. Preliminary figures indicate a substantial expansion in the outflow of private capital in 1964.

But it is clear that the matter goes beyond the initial outlay of funds and subsequent flow of income.

Direct investment, for example, may be reflected immediately in the current account through an increase in exports. In other cases, the output of foreign subsidiaries may compete with United States production both at home and abroad. Finally, some direct investment may have no direct effect on the current account, but simply result in an increase in the dollar reserves of foreign countries.

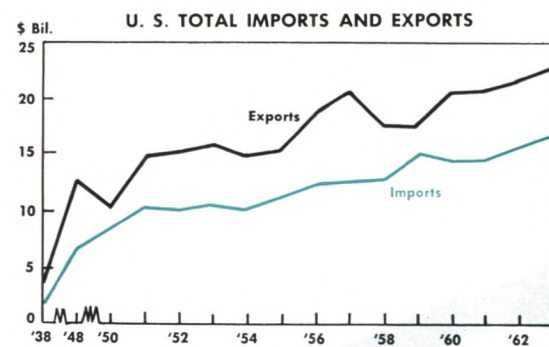
When foreigners obtain dollars by the sale of securities to Americans, the effect on the balance of payments obviously depends upon the way in which the dollars are used. If they are used to buy goods in the United States our exports are immediately increased and, in addition, the balance of payments will be strengthened in the future by a flow of interest income. But if the dollars are used to buy goods from a third country which does not wish to use them in the United States, our position may be weakened.

Similarly, a large part of short-term capital flows are for the purpose of financing exports and are not directly detrimental to the balance of payments position. In recent years, however, "autonomous" capital flows have increased in importance, and although it is difficult to measure the precise impact of these on the balance of payments, it is likely that the effect has not been favorable.

**Effects on International Asset Position** Between 1950 and 1963, United States private foreign investment holdings increased from \$19 billion to \$66 billion, and credits and claims of the United States Government rose from \$12.5 billion to almost \$22 billion. Foreign investments in the United States also increased, however, from \$17.6 billion to over \$51 billion, so this country's net asset position increased from about \$14 billion in 1950 to almost \$37 billion in 1963. But these figures do not accurately depict the changes in the nation's international financial position. The United States gold stock declined by \$7 billion, for example, and a part of the increase in United States Government claims are payable in foreign currencies of limited usefulness.

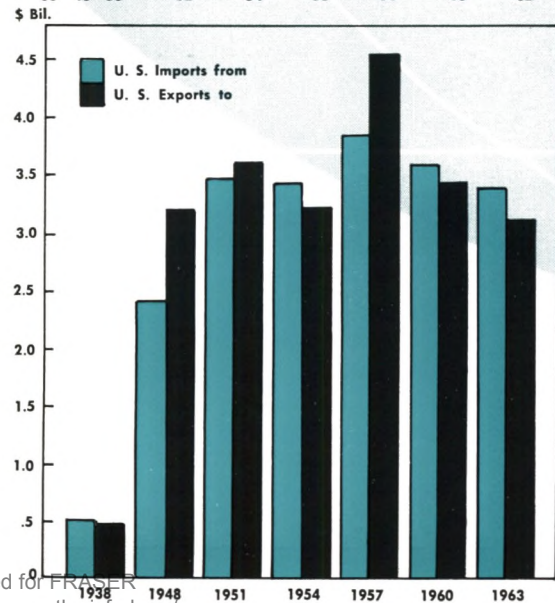
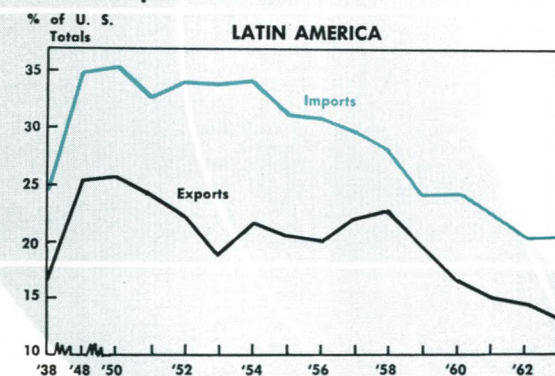
Moreover, the expansion in United States foreign assets was largely in direct investments. On the other hand, more than half the growth in foreign holdings in the United States was in short-term assets and Government securities, and an additional one fourth in corporate stocks. Thus, the international investment position of the United States is similar to that of a commercial bank, with a large part of its liabilities payable on demand or on short notice and most of its assets in relatively illiquid form. This situation may give rise to liquidity problems for a nation as well as for a commercial bank.

# U. S. FOREIGN TRADE



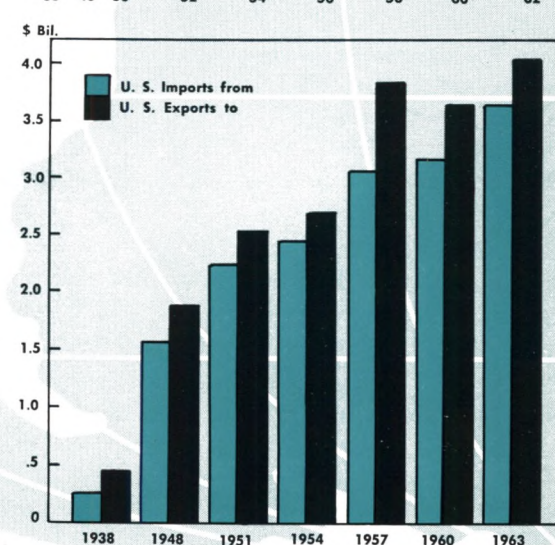
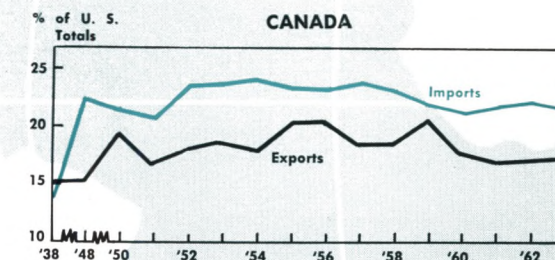
Growth trends in U. S. exports and imports over the past dozen years have been roughly parallel. The sharp rise in exports in 1956-57 was associated primarily with the Suez Crisis. In each of the four years 1960-63, inclusive, the U. S. export surplus, computed to include military aid shipments, exceeded \$5½ billion.

Trade with Latin America still accounts for a sizable fraction of the U. S. total, although both the export and the import trade drifted downward—even in absolute amounts—between the middle 1950's and 1963. As shown in the upper section of this chart, the relative decline in the Latin American trade since 1950 has been pronounced.

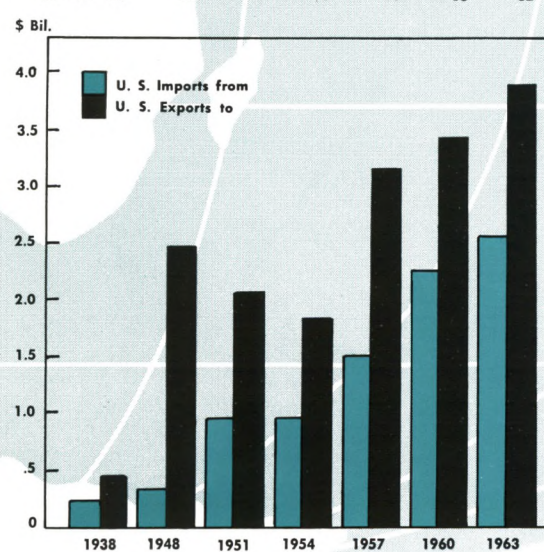
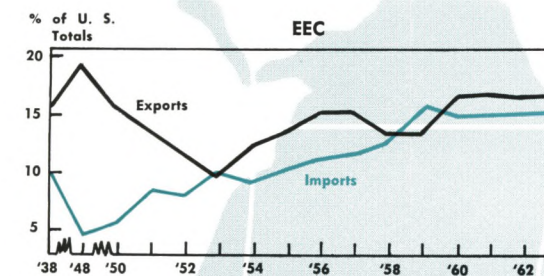


Paralleling a rapid and broadly-based expansion world trade, United States exports and imports have registered substantial increases in recent years. Data published in the United Nations' *Monthly Bulletin of Statistics* show that the combined f.o.b. value of this country's exports and imports (including shipments under military aid grants) was nearly billion in 1963. This was 50% above the 1953 level and nearly 20% greater than in 1957, when exports were extraordinarily high due to the Suez Crisis. Exports in 1963 were 47% larger and imports 6% greater than in 1953. Over this period, however, United States foreign trade gains lagged expansion in world trade, which amounted to 87%. They also trailed the growth in the country's Gross National Product which, measured in current dollars, rose nearly 60%.

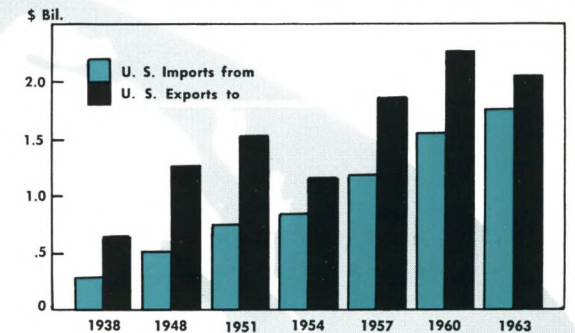
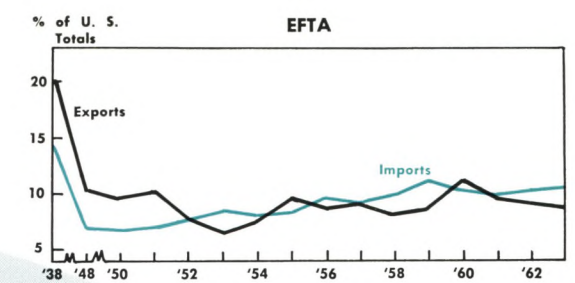
The recent increases have been accompanied by some significant changes in the geographic distribution of this country's foreign trade. For example, both the import and the export trade with Latin America have declined in relative importance. Instead, Asia has become relatively more important both as an export market and as a source of imports. The two large European trading blocs—the European Economic Community (the Common Market) and the less-publicized European Free Trade Association (EFTA)—have also accounted for growing fractions of both imports and exports. Canada, however, remains this country's most important single trading partner.



The U. S. trades more with Canada than with any other single nation. In 1963 trade between the two countries totaled almost \$8 billion, and accounted for about 18% of U. S. exports and nearly 22% of U. S. imports.

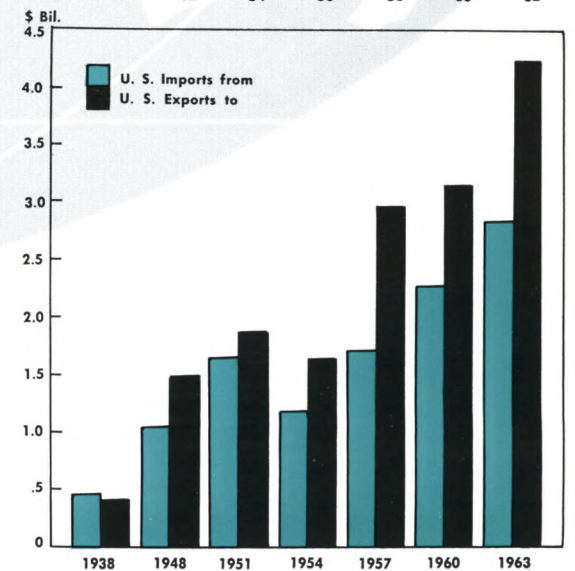
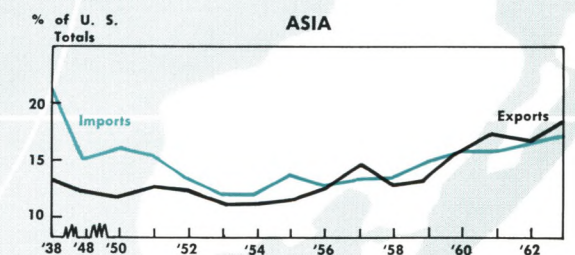


Since its establishment in 1958 the EEC (Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany) has become one of the world's most dynamic markets. Its purchases from this country have grown steadily since 1959 and in each of the four years 1960-63, inclusive, exceeded its sales to the U. S. by over \$1 billion.



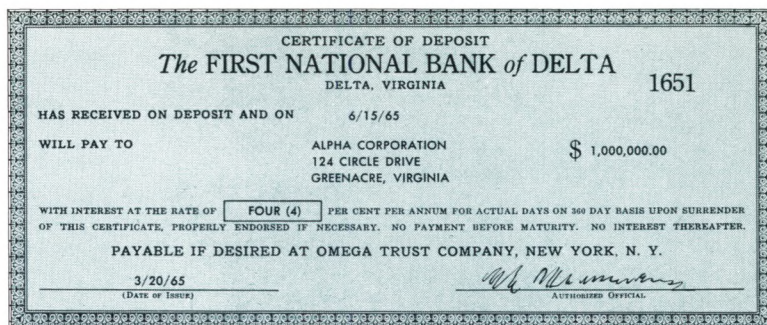
U. S. trade with the European Free Trade Association (Austria, Denmark, Great Britain, Norway, Portugal, Sweden, and Switzerland) has grown substantially since 1953, although less rapidly than trade with the European Economic Community. Before World War II the EFTA countries were relatively more important than the EEC countries in U. S. trade.

Both exports to and imports from Asian nations have grown rapidly. Japan is by far the largest Asian market for this country's exports and also the chief source of its Asian imports.



Note: f.o.b. value for imports and exports.  
Source: United Nations.

# NEGOTIABLE CERTIFICATES OF DEPOSIT



In February 1961, the First National City Bank of New York announced that it would issue negotiable certificates of deposit in large denominations, and that a major Government securities dealer had agreed to make a market in them. Other money market banks and dealers quickly followed suit, thus preparing the way for the spectacular growth of this new money market instrument.

A negotiable certificate of deposit, or CD, is a marketable receipt for funds deposited in a bank for a specified period at a specified rate of interest. The owner of the CD at the time of its maturity receives both principal and interest, while its readily salable feature enables the original purchaser to retrieve his funds before maturity by selling the instrument to another holder. Time certificates did not originate in 1961, but prior to that time they represented primarily savings-type deposits and were generally not negotiable due either to explicit or tacit agreement or to the absence of a secondary market. Before 1961, about \$2.7 billion of these instruments were outstanding at all member banks, with only about \$29 million representing obligations of New York banks. In contrast, today's CD market is dominated by the nation's largest banks, particularly those in New York, and their corporate customers.

**Background** Although traditionally loath to accept corporate time deposits, New York banks were forced by converging postwar economic and financial developments to reconsider their policy. The competitive position of these banks deteriorated during this period, partly because of the slower rate of population growth in the northeast than elsewhere and partly because of the trend toward industrial decentralization. Of still greater significance was the loss of demand deposits which resulted from the increasing sophistication of corporate treasurers in managing their cash balances. As short-term interest rates rose, the accumulation of temporarily excess cash in demand accounts became more and more costly. Consequently, corporations began economizing cash balances and seeking liquidity

through investments in such money market instruments as Treasury bills, commercial and finance paper, and repurchase agreements with dealers. This caused New York banks, which are the principal depositories of large corporations, to experience a further reduction in their share of total member bank deposits, which fell from 31% to under 17% between 1940 and 1960.

The negotiable CD was designed specifically to attract corporate deposits and to enable banks to compete more effectively for short-term funds. Hence its immediate popularity with the New York and other money market banks. Between December 1961 and the end of 1964, the volume outstanding at weekly reporting banks increased 352%. By the close of last year the volume outstanding was nearly \$13 billion, larger than the combined volume of bankers' acceptances and prime commercial paper, and second only to Treasury bills among money market instruments.

**CD Characteristics** CDs may be in registered or bearer form, although the latter is more convenient for secondary market trading. Denominations range from \$25,000 to \$10 million, depending on the size of the issuing bank and the type of CD customer it is trying to attract. Large New York banks seldom issue a CD of less than \$1 million. By setting a high minimum they hope to attract only those funds which are already destined for the money market. Smaller denominations could encourage the conversion of normal corporate demand balances to CDs, with no resulting benefit to the issuing bank. The CD maturity date is chosen by the purchaser to fit his cash needs and may range from one to about eighteen months. A survey taken last November showed that almost 74% of total CDs outstanding matured within the four months which included the December and March tax and dividend dates.

Interest is paid on the certificate's par value and accrues on a 360-day basis. The actual rate is, of course, determined by current money market conditions and is competitive with yields on other short

term instruments. In general, a CD must yield about 25 basis points more than Treasury bills of comparable maturity to attract investors. Certificates bearing popular maturity dates, such as tax and dividend dates, may yield as little as 10 basis points more, however. The size of the issuing bank and the denomination of the certificate also influence the rate. CDs smaller than \$1 million, for instance, will usually carry a higher rate than larger CDs of comparable maturity. The 20 or so largest, "prime-name" banks can ordinarily issue CDs bearing lower rates than those of smaller banks which are not widely known. The latter must usually pay  $\frac{1}{8}$  to  $\frac{1}{2}$  of 1% above the prime CD rate to attract funds.

**Regulation Q** The Federal Reserve's Regulation Q, which sets the maximum rates payable on time and savings deposits, is a fundamental consideration in the market for CDs. When short-term open market rates rise above, or even approach, the prescribed ceiling, CDs cease to be competitive. Bankers find it increasingly difficult to replace maturing certificates and are likely to experience large deposit losses as investors turn to higher yielding instruments. This in turn may compel banks to make compensating reserve and portfolio adjustments which may be especially costly in the face of rising interest rates.

Since 1957, however, Regulation Q has been revised three times in order to allow CD rates to keep pace with rising yields on other short-term investments. The latest revision, which was concurrent with the discount rate hike in November 1964, increased the maximum rate on maturities of 90 days and over from 4% to 4½% and boosted the maximum for 30-to-90 day instruments from 1% to 4%.

**Primary Market Supply** Many factors figure in bank decisions regarding the issuance of CDs. Among them are: (1) the profitability of investment outlets for the new funds, and (2) the outlook for renewals at maturity. Most banks establish a flexible limit on total CDs issued. This limit may be expressed in dollars or, more likely, as a per cent of total deposits.

Although a bank will often negotiate with a large or important lender, it usually has a set of "base rates," expressed in eighths, for various maturities. The bank adjusts these rates according to its eagerness for new deposits, and a very small change often results in appreciable increases or decreases in deposits. Most large money market banks will issue CDs to any corporation, bank, or organization, other than brokers and dealers, without having had any previous relationship with the depositor. Indeed,

CD sales may afford the bank the opportunity to acquire new customers. A bank may refuse to issue a CD if the deposit consists of funds which would otherwise constitute the corporation's normal demand account.

Although CDs are issued by banks of all sizes throughout the country, 67% of the total outstanding at the end of 1964 originated in the New York, Chicago, and San Francisco Federal Reserve Districts, which contain the majority of prime-name banks. New York City alone accounted for 36% or \$4,556 million. Federal Reserve surveys indicate that the CDs of New York and Chicago banks are widely held by corporations for tax and dividend reserve purposes.

**Primary Market Demand** Nonfinancial corporations dominate the demand side of the CD market. On December 5, 1962, for example, they owned an estimated 70% of the outstanding volume of CDs. States and political subdivisions held about 16%, and foreign governments, central banks, individuals, and others owned the rest. This distribution reflects the appeal of the CD to corporate treasurers who are interested in maximizing returns on their liquid balances.

Like banks, corporations usually set flexible ceilings on their CD holdings, often limiting them to a per cent—commonly 25% to 33%—of their Government security holdings. In addition, a corporation may set a limit on total holdings of a particular bank's CDs. Some corporations prefer the certificates of banks with which they maintain other important accounts or credit lines. Others seek a more impersonal approach and limit themselves largely to prime CDs. Purchasers try to avoid maturity dates falling on a weekend or holiday so that income will not be sacrificed before the funds can be reinvested.

**VOLUME OF SELECTED MONEY MARKET INSTRUMENTS OUTSTANDING AT YEAREND**  
(\$ millions)

Date	Negotiable Certificates of Deposit* (\$100,000 and over)	Prime Commercial Paper	Bankers' Acceptances	Treasury Bills
1960	796	4,497	2,027	39,446
1961	2,782	4,686	2,683	43,444
1962	5,442**	6,000	2,650	48,250
1963	9,579	6,747	2,890	51,539
1964	12,583	8,361	3,385	56,476
Percentage Increase	1,481%	86%	67%	43%

\* Data cover all weekly reporting member banks.

\*\* December 5 data.

Sources: Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York, and U. S. Treasury Department.

If a corporation is absolutely sure it will not need its funds prior to maturity, it may purchase CDs from a smaller regional bank and thereby obtain a higher rate. As a rule, corporations use Treasury bills in adjusting their cash positions, with certificates providing second-line liquidity.

**Secondary Market** Although most original purchasers hold their CDs to maturity, the existence of an organized secondary market is of vital importance to prime-name banks in attracting corporate funds. Participants in this market show a marked preference for prime CDs, chiefly because of their greater marketability. Corporations may enter the market at any time: on the selling side when they wish to raise cash or to realize a profit, or on the buying side when they want maturities shorter than can be acquired in new issues. The increasing importance of the secondary market is evidenced by its rapid growth in recent years. In 1964, dealers' daily positions in CDs averaged \$226 million, or almost 2% of the average volume outstanding, and daily transactions averaged \$57 million.

The heart of the secondary market is located in New York City. Since many of the largest corporations have accounts at New York banks, transactions between dealers and customers can be conducted with ease. CDs of out-of-town banks are frequently issued and redeemed through their New York correspondents. This saves the investor the trouble and expense of presenting them in another city and thus enhances their marketability. New York City money market banks will lend funds to dealers against CDs at the same rate as for call loans secured by Government securities. Regulation Q permits a bank to extend a loan against its own CD, but only at a rate 2% in excess of the rate on the instrument. In no case, however, may a bank purchase its own CD in the secondary market.

Dealers rarely trade in "non-prime" CDs or in those in smaller denominations than \$1 million. Rates fluctuate in response to money market conditions. Transactions may be either for immediate or regular delivery, but the former predominates since payment is usually in Federal funds. A dealer will bid more aggressively for CDs if he thinks rates will fall and this helps to narrow the spread between bid and asked quotations, as well as between certificate and bill rates.

It seems unlikely that the CD market can achieve the smooth functioning of the Treasury bill market at any time in the near future. A main reason for this is the large degree of heterogeneity among CDs as compared with bills. While large blocs of Treas-

ury bills represent a homogeneous asset type with common rates, maturities, denominations, etc., the CD is likely to come in a greater variety of contractual terms. Thus the feature that makes the CD an effective fund-raising device for bankers also impedes large-scale secondary trading. Issuing banks will rarely split or consolidate certificates to aid secondary market transactions.

**Effect of CDs on Other Interest Rates** The development and success of the negotiable CD has significantly increased the flexibility with which the aggregate stock of money market instruments can expand and contract in response to changing demands. This, in turn, contributes to greater stability of short-term rates. For instance, if an increase in corporate cash flow pushes short-term rates down, bankers may be willing to issue more CDs, thus increasing the supply and thereby mitigating downward rate pressures. This more or less automatic response of supply to rate trends would also occur in opposite circumstances, thereby lessening upward pressures.

The 50.7% increase in time deposits (excluding interbank) of all commercial banks in the last three years, compared with a 28.5% increase in the three preceding years, can be attributed in large part to the growing use of CDs. In order to maintain the profitability of these accounts, banks lengthened the average maturity of their portfolios of Government securities and turned to mortgages and tax-exempts. This, in turn, contributed to the maintenance of relatively stable long-term rates in the face of a concurrent rise in short rates.

**CDs and Reserve Adjustment** The growth and development of the CD market has provided banks with another means of reserve adjustment. In addition to borrowing from the Federal Reserve, buying Federal funds, or liquidating short-term assets, a bank may now acquire additional funds by simply raising its rate payable on CDs provided, of course, that there is room under the ceiling set by Regulation Q. Thus far, this technique has been used primarily by money market banks. Since owners of short-term funds are responsive to interest rate differentials, banks have been known to acquire millions of dollars of new deposits in a single day by this method. Normally this approach would be used to adjust only those reserve imbalances which do not seem to be of a strictly temporary nature. Banks also make use of the secondary market in adjusting reserve positions, by trading in CDs of other banks in much the same fashion as they trade in the markets for other secondary reserve assets.

# THE FIFTH DISTRICT



Economic growth is the product of many interacting forces: the savings habits of individuals and businesses, institutional facilities for converting savings into productive capital, the pattern of personal incentives, the skill and resourcefulness with which labor is combined with other productive inputs, and many others. Among the factors contributing to long-run growth, the general level of educational attainment occupies a prominent place. A society's expenditures on the education of its members represents an investment in human capital which can produce a large economic pay-off, not only through higher levels of skill in the labor force proper but also through improved efficiency in the overall management of productive resources. Progress in the area of education has been a significant contributing factor to the rapid economic growth experienced by Fifth District states in recent years. The paragraphs that follow give a capsule description of the problems and the progress of the District's public schools, colleges, and universities since 1950.

**The Challenge** Between 1950 and 1964, the school-age population increased about one half in the nation and nearly two fifths in the Fifth District. In the same period, total elementary school enrollment in the five states and the District of Columbia increased slightly more than 18%—from about 2.3 million to over 2.7 million. Although this percentage increase was only half as large as the comparable national figure, it was large enough to put considerable pressure on local school facilities. This was especially the case in Maryland, where enrollments rose nearly two thirds, and in Virginia, where the gain exceeded one third. In the District as a whole, elementary schools were under greatest strain during the second half of the 1950's. During the past few years, the rate of enrollment increase has slowed.

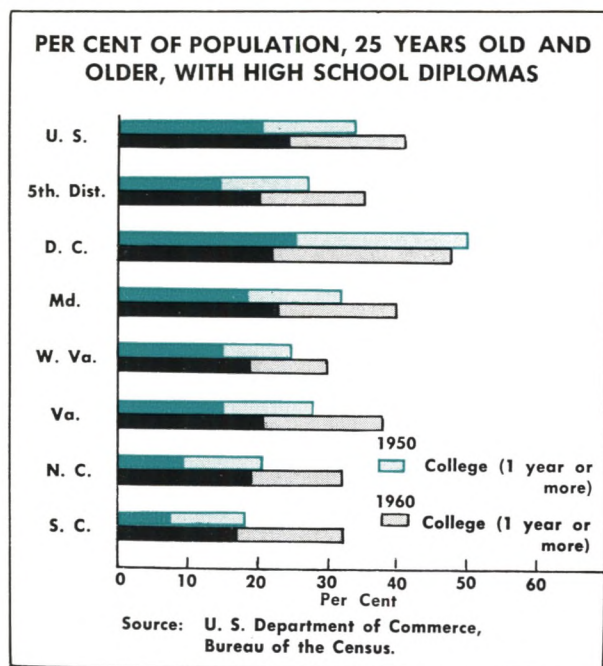
Total enrollment in Fifth District high schools nearly tripled during the 1950-64 period, rising from 537,000 to 1,484,000. Increases were largest in Maryland, where enrollments grew to five times the 1950 level, and in Virginia and in South Carolina,

where enrollments more than tripled. The general growth pattern was the same in each state: a sharp rise in the early 1950's, followed by a slower rate of gain later in the same decade, with renewed pressures in the past few years.

Colleges and universities have experienced even greater stresses and strains than the elementary and secondary schools. An increasing fraction of the growing number of high school graduates has sought college training; and, in turn, more and more college graduates have been going into various fields of graduate study. Between 1950 and 1964, total college and university enrollment in the District more than doubled, rising from 194,000 to 403,000. Current enrollments in institutions for higher education are around 85,000 in Maryland, 58,000 in the District of Columbia, 82,000 in Virginia, 40,000 in West Virginia, 99,000 in North Carolina, and 39,000 in South Carolina. The size of current enrollments in primary and secondary schools and increased labor market emphasis on higher education indicate clearly that the pressures on colleges will continue to build up. Educational experts predict that there will be no significant abatement before the mid-1970's, if then.

The growing number of students at the various educational levels represents only the surface of the problem. The increasing demand for men and women with higher skill levels in the professions, industry, government, and elsewhere has underscored the need for a general up-grading of educational standards. Those responsible for educational programs have found it necessary to devote increasing amounts of time and effort to improving traditional courses of study and developing new ones.

**The Action** Education statistics suggest that Fifth District school systems have responded sharply to these problems, although the District as a whole remains somewhat below national statistical norms. Since 1950, for example, current expenditures per pupil in the District's public schools have risen 141%, compared to a 131% gain nationally. Nonetheless, the District figure of \$368 remains roughly \$100 below the national average. Within the District,



current per pupil expenditures exceed the national average only in Maryland and the District of Columbia.

Capital outlays for the construction and improvement of schools in the Fifth District rose from about \$100 million in 1950 to an estimated \$250 million in the current school year. On a per pupil basis, the figure increased from \$35 to \$59. This was less, both absolutely and relatively, than the gain in the comparable national figure, which rose from \$40 to \$76. Capital outlays per pupil in Maryland and the District of Columbia, however, currently exceed the national average, and Virginia's figure is close to the nation's. In percentage terms, the increase in Virginia since 1950 has outstripped that for the nation, while South Carolina's gain since that year is only slightly below the nation's.

The number of classroom teachers in District elementary and secondary schools increased 62% in the period from 1950 to 1964. Since the corresponding rise in enrollment was 48%, the average number of students per teacher dropped from 31 to 28. The national figure is currently about 27, which is but fractionally lower than it was 15 years earlier.

Of equal importance is the evidence that the quality of instruction has steadily improved. The percentage of elementary school teachers holding standard certificates has risen throughout the District, with Virginia and the Carolinas progressing most on this particular scale. In virtually all parts of the Dis-

trict, rising teachers' salaries in recent years have attested to the desire of school authorities to attract well qualified people.

Higher education is also absorbing more resources. At District colleges and universities both annual capital outlays and operating expenditures have more than doubled since 1950. Enrollments as well as faculty numbers have approximately doubled. Because of some radical changes in course content and methods of instruction, it is difficult to generalize concerning the impact of these changes on the effectiveness of the educational process. Considered in conjunction with a fairly continuous upgrading of entrance requirements, however, recent changes indicate a definite effort to raise educational standards. Emphasis has varied from place to place. Improvements have been balanced in all parts of the District, but Maryland and North Carolina, for instance, have laid more stress on current outlays for larger faculties. The District of Columbia and South Carolina, on the other hand, have leaned more toward expansion of physical plant.

**Success of the Effort** The end results of educational improvement are qualitative in nature and are extremely difficult to measure. As a practical matter, however, change in the fraction of the population holding high school diplomas provides a rough index of progress in improving the quality of the work force. This would appear to be a reasonable measure in view of the fact that employers seem to associate worker quality with educational attainment and to regard possession of the high school diploma as the minimum educational qualification for jobs which offer opportunity for advancement.

The use of this criterion indicates significant educational progress in the District during recent years, as is shown by the chart at the top of this page. Between 1950 and 1960, the fraction of all residents 25 years old and over who had completed high school or more rose from approximately one fourth to slightly more than one third. The District still lags behind the nation as a whole, however, where the comparable rise was from about one third to just over two fifths. The chart also shows the gains that have been made in the percentage of District residents who have attended college one or more years.

**PHOTO CREDIT**

Cover—Chesapeake and Ohio Railway Co.