
THE UNITED STATES

In the

WORLD ECONOMY

**ECONOMIC
SERIES No. 23**

UNITED STATES DEPARTMENT OF COMMERCE

Bureau of Foreign and Domestic Commerce

U. S. DEPARTMENT OF COMMERCE

JESSE H. JONES, *Secretary*

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

O. P. HOPKINS, *Acting Director*

Economic Series—No. 23

THE UNITED STATES IN THE WORLD ECONOMY

The International Transactions of the United States
During the Interwar Period

Prepared in the International Economics and Statistics Unit

By

HAL B. LARY
and Associates

with a Foreword by

WAYNE C. TAYLOR, Under Secretary of Commerce



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1943

CONTENTS

	Page
Foreword.....	v
Summary and recommendations.....	1
Review of the interwar period.....	1
Future problems and policies.....	12
Chapter I. The setting of the problem.....	27
Impact of the United States on the world economy.....	27
Balance-of-payments relationships and problems.....	31
Chapter II. Trade and service transactions.....	36
Merchandise trade.....	37
Other current transactions.....	71
The current account as a whole.....	87
Chapter III. Capital movements.....	89
Long-term capital movements.....	90
Short-term capital movements.....	110
Creditor-debtor position of the United States.....	122
Chapter IV. The varying role of gold.....	124
Chapter V. Balance-of-payments experience of the United States, 1919-39.....	137
Post-war boom and depression, 1919-21.....	137
A period of uncertain balance, 1922-29.....	148
The great depression, 1930-33.....	169
Readjustments and new disturbances, 1934-39.....	183

APPENDIXES

A. Notes on charts and tables.....	201
B. Notes on balance-of-payments estimates.....	209

CHARTS

1. Amount of dollars supplied foreign countries through payments by the United States and amount of dollars used by foreign countries through payments to the United States, 1919-39. (Excludes gold and short-term capital movements).....	VIII 8
2. Indexes of economic activity and international trade.....	8
3. The weight of the United States in the world economy.....	28
4. Indexes of industrial production in the United States and in foreign countries (excluding U. S. S. R.), 1920-38.....	30
5. Indexes of United States national income and value of imports; and ratio of imports to national income, 1909-39.....	38
6. Indexes of quantity of United States imports, national income at constant prices, and physical volume of industrial production, 1919-39.....	39
7. Indexes of total value, unit value, and quantity of United States imports, 1919-39.....	41
8-A. Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.....	44
8-B. Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.....	46
8-C. Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.....	48
8-D. Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.....	50

	Page
9. Imports from the United States and total imports of all foreign countries. (Indexes of dollar values).....	55
10-A. Imports from the United States and total imports of foreign countries, grouped by geographic regions. (Indexes of dollar values).....	56
10-B. Imports from the United States and total imports of foreign countries, grouped by geographic regions. (Indexes of dollar values).....	57
11. Value of United States domestic exports—total, agricultural, and nonagricultural, 1921-39.....	59
12. Indexes of national income, total imports, and imports from the United States, and ratio of imports to national income—aggregates for 11 foreign countries. (Derived from dollar equivalents of values in national currencies).....	64
13-A. National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies).....	67
13-B. National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies).....	68
13-C. National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies).....	69
14. Receipts from, and payments to, foreign countries for freight and shipping services, 1922-39.....	72
15. Proportion of United States imports and exports carried in American-flag vessels, 1922-39.....	73
16. Travel expenditures in foreign countries by residents of the United States, 1919-39.....	74
17. Indexes of United States national income and expenditures for foreign travel, 1919-39.....	76
18. Institutional contributions to foreign countries, 1919-39.....	79
19. Income received from American investments abroad and income paid on foreign investments in the United States, 1919-39.....	80
20. Composition of income from American investments abroad, 1919-39.....	80
21. Dollar volume of foreign bonds, domestic corporate bonds, and domestic stocks publicly offered in the United States (quarterly moving averages).....	92
22. Dollar volume of foreign-bond flotations and index of industrial production in the United States.....	92
23. Yields on selected foreign and domestic bonds, 1922-29 (annual averages).....	97
24. Short-term foreign assets and liabilities of American banks.....	117
25. Gold movements to and from the United States, 1919-39, by quarterly periods.....	126
26. Tenure of the international gold or gold-exchange standard during the interwar period. (Based on relative share in world trade in 1926-29 of countries listed).....	131
27. World monetary gold stocks, distribution by principal countries at selected dates.....	134
28. Percentage increase in national income in the United States and selected foreign countries, 1925 to 1929. (Based on foreign-currency values converted to dollars).....	149
29. Percentage increase in industrial production in the United States and selected foreign countries, 1922 to 1929.....	150
30. Net receipts on current transactions and net payments on long-term capital transactions, 1921-30.....	156
31. Index of United States industrial production, gross payments to foreigners on current account, and long-term capital transactions.....	160
32. A, Net inflow of capital and gold, and, B, cumulative net inflow of capital and gold and cumulative excess of merchandise exports, 1935-39, by months.....	190

TABLES

	Page
1. Decline in dollars supplied to foreign countries in relation to debt-service charges, 1929 to 1932.....	6
2. Foreign-owned gold and short-term assets in the United States as reported by the Treasury Department in June 1942.....	23
3. United States imports according to use and stage of production, 1935-37.....	40
4. United States imports of selected commodities: Value and percentage of total imports, 1929 and 1937.....	43
5. Imports of specified agricultural products showing effects of droughts in the United States in 1934 and 1936.....	52
6. United States exports according to use and stage of production, 1935-37.....	58
7. United States exports of leading manufactured goods in selected years.....	59
8. Agricultural exports: Decline in annual value from 1922-24 to 1937-39.....	60
9. Income from direct investments, by areas and industrial groups, 1935-39.....	82
10. Transactions in outstanding securities between the United States and foreign countries, 1919-39.....	107
11. United States international banking accounts, 1925, 1927, 1929, and 1931.....	113
12. Short-term liabilities to foreigners reported by New York banks on selected dates, 1929-33.....	119
13. International investment position of the United States in selected years (excluding war debts).....	123
14. Gold imports and exports, by principal countries, for specified periods, 1919-39.....	127
15. United States exports (including reexports) and general imports, by regions, 1919-21.....	145
16. Economic conditions in selected countries, 1935 to 1938 as compared with 1929.....	184
17. Imports of all countries, the United States, and all foreign countries, 1929-38.....	187
18. Net inflow of capital into the United States, by countries or areas and by classes of transactions, 1935-39.....	191
19. United States total exports and exports to 11 countries and imports of 11 countries from the United States.....	203
20. Foreign-bond yield averages, 1922-29.....	205
21. Composition of freight and shipping account, 1937.....	210
22. Estimated freight earnings by United States and foreign vessels in the carriage of United States exports and imports, 1937.....	210
	Facing
I. United States balance of international payments, 1919-39.....	216
II. World supply and use of dollars, 1919-39.....	216
III. Capital transactions between the United States and foreign countries, 1919-39.....	216

Foreword

The United States in the World Economy represents the culmination of more than 20 years of research by the Bureau of Foreign and Domestic Commerce on the balance-of-payments and international-investment position of the United States. The Bureau's first statement in this field appeared in 1923 and was followed by annual bulletins and numerous other studies until publication of international trade and financial statistics was suspended for security reasons.

This study offers a comprehensive and authoritative analysis of the international transactions of the United States from the end of World War I to the beginning of World War II. Because of the endless ramifications of the subject and the innumerable refinements of statistical data that might be made, a study of this type is never finished. Publication at this time is prompted by the timeliness of the analysis.

Although numerous salutary lessons are to be drawn from the experience of the past, the conclusion that emerges most emphatically from the survey is the fundamental importance of maintaining conditions conducive to a more stable and ample flow of dollars in our transactions with other countries. The most essential of these conditions lies not in the field of foreign economic policy as such but in the attainment of a more fully and more smoothly operating domestic economy—the major determinant of the volume and course of our purchases of foreign goods and services. In addition, a more adequate supply of dollars should entail both a freer flow of imports and a renewed and sounder participation of American capital in international investment.

Of even greater importance than the general level of the flow of dollar payments to foreigners is the need for continuity and regularity in the foreign economic policy of the United States and in the actual behavior of our international transactions. It would be tragic indeed if the United States, after a period of renewed full participation in the world economy, were to permit another abrupt fall in the supply of dollars to disturb the recreated international commercial and financial mechanism, whether through increased trade restrictions, through the misbehavior of foreign investment, or through the improper functioning of the domestic economy. Commercial and investment policies, however, are susceptible of intelligent determina-

tion and should no longer constitute such disturbing elements as in the past. The functioning of the American economy as a whole presents some of the most baffling problems. On the solution of these problems, through maintenance of a high and reasonably stable level of economic activity in the United States, the interests of this country and of other countries are most clearly and indisputably united.

A world economic structure organized on the basis of equal treatment and with large scope for free enterprise cannot be maintained in the face of such reductions in the supply of dollars as have occurred in our international transactions in the past. Unless the supply of dollars is more adequate to meet foreign requirements, other countries will assuredly insist on their rights to exercise a close selective control over the use of the amounts available and to promote more intensive relations with third countries under preferential trading arrangements. Unless dollars are made available with greater regularity than in the past, it would be both unjust and unwise to demand the removal of restraints and controls largely designed to protect the internal economies of other countries against external shock and pressure.

In addition to the disturbances resulting from variations in the flow of dollar payments by the United States to foreign countries during the interwar period, serious difficulties also arose from the misuse of dollars by foreigners. This was notably true of the behavior of foreign capital, which was especially attracted to the United States in time of distress and unrest abroad and of economic expansion in this country. Such shifts of capital, which went largely into speculative stock-market transactions and short-term balances, were of little or no benefit to this country and did positive damage to other countries. Unless brought under control in the future, capital movements of this nature might readily nullify other efforts to attain greater stability in international transactions and would decrease the amount of dollars available to foreigners for purchases of American goods and services.

The United States will emerge from the war with an enormously expanded industrial and agricultural capacity and will be confronted with grave difficulties of readjustment to peacetime conditions. Reappearance of civilian demand in this country and relief and rehabilitation activity abroad will constitute a strong market in the months immediately following the end of hostilities and will serve to postpone some of the necessary adjustments. A healthy and continuing foreign demand for American goods will greatly facilitate these adjustments, minimize the dangers of economic collapse and unemployment, and generally assist in the maintenance of production and national income at high levels.

The United States in the World Economy was prepared in the International Economics and Statistics Unit of the Bureau of Foreign and Domestic Commerce by Hal B. Lary, Assistant Chief of the Unit and Analyst-in-Charge of its Balance-of-Payments Section, assisted by various members of his staff. The study was begun in the summer of 1942 under the general direction of Dr. Amos E. Taylor, now Chief of the Division of Research and Statistics, and was carried to conclusion under the supervision of Dr. August Maffry, Chief of the International Economics and Statistics Unit.

WAYNE C. TAYLOR,
Under Secretary of Commerce.

MAY 1943.

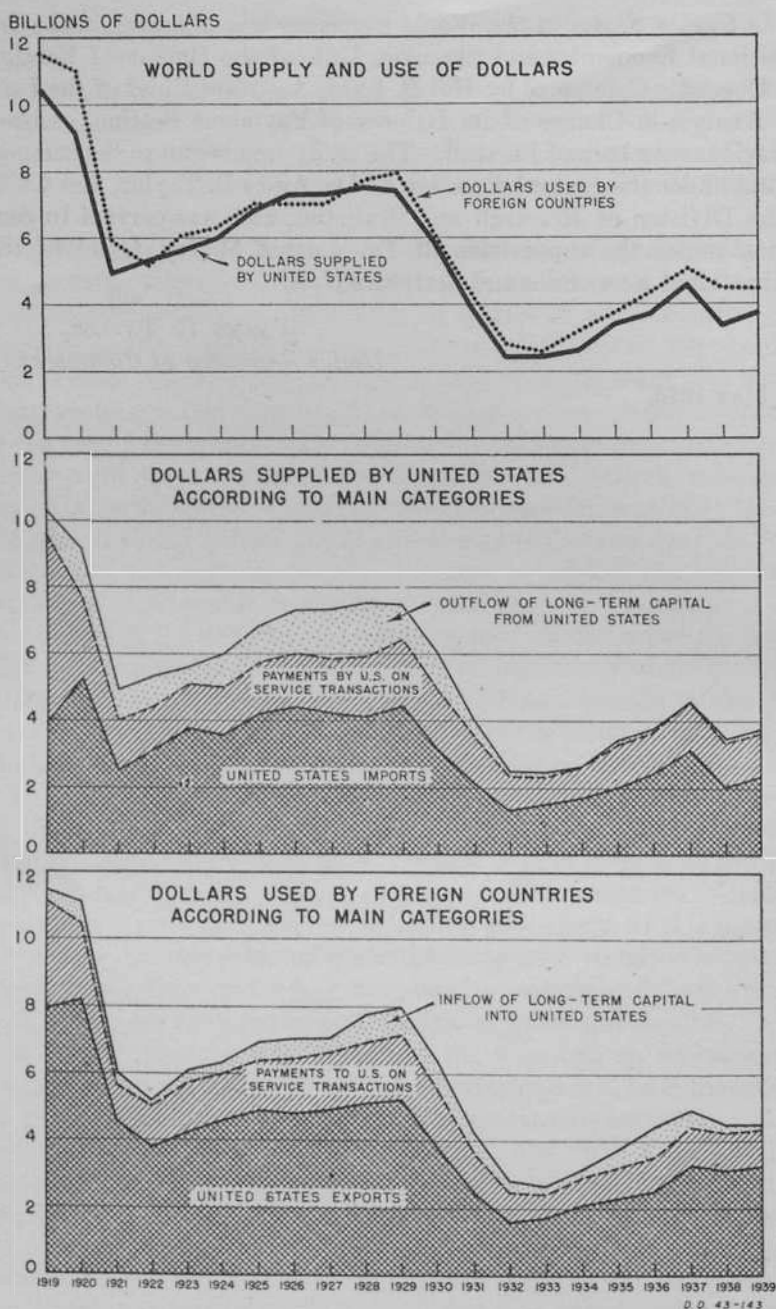


Chart 1.—Amount of dollars supplied foreign countries through payments by the United States and amount of dollars used by foreign countries through payments to the United States, 1919-39. (Excludes gold and short-term capital movements.)

SUMMARY AND RECOMMENDATIONS

REVIEW OF THE INTERWAR PERIOD

The balance of international payments of the United States is a record of (1) dollars made available to foreign countries by the United States through purchases of goods, services, and investments abroad, and (2) the uses to which dollars are put by foreign countries in making similar purchases from the United States. These transactions run into billions of dollars in both directions every year and exercise a profound influence on economic life and well-being at home and abroad. At times, sharp strains may develop in the relationship between these concurrent two-way flows, when the movement in one direction unduly rises or falls out of proportion to the other. Such disturbances produce drains on gold and other reserves and necessitate compensating readjustments in incomes and spending habits.¹

The total streams of dollars supplied and dollars used during the 21 years from the end of the first World War to the beginning of the second are traced in chart 1. Their most striking feature is their wide variability. Three periods of heavy decline stand out—1921, 1930–32, and 1938. These periods, corresponding to years of recession and depression in business activity, were all characterized by severe drains on the monetary reserves of foreign countries and by pressure on the exchange rates of foreign currencies. Otherwise they have little in common and are of interest largely because of their differences. Between these periods of decline two major periods of recovery and expansion intervened, which also had little in common with each other.

The decline in 1921, which actually began in the preceding year, was severe but was quickly followed by a steady recovery, during which there seemed to be a fairly stable and balanced relationship between dollars supplied and dollars used. The decline after 1929 was deep and prolonged and involved the collapse of the previously existing international monetary and commercial system, and when the upturn did set in, it was marked by a continuing shortage in dollars supplied as compared with dollars used. The 1938 decline, which began in the latter part of 1937, was about as brief as the early post-war recession and was especially marked in the flow of outpayments, with much milder effects on the amount of dollars used by foreign countries and with little obvious influence on conditions abroad.

¹ The balance of payments is presented in conventional form in table I, but the present discussion is based chiefly on table II, which shows the world supply and use of dollars on current and long-term capital accounts and treats gold and short-term capital as "balancing items." These basic tables, together with table III, giving capital movements in some detail, will be found at back of volume.

International Transactions of the United States During the Depression of 1920-21

The downturn in the international transactions of the United States in 1920-21 came after a brief but wild inflationary boom at home and abroad following the sudden abandonment of wartime controls. A tremendous volume of deferred capital expenditure, including the replenishment of inventories, the sudden release of accumulated consumer purchasing power, and the urgent needs of a ravished Europe for foodstuffs and reconstruction materials had outweighed for a time the disappearance of military demand as the chief support of the world's markets.

A sharp recession in business activity in the United States in 1920, however, brought a rapid decline in imports. Shortly afterward came a swift fall in exports, in which the abrupt termination of United States Government lending to its former Allies was an important factor. These changes were accompanied by a steep fall in prices in this country and in the world at large. The depression was severe but of relatively short duration. Industrial production in the United States began to recover during 1921 and by the end of the next year was already above the 1920 peak, although prices remained far below their inflated early post-war levels.

Imports responded to the improvement in domestic business and began a steady rise in the second half of 1921. Recovery in foreign countries appears to have been longer delayed, with chaotic conditions prevailing throughout much of Central and Eastern Europe, and the upturn in exports did not begin until several months after the upturn in imports.

The major factors contributing to the relative ease and speed with which our international transactions weathered the strain of the 1920-21 period appear to have been the following:

1. Of basic importance was the fact that the depression was short in the United States and was quickly followed by a vigorous recovery and prosperity which, with minor set-backs, lasted until 1929.

2. As pressure emanated from this country through the fall in business activity and prices, decline in imports, and cessation of Government lending, other countries were able to absorb part of the strain by permitting their exchange rates to depreciate and thus avoided becoming enmeshed in excessive deflation in their own economies.² This was possible because the pegged exchange rates maintained among the Allies during the war had been abandoned and the international gold standard had not yet been restored. Few countries, if any, attempted at that time to maintain fixed rates on the United States dollar.

3. Also largely because they had not yet recommitted themselves to the gold standard and the defense of reserve positions, foreign countries dipped heavily into their gold stocks to help meet the deficit in their balance-of-payments position vis-à-vis

² Depreciation in a number of European countries at this time or later grew, of course, chiefly out of their internal inflationary developments and the flight of capital, but the above reference is primarily to other countries.

the United States without thereby being compelled to enforce stern measures of internal deflation.

4. The upturn from the 1920-21 depression was facilitated by the huge tasks of reconstruction in Europe and of economic development throughout the world in general that remained after the war, offering ample investment opportunities and creating a strong demand for American machinery and materials.

5. American capital was rapidly being made available from growing incomes and savings and was ready to find profitable outlets abroad, thus supporting foreign demand for our goods and contributing generally to the increase in economic activity in foreign countries.

A Period of Uncertain Balance, 1922-29

Despite initial currency disorders, controversies over reparations and war debts, and some growth in tariff barriers, the years from 1922 to 1929 were marked, on the whole, by world-wide economic expansion and rising incomes, with a corresponding increase in international transactions. The supply of dollars was expanded not merely by a rise in United States imports but also by increasing American tourist expenditures and other service remittances, and by a strong flow of loans and other investments abroad. These sources provided ample funds out of which foreign countries bought our goods, made war-debt payments, and serviced the growing volume of private American investments.

The relatively close correspondence between the supply and use of dollars and their common upward movements from 1922 to 1929 suggest the existence and successful operation of a balancing mechanism relating the various items through forces inherent in the economic system of the period. Our imports, loans, and other payments undoubtedly helped to sustain and promote economic growth and the rise in incomes abroad and thus supported foreign demand for our goods and services during the period as a whole. There is also some evidence of year-to-year adjustments of a compensating nature between the various transactions. Maintenance of approximate balance between the total supply and use of dollars in these years must be largely attributed, however, to the absence of any undue and prolonged disturbance in any of the major items—a situation that was abruptly and violently changed toward the end of the period.

It is commonplace to point out various maladjustments and weaknesses in the world economic structure of the twenties which led to its eventual undoing. While the mere enumeration of such factors scarcely constitutes convincing evidence of the inevitability of collapse, they undeniably represented points of vulnerability susceptible of breaking under pressure. Among the most prominent was the general weakness of prices. The failure of manufactured goods to rise appreciably in price during a period of economic expansion may have resulted merely from the increasing efficiency of industry. There was also striking technical progress in agriculture, but the declining tendency in primary prices must be largely attributed to wartime and post-war expansion of production in the face of relatively inelastic demand. This maladjustment was aggravated by numerous ill-conceived schemes for maintaining artificially high prices, leading to an

accumulation of surplus stocks and a generally vulnerable position for many key commodities.

Another serious weakness in the world economy of the twenties was what is now generally recognized as the overvaluation of the pound sterling, along with various satellite currencies, and the undervaluation of the French franc in the return to the gold standard. Restoration of the pound to its old gold parity with the dollar, undertaken despite the relatively higher cost and price structure in the United Kingdom, contributed to that country's generally weak position in the world economy and to its excessive and vulnerable dependence on foreign short-term capital as a means of balancing its international accounts.

On the other hand, stabilization of the franc at one-fifth its pre-war parity did not reflect its true equilibrium level but rather a depreciation due largely to flight of capital. The French balance-of-payments position was thus excessively "strong" and, together with the reflux of private capital, resulted in an accumulation of large French balances in other countries subject to sudden withdrawal. The French action intensified the weakness in the British position, and both made for a generally unstable international situation.

One of the most critical features in this country's international transactions was the behavior of capital. To regard the United States' position as a lending country as artificial or improper would be totally unwarranted. There was no inherent reason why there should have been an immediate adjustment in foreign trade to the newly acquired creditor status at the end of the war period (although the higher tariffs of 1921 and 1922 could only increase the difficulty of the eventual adaptation). Foreign countries needed and demanded American goods and American capital, and it was natural that the United States should have supplied both. The mistakes were rather in the particular behavior of our lending operations—not so much in our investment policy as in the lack of one.

Under the high-pressure salesmanship methods by which foreign issues were solicited and sold, our loans proved to be their own undoing. The flotation of one loan frequently came to be regarded as adequate justification for further issues to the same borrower or the same country without adequate regard to the growing burden of indebtedness. In some instances, notably in loans to Germany, new lending was vigorously prosecuted long after warnings from high places were sounded. The very operations that expanded the incomes and consumption of foreign countries and made them increasingly dependent on an un-failing source of exchange thus helped to ensure the inevitability of a change and the probability that it would be disastrously abrupt and complete.

Another weakness in American investment activity was that our issuing houses never really regarded foreign issues as more than a side line, which they exploited for a time but felt free to drop when more attractive opportunities presented themselves at home. In these circumstances it is not surprising that, under the intense competition of the stock-market boom, new flotations for foreign countries were suddenly curtailed in the middle of 1928 and, aside from a brief upturn in the first half of 1930, failed to recover thereafter.

Strains and Adjustments During the Great Depression

Reduction in the outflow of capital in 1928 was partly offset by further increases in imports during the late stages of the boom. The boom came to an end in the latter part of 1929, however, with a sudden fall in industrial production and in general business activity and a severe break in the stock market. In response, imports registered a sharp decline, accentuated by the collapse of raw-material prices and by an upward revision of the American tariff in 1930. Exports reached a boom-time peak in late 1928 and early 1929 and showed a slight weakening tendency thereafter, but the real break in exports did not come until about the same time as that in imports, and initially was somewhat less severe. The downturn in industrial activity abroad roughly coincided with that in the United States but, in general, proceeded more gradually.

The fall in our international transactions which set in at this time was severe and protracted, and the upturn did not come until after the financial and trading machinery of the twenties had been thoroughly wrecked and new systems operating on completely different principles had been established. The major factors accounting for the duration of the decline and the severity of its consequences were in many respects the reverse of the more favorable conditions noted with respect to the 1920-21 period. Among these factors were the following:

1. The most serious retarding influence was the behavior of economic life in the United States which, in contrast to the experience of the early post-war recession, remained long and severely depressed. As compared with 1929 levels, the fall in economic activity in the United States was greater than that in other countries and was somewhat more prolonged.

2. Also in contrast to our recovery after the 1920-21 depression, American investment activity in other countries was not revived. If perhaps the exhaustion of favorable investment opportunities near the close of the twenties was more apparent than real, it quickly became a reality because of the rapid spread of the depression and of a depression psychology, by defaults on outstanding loans, and by unfavorable political and exchange developments abroad. Thus little basis or possibility for a renewed outflow of American capital was afforded. On the contrary, from 1931 on there was a substantial reverse flow through a reduction in previous investments abroad.

3. Curtailment in the supply of dollars resulting from our reduced imports and cessation of investment activity presented a readjustment problem of unparalleled dimensions. During the 4 years from 1926 through 1929 the amount of dollars supplied ranged between \$7,300,000,000 and \$7,500,000,000, and foreign incomes and spending habits and the international debt structure were fairly well adjusted to this level.

The abrupt fall in the dollar supply by some \$5,000,000,000, or 68 percent, over the short space of 3 years, necessitated vast changes in the foreign use of dollars and in the economic systems from which the demand arose. The problem was aggravated, moreover, because of fixed obligations, including war-debt pay-

ments due the United States in an annual volume of some \$900,000,000. If these obligations were to have been met without default, the full burden of adjustment would have had to fall on purchases of American goods and on other payments to the United States. This is brought out in table 1.

TABLE 1.—*Decline in Dollars Supplied to Foreign Countries in Relation to Debt-Service Charges, 1929 to 1932*

Transaction	1929	1932	Amount of decrease	Percentage decrease
Dollars supplied by the United States through purchases of goods and services and new investments abroad	Million dollars 7,400	Million dollars 2,400	Million dollars 5,000	68
Dollars required to meet fixed debt-service payments to the United States, assuming no defaults or adjustments ¹	900	900	0	0
Remainder available to foreign countries for other purposes	6,500	1,500	5,000	77

¹ Approximate contractual amounts due United States for interest and amortization of foreign dollar bonds and of war debts. Actual payments to the United States under these headings totaled about \$580,000,000 in 1932.

4. In further contrast to the more flexible situation at the beginning of the decade, the world at large had returned to a regime of fixed exchange rates under the reconstituted international gold, or gold-exchange, standard which had won general adherence by the end of the twenties. Although several of the primary producing countries, including Australia and Argentina, quickly abandoned the standard, it was given up only reluctantly and under the inexorable pressure of events by most nations. The initial endeavor to defend their exchange parities and reserve positions let the task of readjustment in their external demands fall full force on their internal economic life, thus strengthening the forces of depression and deflation throughout the world generally.

One can only speculate as to how much deflation other countries would have had to enforce and endure—if the adjustment had been carried all the way through in this manner. The degree of deflation that would have been required was possibly even greater than that experienced in the United States and certainly far more severe than that which actually occurred abroad. Quite apart from the economic undesirability of inducing deflation to such a degree, it could not have been achieved except with even graver social and political disturbances than those which actually occurred.

5. Other countries could halt the drop in their economic activity and institute measures for domestic expansion only by freeing themselves from external deflationary pressure. While in many countries the immediate force was exerted by the wild flight of capital, the basic strain emanated largely from this country's crippled economy and the drastic cut in the supply of dollars.

The principal measures of adjustment resorted to by other countries, most of which involved a radical departure from the

gold standard and the previous world commercial system in general, were as follows: (1) Abandonment of gold parities and depreciation of foreign currencies with respect to the dollar; (2) general tariff increases aimed at curtailing total imports and promoting domestic production; (3) preferential tariff and commercial arrangements designed to foster trade among the participants and to divert trade from other sources of supply; (4) direct trade and exchange control through quotas and licensing requirements for the purpose of forcing trade along selected channels and restricting the use of foreign exchange to the available supply.

These methods were used in various combinations according to place and time. They were accompanied, moreover, by various types of measures for internal expansion and were frequently carried far beyond the requirements of external adjustment. In some countries, notably Germany, they eventually became instruments for violent political as well as economic nationalism.

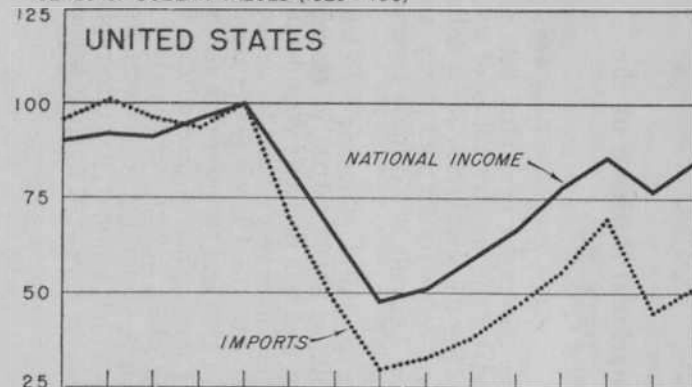
Regardless of these differences as to time, place, and ultimate results, however, the changes and adjustments made by foreign countries had the effect of preventing their increasing internal purchasing power from "spilling over" into the American economy and further depleting their gold and exchange reserves. In many countries, especially those owing large external debts or producing chiefly primary goods, gold and exchange reserves had already been virtually exhausted and were exceeded by their short-term obligations. Recovery abroad was thus achieved along national and bilateral lines which offered little stimulus to our international transactions.

Deterioration in the International Position of the United States, 1934-39

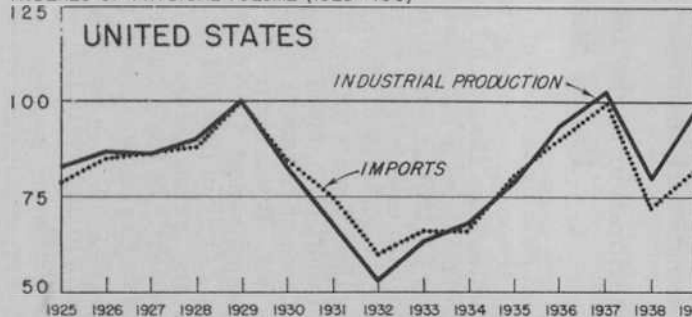
The most striking features of our balance of payments from 1934 to 1939 were the unprecedentedly heavy movement of capital into the United States from abroad and the attendant massive inflow of gold. These movements set in immediately after the revaluation of the dollar on January 31, 1934, at some 40 percent below its old gold parity, and continued with considerable variation, but only one definite reversal, until after the outbreak of World War II.

During these 6 years the net inflow of capital, including both long-term and short-term, amounted to almost \$6,000,000,000, as recorded in the balance-of-payments estimates, and was probably considerably larger in fact. It was clearly the major factor responsible for net gold movements of almost \$10,000,000,000 into the United States during the period. Only in 1934 and again in 1938 and 1939 were net receipts on trade and service transactions of importance in determining the gold movement. In the 3 intervening years, in fact, our payments on trade and service items exceeded receipts—a striking adjustment from this country's position in the twenties, which, however, was interrupted by the slump in imports in 1937-38 and the growth of wartime demand for our exports.

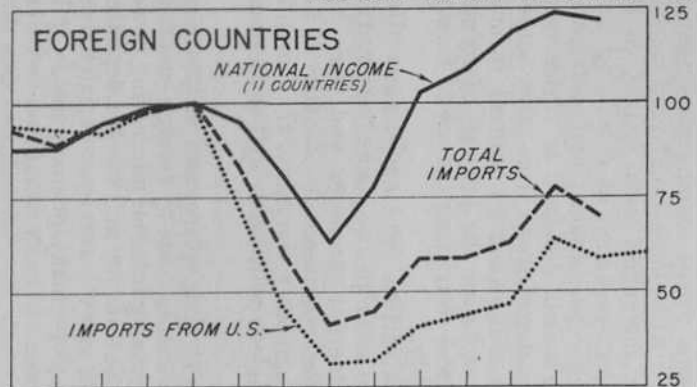
INDEXES OF DOLLAR VALUES (1929 = 100)



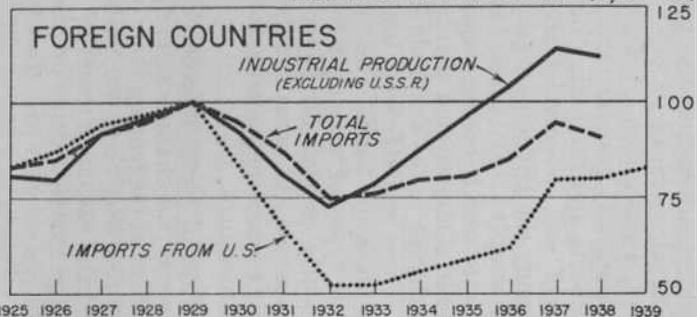
INDEXES OF PHYSICAL VOLUME (1929 = 100)



INDEXES OF DOLLAR VALUES (1929 = 100)



INDEXES OF PHYSICAL VOLUME (1929 = 100)



D.D. 43-244

Chart 2.—Indexes of economic activity and international trade.

Note.—Index of national income for foreign countries is based on data for United Kingdom, Canada, Australia, New Zealand, Denmark, Norway, Sweden, France, the Netherlands, Germany, and Japan.

Although amortization and repatriation of foreign securities and continuation of more or less normal investment in American stocks and bonds were important components of the capital inflow, the major forces seem to have resided in what is loosely called flight of capital. The abnormal character of the movement is indicated in part by the fact that upwards of \$2,500,000,000 was in the form of increases in non-interest-bearing foreign dollar balances. It is further borne out by the fact that the periods of heaviest transfers coincided with the recurrent crises in France and other members of the gold bloc in their vain efforts to cling to the remnants of the predepression gold standard and with the frequent political and military crises that marked the years leading up to the second World War.

Spectacular though they were, these huge gold and capital movements were probably of less basic significance than other features of our balance-of-payments relationships. As far as effects on the United States are concerned, foreign funds transferred to this country were not invested in productive enterprise in an appreciable amount, but for the most part were held idle in American banks or employed in stock-market speculation. The nature of this capital movement, hence, was not such as to make any substantial contribution to economic recovery and development in the United States, and the accompanying influx of gold merely added to our already large gold stocks and increased the excess reserves of member banks with the Federal Reserve banks. The effects on foreign countries were doubtless more serious. They unquestionably contributed to the successive defections from the gold bloc, although even in this respect they were more symptomatic than basic.

Of more critical significance than the behavior of gold and capital movements during this highly abnormal period were the continued lag in our international trade and service transactions as compared with internal business activity at home and abroad, and the further development and crystallization of foreign economic systems along national and bilateral lines. The essential facts in this situation are set forth in chart 2, which shows basic trends both in terms of values, which are of immediate concern in the dollar supply and use relationship, and of "real," or physical volume, measures.

The left-hand side of the chart shows the rapid fall in economic activity in the United States after 1929 and the more gradual revival beginning in 1933, together with corresponding movements in imports. Comparison of the value and quantity trends in imports indicates that the greater fall and lag in the former as compared with the course of national income were attributable chiefly to the greater weakness in import prices than in our internal price structure as a whole.

The right-hand side of the chart presents a composite picture of the trends in economic activity in foreign countries and in their imports. Both the national-income series for 11 countries and the general index of industrial production for all foreign countries reflect a substantial recession in economic activity abroad from 1929 to 1932 and a very marked recovery thereafter.³ As compared with the movement in this

³ Since the various national-income series expressed in foreign currencies have been converted into dollars at annual average exchange rates and then added, the series plotted in chart 2 reflects fluctuations in these rates as well as in the original estimates. Both the decline in 1931 and 1932 and the subsequent upturn are therefore exaggerated as measures of changes in real economic activity abroad, although they should indicate fairly well the trend in foreign purchasing power as expressed in dollars.

country, the decline abroad was less severe and was followed by a much more vigorous expansion, which soon carried well beyond the 1929 peak.

The contrast between the movements in the internal economic activity of other countries and the behavior of their imports is striking. There developed a twofold spread of great significance to the international position of the United States: Not only did imports of other countries in general drop far below the level of their internal activity but their imports from the United States in particular were still further repressed. The first of these spreads may be taken as a rough measure of the growing self-sufficiency and economic nationalism of foreign countries⁴ and the second as an indication of the extent to which they obtained imports from sources other than the United States and fostered trade along bilateral lines.

Despite these restrictions, however, foreign purchases of American goods and services during the 1934-39 period as a whole were larger than similar purchases by the United States from other countries, the excess swelling the influx of gold that accompanied the transfer of foreign capital to this country. The shortage in the dollar supply and our internal economic difficulties responsible for it may therefore be regarded as the basic factors limiting our international transactions and as forceful contributions to the growth and strengthening of more exclusive economic systems abroad.

The third period of decline in our international transactions began in the latter part of 1937. The decline was sharp, particularly on the dollar supply side, but was also brief. It started with a rapid fall in imports in the third quarter, which again reflected an abrupt change in the tempo of our domestic economy. Earlier in the year industrial production in the United States had reached a peak approximately equal to that of 1929, but in September it began the steepest fall on record. Over a period of 9 months the index of the physical volume of industrial production fell 33 percent, or more than in the first 18 months of the great depression starting in 1929. This sudden recession is apparently attributable chiefly to a tightening of credit policy and a reduction in Government expenditures and was halted by a quick reversal of these policies. Recovery was somewhat less rapid than the decline had been, however, and imports in 1939 remained well below the 1937 level.

The recession of 1937-38 was distinguished by its comparatively mild effects abroad and on our exports. Production in some countries, including the United Kingdom and France, fell moderately, partly in response to our own decline and partly because of internal influences. In Germany, Japan, and various other countries, however, there was scarcely any deviation from the upward trend. United States exports did not fall off until early 1938, and then only slightly. The gap between the amount of dollars supplied and the amount used thus widened appreciably in 1938 and 1939, occasioning further drains on foreign gold reserves.

⁴ With respect to the gap between the national-income series and the value of imports, however, some allowance should probably be made for the increasing importance of services as distinguished from commodities in the various national income totals.

The reasons for the short duration of the decline in our international transactions in 1937-38 and for its failure to have more serious repercussions seem to be as follows:

1. Of basic importance with respect to the supply of dollars, prompt and energetic action was taken by the national authorities to prevent the development of the domestic recession into progressive and cumulative deflation along the 1929-32 order and to insure revival.

2. Also in contrast to our experience during the great depression, the strain in 1937-38 was not aggravated but rather was tempered by the behavior of capital. New investment of American capital abroad had been almost completely suspended since 1931, and there was thus little room for further reduction and pressure from this source. On the contrary, the net inward movement which had been under way for several years was sharply reversed, beginning in the latter part of 1937, thus helping to ease the dollar supply situation. This "adjustment" in the flow of capital, while causally related to the disturbance in our domestic economy and import trade, was different from any balancing mechanism as usually understood and was rather of a curious and coincidental character. The abrupt fall in business in this country gave rise to widespread rumors that, as a combative measure, the Government might engage in further currency manipulation and depreciation. Such rumors quickly discouraged further capital transfers to the United States and caused substantial withdrawals over a period of several months.

3. A further difference as compared with the initial situation in 1929 and 1930 is that foreign countries in the main were no longer committed to the defense of rigid exchange rates and of their exchange positions, which, moreover, had been generally bolstered by the rise in the value and in new production of gold. This flexibility was not a factor of major consequence during the period of sharpest decline in our business activity. The fall in imports was amply compensated for a time by the concurrent outflow of capital, as mentioned above, and, in fact, the pound sterling and various continental currencies, with the notable exception of the French franc, appreciated substantially in the exchange market. Latin American currencies, however, weakened early in 1938, and later in the year the decline became general as the flow of capital to the United States was resumed and our imports continued to lag behind exports.

4. In addition to the greater flexibility of exchange rates in general, by the time of the 1937-38 recession many foreign countries had developed intricate systems of trade and exchange controls and other techniques which helped them to absorb shocks from the outside without transmitting undue pressure to their internal economic structures. Such measures were most effective in countries like Germany that had most completely insulated themselves and were less effective in many

primary producing areas that remained perforce heavily dependent on the United States market.

5. Finally, among the important factors sustaining foreign production and the demand for American goods, despite the deflationary influence proceeding from our own recession, was the growing armaments boom during the months preceding the outbreak of the war in Europe and the active military demand from Japan, already engaged in the invasion of China.

FUTURE PROBLEMS AND POLICIES

Although various salutary lessons are to be drawn from our experience during the years extending from the end of the first World War to the beginning of the second, the conclusion that emerges most emphatically from the foregoing survey is the fundamental importance of maintaining a more stable and ample flow of dollars in transactions with other countries.

Two main sources of instability and disturbance in the international dealings of the United States stand out: (1) The extraordinary amplitude of fluctuations in domestic economic life, with concomitant variations in our purchases of foreign goods and services; and (2) the erratic behavior of capital movements, reflecting the sudden shifts of American interest in foreign investments and the fluctuating preferences of foreigners for American securities and dollar balances.

While the extent of causal connection between the two events is a moot question, the fact that the abrupt curtailment in our international lending in 1928 and 1929 was closely followed by a world depression of unparalleled magnitude with its epicenter in the United States imposed an intolerable burden of adjustment on a world economy already beset with serious maladjustments and political unrest. The decline by more than two-thirds in the supply of dollars currently made available to other countries over the short space of 3 years contributed forcefully to the collapse of the world economic and financial structure, the development of recovery programs abroad along narrow national and bilateral lines, and the general deterioration of our international economic position.

The end of the present conflict will afford this country an opportunity to assist in the development of a sounder world economic order and to regain a fuller participation in the benefits of international trade. The United States has already committed itself in the Atlantic Charter to the "fullest collaboration between all nations in the economic field with the object of securing, for all, improved labor standards, economic advancement and social security."

More specific objectives have been set forth in article VII of the "master agreements" signed by the United States and various other countries regarding Lend-Lease arrangements. This article particularly mentions three points:

- (1) The expansion, by appropriate international and domestic measures, of production, employment, and the exchange and consumption of goods, which are the material foundations of the liberty and welfare of all peoples.
- (2) The elimination of all forms of discriminatory treatment in international commerce.
- (3) The reduction of tariff and other trade barriers.

Pursuit of these aims, or of any other efforts to reestablish a sounder national and international economy, entails definite responsibilities on our part, with respect not merely to the formal content of our tariff laws and commercial agreements but also to the actual behavior of our international transactions. A world economic structure organized on the basis of equal treatment and with large scope for free enterprise cannot be maintained in the face of such reductions in the supply of dollars as have occurred in our international transactions in the past. Unless the supply of dollars is more adequate to meet the requirements of other countries, they assuredly will insist on their rights to exercise a close selective control over the use of the amounts available and to promote more intensive relations with third countries under preferential trading arrangements. And unless dollars are made available with greater regularity than in the past it would be both unjust and unwise to demand the removal of restraints and controls largely designed to protect the internal economies of other countries against external shock and pressure.

A more ample and stable flow of payments by the United States is also an indispensable condition for the maintenance of more orderly exchange relationships between the dollar and foreign currencies, as well as for the achievement of a more balanced distribution of world gold stocks and the prevention of further inordinately large gold movements to the United States. If this basic condition were not fulfilled, international monetary stability would probably prove untenable, even as the reconstituted gold standard of the twenties succumbed under the impact of the great depression.

Exports and Foreign Dollar Requirements

What will constitute an adequate supply of dollars in our future transactions with other countries cannot be predicted at this time. Apart from the probability that post-war prices will be on a generally higher level than in the late thirties, forces now discernible may be expected to decrease foreign dollar requirements, while others will work in the opposite direction.

During the interwar period, particularly during and after the great depression, foreign countries energetically pursued policies of industrialization and self-sufficiency. This development has been strongly accentuated by the enforced expansion of national productive efforts and capacities during the present war and may lead to the permanent loss of some of this country's export outlets for specific commodities.

On the other hand, more powerful forces will undoubtedly increase the demand for American goods far above the pre-war level, although there probably will be a considerable slackening as compared with the current huge wartime export movement. The war will leave a legacy of human want and misery that can be alleviated only through vast supplies of food, clothing, medicines, and other necessities. Moreover, the conflict has wrought staggering destruction of the productive equipment and resources of many countries. Other countries, less directly subject to devastation, also have suffered serious impairment in their productive capacity and working capital for normal civilian requirements through concentration on the war effort. These needs for relief and reconstruction will have to be met largely from

outside sources, and the United States stands foremost among countries able to supply them.

Beyond the critical necessities of the early post-war years lies a great task of economic development throughout the world in general and especially in areas that hitherto have enjoyed few of the benefits of progress. The demand for higher and more secure standards of living and for fuller utilization of natural resources is already finding expression in far-reaching national programs of economic and social advancement.

Execution of these programs will entail procurement of American goods in heavy volume. They will immediately require machinery and equipment of types in the manufacture of which American industry excels. In the long run, moreover, the increase in industrialization and living standards abroad should provide a strong and enduring demand for our producers' goods and also for the wide variety of American-manufactured consumers' goods so attractive to people with rising incomes. The strength of foreign demand for this country's industrial products in times of economic expansion was demonstrated in the prosperity of the twenties and, within the limits set by the available supply of dollar exchange, was again manifested during the upswing which reached a peak in 1937.

In brief, not only will post-war requirements for relief and reconstruction occasion a heavy flow of American exports, but there will also be an active demand of a more enduring nature for American goods, particularly industrial products. The indispensable proviso is, of course, that a sufficient supply of dollars be forthcoming to accommodate this potential trade. Again, forces will be working in both directions, some tending to increase the supply and others tending to reduce it.

Imports and the Supply of Dollars

Past experience clearly indicates that the greatest contribution toward a large and stable flow in the supply of dollars—indeed, an indispensable one—lies in the maintenance of a high level of national income and production in the United States. Achievement of such a goal is desirable for reasons of internal stability and progress, in addition to international considerations. Moreover, as domestic factors appear to have been chiefly responsible for the violence of our economic fluctuations in the past, so the remedies must be found largely through the development of a sounder internal economic and financial structure. The causal relationship between internal and external stability, however, runs in both directions, since a large and flourishing export trade would greatly stimulate domestic business activity. In other words, a fuller and more orderly process of economic development in the United States would promote and, in turn, be facilitated by a greater degree of stability and prosperity in our international transactions.

Assuming that the goal of a more fully functioning economy in the United States will be attained, the resulting stimulus on imports should not be exaggerated.

In the first place, our imports consist chiefly of raw materials and semimanufactured goods imported in amounts varying closely with

the course of industrial production. They are tied, so to speak, to the rate of domestic industrial activity and show no tendency to rise any faster. Another important group of imports consists of food-stuffs, for which possibilities of expansion are still more narrowly circumscribed. The behavior of imports stands in marked contrast to that of exports, which consist largely of high-standard-of-living goods and which, under conditions of economic expansion and rising incomes abroad, are susceptible of attracting a still more rapidly growing volume of foreign purchases. Imports of some finished manufactures, it may be noted, demonstrate a capacity for rapid increase in times of rising prosperity similar to exports, but the variety of such goods has been severely limited by the tariff, and they constitute only a minor part of the total.

In the second place, future imports will probably stand in lower relation to the volume of internal economic activity than in the past. The trend toward greater national self-sufficiency has also produced striking results in the United States. During the first World War the United States experienced a tremendous increase in industrial capacity, including notably the production of chemicals and dyestuffs previously obtained from Germany. During the present war the cycle has been partially completed with imports of raw materials from the Far East cut off and a consequent development of new sources and substitutes within our own borders. While careful evaluation of productive efficiencies as well as of political interests would doubtless reveal the desirability of resuming imports of many of these items—and, indeed, of reducing tariff duties against others—it must be reckoned as probable that many of the wartime developments will become a permanent part of our industrial system.

While limitations on the quantity of imports have thus been set by our tariff and industrial structure, an increase in total value may result from higher raw-material prices. The behavior of United States imports in relation to changes in price is highly distinctive. Over a broad range of commodities, such as a country's total exports or imports, a relative decline in prices generally may be expected to promote sales, while an increase in price works in the opposite direction.

This generalization is not valid, however, with respect to United States imports as a whole because they consist chiefly of primary goods or partially fabricated materials, which are largely noncompetitive, and for which the demand is tied to the course of industrial production. A decrease in foreign prices—whether direct or by means of currency depreciation—thus has little or no stimulative effect on United States imports, with minor exceptions, and only results in a fall in the total value of our purchases. This characteristic of American import trade is particularly unfortunate in times of depression and pressure on the balance of payments of foreign countries with the United States. It means that a fall in foreign prices under such conditions does not facilitate but only aggravates the problem of adjustment.

On the other hand, a rise in prices of United States imports has little retarding effect on our purchases but rather contributes to an increase in total value. This has been true under the various devices adopted by foreign countries in the past for raising prices of particular commodities, notably of rubber under the famous Stevenson Plan of the early twenties. Such methods usually succeeded for a time in raising

prices far above the point of balance between production and consumption. Their eventual failure was caused, not by any decline in volume of sales to the United States, but because of the accumulation of stocks and the encouragement given by higher prices to increased output by producers outside the control scheme.

Under the stimulus of war demand, primary prices have now recovered from their severely depressed state of the thirties, but this strength may not be maintained in time of peace. International efforts to effect special commodity agreements can and doubtless will be directed toward moderating the cyclical peaks and valleys typical of raw-material prices in the past.

By way of summarizing the prospects for the future of merchandise trade, both exports and imports probably will increase in total value as compared with their pre-war levels, but the forces stimulating exports will be different from and stronger than those determining imports. Provided that the supply of dollars on other accounts permits, a continuation of our characteristic export surplus may be expected.

Probable Trends in Service Transactions

Service transactions, although smaller in the aggregate than commodity imports and exports, have considerable weight in determining the balance in our international accounts. As with merchandise trade, it is impossible to assign definite values to future payments and receipts proceeding from these sources. Certain trends are, however, discernible.

A wartime development in shipping, analogous to that affecting some of our raw-material imports, is tending to make the United States more independent of foreign countries. During the interwar period foreign vessels handled 63 percent of American imports and exports⁵ and the greater part of American tourist travel to oversea countries. The United States balance of payments accordingly showed substantial net payments over receipts on freight and shipping account. Our present policy, in the interest of national security, is to build and maintain a merchant fleet capable of carrying a larger part of our foreign trade. Accordingly, net payments on this account will undoubtedly be reduced and perhaps replaced by an excess of receipts.

American expenditures for foreign travel constitute one of the most likely sources of increase in the supply of dollars. Travel is, in a sense, the most important luxury "commodity" purchased from foreign countries and, typical of its class, shows a very high response to rising income. Under conditions of prosperity in this country and reasonable security abroad, travel outlays after the war may again rise to or above the high levels reached in 1929.

By contrast, personal remittances by residents of the United States to relatives and friends abroad, which were an important source of dollar exchange to foreign countries after the first World War, are unlikely to play a similar role in the future. These remittances showed a pronounced secular decline throughout the interwar period, reflecting the sharp fall in immigration and the gradual weakening of ties between residents of foreign origin and their mother countries.

⁵ Based on tonnage figures, 1921-39.

Under these conditions, little more than a slight and short-run increase in such outpayments is to be expected after the present war.

There is little basis for expecting a definite trend one way or the other in net receipts on interest and dividend account in the early post-war years. Important British investments in this country were sold or hypothecated in the early stages of the war, thus tending to reduce the future supply of dollars to the United Kingdom. Increased returns will doubtless accrue on other foreign investments here if a higher level of American prosperity is maintained.

On the other hand, some of this country's investments in foreign countries have been destroyed or impaired by the war, and others have little prospect of an early recovery in earning capacity. However, returns on many of the investments so affected, especially in Central Europe, had already been curtailed by exchange control and other restrictions long before the war, and further reduction will not necessarily be large. The most important factor will be the state of business in nearby areas—Canada and Latin America—where the greater part of our direct investments have been made.

If relatively prosperous conditions are maintained in these areas, net receipts on interest and dividend account may be somewhat larger than before the war. Moreover, in the long run an increasingly large excess of receipts on direct investments is to be reckoned with if, as subsequently suggested, the investment of American capital abroad is resumed in significant amounts.

Post-War Relief and Rehabilitation

Finally, one other type of "service" transaction must inevitably constitute the most important contribution toward solution of the dollar-supply problem during the early post-war years. This contribution will be in the form of direct material assistance rendered by the United States in meeting the vast burdens of relief and rehabilitation in the war-torn areas of Europe and Asia. The materials required for this purpose must come chiefly from countries with large and unimpaired productive capacity and available stocks, among which the United States will be preeminent.

Some countries stricken by the war will be able to pay for part or perhaps all of their relief needs out of gold and dollar reserves previously accumulated and now immobilized in this country. By and large, however, the limits of such reserves and the size of the relief problems—particularly in Eastern Europe and China—are such that much and possibly most of the financial load must be assumed by the United States. To a limited extent, this assistance may be supplied by semiofficial and private institutions, such as the Red Cross and other relief organizations, but the major part may have to be furnished by the United States Government. Recognition of the urgency of relief needs and of the contribution that prompt aid will make to the success of our armed forces has already resulted in a program of assistance for the liberated areas, but it is obviously impossible to come to grips with the problem as a whole until the Axis forces have been rolled back and vanquished.

In the interest of all, however, direct assistance by the United States Government should not extend beyond the period of relief and rehabilitation, and as soon as human want and suffering have been

relieved and economic life restored the international exchange of goods and services, together with the further reconstruction and development of other countries, must be put on a sounder and more self-sustaining basis.

Interest of the United States in a High Level of International Transactions

Examination of forces and trends now discernible in our international transactions indicates that, especially after the termination of immediate post-war aid to foreign countries by the United States, the flow of dollars supplied through purchases of goods and services from other countries will be not only less than they would like to spend in this country but less than they must spend if reconstruction and development programs abroad are to be carried through on a scale commensurate with basic needs and legitimate aspirations. In addition to retarding recovery and progress abroad, with attendant delays in the achievement of a more peaceful and orderly world society, restriction of our international transactions to a relatively low level would entail serious disadvantages from a national point of view.

A low level of transactions between the United States and other countries would inevitably mean perpetuation of restrictive trade and financial controls abroad and further development of bilateral arrangements among foreign countries to the exclusion of the United States. Foreign demand will not be evenly spread over all our export goods but will be directed first toward types essential for carrying out programs of economic reconstruction and development. In the absence of a relatively plentiful supply of dollars permitting a greater measure of freedom, foreign governments will insist on exercising selective control over the uses to which the available amounts are put. Beyond this, they will have to promote their foreign trade generally without opening their doors to more goods from the United States than they can pay for.

The United States will emerge from the war with an enormously expanded industrial and agricultural capacity and will be confronted with grave difficulties of readjustment to peacetime conditions. Reappearance of civilian demand in this country and relief and rehabilitation activity abroad will constitute a strong market in the months immediately following the end of hostilities and serve to postpone some of the necessary adjustments. A healthy and continuing foreign demand for American goods will greatly facilitate these adjustments, minimize the dangers of economic collapse and unemployment, and generally assist in the maintenance of production and national income at high levels.

Although various branches of industry, such as machinery and machine tools, automotive products, and aircraft, will be dependent on foreign markets to absorb their expanded output, the interests of agriculture are special. It is not as easy to establish for farm products technical superiority, such as that which marks our manufactured goods, and in general farm products are subject to intense competition in foreign markets from other sources of supply. For reasons given in the second preceding paragraph, American agriculture cannot hope to recover and maintain large foreign outlets, beyond the obvious

requirements of post-war relief, except within the framework of a large volume of international transactions.

The future interests of the United States, both as a member of world society seeking to bring order and progress out of chaos and as an individual nation grappling with vast problems of economic readjustment and reemployment, are therefore to maximize its international transactions and, to this end, to make available a larger and more stable supply of dollars. There are two principal ways by which this result may be attained, and these are not mutually exclusive but rather are naturally complementary. One way is by a renewed outflow of American capital, and the other is by positive measures to permit a larger volume of imports.

Need for a Sound International Investment Program

In view of our high standard of living and enormous capacity for saving, it is both natural and logical that American capital should resume investment activity abroad on a scale large enough to sustain this country's export trade and concurrently support reconstruction and development programs in foreign countries.

It was also natural and logical that this country should have supplied investment capital to other countries after the first World War. Unfortunately, two cardinal mistakes were made: (1) There was, far too frequently, an extremely poor choice of investment risks, reflecting both the absence of any official policy and the abuse and mismanagement of the capital market by inexperienced and unscrupulous investment houses temporarily attracted by opportunities for abnormal profits; (2) largely as a result, the outflow of American capital behaved in an erratic fashion, rising to a peak in the first half of 1928 and falling sharply thereafter.

Whether because of disturbances thereby set in motion or by tragic coincidence, the advent shortly afterward of a world-wide depression with a particularly marked and prolonged decline in United States imports inevitably caused many otherwise sound loans to go into default along with those that were patently bad from the beginning. That service was successfully maintained throughout the depression on approximately two-thirds of our total foreign bond holdings is, in fact, rather more surprising.

Under these circumstances, the unfortunate results experienced on part of this country's foreign investments should serve not to stifle initiative in this field but rather to point the way to sounder policies and practices. The fundamental requirement is that investment programs be formulated on a comprehensive and long-range basis and executed at a reasonably regular rate and in a manner that will both strengthen the economic and social structure of the borrowing country and provide reasonable returns and adequate safeguards to the investor. The responsibility for developing such programs will doubtless be borne chiefly by the governments concerned, and much of the capital may have to be provided through official agencies. Certainly the methods of foreign-bond flotation employed in the twenties would be both unacceptable to the individual investor and undesirable in the interest of international stability. The answer for the future depends largely on the initiative and ability of private capital to work out methods of investment that will meet the basic requirements specified.

The most promising outlet for private American capital would seem to be direct investments. During the interwar period investment of capital in the form of enterprises partly or wholly under American control yielded results that were, in general, more satisfactory from several points of view than investments in foreign dollar bonds. Direct investments proved to be far less of a burden on the international exchanges in times of depression, being subject to variable returns in the currency of the capital-importing country rather than to fixed debt charges in dollars. Largely because of this flexible feature, American direct investments abroad weathered the depression much more successfully than the foreign dollar bond portfolio.

Another comparative advantage of direct investments indicated by the experience of the interwar period is that they made a more positive contribution—through development of industrial capacity—toward strengthening the general economic position of capital-importing countries. The profit motive underlying the establishment of American enterprises abroad tended to insure their productivity, whereas loans floated by foreign governments were not subject to this test. Another contributory factor was the continuing American interest, accompanied by American technical and managerial services, in the successful operation of these enterprises.

Much may be said for making future direct investments abroad under conditions permitting appropriate financial and managerial participation by nationals of borrowing countries. Joint participation by American and foreign business interests has already yielded excellent results in some countries, notably Canada and the United Kingdom, and similar methods might well be more extensively employed in other areas. This expedient serves to "nationalize" enterprises financed by alien capital, to reduce the friction commonly generated by absentee ownership, and, thus, to deter movements toward expropriation and various forms of tax and other discrimination. It also provides opportunities for the development of technical and managerial skills among the nationals of the borrowing countries.

Possibilities for extending loans, as distinguished from direct investments, for the post-war development of underindustrialized countries are extremely limited except through official agencies.

International investment problems relate not only to the behavior of American capital but also to that of foreign capital. Foreign interest in United States investments is a matter of long standing. In contrast to its important pre-1914 role in developing the American economy, however, foreign capital during the interwar period made little positive contribution either to this country or to the countries from which it came, and, on occasion, was a seriously disturbing factor. In times of business expansion in the United States and economic or political difficulties abroad, foreigners tended to shift funds to the United States in heavy volume, although largely into speculative stocks and other impermanent forms. International capital movements of this nature fulfilled little or no useful function. Unless brought under control in the future, such movements might readily nullify efforts along other lines to attain greater stability in international transactions and would decrease the amount of dollars available to foreigners for purchases of American goods and services.

Reduction of United States Trade Barriers

The second principal means of increasing the flow of dollars regularly supplied to other countries is through a further reduction in the United States tariff structure beyond that already achieved under the reciprocal trade agreements program and on a scale sufficient to permit a larger volume of imports. This course of action is not an alternative but a natural corollary to new investment of American capital abroad in the years of peace ahead.

For one thing, an outflow of capital should not be looked upon primarily as a means of effecting adjustments to major and long-run strains in international transactions. It must be soundly based on the practical possibilities for carrying out economically remunerative investment projects. For such purposes capital should be readily and amply provided. But beyond these limits extension of loans to other countries would serve only to support for a time foreign demand for American goods at levels untenable in the long run and would result in accumulation of an unduly large and vulnerable international debt structure. So far as possible an increase in foreign demand for our products should be offset by larger imports into the United States. The balancing of the supply and use of dollars in this manner would constitute a firmer basis for long-run stability in our international transactions.

In the second place, provision of capital to foreign countries is not a means of avoiding adjustments to an excess of dollars used over dollars supplied on trade and service transactions. It only postpones inevitable adjustments. In time the increasing return flow of returns on investments, together with repayment of capital on loans, must entail a corresponding shift in trade and service accounts. Such a shift can be accomplished only by an increase in purchases from foreign countries or a decrease in sales to them. For a growing and prosperous country the former course is by all odds to be preferred. From the standpoint of the investor, whether an individual or a nation, the very purpose of capital accumulation is to forego present consumption in order to enjoy a fuller and richer future. The placing of obstacles in the path of such natural and desirable adjustments can mean only one of two things: (1) The full burden of change must be borne by a decline in exports, or (2) the shortage of dollars must give rise to defaults or an accumulation of frozen balances abroad. Public policy should therefore be directed toward facilitating rather than hindering the flow of imports, which are the principal vehicle for the transfer of financial payments.

These considerations do not mean that the United States should forthwith scrap its tariff structure. Exchange rates, price levels, labor standards, and other basic conditions influencing exports of foreign countries may be subject to flux for some time after the war and may afford temporary advantages to foreign producers that could not be maintained in the long run. To expose domestic producers to sharp disturbances emanating from short-run situations of this character would be undesirable.

On the other hand, to wait until a more durable balance has been achieved in our international transactions before further reducing our trade barriers would be a mistake, because a larger volume of United States imports must be an essential part of future trading relation-

ships if they are to be based on a high rather than a low level of transactions. As the most practicable means of lowering the tariff wall, the reciprocal trade agreements program should be prosecuted as vigorously as possible not only after but also during the present conflict.

Both in the negotiation and in the appraisal of these agreements, however, emphasis might well be placed less on the concessions obtained from other countries and more on the reductions effected by this country. If the record of the past proves anything, it is that other countries have consistently tended to purchase American goods and services in larger and more regular volume than the United States has bought of foreign goods and services and that the major handicap to exports has not been trade restrictions abroad so much as the underlying shortage of dollars. The latter difficulty will be intensified unless the United States renders possible a freer flow of imports.

Critical Importance of the Period of Transition

The problems of the immediate post-war years will be among the most difficult of all, and the manner in which they are resolved may well set the stage for this country's internal and external economic well-being for years to come. For instance, although the selection of appropriate exchange rates will be difficult and the possibility of subsequent adjustments should be retained, it is inconceivable that the foreign exchanges should forthwith be set free to find their own "natural" levels, as was done after the last war. Another major transitional problem will be the dire need of many foreign countries, among both our Allies and our enemies, for outside assistance to pay for their relief needs and to rehabilitate their economies.

The real heart of the immediate post-war problem, however, will be not so much an initial general lack of purchasing power but a relative abundance of accumulated dollar reserves and the strength of demand, both domestic and foreign, in the face of a continued though temporary shortage of things—goods and possibly also ships. Until these shortages are made good, only one solution is possible: Continuation of allocation of supplies to meet the most urgent needs, rationing to the individual consumer, price control, and restraints on the liquidation of savings. However unpalatable maintenance of these restrictions for a time after the war may be, their sudden abandonment could only mean a repetition on a vastly more disturbing scale of the speculative boom-and-depression sequence experienced after the first World War.

Special importance therefore attaches to the disposition of accumulated foreign short-term assets in the United States. According to data assembled by the Treasury Department in June 1942, but based partly on the results of its census of foreign property in the United States as of June 1941, the total of these short-term assets, including earmarked gold, was more than \$6,500,000,000, with the announced distribution as given in table 2.⁶ The assets of enemy countries as

⁶ U. S. Treasury Department. Administration of the Wartime Financial and Property Controls of the United States Government. 1942. P. 40.

The figures cited above and in table 2 do not include foreign-owned long-term investments, which are far less susceptible of sudden liquidation than gold and dollar balances. (The amount of long-term investments in the United States owned by residents of foreign countries as of the end of 1941 is estimated by the Department of Commerce at \$5,300,000,000—a figure substantially lower than the preliminary figures of long-term investments reported by the Treasury in the publication cited. The difference is attributable chiefly to additional data revealed by the Treasury's census. Final results of the census have not been announced.)

shown were negligible. Also, although not shown separately, the dollar resources of our principal Allies were seriously depleted, according to information submitted in connection with the Lend-Lease program. On the other hand, the gold and dollar balances of the United States belonging to Latin American countries were nearing the billion-dollar level, according to the figures reproduced in table 2, and they have since further increased as a result of heavy war purchases and other expenditures by the United States. Several of the occupied and other blocked countries also have large holdings, chiefly accumulated before the war or during its early stages.

TABLE 2.—*Foreign-Owned Gold and Short-Term Assets in the United States as Reported by the Treasury Department in June 1942*¹

[In millions of dollars]

Groups of countries	Earmarked gold	Deposits and other banking assets	Total
Enemy countries.....	24	160	184
Enemy-occupied countries ²	1,269	1,225	2,494
Other blocked countries ³	848	975	1,823
Other American Republics.....	322	605	927
All other countries.....	4	1,115	1,119
Total.....	2,467	4,080	6,547

¹ Deposits and other banking assets are preliminary totals computed from the Treasury census of foreign property in the United States as of June 14, 1941.

² Plus Finland.

³ Including China.

If suddenly released for expenditure on American goods in short supply after the war, these foreign balances could help to support for a time a major inflationary boom—to the long-run detriment of all concerned. Ways should therefore be found for preventing this accumulated buying power from being dissipated in a surge of competitive bidding and for assuring rather that it provide a more gradual and continued support to international transactions generally. Part of these balances might be withdrawn in the form of gold, or left indefinitely under earmark, to bolster the reserve position of foreign countries—a development that could only be welcomed by the United States in view of its excessively large gold holdings. Beyond this, it would be highly desirable if a large part of these funds were channeled into long-term investment, along with American capital, in accordance with the suggestions previously made for working out international development programs. Latin American short-term assets, for instance, would be adequate under appropriate conditions to finance a considerable part of the industrialization and other developmental projects that could be undertaken in that area.

A substantial measure of foreign participation in these programs would have the twofold advantage of helping to hold the future international debt structure down to lower and more balanced proportions and of increasing foreign interest in the enterprises established—features that would help to protect the American share in international investments from unfavorable economic or political trends abroad.

Need for a Comprehensive and Consistent Economic Policy

In the preceding pages the past functioning of the international transactions of the United States has been briefly surveyed—a subject developed in greater detail in the following chapters—and an attempt has been made to point the way toward a more successful conduct of our economic and financial relations with other countries in the future. As the most important means to this end, primary emphasis has been placed on the maintenance of conditions permitting a relatively large and reasonably regular flow of payments to foreign countries. The most essential of these conditions lies not in the field of foreign economic policy as such but in the attainment of a more fully and smoothly operating domestic economy, the major determinant of the volume and course of our purchases of foreign goods and services. In addition, a more adequate supply of dollars should entail both a freer flow of imports through further tariff reductions and a renewed participation of American capital in international investment.

Cogent reasons have been advanced as to why a relatively high level of international transactions is in the interest of the United States both as a nation and as a member of the society of nations. A high level of transactions is not altogether indispensable, however, to the achievement of economic well-being either at home or abroad. The record of the thirties demonstrated that foreign countries, save for those narrowly dependent on the American market, could adapt themselves, after initial serious disturbances, to a relatively low level of exchange with the United States and yet attain a substantial internal prosperity and promote their trade with each other. And, in time, this country could also make the necessary adjustment in its export trade and domestic economy, although with difficulties exemplified by the agricultural policies of recent pre-war years. A world economy organized on this basis would unquestionably be less progressive and more subject to commercial restrictions and discriminations, but it is an altogether possible one.

What is emphatically not possible is to have it both ways—a large volume of dollar receipts against a small volume of dollar payments. Yet United States foreign economic policy in the past has been largely predicated upon this manifest impossibility, most notably when the tariff on imports was sharply increased on two occasions in the face of continued efforts to collect war debts and promote exports. Just as the supply and use of dollars have to be brought into either natural or forced adjustment, so are all aspects of foreign economic policy inter-related. The conduct of economic relations cannot be successful in the aggregate unless individual economic policies are harmonious and consistent. This country can, for instance, impose tariffs on rubber and other goods recently brought into domestic production—and, without prejudicing the case, military interests may require such protection—but it would be prudent to make provision at the same time for the transfer of additional thousands of workers from agriculture and other exporting industries and for the assistance of still greater numbers whose livelihood is indirectly derived therefrom.

Of even greater importance than the general level of the flow of dollar payments is the need for continuity and regularity in our foreign economic policy and in the actual behavior of our international

transactions. It would be tragic indeed if the United States, after a period of renewed full participation in the world economy, were to permit another abrupt fall in the supply of dollars to disturb the recreated international trading and financial mechanism, whether willfully through increased trade restrictions, carelessly through the misbehavior of foreign investment, or involuntarily through the improper functioning of the domestic economy. Commercial and investment policies, however, are susceptible of intelligent determination and should no longer constitute such disturbing elements as in the past. The functioning of the American economy as a whole beyond question presents the most baffling problems. On the solution of these problems through the maintenance of a high and reasonably stable level of economic activity in the United States the interests of this country and other countries are most clearly and indisputably united.

CHAPTER I

THE SETTING OF THE PROBLEM

Importance of the Interwar Period

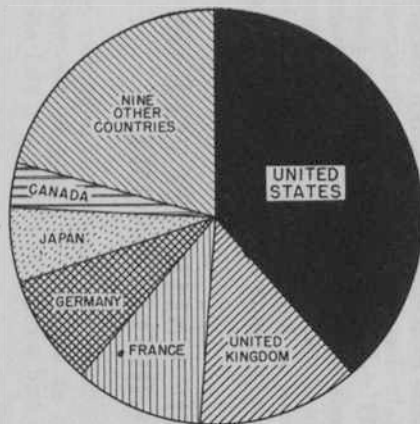
This study is devoted to an analysis of the economic and financial relations between the United States and other countries during the period 1919 to 1939. The critical importance of the period is perhaps sufficiently emphasized by the fact that it began and ended with war and that it represents from every point of view a distinct chapter in the history of the world economy. More specific reasons may be given, however, for a close examination of our international transactions during these two decades.

1. The world will soon be confronted once more with the task of attempting to construct a viable economic and financial system. Past failure in this field is commonly recognized as one of the major causes of the present chaos, and there is a general determination to build more soundly in the future. It is therefore imperative to identify the causes of the disintegration of the world economy in the interwar period and, with more specific reference to the scope of this study, to ascertain the role of the United States in this experience.

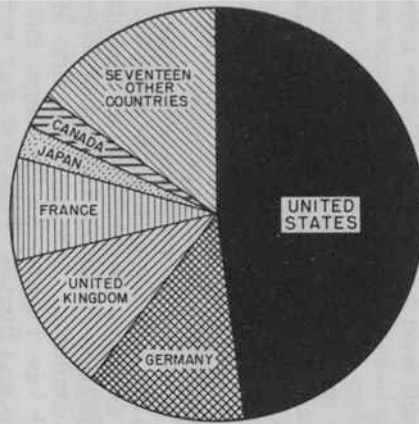
2. Some of the most serious pressures and strains in our international transactions of the past can be expected to recur in the future. For example, the problems of transition and of relief and rehabilitation following the end of World War II will be basically similar to those after the first World War, although on a far vaster scale. In the longer run, while the international trade and finance of the post-war world will not simply revert to pre-1939 conditions, neither will they be dissociated altogether from the past. Many established patterns of international relationships, although obscured, will not have been completely destroyed even under the stress and strain of global war. If different patterns are the goal of future policy, the resurgent forces of the past must be understood and rendered amenable to control. Some of the knottiest problems of post-war commercial and monetary policy will have grown directly out of developments in the years immediately preceding the war.

IMPACT OF THE UNITED STATES ON THE WORLD ECONOMY

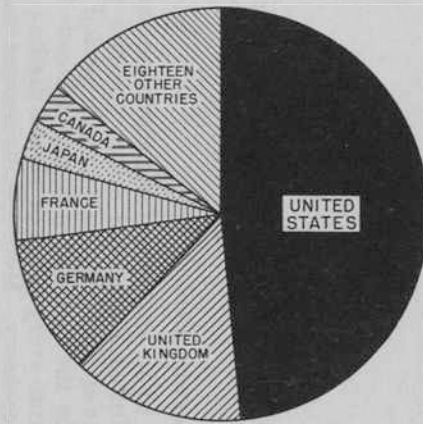
In studying the international transactions of a smaller country, developments in the world at large usually may be accepted as forces over which that country had no decisive influence, and attention may



RELATIVE VALUE OF CONSUMPTION
OF 9 PRINCIPAL RAW MATERIALS
AND FOODSTUFFS, 1927-28



RELATIVE VALUE OF
INDUSTRIAL PRODUCTION,
1925-29



RELATIVE VALUE OF NATIONAL
INCOMES EXPRESSED IN
DOLLARS, 1929

Chart 3.—The weight of the United States in the world economy.

be concentrated on its problems and policies in the light of broad external developments. Such an approach would be inadequate with respect to the United States, however, since this country is not merely affected by events abroad but in turn exercises a profound influence over them.

Economic Weight of the United States

The dominant role of the United States in the world economy is suggested by the fact that it ranked as the premier exporting nation during the interwar period, accounting for 15.6 percent of the world total in 1929. In the same year, its share of total imports was 12.2 percent, being exceeded only by that of the United Kingdom. With respect to imports of raw materials only, the United States was easily the most important importer.

A more balanced view of the international position of the United States may be obtained by comparing its consumption of key commodities with that of other leading countries. Computations by the United States Department of Agriculture, based on data for 1927 and 1928, show that this country's share in the consumption of nine principal raw materials and foodstuffs was 39 percent of the total for the 15 most important commercial nations.¹ The relative shares of the United States and other leading countries are indicated by chart 3.

A still more striking indication of this country's dominant place in the world economy is furnished by comparisons of industrial production. Computations useful for this purpose have been made by the Economic Intelligence Service of the League of Nations in determining the relative country weights used in its index of world industrial production. The criterion employed was the net value of industrial production (value added in the process of manufacture), which in turn was based on a detailed comparative study of industrial censuses or other relevant data for the period 1925-29. On this basis the relative industrial importance of the United States was placed at 46 out of 100 for all countries, including the Union of Soviet Socialist Republics, or 48 percent if the U. S. S. R. is excluded, as in chart 3.²

Another forceful impression of the international position of the United States is obtained by a comparison of purchasing power as indicated by estimates of national income. Unfortunately, such estimates are available only for a limited number of countries and are computed by different and sometimes rather questionable methods. As a rough measure, however, these figures indicate that national income in the United States in 1929 was as high, in terms of dollars, as in 23 foreign countries combined, including the United Kingdom, Germany, and France (chart 3). In terms of "real" income, the relative share of the United States was, of course, far less because of the

¹ The nine commodities used in the compilation are: Cotton, wheat, sugar, rubber, silk, copper, tin, tea, and coffee. "A comparison of the value of the production of these commodities with the value of the production of a longer list of commodities important in international trade indicated that the group of nine commodities represented not only those commodities which were primarily most important from the standpoint of the total annual value of production but also those which were most important in terms of value in international trade. This group of commodities also represented a fair distribution as between foodstuffs, raw materials for textile production, and raw materials for industrial use."

Source: Wall, Norman J. Monthly Index of World Industrial Production, 1920-1935. U. S. Department of Agriculture, Preliminary Report. June 1936. Pp. 9, 11. [Processed.]

² League of Nations. World Production and Prices, 1935-36. 1936. Pp. 21-22.

generally higher prices of goods and services in this country; nevertheless, the comparison serves to illustrate the importance of American purchasing power in the functioning of the world economy.

Variability of Domestic Production

The foregoing comparisons may be objected to for the reason that they pertain to the late twenties, the period of our highest peacetime prosperity, and that similar comparisons for later years would yield more moderate results. Such objections, however, point to a dynamic aspect of our international relations not revealed in these static comparisons, which is of the utmost importance in gaging the impact of economic trends in the United States on other countries.

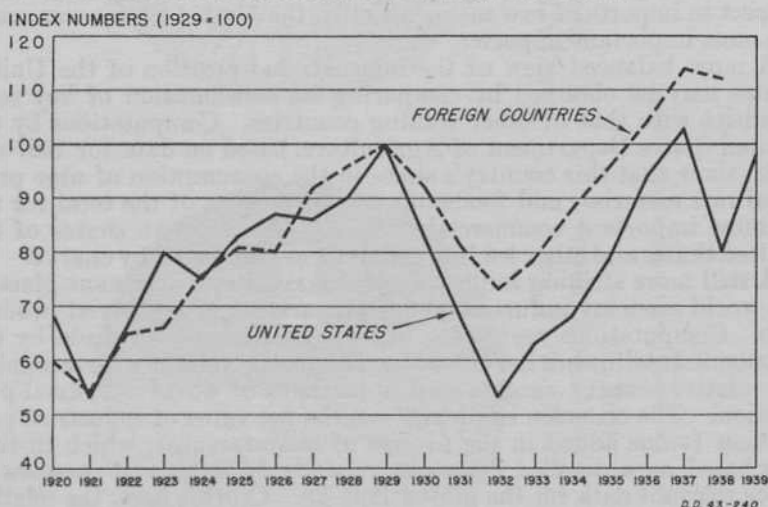


Chart 4.—Indexes of industrial production in the United States and in foreign countries (excluding U. S. S. R.), 1920-38.

According to a principle in physics, force is equal to mass multiplied by acceleration. The same principle may be applied by analogy to the present subject by noting, as has been done, the heavy "mass" of the United States in the world economy and by then observing the relatively high variability in our business transactions. Here also various means of approach might be employed, but the simplest and most conclusive evidence is afforded by a comparison of industrial production at home and abroad. In this application, however, it is not the relative weight of industrial production at a given moment but its course through time that is to be observed. Such a comparison is made in chart 4, from which it is apparent that the amplitude and vigor of industrial fluctuations were considerably more pronounced in the United States than in foreign countries during the interwar period.³ This conclusion is strongly reinforced when account is taken of special factors—strikes in the United Kingdom in 1921 and 1926 and the collapse of German industry during the occupation of the

³ An index of business activity for any one country, of course, exhibits more short-run variability than the total for a large group of countries, in which individual aberrations tend to cancel out. This, however, does not explain why major changes in the business cycle should have been so much more violent in the United States than in other industrial countries, as they were in 1920-21, 1929-32, and 1937-38.

Ruhr in 1923—that introduced sharp but temporary declines in industrial production abroad not attributable to cyclical influences.

Size and Variability of Financial Relationships

Similar conclusions with respect to the key role of the United States emerge when attention is shifted from trade and production to financial transactions. During the decade following the first World War, the United States was the primary source of international loan capital. From 1919 through 1929 foreign loans floated in the United States provided some \$7,500,000,000 of new capital to other countries, or more than the total of similar issues floated in the United Kingdom, France, the Netherlands, and all other capital-lending countries combined. Through these loans, as well as through new direct investments abroad, there was a heavy outflow of long-term capital, although foreigners at the same time invested substantially in this country through the stock market. In the thirties, by contrast, new loan issues and other investments of American capital abroad came to a virtually complete standstill, and there was instead a heavy net inflow of capital from other countries.

Also of great significance is that the United States, because of its claims arising out of intergovernmental debts originating in the first World War and the rapid expansion in its foreign investments during the next decade, had become by the end of the twenties one of the world's leading creditor nations. The only country with foreign claims and investments equal to or possibly in excess of those of the United States was the United Kingdom, whose creditor position had been built up more gradually during the preceding century. And it is an especially critical fact that fixed debt service obligations payable to this country, as distinguished from more variable receipts from direct investments, aggregated more than \$900,000,000 annually at the beginning of the great depression.⁴

Other factors that should be considered with reference to the international position of the United States are its heavy share in total world gold stocks, the chronic attraction of the dollar for flight capital from other countries, and the lure of the stock market for foreign speculators.

In brief, the United States not only has exerted a tremendous influence on the world economy but also has shifted its influence with peculiar force. The impact of domestic economic developments on the rest of the world and the repercussions of its policies in the international sphere can scarcely be overrated.

BALANCE-OF-PAYMENTS RELATIONSHIPS AND PROBLEMS

The balance of international payments affords a statement, based partly on actual records and partly on estimates, of the transactions between the United States and foreign countries through which their reciprocal influences are expressed. For reasons of convenience, these transactions are considered under a number of broad groups, such as

⁴ Including war-debt receipts from other countries and interest and amortization receipts on other loans for foreign account (excluding, however, a small element of fixed-service obligations due by American-owned foreign corporations, which are included with direct investments abroad).

merchandise trade, travel expenditures, and long-term capital movements. But each group consists in fact of hundreds of thousands of separate transactions in both directions concurrently carried out by a host of individuals and enterprises, each motivated by profit or other considerations. These separate transactions, however, are bound together by common features, making of the balance of payments something far more than a mere aggregation of unrelated items.

Influences Determining the Course of International Transactions

The first important common feature that may be noted with respect to our international transactions is that, over broad classes, they are more or less consistently determined by the same general forces. Broadly speaking, United States purchases of goods and services from foreign countries vary in response to business conditions in this country, increasing in times of rising prosperity and falling with business decline. The same thing is generally true of business conditions abroad and foreign purchases from the United States.

Within this broad framework, however, trade in individual commodities or commodity groups exhibits patterns of behavior differing to greater or less extent from the general trend. Imports of certain items characteristically respond more vigorously to changes in business conditions and purchasing power than those of other goods. Service transactions also show varying degrees of response to business conditions. Earnings on direct investments abroad, for example, are closely related to the prevailing state of business in foreign countries, whereas receipts of interest on loans are directly tied to the principal amount outstanding and do not vary according to general economic conditions except as extreme depression may induce default or as a revival in business may permit resumption of previously defaulted service. Moreover, many special influences, such as tariff changes, exchange control, shipping subsidies, and droughts, may cause a sharp divergence in trade and service transactions from their usual course.

Because of these considerations, an appraisal of our international transactions during the interwar period must involve, as a first step, an investigation into the proximate influences bearing on the various trade and service transactions, together with an analysis of their typical patterns of behavior in response to these influences. An investigation along these lines is undertaken in chapter II.

Payments to foreigners on trade and service transactions are characterized by the fact that they involve an immediate *quid pro quo*. Payments for imports, for example, have their counterpart in the goods received, and payments for travel abroad have theirs in the various transportation, hotel, and similar services rendered by foreigners. Similarly, receipts from foreigners on trade and service account entail an immediate *quid pro quo* rendered by residents of this country.⁵ Since these payments and receipts have in each instance their counterpart in some immediate good or service, they are designated "current transactions" or as composing the "current account."

⁵ For some service payments—for example, institutional contributions to relieve distress abroad or personal remittances to provide assistance to relatives—the *quid pro quo* is intangible and in the nature of psychological satisfaction. Interest and dividends, while growing out of past investment, must be thought of as payment for the current use of capital—also a highly intangible form of service.

Capital movements, on the other hand, do not represent payments for goods or services currently received or rendered but have their counterpart in some past or future transaction. This description holds true even though the movement of funds is accompanied by the transfer in return of securities, titles to property, or other claims, since such instruments merely constitute legal evidence of the acquisition of future rights or the liquidation of obligations created in the past. Capital movements are further characterized by the fact that they are subject to influences different from those determining trade and service transactions.

In general, forces determining the international flow of capital are much more unstable than those influencing current transactions—a difference particularly marked during the interwar period. As a result, capital movements are erratic and, with special reference to security transactions and movements of short-term capital, may be suddenly and violently reversed—a behavior exceptional for commodities and nonexistent for services which are consumed in the same process by which they are created.

In view of the difference between current and capital transactions, both in their nature and in the forces to which they respond, capital movements during the interwar period require separate analysis. This analysis is made in chapter III.

Necessity for Balance Between Receipts and Payments

In many respects the most important characteristic of our international transactions, and one which establishes definite relationships between them, is the necessity for an approximate balance between payments made to foreigners and payments received from them. The operation of forces tending toward a balance is sometimes obscure, but the necessity for a balance is readily shown. It arises from the elementary fact that a nation, like an individual or any other economic entity, cannot pay out more than it receives except by drawing on its cash reserves or by borrowing. Or, stated inversely and with more pertinence to our international position as described in this study, foreign countries, considered as a group, cannot make dollar payments to this country in excess of the dollar payments that we concurrently make to them except by drawing on their reserves of gold or dollar balances or by borrowing in this country.

Gold movements and changes in short-term funds, including both our claims on foreign countries and their claims on us, may be called "balancing items." That is, movements of gold and short-term funds may be considered as being primarily of a passive character, resulting from more or less temporary differences between payments and receipts on other accounts. It is also useful to speak of the sum of payments made by us on all other transactions—purchases of goods, services, and long-term investments—as the "supply of dollars" made available by the United States to other countries and, similarly, to consider our corresponding receipts as constituting the "use of dollars" by other countries in making payments to the United States. Our international transactions arranged according to this classification are shown in table II.

The distinction thus made between "balancing items" and other transactions is somewhat arbitrary and imprecise. It is justified by the fact that procurement of foreign exchange by reduction in gold stocks or accumulated cash balances cannot continue indefinitely and represents an impairment in a country's reserve position. Short-term borrowing is similarly subject to limitations and also constitutes an impairment in a country's reserve position in that funds so obtained may be quickly recalled.

But exceptions to this broad classification must be noted. In the first place, exports of newly mined gold constitute a regular source of foreign exchange for producing countries and are not a drain on their reserves. In very recent years this qualification has tended to apply to the external world in general vis-à-vis the United States because of the enormous rise in gold production beyond requirements for monetary reserves. In the second place, in times of stress a country may finance needed imports by marshaling and selling its long-term investments in addition to drawing on its gold and foreign-exchange reserves. In such instances the distinction between the two categories of transactions is scarcely valid. The outstanding example is furnished by the United Kingdom's methods of financing its purchases in the United States in the early stages of World War II before Lend-Lease aid began on an important scale. Such methods, however, are rare in peacetime.

It is also important to note that short-term capital movements are frequently not of a passive and "balancing" nature. In fact, movements of short-term capital during the interwar period originated to a large extent not in disparities in the general balance-of-payments position, but in the search for safety or speculative profit or in other special factors. For the most part, however, movements of the latter sort were offset directly by gold shipments or by other short-term capital movements in the opposite direction. Hence, although both short-term capital and gold movements must be explained largely in terms of special factors, as discussed in chapters III and IV, the difference between the two, or their sum when they move in the same direction, may be regarded in the main as the result of disparities between the supply and use of dollars.⁶

This method of treatment is illustrated by the figures shown for 1933 in table I. In that year there was a net gold outflow of \$173,000,000, but this movement did not result from any strain in that direction in our general balance-of-payments position. As a matter of fact, the strain was in the opposite direction, inasmuch as foreigners made excess payments of \$185,000,000 to us on trade, service, and long-term capital account. What happened was that foreigners not only drew down their dollar balances by the amount required to pay for this excess but also withdrew large additional amounts as the banking crisis reached its climax early in 1933 and the fear spread that the dollar would be depreciated. The consequent total decline in foreign short-term funds in this country was \$454,000,000.

⁶ "Unexplained items" are also included with "Balancing items" in table II. This was done primarily because "Unexplained items" cannot be assigned to either "Supply of dollars" or "Use of dollars," but "Unexplained items" also probably reflect in large part unrecorded movements of short-term capital. The derivation of the estimates of the various items is given in appendix B.

Obviously, therefore, the greater part of the reduction in foreign-dollar balances in 1933 and the attendant gold exodus must be attributed to special factors, and only the net movement on gold and short-term account combined may be regarded as the necessary and "passive" offset to the imbalance between the "supply of dollars" made available by our payments to foreigners and the "use of dollars" by foreigners for payments to us.

Since the necessity for an approximate balance between the supply of dollars and use of dollars is obvious, the important question arises as to how such a relationship works itself out in detail. For economic life inevitably involves changes—tariff revisions, shifts in demand, fluctuations in basic economic conditions, droughts—that create more or less serious variations and disturbances in this relationship and give rise to increases or decreases in imports or exports as well as in other transactions. An understanding of the nature and origin of these changes and the adjustments to which they give rise is of great practical importance in the determination of commercial and monetary policy and in the promotion of the general economic welfare.

Questions of this character are the principal subject matter of chapter V, where the behavior of our balance of international payments as a whole during the interwar period is analyzed.

CHAPTER II

TRADE AND SERVICE TRANSACTIONS

International receipts and payments on current account tend in general to vary in accordance with changes in underlying business conditions. The various transactions entering into the account, however, occasionally behave in a distinctive and somewhat puzzling manner. For example, why did imports into the United States after the early post-war inflation reach their highest point in 1926, whereas the peak of American prosperity did not come until 3 years later? Why did expenditures for travel abroad, on the other hand, rise steadily during the twenties, approximately doubling from 1922 to 1929? Why did they hold up better than imports in 1930 and then fall more heavily until 1933? Why did personal remittances reach their maximum in the mid-twenties and decline gradually thereafter? Why did interest and dividend payments to foreigners fall more rapidly than corresponding receipts after 1929?

Most of these and similar instances of varying behavior can be fairly readily explained. Several more basic questions, however, should be borne in mind in a review and analysis of the current account in the balance of payments of the United States. What observations and conclusions of general validity can be set forth as to the typical behavior of trade and service transactions? Are variations in domestic business conditions or in conditions abroad transmitted with greater or less amplitude of movement and disturbance in international dealings? On the other hand, to what extent do the various trade and service transactions exhibit a capacity for ready adjustment in response to strains in the general dollar supply-and-use relationship?

For convenience of analysis, receipts and payments under the various types of transactions within the current account are considered either jointly or in sequence. This does not mean that receipts and payments within each group are necessarily more closely related to each other in a causal sense than to other types of transactions. For example, exports of automobiles to Norway were no more directly related to imports of fish from that country than to freight payments made for Norwegian shipping services. And receipts of interest and dividends from Chile were certainly more closely connected with United States imports of copper than with payments of interest and dividends to Chilean investors.¹

Calculations of the net position on freight and shipping services, interest and dividends, or other items are of only limited interest or usefulness in analyzing the balance of payments, as they only serve to

¹ Nor should sight be lost of the multilateral character of international transactions, even though there was a pronounced tendency toward bilateralism during and after the great depression. For example, United States exports to the United Kingdom were determined not only by imports from that country but also by American purchases of rubber and tin from British Malaya.

show the general structure of our international transactions or significant structural changes over the years. The relationship between total receipts and total payments on current account and the variations and adjustments in this relationship are of much greater importance.

MERCHANDISE TRADE

The general course of United States exports and imports during the interwar period may be observed in chart 1. Largely because of the inflationary spurt that carried prices far above their wartime levels, both exports and imports reached a peak shortly after the first World War. They then fell swiftly during the ensuing deflation and depression but rose again strongly though gradually under the stimulus of general world recovery and prosperity in the twenties. With the onset of the great depression at the end of the decade, United States foreign trade registered a severe and prolonged decline that lasted until 1932 and carried export and import values below their pre-1914 levels. Then came a gradual upturn, which at its highest point, however, was still much lower than in 1929 and was interrupted by another sharp though temporary drop in 1938.

One fact of great significance in the balance-of-payments relations of the United States is the persistence of an excess of exports throughout the interwar period—an excess that, in fact, dates back more than half a century through war and peace, prosperity and depression. That this feature was not immutable is shown by the shrinkage in the surplus of exports during the early thirties, which reduced it almost to the vanishing point in 1936.² The history of the American trade balances, however, indicates that influences determining the relationship between exports and imports yield only stubbornly to new forces and that necessary adjustments may be effected with difficulty.

United States Imports

Relation of Imports to National Income

National income is the most comprehensive measure, in value terms, of basic economic conditions influencing the behavior of imports. The general similarity of movement in the two series is clearly brought out in chart 5, which traces their course from 1909 to 1939. While the general level of imports in relation to national income, as measured in the lower part of the chart, was about the same in the twenties as before 1914, or even slightly higher, the relationship was considerably less stable after the first World War. The value of imports was particularly high in 1919 and 1920 as compared with national income, but fell to an exceptionally low point during the great depression of the early thirties, from which it recovered only partially. In general, value of imports appeared to fluctuate more widely than national income, rising faster during an upturn in business and falling faster in times of depression. There was, moreover, a peculiarly large hump in imports in 1925 and 1926 that had no visible connection with the course of national income.

² During the fiscal year 1936-37 there was actually an import surplus of slightly more than \$100,000,000. Imports would probably have registered an excess in other years had they been valued on a c. i. f. basis, as is the practice in most countries.

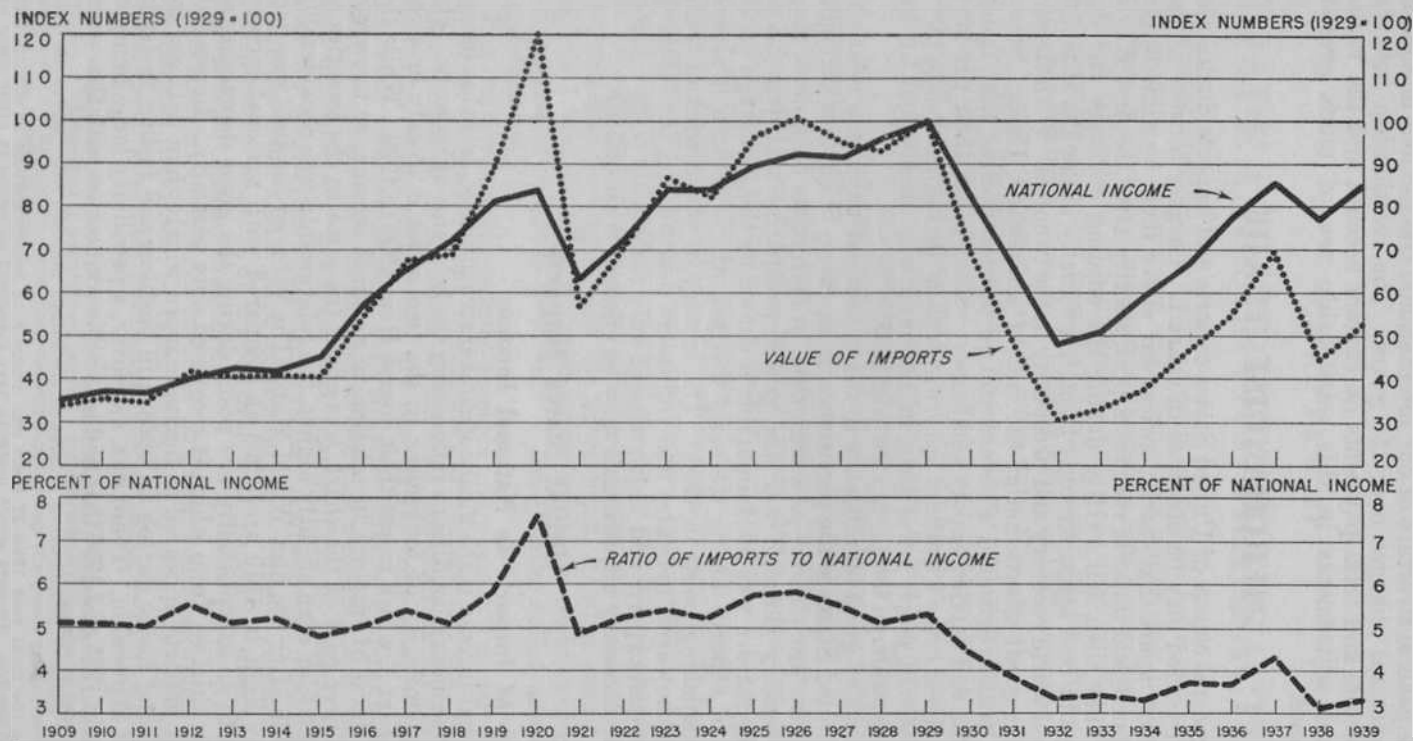


Chart 5—Indexes of United States national income and value of imports; and ratio of imports to national income, 1909-39.

D.D. 43-160

Relation of Imports to Industrial Production

The divergences between the trends in imports and national income are attributable primarily to the relatively greater variations in import prices than in domestic prices. When both imports and national income are expressed in terms of constant prices the relationship is remarkably close. An even closer association may be observed between imports at constant prices (or quantity of imports) and the physical volume of industrial production. These comparisons are made in chart 6.

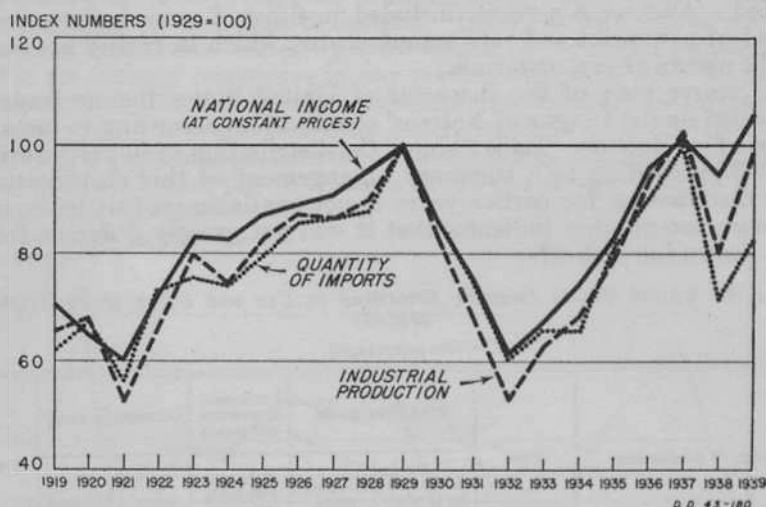


Chart 6.—Indexes of quantity of United States imports, national income at constant prices, and physical volume of industrial production, 1919-39.

One fact of paramount importance immediately emerges from these comparisons: The aggregate physical volume of United States imports was not affected to any marked degree by changes in prices. It might be expected, on general *a priori* grounds, that a relative decline in import prices would tend to stimulate purchases from other countries and that a rise in import prices would have the opposite effect. Such tendencies, however, are not apparent in the behavior of United States imports during the interwar period. The quantity of imports in the aggregate seems, rather, to have been directly determined by the trend in real economic activity in the United States as measured by the index of industrial production and to have been little influenced by relative changes in price.³

An explanation for this relationship is not far to seek. United States imports consist preponderantly of primary products or partially fabricated goods that are not consumed directly but are used for further manufacture. The character of imports is disclosed in their distribution by economic classes as compiled by the Department of

³ This behavior also explains why the physical volume of United States imports was not appreciably stimulated by the depreciation of foreign currencies during the early stages of the great depression or curtailed by the subsequent depreciation of the dollar. These developments are briefly considered in chapter V.

Commerce. This distribution is as follows (average for 1919 through 1939):

<i>Economic class</i>	<i>Percent of total imports</i>
Crude materials.....	35.2
Crude foodstuffs.....	12.7
Manufactured foodstuffs.....	13.4
Semimanufactures.....	18.3
Finished manufactures.....	20.4

Crude materials, crude foodstuffs, and semimanufactures used by American industry constituted 66 percent of total imports during the period. Another 6 percent, included in finished manufactures, consisted of newsprint and jute manufactures, which in reality are more in the nature of raw materials.

A clearer view of the character of United States import trade is provided by the League of Nations' classification according to use and stage of production. Table 3 shows the distribution of imports during 1935-37 according to a summary arrangement of this classification. The distribution for earlier years is not available on this basis, but a rough compilation indicates that it was not greatly different from that shown for 1935-37.

TABLE 3.—United States Imports According to Use and Stage of Production, 1935-37

[In percentages]

Stage of production	Year	Producers' goods		Producers' or consumers' goods	Consumers' goods		Total
		Materials for production	Capital equipment	Fats and oils, fuels and lubricants	Food	Nonfood	
Crude.....	1935.....	35.1	0.1	3.1	4.9	-----	43.2
	1936.....	35.2	.2	2.8	4.5	-----	42.7
	1937.....	38.1	.1	3.0	3.9	-----	45.1
Simply transformed.....	1935.....	23.6	-----	6.0	1.2	-----	30.8
	1936.....	24.0	-----	5.3	1.4	-----	30.7
	1937.....	23.5	-----	5.4	1.6	-----	30.5
More elaborately transformed.	1935.....	12.6	.9	-----	5.0	5.8	24.3
	1936.....	12.9	.9	-----	6.0	5.7	25.5
	1937.....	12.6	1.0	-----	4.9	5.0	23.5
Total.....	1935.....	71.3	1.0	9.1	11.1	5.8	98.3
	1936.....	72.1	1.1	8.1	11.9	5.7	98.9
	1937.....	74.2	1.1	8.4	10.4	5.0	99.1

¹ Remainder of imports consists of goods listed as "Unclassifiable."

Behavior of Import Prices

Variations in import prices, although exerting little apparent influence on total quantity of imports, had a substantial and direct effect on their total value. The importance of this factor is brought out in chart 7.

The inflation of prices in 1919 and 1920 and the swift collapse in 1921 accounted for most of the wide variation in the total amount of dollars supplied against imports in those years. Price changes were also largely responsible, although to a smaller degree, for the substantial rise in value of imports after 1922. Beginning in 1926, however, there came a steady decline in import prices, which was greatly accelerated during the depression after 1929 and accounted in large measure for the extremely low level to which the value of imports declined in 1932

and 1933. Thereafter import prices recovered gradually, but even at the highest point in 1937 remained considerably lower than the lowest levels of the twenties.

As might be expected from the commodity composition of imports, import prices during the interwar period were fairly representative of the general trend in world prices for primary goods. Such commodities are subject to far wider fluctuations in price than manufactured goods. This greater variability may be attributed chiefly to the fact that production of primary goods is highly competitive, with certain important but usually temporary exceptions, and not readily curtailed or expanded to meet changes in demand. On the other hand, consumption of raw materials varies with the course of industrial production and is not directly responsive in any marked degree to price changes. Consumption of foodstuffs is less subject to wide fluctuations during the business cycle, but is also relatively unresponsive to price changes. It follows that an imbalance between production and consumption of primary goods, whether due to changes in the one or the other, is likely to cause wide fluctuations in prices.

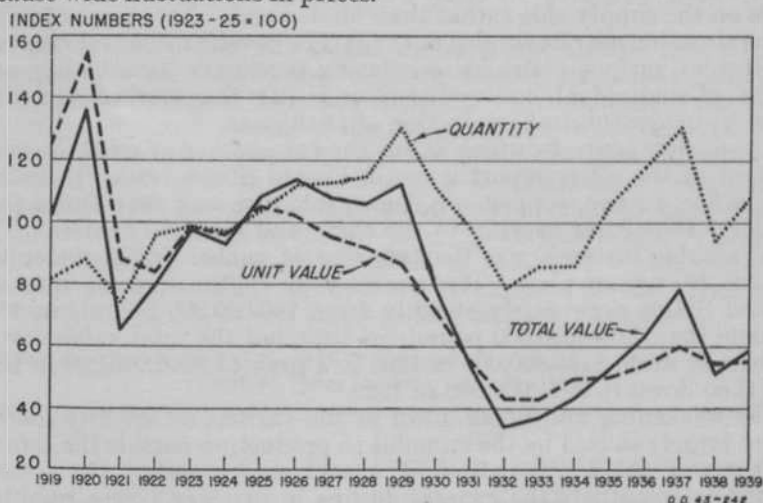


Chart 7.—Indexes of total value, unit value, and quantity of United States imports, 1919-39

Inasmuch as the United States is the world's leading importer of primary products, it is not surprising that variations in its import requirements have impinged very strongly on prices of primary goods in general and of those for which this country is the principal market in particular. In other words, changes in economic activity in the United States have tended to exert a double and direct influence on the value of imports, affecting both quantities and prices in the same direction.

The rise in industrial production and import demands in the early twenties undoubtedly stimulated prices, whereas the swift decline in domestic economic activity during the depression of the early thirties was a major factor in the even sharper fall of primary prices. The influence of changes in the American market stood out with particular clarity in the depression of 1937-38, which was much more pronounced in this country than in other leading industrial countries and produced immediate effects on world prices for raw materials and foodstuffs. On

the other hand, as shown in chart 7, variations in prices of United States imports were not systematically related to changes in quantity throughout the interwar period, and at times there were wide divergences.

The rise and fall in prices during the early post-war boom and depression were extremely large as compared with changes in the quantity of goods moved and showed the effects of powerful speculative forces superimposed upon initial transportation difficulties and shortage of supplies. The value of sugar imports, an important item in point, rose from \$393,000,000 in 1919 to \$1,015,000,000 in 1920 and fell back to \$235,000,000 in the following year, whereas the quantity of sugar imports varied only between 2,800,000 and 3,800,000 short tons in those years.

Although the recovery of import prices after the post-war depression reflected the strength of rising demand in the United States and other important consuming countries, their particularly high levels from 1923 to 1926 and their subsequent decline in the face of a continued upward trend in volume of imports are attributable to influences on the supply side rather than on demand. Two major factors in the situation may be singled out: (1) The development and eventual collapse of various plans for regulating production, marketing, and prices of individual commodities, and (2) the marked technical progress in agricultural production after the war.

Commodity controls, which at one time or another affected the price of most of the main import items in United States trade (including silk, coffee, rubber, copper, oil, sugar, jute, tin, and tea) had a particularly important bearing in the early and middle twenties. The most notable instance was the behavior of rubber prices under the famous Stevenson plan. The quantity of rubber imports into the United States grew fairly steadily from 700,000,000 pounds in 1923 to more than 1,000,000,000 pounds in 1929, but the total value moved erratically from \$185,000,000 in 1923 to a peak of \$506,000,000 in 1926 and then down to \$241,000,000 in 1929.*

The weakening and break-down of the various commodity-control plans, largely caused by the stimulus to production outside the control system and the accumulation of unsold stocks within the system, tended to accentuate the general decline in primary prices resulting from the growth in technical efficiency, the immobility of labor in agriculture, and such other factors as the increase in tariff barriers. In consequence, import prices on the whole moved steadily downward in the second half of the twenties despite the general increase in consumption, and the fall became precipitous with the beginning of the depression in the United States and other industrial countries.

During the depression most of the commodity-control schemes reappeared in some form and, as economic activity revived, served to support the general economic forces making for an upturn in prices. However, with few exceptions, tin and sugar being the most important, import prices failed to recover their predepression levels or their previous relationships to domestic or export prices generally. This weakness in import prices was an important factor limiting

* Although prices of other import items were also generally higher in the middle twenties than in later years, the gyrations in the price of rubber alone were sufficient to explain the higher value of total United States imports in 1926 than in 1929 and to account for most of the divergence previously noted between the trends in imports and national income in 1925 and 1926.

the supply of dollars made available to foreign countries in the thirties.

Varying Nature of Demand for Imports

Although there was a close relationship between the aggregate volume of imports and industrial production during the interwar period, individual commodities manifested a variety of behavior patterns. These patterns largely reflect variations in the domestic demand for the end product. For example, the variability of the demand for products requiring tin in their manufacture is such that the quantity of tin imports may fluctuate widely. On the other hand, conditions of supply are also important. If a considerable portion of the supply of a raw material—for instance, hides and skins—is produced in the United States, the amount of imports tends to vary widely even though the demand for leather products fluctuates only moderately. This follows for the reason that at low levels of production, domestic supplies of the raw material are adequate, whereas at high levels supplementary supplies must be procured from other countries.

While the nature of the causal forces is not always immediately apparent, the influence of the foregoing factors stands out clearly in the behavior of some of the commodities for which indexes of the quantity of imports and output of the end product (or of the related industrial group) are plotted, together with the general index of industrial production, in charts 8-A to 8-D. Indexes of the value of imports are also shown, although no attempt is made at this point to account for fluctuations in the prices of the various items. The commodities selected—necessarily limited to those for which data are available on both quantity of imports and output of the end product*—are listed, with their import values in 1929 and 1937, in table 4.

TABLE 4.—United States Imports of Selected Commodities: Value and Percentage of Total Imports, 1929 and 1937

Item	1929		1937	
	Value	Percentage of total imports	Value	Percentage of total imports
	<i>Thousands of dollars</i>		<i>Thousands of dollars</i>	
Rubber, crude.....	240,966	5.5	247,521	8.2
Newsprint, standard.....	144,493	3.3	122,529	4.1
Wood pulp.....	88,573	2.0	98,269	3.3
Copper ¹	153,708	3.5	52,562	1.7
Tin ¹	91,906	2.1	104,418	3.5
Petroleum, crude.....	79,943	1.8	20,761	.7
Wool and mohair, unmanufactured.....	87,344	2.0	96,345	3.2
Silk, raw.....	427,126	9.7	106,594	3.5
Hides and skins, raw.....	137,281	3.1	71,056	2.4
Tobacco, unmanufactured.....	53,821	1.2	31,923	1.1
Cane sugar.....	209,277	4.8	124,649	4.1
Coffee.....	302,397	6.9	150,579	5.0
Total.....	2,016,835	45.9	1,227,208	40.8
Total imports.....	4,399,631	100.0	3,009,852	100.0

¹ Includes all forms of the metal and manufactures except machinery and vehicles.

* Indexes of production of the end product, or related industrial group, as well as the general index of industrial production are those computed by the Board of Governors of the Federal Reserve System. Cf. Federal Reserve Bulletin. August 1940. Pp. 753-771; 825-832.

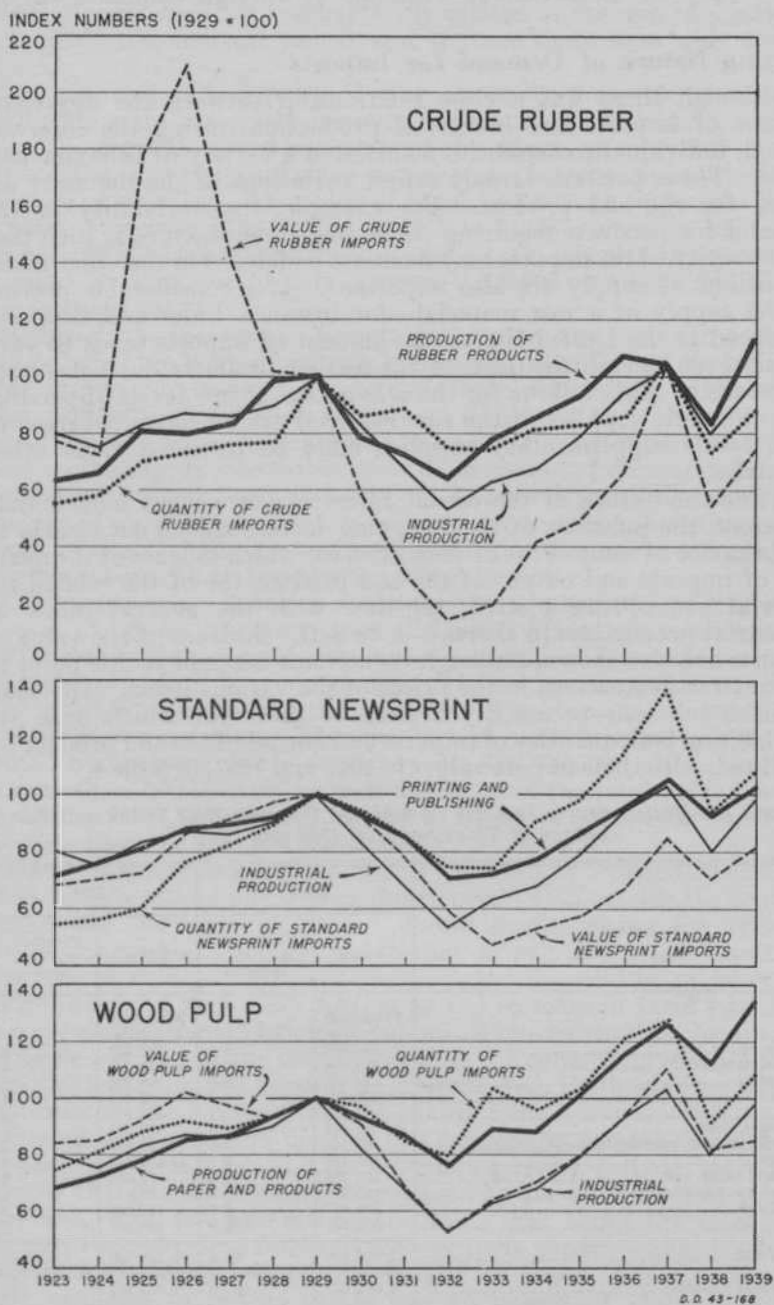


Chart 8-A.—Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.

Crude Rubber.—The output of rubber and products behaved in much the same manner as the total index of industrial production during the interwar period, although after the great depression rubber products increased in relative importance. Before 1929 the quantity of crude rubber imports corresponded closely to the output of rubber and products, but thereafter the two series diverged considerably. In the early thirties low prices induced imports of crude rubber in excess of immediate demand for consumption, with the result that stocks in the United States tripled between 1929 and 1933. The use of reclaimed rubber, which constituted between 17 and 23 per cent of all rubber consumed after 1931 and considerably more in some previous years, seems to have moderated fluctuations in imports. Consumption of reclaimed rubber tended to rise or fall more rapidly than manufacture of rubber products and thus absorbed part of the impact of cyclical changes that otherwise would have fallen on imports.

Standard Newsprint.—The index of printing and publishing shows considerably more cyclical stability than does the index of industrial production as a whole. This is attributable largely to the fact that newspaper circulation tends to be well maintained even in periods of low business activity. Relative to both of these indexes, the quantity of newsprint imports showed a strong upward trend, reflecting lower production costs in Canada, the chief foreign supplier, than in the United States. In recent years three-fourths of the newsprint used has been imported, and it is therefore not surprising that, when secular trends are eliminated, cyclical fluctuations in the index of imports correspond closely to those in the index of printing and publishing.

Wood Pulp.—The index of paper and paper products seems to have manifested less fluctuation during the business cycle than the total index of industrial production. It shows a considerable upward trend, largely as the result of more widespread and elaborate packaging of many types of products and the increasing use of paper-board boxes and cartons instead of other forms of shipping containers. The quantity of wood pulp imports varied in close conformity with output of paper and products, also showing a strong upward trend. Although domestic capacity was large and there was a substantial tariff on wood pulp, certain types of foreign pulp were preferred because of special qualities and low cost. Imports dropped sharply in 1938, however, partly because of previous overstocking in this country and partly because pulp exports from the Scandinavian countries were largely diverted to Germany, which was building up a stock pile for its war needs.

INDEX NUMBERS (1929 = 100)

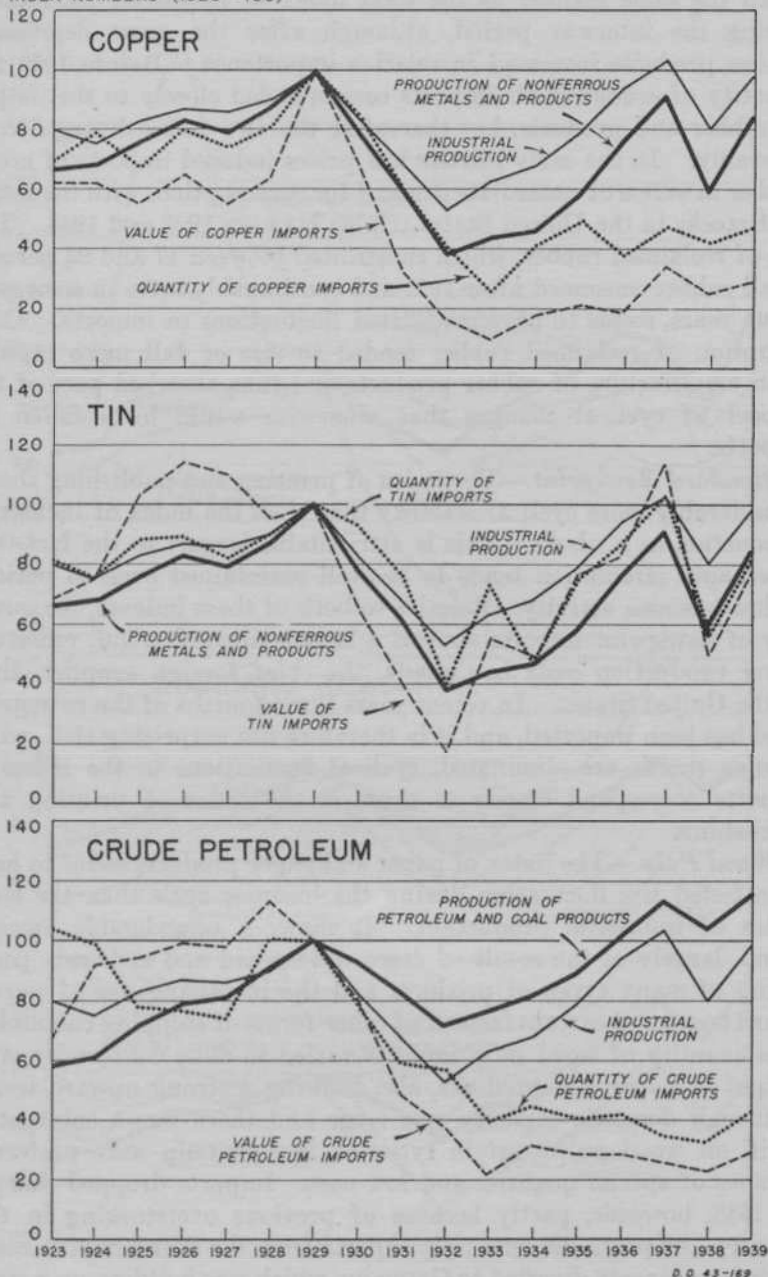


Chart 8-B.—Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.

Copper.—Output of nonferrous metals and products is subject to wider cyclical fluctuations than industrial production as a whole. This is attributable to the large proportion of nonferrous metal going into the production of durable goods, which are more sensitive to the business cycle than other types of products. Copper imports varied even more widely during the interwar period. The United States is a large producer of copper and a net exporter in most years. Copper imports are related, therefore, not only to domestic consumption but also to domestic production and to exports. There was fairly close correlation between copper imports and output of nonferrous metals and products until 1932, when a "tariff" in the form of an excise tax was imposed upon imported copper, except unrefined copper for processing and reexport. Imports of refined copper were thus discouraged and the failure of total copper imports to regain their former importance after the depression may be attributed in part to the effects of this tax.

Tin.—The quantity of tin imports fluctuated widely, but these fluctuations seem in general to have been a reflection of the instability of nonferrous metals. There is a fairly close similarity of movement between the indexes of tin and nonferrous metals over most of the period, with no particular secular trend apparent in either index. Inasmuch as all the tin used in the country is imported, tin imports depend directly upon demand, and the question of an alternate domestic source of supply does not arise, as it does with copper.

Crude petroleum.—The index of petroleum and coal products shows considerably more cyclical stability than the general index of industrial production, though this relation is somewhat obscured by the distinct upward secular trend of the former. The upward trend can be attributed to the greatly increased demand for petroleum products, since coal products have a weight of only about 13 percent in the combined index. Crude petroleum imports, on the other hand, showed a sharp downward trend accompanied by wide short-run fluctuations, which had little obvious connection with the business cycle. Imports of crude petroleum supply only a small part of the American market and appear to have been increasingly replaced by domestic production in recent years.

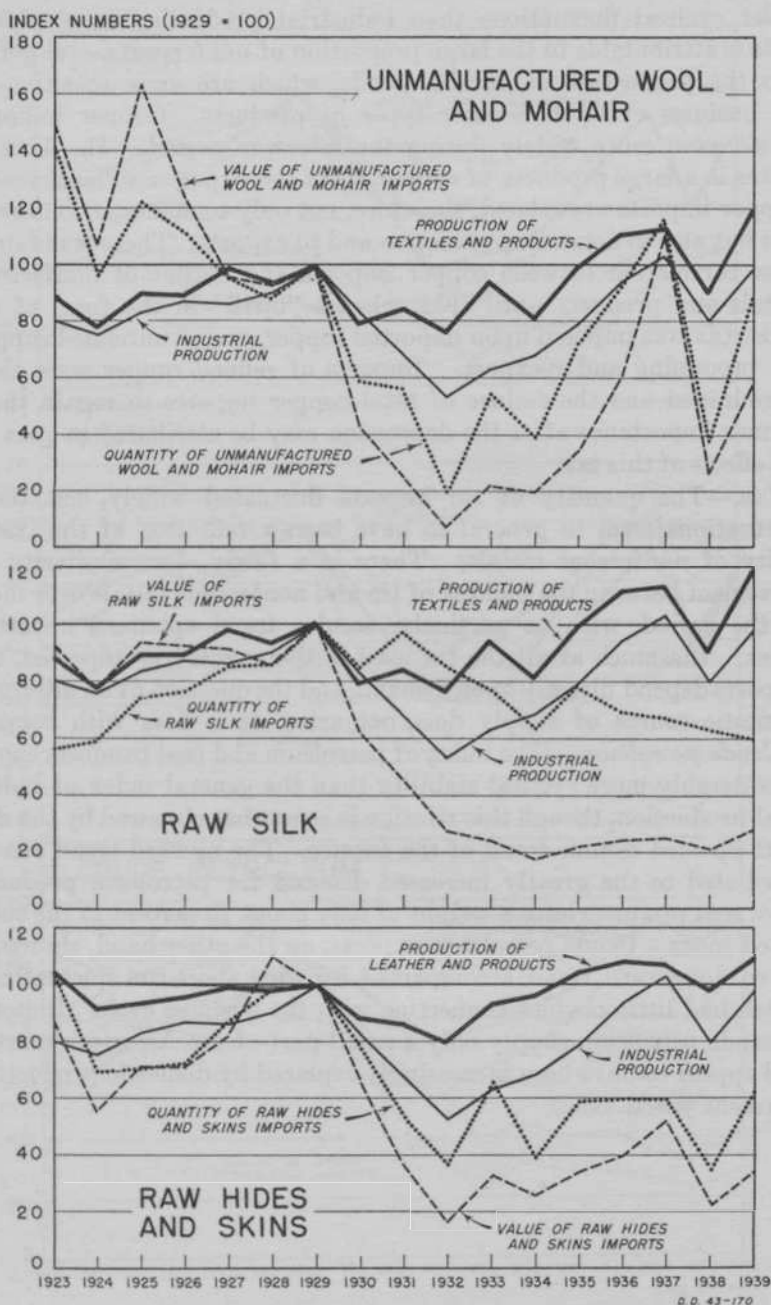


Chart 8-C.—Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.

Unmanufactured Wool and Mohair.—Reflecting the relative stability of demand for nondurable goods, output of textiles and products is somewhat less sensitive to cyclical fluctuations than industrial production, as a whole. The slightly upward secular trend of textiles and products is opposed by a generally downward trend in wool imports. Moreover, wool imports were far less stable than output of textiles and products during the business cycle.

Part of the explanation lies in the type of wool imported. In recent years from 60 to 85 percent of wool imports has been of the coarser grades classed as carpet wools. These grades are used chiefly in the manufacture of consumers' durable and semidurable goods, for which demand is elastic. Other classes of foreign wool are directly competitive with the domestically produced commodity and, because of the high rates of duty in effect throughout the period, occupied a marginal position; thus relatively more wool was imported when textile production was large than when it was small. The steady increase in the domestic production of wool from 1923 to 1931 accounted for the strong downward trend of imports during the period.

Raw Silk.—The rising trend in production of textiles and products during the twenties was accompanied by an even sharper increase in silk imports. After 1929, however, silk imports moved erratically downward and failed to recover after the low point of the great depression was passed. This behavior reflects, in the first phase, the growing demand for fine textiles in keeping with the general rise in the standard of living and, in the second, the inroads made by rayon upon the market for many silk manufactures, although the natural product continued to be preferred for hosiery.

Raw Hides and Skins.—The index of leather and products is considerably more stable than the total index of industrial production; it is, in fact, the most stable of the individual series examined. No particular secular trend is apparent, and cyclical fluctuations are small.

On the other hand, the index of hides and skins imported exhibits wide cyclical fluctuations around a strong downward trend. Imports are needed not only to supply kinds and grades of leather not produced domestically but also to supplement domestic sources when the latter are inadequate. Imports that serve this purpose are, therefore, marginal and are dependent not only upon the level of industrial activity in the United States but also upon the quantity of hides available domestically. These marginal imports are largely responsible for the cyclical fluctuations and also for the downward trend indicative of a decreasing dependence upon imports to supply the kinds of hides produced domestically. Removal of hides and skins from the free list by the tariff of 1930 was at least partly responsible for the failure of imports of these items to regain their predepression importance after 1929.

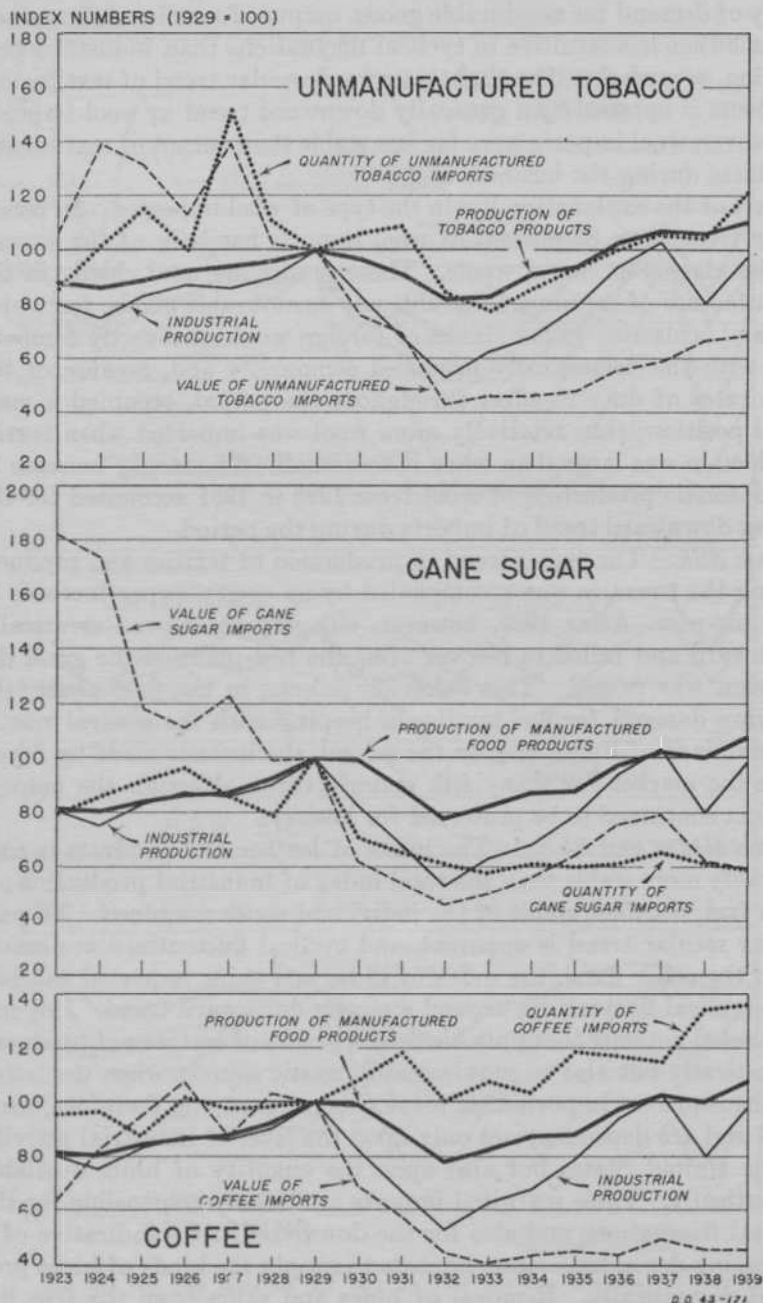


Chart 8-D.—Indexes of imports of selected commodities, output of related products, and total industrial production in the United States, 1923-39.

Unmanufactured Tobacco.—Over the business cycle the index of tobacco products ranks high in stability among the commodities examined. It is considerably more stable than the index of industrial production and shows almost no secular trend over the period.

Tobacco imports exhibited no such stability, and until after 1931 there apparently was little or no correlation between the importation and manufacture of tobacco. Since large stocks of unmanufactured tobacco are carried over from one year to the next, American purchases abroad reflect to some extent variations in the size and quality of foreign crops, principally those of Turkey, Greece, Netherlands Indies, and Cuba, rather than the domestic demand actually prevailing when purchases are made. Quantitatively, imports are small compared with domestic production, but their position cannot be considered marginal. Because of their different and distinctive characteristics, imported and domestically produced tobaccos are not close substitutes for each other.

Cane Sugar.—The demand for manufactured foods is far more stable than the demand for other manufactured products. There is little correlation between manufactured food products—an extremely broad class—and the index of cane sugar imports. Sugar imports showed a downward trend, largely as the result of the encouragement and protection afforded domestic producers by tariff and other restrictions on imports. The tariff on sugar was high, duties collected amounting to as much as 193 percent of the value of dutiable sugar imported in 1932. A quota system of import control was put into effect in 1934, and after 1935 quotas were maintained at a constant level. In addition to profiting by these limitations on imports, domestic producers received sizable rental and benefit payments under the Agricultural Adjustment Act and the Soil Conservation Act, which supplanted it. Production was thus stimulated in the United States, Hawaii, and Puerto Rico, and imports from countries outside the United States customs area were discouraged. In recent years, therefore, domestic agricultural policy and direct control of imports have been more important in determining the pattern of sugar imports than either sugar prices or the level of consumer income.

Coffee.—The quantity of coffee imports showed a pronounced secular rise during the interwar period, indicating an increase in per capita consumption. Imports also exhibited fairly wide year-to-year fluctuations, which apparently had little connection, however, with changes in domestic business conditions. Inasmuch as coffee is a "near essential" and consumption relatively inelastic, these fluctuations may be attributed partly to annual variations in the size of the coffee crop and partly to special economic and political factors that occasionally affected supply and marketing.

Effect of Drought on Imports

While the vagaries of nature have ordinarily been far less of a factor in determining the course of imports than have fluctuations in the industrial system, weather conditions in the United States exercised a substantial influence on purchases from other countries during the middle thirties.

The drought in 1934 was the worst recorded in the United States, and, being especially severe in sections devoted to pasturage and to grain raising, greatly reduced both food-grain supplies and livestock. Another great drought struck many of the same areas in 1936, and the grain harvest was once again curtailed, although, unlike 1934, hay and forage yields were almost normal.

The effects of the droughts may be seen in the increase in imports of certain agricultural products, as shown in table 5. The chief commodities affected were grains and feeds, meat and dairy products, animal fats, and vegetable oils. Imports of corn, for example, rose from 200,000 bushels in 1934 to 20,400,000 in 1935 and to 78,000,000 in 1937, and fell again to only 400,000 in 1939. Wheat imports increased fivefold from 1933 to 1937. Imports of fodders and feeds more than doubled in value from 1934 to 1937. Imports of all grains, which in 1933 had been 0.8 percent of total imports, rose to 3.1 percent of a much larger total value of imports in 1935 and 1936. Despite the fact that the drought in 1936 was not as severe as the one in 1934, imports of many commodities continued to increase in 1937 over 1935. In the earlier year there was a large surplus of agricultural products carried over from previous years, whereas in the later year available stocks were considerably smaller.

TABLE 5.—Imports of Specified Agricultural Products Showing Effects of Droughts in the United States in 1934 and 1936

[Values in thousands of dollars]

Individual products and groups of products	1929	1933	1934	1935	1936	1937	1938
Animals, edible.....	22,269	584	638	8,863	12,398	18,694	9,388
Hogs.....	55	1		313	1,454	1,529	5
Meat products.....	40,893	9,293	12,840	19,178	25,615	39,838	29,754
Pork, fresh.....	755	58	26	541	1,791	3,158	671
Animal oils and fats, edible.....	193	13	92	1,264	1,316	1,242	337
Butter.....	1,036	150	210	3,577	2,016	2,509	425
Grains and preparations.....	20,003	13,285	33,481	73,314	84,424	102,392	7,976
Corn.....	447	77	1,530	20,292	16,082	56,184	258
Wheat and flour.....	16,262	5,769	14,496	30,416	48,309	19,941	2,766
Fodders and feeds.....	17,452	4,192	7,593	12,932	12,266	16,090	3,809
Cottonseed cake and meal.....	579	38	503	669	283	478	57
Vegetable oils and fats, edible.....	16,418	7,050	8,522	25,483	22,476	30,808	15,970
Cottonseed oil.....			383	8,880	7,371	11,958	3,411
Vegetable oils, nonfood, expressed.....	84,243	27,236	26,176	53,352	62,827	81,208	42,595
Total of product groups.....	202,507	61,803	89,552	197,963	223,338	292,781	110,254
Total of product groups as percentages of total imports.....	4.6	4.3	5.4	9.7	9.2	9.5	5.6

Notwithstanding the large increase in importation of farm products, most of these imports represented a small proportion of home production and fell far short of offsetting the deficits left by the drought. In 1937 corn imports were only 2.9 percent and wheat imports only 5.5 percent of domestic output and other agricultural imports were similarly small. The shortages were relieved by depleting stocks, earlier

marketing and heavier slaughtering of livestock, and other methods, rather than by importing large quantities.

Ironically, the influences generated by changes in weather conditions during these years tended to reinforce both the effects of the upturn in industrial production in stimulating imports through 1937 and the effects of the business recession of 1937-38 in producing a decline.

Influence of Tariff Policy on Imports

The discussion of factors affecting the behavior of imports has thus far been concerned primarily with influences emanating from the general operation of the economic system, including particularly changes in demand and prices connected with fluctuations in the business cycle. Intermingled with the effects of these influences were those produced by the commercial policies of the United States with respect to imports.

The high-tariff policy followed by the United States for many decades has served, as indeed has been its purpose, to exclude or severely restrict a potentially large volume of imports—how large, it is impossible to say. Imports have been limited in the main to goods required to supplement domestic output or goods not produced in this country, together with relatively small amounts of luxury articles brought in over the tariff barrier. As one result of the tariff, therefore, imports consist chiefly of primary products, which, as already mentioned, are susceptible to wide variations in price. This element of instability in the dollar value of imports is increased by the preponderance of specific duties in the United States tariff structure, the burden of which increases with falling prices and decreases with rising prices.

Of major interest in connection with the foreign economic policy of the United States during the interwar period are the effects on the flow of imports produced by changes in duties as distinguished from the generally restrictive effects of the whole tariff structure. Two major tariff laws were passed during the interwar period, one in 1922 (which had been preceded by an emergency tariff act in 1921) and the other in 1930. Each of these laws constituted a substantial increase and broadening in the tariff structure. Beginning in 1934, however, the direction of change in the United States tariff was reversed. Through the various agreements concluded with foreign countries under the Reciprocal Trade Agreements Act of that year and subsequently extended, a gradual reduction in tariff rates was brought about, tending to permit a somewhat freer flow of imports.

Appraisal of the effects of these tariff changes on the total dollar value of imports is a difficult and uncertain undertaking, which may explain why it apparently has never been attempted in any comprehensive and systematic fashion. The most serious difficulty lies in the fact that each of these changes occurred during times of sharp business cycle movements, and the effects of the one can scarcely be separated from those of the other. The tariff measures of 1921 and 1922 were preceded by the highly abnormal period of the World War and the early post-war inflation and depression—conditions which do not afford a satisfactory basis for comparison. The act of 1930 came early in the course of the great depression, and the restrictive effects of both on imports were inextricably merged. Finally, the more liberal tariff

policy followed under the Reciprocal Trade Agreements Act coincided with a rise in the domestic business cycle, which alone would have caused a substantial increase in imports.

Another difficulty lies in the sheer magnitude of the work that would be required to trace the history of the great number of commodities affected by tariff changes, and a third obstacle lies in the progressive refinement of the tariff schedule, segregating many items for which previous import records are not available.

While lack of data precludes an adequate appraisal of the situation, several considerations suggest that changes in the tariff structure during the interwar period, although important with respect to some commodities, did not exercise a dominant influence on the general level and course of imports. The first is that the American tariff before the first World War was already so high as to leave little room for further restrictions to produce an effect without impeding the inflow of essential materials. Secondly, the war itself, through the increase in domestic and foreign demand and the enforced curtailment of imports, gave a more powerful stimulus to internal industrial expansion than any tariff could offer. In the third place, with particular reference to the reciprocal trade agreements program, the duty reductions embodied in the agreements have been limited by law to not more than 50 percent of the statutory rate and have been cautiously negotiated with a view of minimizing the effects on domestic production. And a final consideration to be borne in mind is that the various alterations made in tariff rates during the interwar period do not appear to have altered appreciably the close relationship between industrial production and quantity of imports.

In brief, it seems clear that the wide fluctuations in domestic economic activity and world prices were of much greater consequence in determining the behavior of imports during the interwar period than were upward or downward revisions of the tariff. The foregoing considerations, however, are all general and approximate, and it would be a mistake to conclude that changes in the American tariff were of negligible importance. Even though the pre-war tariff had already been pushed close to its maximum degree of restriction, the increases in duties in 1922 and 1930 unquestionably had some further depressing effect on the quantity and price of imports; and the 1930 act in particular was superimposed upon and accentuated an already rapid deterioration in imports. On the other hand, the reciprocal trade agreements, however modest and gradual their results in scaling down the wall of restriction with which this country had surrounded itself, served to strengthen the effects of domestic recovery in reviving a healthy demand for imports.

United States Exports

Variety of Influences Affecting Exports

Forces determining the course of United States exports during the interwar period were considerably more varied and complex than those responsible for the behavior of imports. It is true that changes in the dollar volume of exports were closely related to variations in basic economic conditions in the principal foreign markets.⁹ This

⁹ Account must be taken, however, of the marked shift that developed in this relationship during the great depression.

relationship is reflected in the comparisons made in charts 9, 10-A, and 10-B between United States exports and total imports of foreign countries, although the latter is an imperfect measure of economic conditions abroad. These comparisons, however, reveal a number of significant divergences, the more important of which may be briefly noted:

1. There was a particularly marked increase in United States exports to most continental areas from 1911-13 to the early post-war years as compared with total imports of foreign countries. The percentage of total foreign-country imports derived from the United States rose from 12.4 in 1911-13 to 18.0 in the 1922-24 period.

2. Exports to Europe reached a peak in 1925, after which they dropped to lower levels, whereas shipments to most other areas continued to expand vigorously.

3. During the world depression of the early thirties United States exports declined much faster than foreign imports, and the wide gap that developed between them persisted throughout the upswing after 1932.⁷ The only exception was in trade with Asia, where the share of the United States showed a slight tendency to rise. This country's share in all imports of foreign countries fell from 16.8 percent in 1929 to an average of only 12.8 for the 1933-38 period.

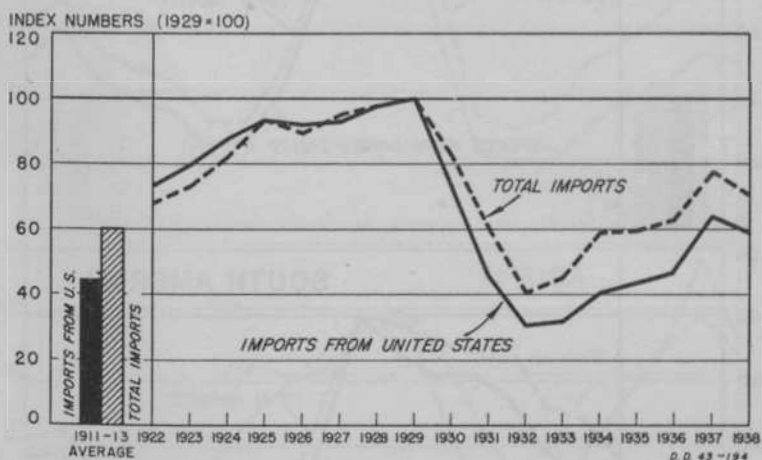


Chart 9.—Imports from the United States and total imports of all foreign countries. (Indexes of dollar values.)

Note.—Imports from the United States are as recorded in United States export statistics.

The foregoing differences may be explained chiefly by two factors: (1) The widely varying behavior of commodities or commodity groups of special importance in the export total, and (2) the commercial and monetary policies of foreign countries.

⁷ Inasmuch as import trade figures for foreign countries have been converted into dollars at annual average rates of exchange, the decline in the dollar value of foreign imports from 1929 to 1932 reflects in part the depreciation of foreign currencies, whereas the sharp rise in 1933 and 1934 reflects in part the depreciation of the dollar.

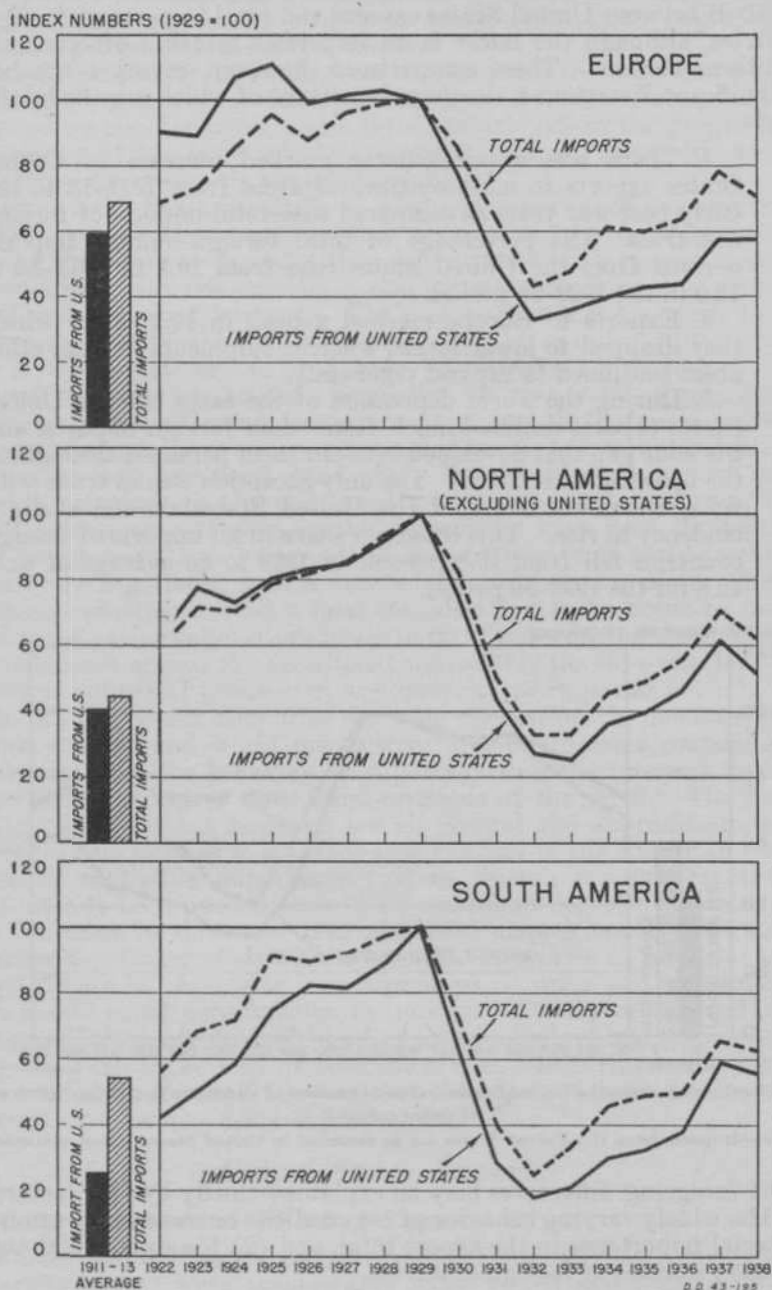


Chart 10-A.—Imports from the United States and total imports of foreign countries, grouped by geographic regions. (Indexes of dollar values.)

Note.—Imports from the United States are as recorded in United States export statistics;

INDEX NUMBERS (1929 = 100)

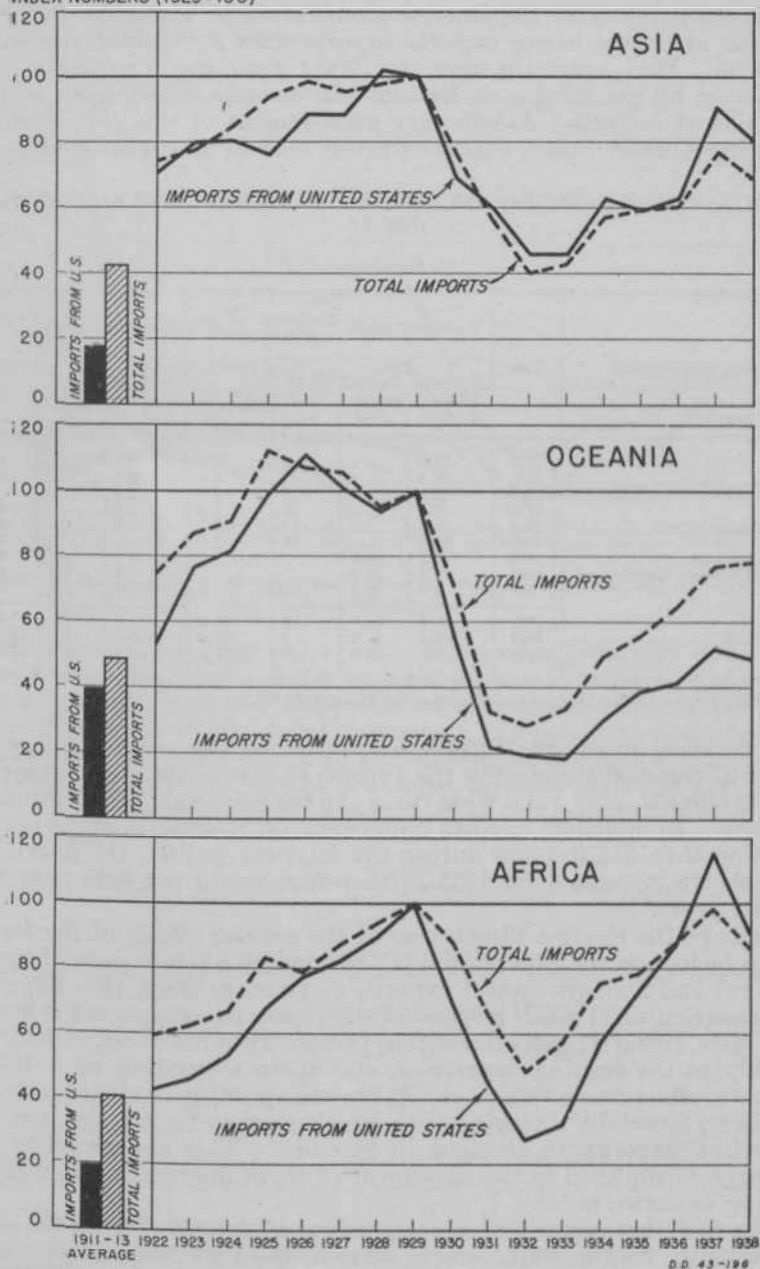


Chart 10-B.—Imports from the United States and total imports of foreign countries, grouped by geographic regions. (Indexes of dollar values.)

Note.—Imports from the United States are as recorded in United States export statistics.

Behavior of Principal Exports

As compared with the heavy concentration of materials for production in United States imports, exports show a widely varied composition. Here again the most significant grouping is probably that employed by the League of Nations and already drawn upon in the analysis of imports. A summary arrangement of this classification covering United States exports during 1935-37 is given in table 6.

TABLE 6.—United States Exports According to Use and Stage of Production, 1935-37

[In percentages]

Stage of production	Year	Producers' goods		Producers' or consumers' goods		Consumers' goods		Total
		Materials for production	Capital equipment	Fats and oils	Fuels and lubricants	Food and other non-durable	Durable	
Crude.....	1935	26.9	0.1	0.1	5.0	3.4	-----	35.5
	1936	24.4	-----	.1	4.9	2.9	-----	32.3
	1937	20.5	-----	.1	4.9	2.2	-----	27.7
Simply transformed.....	1935	12.5	-----	.8	8.9	1.3	-----	23.5
	1936	13.3	-----	.8	8.7	.9	-----	23.7
	1937	17.6	-----	.6	8.0	.9	-----	28.0
More elaborately transformed.....	1935	7.1	19.6	-----	-----	7.2	6.7	40.6
	1936	7.5	22.0	-----	-----	6.8	7.2	43.5
	1937	6.9	22.8	-----	-----	5.7	8.5	43.9
Total.....	1935	46.5	19.7	.9	13.9	11.9	6.7	199.6
	1936	45.2	22.0	.9	13.6	10.6	7.2	199.5
	1937	45.0	22.8	.7	13.8	8.8	8.5	199.6

¹ Remainder of exports consists of goods listed as "Unclassifiable."

Differences in the characteristic behavior of demand for different types of commodities during the various phases of the business cycle would alone account for a wide variety in the movement of our leading exports. In addition, exports underwent far greater shifts in composition than did imports during the interwar period; the distribution shown in table 6 for 1935-37 therefore would not hold true for earlier years.⁸

Perhaps the clearest illustration of the general effects of the foregoing factors on the export total is provided by a comparison of agricultural and nonagricultural exports, as given in chart 11. Exports of nonagricultural goods responded vigorously to changes in the business cycle, rising strongly during the prosperity of the twenties, falling swiftly in the ensuing depression, and again expanding after 1933. This wide fluctuation reflects chiefly the susceptibility of manufactured products, especially durable goods, which account for a large part of American exports, to changes in incomes.⁹ This susceptibility is strongly exemplified in the movement of three important commodity groups, as shown in table 7.

The fact that exports of these goods rose sharply during the upswing from 1932 to 1937, coming close to the 1929 peak, despite the highly restrictive commercial policies of foreign countries, testifies

⁸ Figures on United States exports arranged according to the League of Nations' classification by use and stage of production are not available for other years.

⁹ In 1937 durable goods made up 47 percent of total United States exports as compared with only 16.7 percent of imports according to the League of Nations' classification as given in *International Trade Statistics*, 1938. 1939. P. 111.

to the vigor of foreign demand for these types of American manufactures during times of business expansion abroad and to the strength of their competitive position.

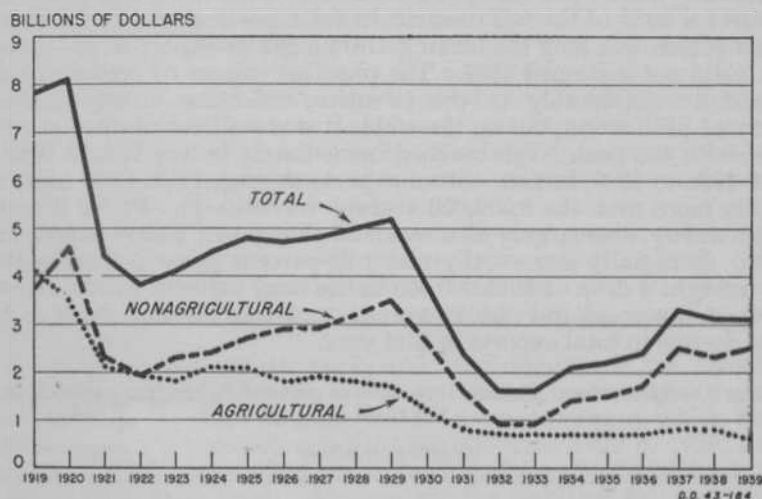


Chart 11.—Value of United States domestic exports—total, agricultural, and nonagricultural 1921-39.

In contrast, agricultural exports followed a generally downward trend throughout most of the interwar period, showing a brief period of strength in 1924 and 1925, with an export value of slightly more than \$2,100,000,000 in each of these years, and leveling out during and after the great depression to an annual total of less than \$800,000,000.¹⁰ Agricultural goods therefore accounted for only about 25 percent of aggregate exports in the 3 years 1937-39 as contrasted with 47 percent in 1922-24.

TABLE 7.—United States Exports of Leading Manufactured Goods in Selected Years

[In millions of dollars]

Year	Iron and steel-mill products	Machinery, all classes	Automobiles, including engines and parts	Total	Index (1929=100)
1922	136.2	233.9	103.2	473.3	35.2
1929	200.1	604.4	541.4	1,345.9	100.0
1932	28.9	131.3	76.3	236.5	17.6
1937	300.1	479.1	346.9	1,126.1	83.7
1938	184.2	486.3	270.4	940.9	69.9

The long-run decline in agricultural exports appears to represent a deterioration in the competitive position of American farm products on world markets, already in evidence before 1914, and is attributable in part to the high-costs burden thrust on the farmer by the protective tariff on manufactured goods. The decline was intensified during the interwar period by the downward readjustment from the expanded

¹⁰ Except in 1938, when they amounted to \$828,000,000.

production levels of the first World War, by the growing barrier of commercial restrictions in importing countries, and in recent years by domestic price-raising policies resorted to in an attempt to lift the deflationary load from the farmer's back. Four major commodities account for most of the fall in agricultural exports, as shown in table 8.

Raw cotton was long the leading United States export item—a position it did not lose until 1937. The physical volume of cotton exports fluctuated considerably in the twenties, reflecting chiefly changes in annual production, but on the whole it was well maintained as compared with the peak levels reached immediately before World War I. From 1925 to 1929, in fact, cotton exports averaged 8,674,000 bales, or slightly more than the 8,532,000 average for 1910-14. Prices likewise varied widely, also largely as a result of changes in yearly output and stocks. Especially noteworthy was a 28-percent price decline in 1926 that brought a drop of \$245,000,000 in the total value of cotton exports despite a 6-percent increase in volume and was the dominant factor in the decline in total exports in that year.

TABLE 8.—*Agricultural Exports: Decline in Annual Value from 1922-24 to 1937-39*

[In millions of dollars]

Commodity	Average, 1922-24	Average, 1937-39	Amount of decline
Cotton, unmanufactured.....	810.3	280.1	530.2
Wheat (including flour).....	274.9	75.5	199.4
Cured pork.....	106.3	10.8	95.5
Lard.....	119.1	18.2	100.9
All other farm products.....	627.7	375.4	252.3
Total.....	1,938.3	760.0	1,178.3

Cotton exports continued to hold up well in quantity during most of the great depression, amounting to 9,059,000 bales in 1932 and 8,572,000 bales in 1933; but, in common with most other primary goods, cotton prices were disastrously low. Thereafter internal recovery measures, including acreage reduction and loan programs, alleviated somewhat the price situation for the individual farmer, but largely at the expense of steadily growing foreign competition and shrinkage in export demand for the American product. Restrictive trade and exchange policies of other countries also tended to curtail the demand for American cotton. By 1938 cotton exports declined to 4,561,000 bales valued at \$228,647,000 and accounted for only 20 percent of foreign consumption, compared with about 47 percent in 1928.

In contrast to cotton, exports of wheat (including flour) and pork reached a peak around 1900 and, confronted with increasing competition from other producing areas, had already begun to decline before 1914. This decline was temporarily interrupted by the heavy food-stuffs requirements of Europe during the first World War and the early post-war years, exports of these items reaching an all-time high in 1919 in both quantity and value. By the middle twenties, however, the downward trend was again under way and, subject to little deviation, proceeded with increased tempo on into the depression. Shipments of lard provided something of an exception, being maintained much better than wheat and pork until as late as 1933.

As was true of cotton, domestic recovery measures aimed at curtailment of production and maintenance of prices, together with the import restrictions and preferential commercial arrangements of foreign countries, appear to have been chiefly responsible for the virtual disappearance of export markets for wheat and pork. Added to these influences were the heavy droughts of 1934 and 1936, which placed the United States on an import basis for wheat as well as corn in those years, but increases in home production and short crops abroad brought a renewal of grain exports on a relatively small scale in 1937.

The inevitable conflict between the necessity of assisting American farmers through maintenance of agricultural prices above depressed world levels and the need of retaining foreign markets for American farm products at last led to the institution of export subsidies for wheat, beginning in 1938, and for cotton, in the following year. These programs undoubtedly provided some immediate stimulus to exports and may be considered as partly responsible for the minor increases in those years.

Although cotton, wheat, pork, and lard dominated the movement in agricultural exports, two other important commodities behaved quite differently. One of these was tobacco, exports of which fluctuated between \$137,000,000 and \$164,000,000 from 1922 to 1929, fell to about half this level during the following depression, and again rose to about the earlier level. An even greater stability, subject to year-to-year crop variations, may be observed in the quantity figures. This behavior indicates the relatively inelastic nature of foreign demand for American-grown tobacco.

Still more interesting was the behavior of fruit exports. This item doubled in value from \$67,450,000 in 1923 to \$135,985,000 in 1929 and was the only agricultural export to show a definite and steady rise during that period. Such an increase might indicate either that foreign demand for American fruit increases rapidly with rising incomes abroad or that there has been a long-term upward trend in this demand since the first World War. The latter seems to have been the principal factor involved, as shipments of fruit, although falling back to around \$70,000,000 annually, did not suffer so severely during the great depression as other agricultural exports. After the depression, however, fruit exports failed to recover as strongly as might have been expected. They increased to \$91,634,000 in 1935 and then followed a somewhat erratic course, eventually reaching a post-depression maximum of \$96,119,000 in 1938. The explanation for this behavior appears to be in commercial restrictions imposed abroad.

The foregoing discussion of varying tendencies in exports of different commodities also serves to place in proper perspective the much-discussed long-run decline in the relative share of total exports taken by Europe and the increasing importance of other areas as export markets. Before 1900 Europe absorbed more than 75 percent of total United States exports, but thereafter this ratio fell rather steadily—to around 62 percent just before World War I, 53 percent in 1921–25, 45 percent in 1929, and about 41 percent in 1937–39.

The change, however, is subordinate to the shift in commodity distribution. Europe has been by far the most important market for American agricultural goods, and the deterioration in the export position of the United States in these products produced a concomitant decrease in Europe's share in the export total. It is important to note,

however, that for the commodities in which the export position of the United States was strongest Europe's share was well maintained. Of finished manufactures as a whole, the percentage going to Europe amounted to 32 in 1910-14, 32 in 1926-30, 35 in 1931-35, and thereafter ranged from 28 to 33.

Foreign Restrictions

New tariff barriers imposed by foreign countries were undoubtedly a factor of some consequence in restricting American exports and determining their year-to-year movements in the decade following the first World War. The newly created States in the predominantly agricultural areas of Central and Eastern Europe hastily sought, by commercial policy and other means, to provide themselves with an industrial armor, and there was a general effort to promote industrialization on the part of primary producing countries throughout the world. Probably of more serious consequence for American exports during these years were policies pursued by France, Germany, Italy, and various other industrial countries for the maintenance and protection of their agricultural production. On the other hand, a number of foreign countries—notably the United Kingdom, the Netherlands, and the Scandinavian countries—maintained liberal trade policies, and the commercial restrictions by foreign countries in general during the twenties were not sufficient to prevent a vigorous growth in United States exports.

The weakness of world primary prices at the beginning of the great depression brought on a new wave of tariff restrictions imposed by importing countries in an effort to maintain their own agricultural prices and production. Most of the tariff revisions of 1930 were primarily concerned with agricultural items. The United States Tariff Act of 1930, which had been long preceded by reports and rumors of impending duty increases, provided a strong fillip toward more restrictive commercial policies in general and led directly to retaliatory action by several countries.

It was not until 1931, when the depression had developed into a serious international monetary crisis, that commercial and related policies of foreign countries came to exercise a dominant and continuing control over virtually the full body of world trade and to impose almost insurmountable barriers to United States exports. These restrictive measures, however, were to a large extent the particular means adopted by foreign countries to make the inevitable adjustment to strains in their balance-of-payments position, and these strains emanated largely from the vertiginous decline in the supply of dollars after 1929 and the continuing low level of dollars supplied in later years.¹¹

In virtually all foreign countries the adjustment in their external transactions was accompanied in part by depreciation of their currencies, although the change was resisted in France and other gold-bloc countries until long after the depth of the depression was past elsewhere, and in Germany and various other countries was never openly acknowledged but was disguised by a confusing array of special conversion rates for various types of transactions. In addition, most countries resorted to far sterner and more enduring measures,

¹¹ These relationships are discussed in chapter V.

either through apparent necessity or through choice. There was, of course, a practically universal upping of import duties, marked particularly by the adoption of a heavy tariff structure by the United Kingdom in 1932, but in addition much more direct and decisive non-tariff means of control were adopted, especially by continental European countries. These measures entailed minute supervision and licensing of trade transactions, either through the medium of exchange control or import quotas or various combinations of both.

An inevitable counterpart of these restrictions was the development of preferential tariff systems and of special bilateral trading arrangements through clearing agreements and similar devices, leading to the diversion of trade from its accustomed channels and the growth of regionalism in commercial relations. Indeed, in the United Kingdom the adoption of a full-scale general tariff was partly motivated by the desire to provide a basis for bargaining in negotiating preferential trading arrangements, as shortly thereafter embodied in the Ottawa agreements with Empire countries and in agreements made with other closely affiliated non-Empire countries, notably Denmark and Argentina.

In continental Europe it soon became evident that trade and exchange controls were too binding and that ways must be found to unblock some of the channels of international commerce if internal economic life was to revive and continue. This necessity led naturally to direct "swapping" and trade-balancing arrangements between pairs of countries. The disadvantages of such trading mechanisms as compared with open multilateral trade have been emphasized many times; but, under the circumstances of profound international imbalance then prevailing, these arrangements did permit a certain revival of commercial exchange, however artificial or crippled, without opening the door to a general influx of outside goods in excess of capacity to pay. This system was most fully exploited by Germany and became the instrument for economic penetration and spoliation of many of its neighboring States, particularly in the Danubian and Balkan areas. Germany also extended the system with considerable success to South American countries, where German trade registered substantial increases under the famous *Aski-mark* device.

While it is impossible to trace in detail the effects of these various measures of trade restriction and control on American exports after 1929, the general consequences—in the diversion of foreign purchases away from the United States to other sources of supply—are apparent in charts 9, 10-A, and 10-B. A further view of these results, particularly as compared with the internal economic activity of foreign countries, is given in the following section.

United States Exports in Relation to Foreign Incomes

With the preceding discussions of the behavior of leading export commodities and of foreign commercial policy as a background, the course of United States exports may now be compared with changes in economic activity abroad. The best measure of these changes, in value terms, would be provided by an index of the combined national incomes of foreign countries, and the comparison would be analogous to that which has been made of national income and imports of the United States. This procedure involves a number of difficulties, several of which are subsequently discussed, but among the most

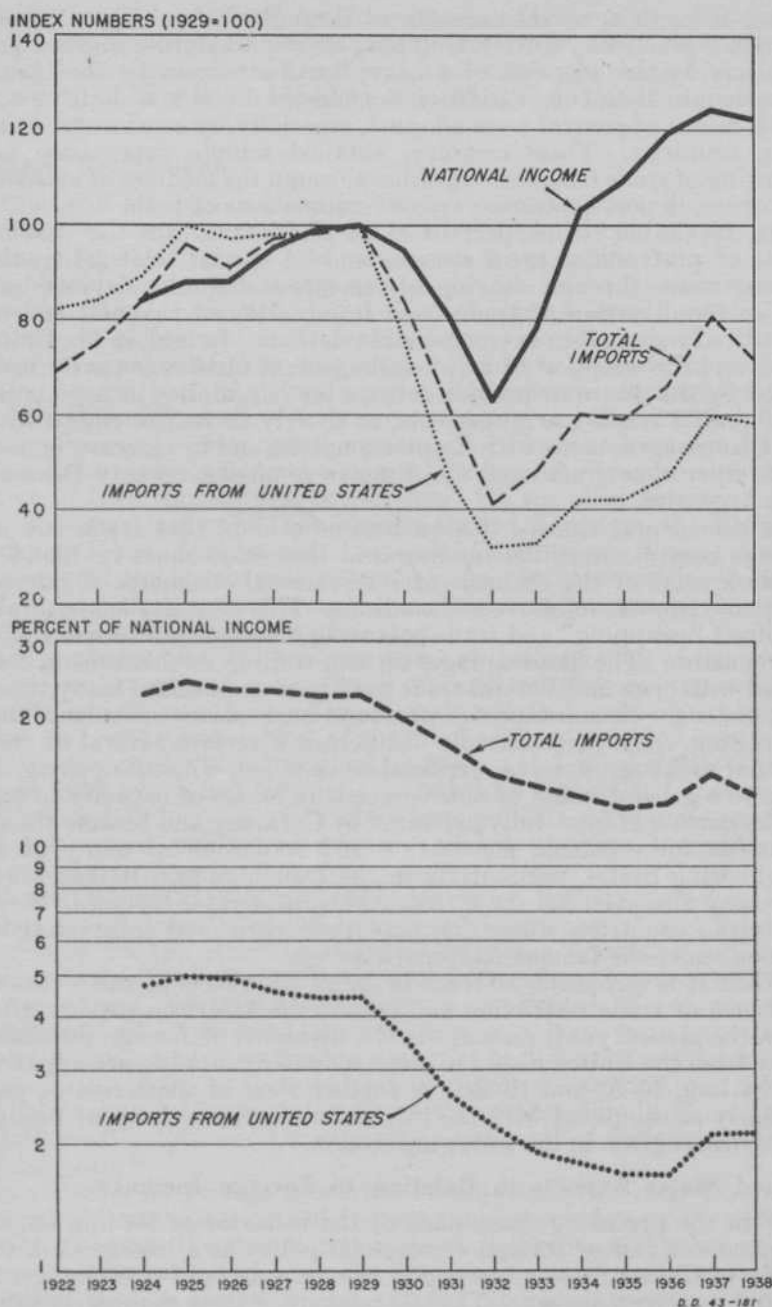


Chart 12.—Indexes of national income, total imports, and imports from the United States, and ratio of imports to national income—aggregates for 11 foreign countries. (Derived from dollar equivalents of values in national currencies.)

Note.—Countries included are: United Kingdom, Canada, Australia, New Zealand, Denmark, Norway, Sweden, France, the Netherlands, Germany, and Japan.

serious is the lack of satisfactory national income estimates for most countries.

Income series covering the years 1924-38 have, however, been brought together for 11 countries: The United Kingdom, France, Germany, the Netherlands, Norway, Sweden, Denmark, Canada, Australia, New Zealand, and Japan.¹² These countries constituted about 63 percent of the total foreign market for United States goods during that period, and shipments to them corresponded closely to the movement in total United States exports, especially during the great depression and subsequent upturn. In order to express the incomes of these countries in a common unit and to provide a basis for comparison with the movement in trade, the figures have been converted from their original currencies into dollars, at annual average exchange rates, and combined into an index as shown in chart 12.

Aside from such weaknesses as inadequacy of coverage, particularly for primary producing countries, and widely divergent trends from country to country among those included, the income index does not provide a satisfactory measure of changes in real economic activity abroad. A more satisfactory index of real activity would be afforded, if data were available, by income series calculated at constant prices and converted into a common unit at fixed rates, whereas the present index is affected by wide changes in both prices and exchange rates.

The effect of exchange-rate variations is particularly marked in the sharp fall in 1931-32, reflecting the depreciation of the pound sterling and many other currencies, and the rise in 1933-34, reflecting the appreciation of foreign currencies coincident with the fall and devaluation of the dollar. Despite these qualifications, however, the high level of the index in the late thirties undoubtedly reflects a substantial real economic expansion as compared with conditions in the twenties in several major countries, notably the United Kingdom, Germany, and Japan, even though relatively depressed conditions persisted in some of the other countries.¹³

The purpose of the index, however, is not to measure real economic activity but simply to show for the countries concerned changes in the sum total of the dollar equivalents of their national incomes. A reasonable expectation would be that, in the absence of restrictions and other special factors, increases or decreases in the dollar equivalents of foreign incomes would give rise to corresponding changes, perhaps in roughly similar proportions, in the dollar value of their imports from the United States. To be sure, it is unlikely that changes in the calculated dollar value of incomes resulting solely from variations in exchange rates would produce precisely the same results as changes in the internal level of economic activity of other countries, but in either instance a shift in the same direction in imports might logically be expected.¹⁴

¹² The methods and care employed in the construction of national-income estimates vary widely. Because of this and the problem of appropriate exchange rates, direct comparisons of national-income totals are always questionable. In this study, however, it is not so much their comparability from country to country that is of primary concern, as their reliability in showing relative changes over a period of years.

¹³ The generally higher value of foreign currencies in terms of the dollar after the latter was devalued is offset to a substantial degree in the index by the general failure of prices and living costs to regain their predepression levels.

¹⁴ In other words, since the index of national incomes of all countries, shown in chart 12, embodies both changes in their internal economic activity and variations in the dollar exchange value of their currencies, their imports from the United States might be expected to reflect, in addition to special influences, not only income elasticity but also price elasticity of demand for United States goods.

The comparison of the actual behavior of incomes and imports of foreign countries as given in chart 12 is interesting, not so much because of any similarity of movement that may be found at particular phases in accordance with the foregoing *a priori* expectations as for the wide divergences that developed.

The failure of imports from the United States to keep pace with the rise in incomes in the 1925-29 period is readily explained by the abnormally high level of shipments of foodstuffs and other agricultural exports to Europe in the early twenties. During the great depression and subsequent recovery of the next decade imports from this country—whether measured by import figures of foreign countries or United States export figures¹⁵—fell drastically as compared with national incomes.

As indicated in the lower section of chart 12, total imports of the 11 countries in relation to their national incomes declined from 22 percent in 1929 to 12 or 15 percent in the late thirties, and during the same time imports from the United States fell from 4.4 percent of national incomes to between 1.7 and 2.1 percent.

This behavior is not surprising in view of the fact that very severe trade restrictions were imposed during this period, as already described. Indeed, the divergences between the three series may be taken as rough measure of the importance of these restraints. The spread between national incomes and total imports indicates the degree to which foreign countries erected trade barriers and concentrated on internal recovery, although the relatively lower prices of goods moving in international trade were also a factor in this divergence as they were in that which developed between United States national income and imports. The further spread between total imports of the countries concerned and their imports from the United States indicates the influence of preferential tariffs and bilateral trading arrangements in diverting imports of foreign countries away from the United States to other sources of supply, and—undoubtedly a secondary factor—the discouraging effect of United States price-raising policies on agricultural exports.

Because of the difficulties attending the conversion of foreign-income series into dollar equivalents and their combination in a single index, comparisons of incomes and imports for each of the countries concerned have also been made in terms of the original foreign currencies. Relevant data for this purpose are plotted in charts 13-A, 13-B, and 13-C. The comparisons bear out the general observations based on the aggregate data for the 11 countries, particularly the lower level of imports as compared with national income in the thirties and the still greater relative decline in imports from the United States.¹⁶ Important distinctive features peculiar to each country, or to certain groups of countries, may, however, be briefly mentioned.

¹⁵ Imports from the United States plotted in chart 12 are derived from the trade statistics of the foreign countries covered, but, as noted in appendix A, a series based on United States statistics of exports to these countries shows similar behavior.

¹⁶ The spread between imports from the United States and imports from other sources is somewhat greater, of course, than that between imports from the United States and total imports. The difference is particularly marked in Canada, whose imports from the United States constituted 69 percent of its total imports in 1929 and 61 percent in 1937.

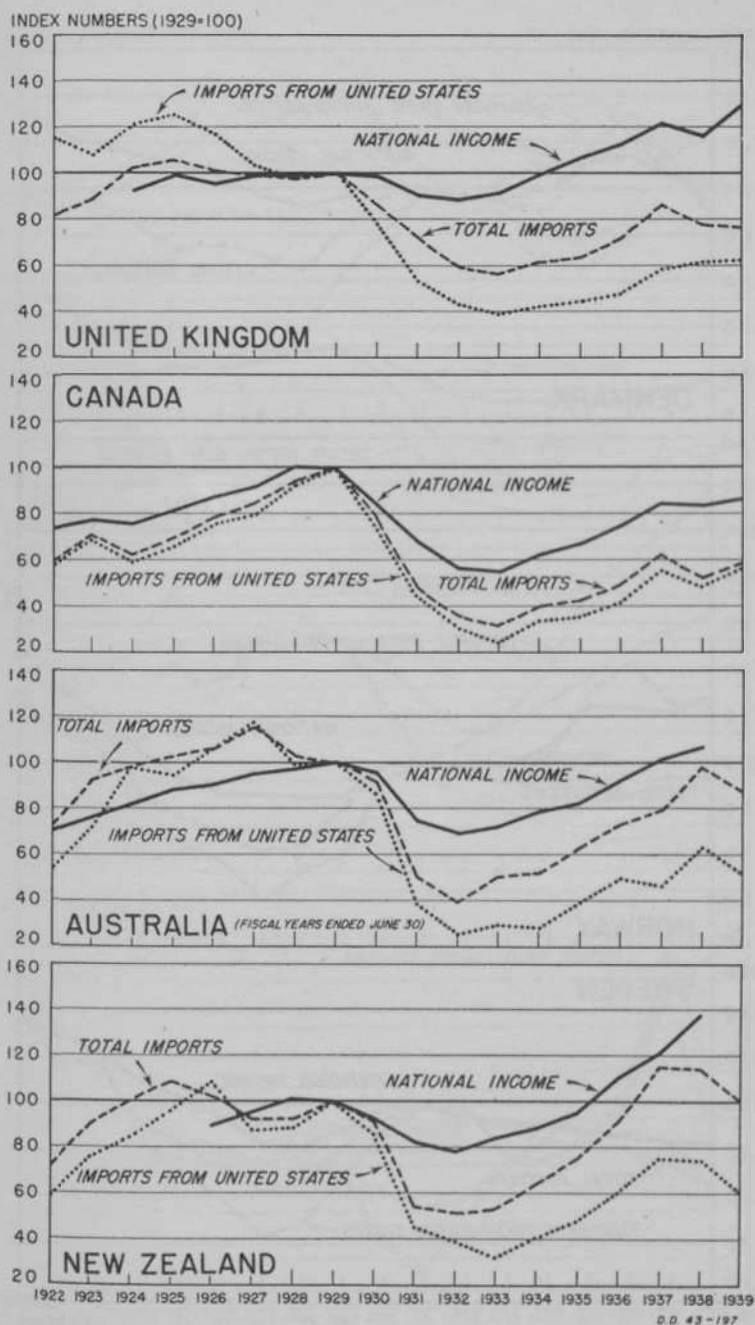


Chart 13-A.—National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies.)

The comparison of the actual behavior of incomes and imports of foreign countries as given in chart 12 is interesting, not so much because of any similarity of movement that may be found at particular phases in accordance with the foregoing *a priori* expectations as for the wide divergences that developed.

The failure of imports from the United States to keep pace with the rise in incomes in the 1925-29 period is readily explained by the abnormally high level of shipments of foodstuffs and other agricultural exports to Europe in the early twenties. During the great depression and subsequent recovery of the next decade imports from this country—whether measured by import figures of foreign countries or United States export figures¹⁵—fell drastically as compared with national incomes.

As indicated in the lower section of chart 12, total imports of the 11 countries in relation to their national incomes declined from 22 percent in 1929 to 12 or 15 percent in the late thirties, and during the same time imports from the United States fell from 4.4 percent of national incomes to between 1.7 and 2.1 percent.

This behavior is not surprising in view of the fact that very severe trade restrictions were imposed during this period, as already described. Indeed, the divergences between the three series may be taken as rough measure of the importance of these restraints. The spread between national incomes and total imports indicates the degree to which foreign countries erected trade barriers and concentrated on internal recovery, although the relatively lower prices of goods moving in international trade were also a factor in this divergence as they were in that which developed between United States national income and imports. The further spread between total imports of the countries concerned and their imports from the United States indicates the influence of preferential tariffs and bilateral trading arrangements in diverting imports of foreign countries away from the United States to other sources of supply, and—undoubtedly a secondary factor—the discouraging effect of United States price-raising policies on agricultural exports.

Because of the difficulties attending the conversion of foreign-income series into dollar equivalents and their combination in a single index, comparisons of incomes and imports for each of the countries concerned have also been made in terms of the original foreign currencies. Relevant data for this purpose are plotted in charts 13-A, 13-B, and 13-C. The comparisons bear out the general observations based on the aggregate data for the 11 countries, particularly the lower level of imports as compared with national income in the thirties and the still greater relative decline in imports from the United States.¹⁶ Important distinctive features peculiar to each country, or to certain groups of countries, may, however, be briefly mentioned.

¹⁵ Imports from the United States plotted in chart 12 are derived from the trade statistics of the foreign countries covered, but, as noted in appendix A, a series based on United States statistics of exports to these countries shows similar behavior.

¹⁶ The spread between imports from the United States and imports from other sources is somewhat greater, of course, than that between imports from the United States and total imports. The difference is particularly marked in Canada, whose imports from the United States constituted 69 percent of its total imports in 1929 and 61 percent in 1937.

INDEX NUMBERS (1929=100)

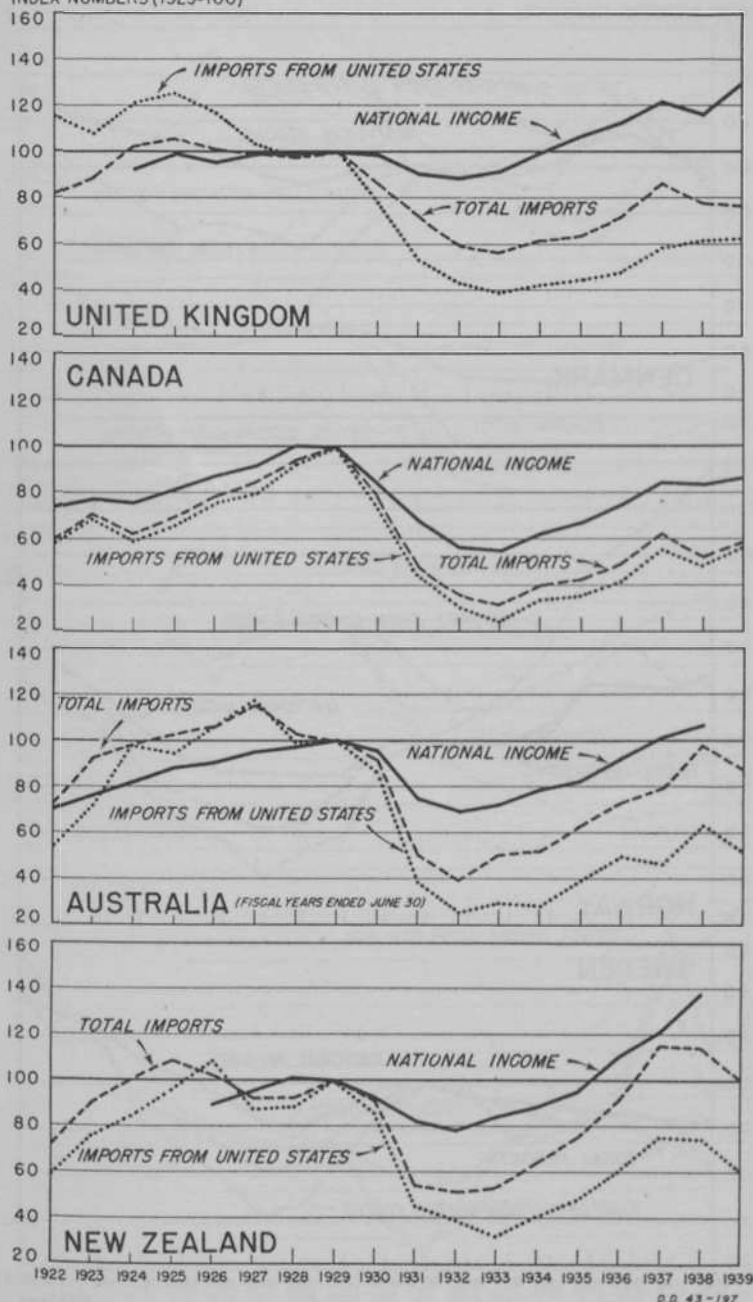


Chart 13-A.—National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies.)

INDEX NUMBERS (1929=100)

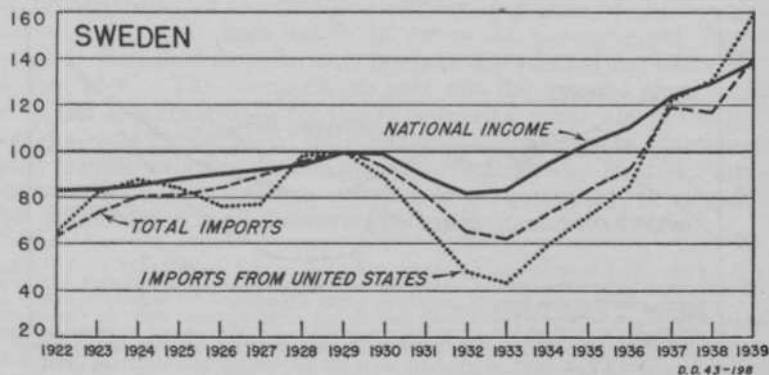
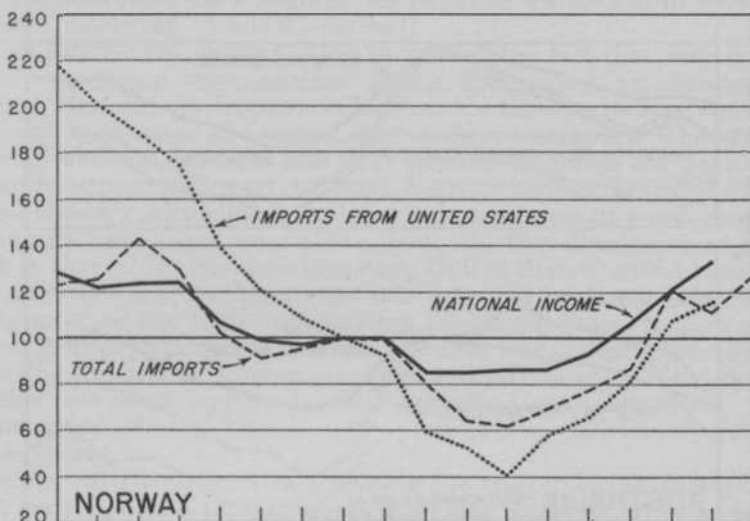
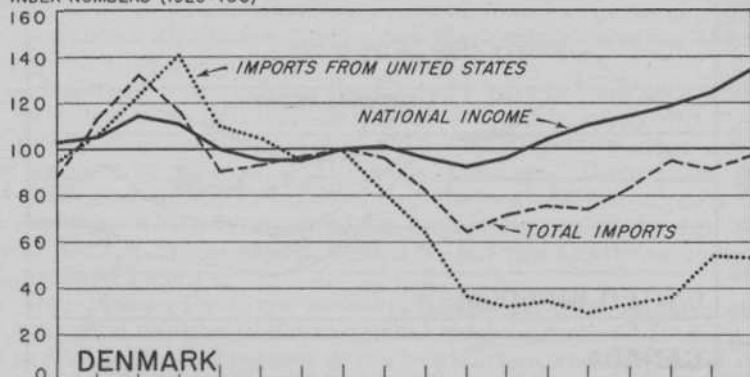


Chart 13-B.—National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies.)

INDEX NUMBERS (1929=100)

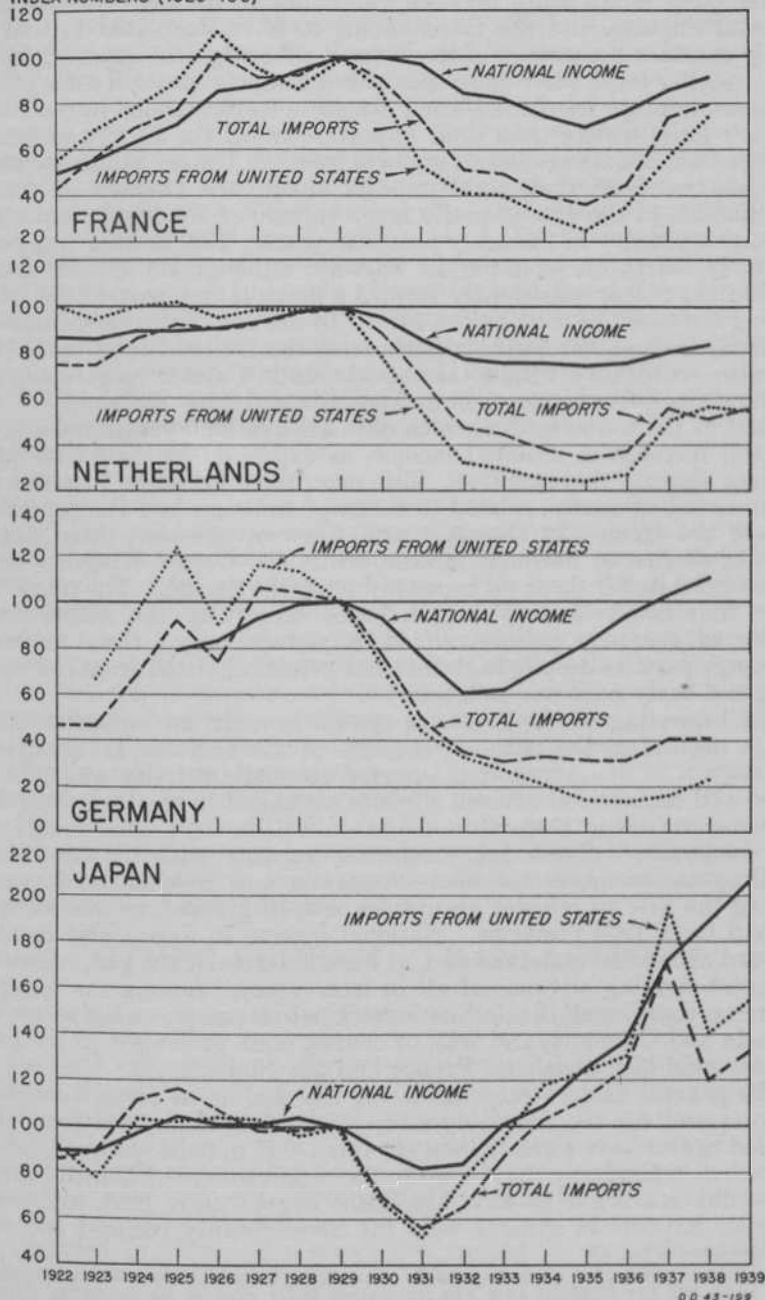


Chart 13-C.—National income, total imports, and imports from the United States of selected foreign countries. (Indexes of value in national currencies.)

D.D. 43-199

In most of the countries there was, before the great depression, a rather close relationship between variations in national income and in total imports, and the latter seems to have fluctuated around a fairly constant percentage of the former. As might be expected from their smaller total, their more specialized composition, and some other features, imports from the United States, however, tended in the main to vary more widely than total imports. In all the European countries for which data are shown imports from the United States declined as compared with their total imports during the twenties—a trend attributable to the exceptionally large volume of foodstuffs imported from this country in the early post-war years. This decline was particularly sharp, for example, in Norway, although its imports from the United States consistently formed a much larger part of the total during the twenties than before 1914. In the non-European countries covered, on the other hand, imports from the United States tended to move in conformity with total imports, as in Canada and Japan, or to show a relative increase, as in Australia and New Zealand.

Most of the countries for which data are available registered a substantial increase in national income, as expressed in their own currencies, during the twenties. The exceptionally large increase in France was, of course, related to currency inflation and the depreciation of the franc. In Denmark and Norway, however, there was a definite decline in national income, while the United Kingdom and Japan exhibited little or no increase during the period. The trends in these four countries may be attributed largely to the deflationary effects of currency policies aimed at restoration of their pre-war exchange parities despite high internal prices inherited from the war-time and early post-war inflation.¹⁷

The beginning of the great depression brought an immediate and severe decline in the national incomes of most of the 11 countries, although it is of interest that internal economic activity was apparently well maintained or even slightly expanded in the three Scandinavian countries in 1930, while the initial fall in the United Kingdom was moderate.¹⁸ These four countries, together with the two other sterling-bloc members included—Australia and New Zealand—were among the first to register an upturn and, in general, recovered well beyond their 1929 positions. National income in Japan also turned upward about the same time and, at least in terms of the yen, recorded the most striking advance of all in later years. Among the foreign countries considered, the decline in national income was most severe in Canada and Germany, and was, of course, most prolonged in the two former gold-bloc members, France and the Netherlands.

The general factors responsible for the decline in foreign-country imports and for the relatively more severe fall in imports from the United States have already been set forth. It may be observed, however, that in Germany the spread to the disadvantage of United States trade did not begin in any significant degree until 1933, although German imports in general were far more sharply reduced and re-

¹⁷ In Japan, restoration of the yen to its old gold parity was not actually undertaken until 1930, but the exchange rate was maintained fairly close to its old parity during most of the twenties.

¹⁸ During 1930 industrial production actually increased somewhat in Denmark, Norway, and Sweden and fell by only 8 percent in the United Kingdom.

mained lower than in other countries (in terms of the various national currencies).

With respect to the behavior of imports during the recovery phase after the great depression, the contrast between Denmark and the other two Scandinavian countries is especially noteworthy. Denmark was not only more intimately related to the United Kingdom through prior trade connections and preferential trading agreements concluded during the depression but also practiced exchange control favoring imports from its principal customers. On the other hand, Norway and Sweden, although they also depreciated their currencies along with the pound and formed part of the sterling bloc, engaged in direct controls and preferential practices on a far milder scale. The recovery in total imports of Norway and Sweden, and particularly in imports from the United States, which followed closely similar patterns in the two countries, suggests that, of the various measures of adjustment adopted to meet balance-of-payments strains, exchange depreciation proved far less of a permanent barrier to the eventual recovery of United States exports than other restraints imposed by foreign countries.

Japan formed the chief exception to the general trend, at least until severe trade and exchange restrictions were imposed in 1938, in that its total imports early recovered approximately their former relation to national income, while imports from the United States expanded in even stronger measure. This experience might also be taken to bear out the foregoing suggestion as to the relatively less onerous bearing of exchange depreciation on imports from the United States; but it would be hazardous to base any conclusions thereon because of Japan's obvious orientation toward military and economic expansion throughout the thirties, giving rise to an import demand in which American products were particularly essential.

Finally, whatever may have been the stimulus toward expansion of United States exports provided by the depreciation of the dollar in 1933-34, its effects do not stand out in these graphic comparisons. There was little apparent tendency for imports from the United States to regain immediately their previous relationship to incomes or to total imports of foreign countries.

OTHER CURRENT TRANSACTIONS

Transportation Payments and Receipts

Receipts and payments for international shipping services in the United States balance of payments during the interwar period exhibited cyclical variations closely paralleling the fluctuations in merchandise imports and exports. The relation between the two is, however, extremely complex, and such other factors as changes in freight rates and in the competitive position of the American merchant marine exerted a significant influence.

Included in shipping receipts are freight on exports carried in United States vessels, expenses of foreign vessels in United States ports, fares paid by foreigners traveling on American ships, and cer-

tain receipts in connection with railroad operations. Payments comprise the reverse of each of these with ocean freight including only payments on imports carried in foreign vessels.¹⁹ The relative importance of each of the components of this item in the balance of payments is disclosed in chart 14.

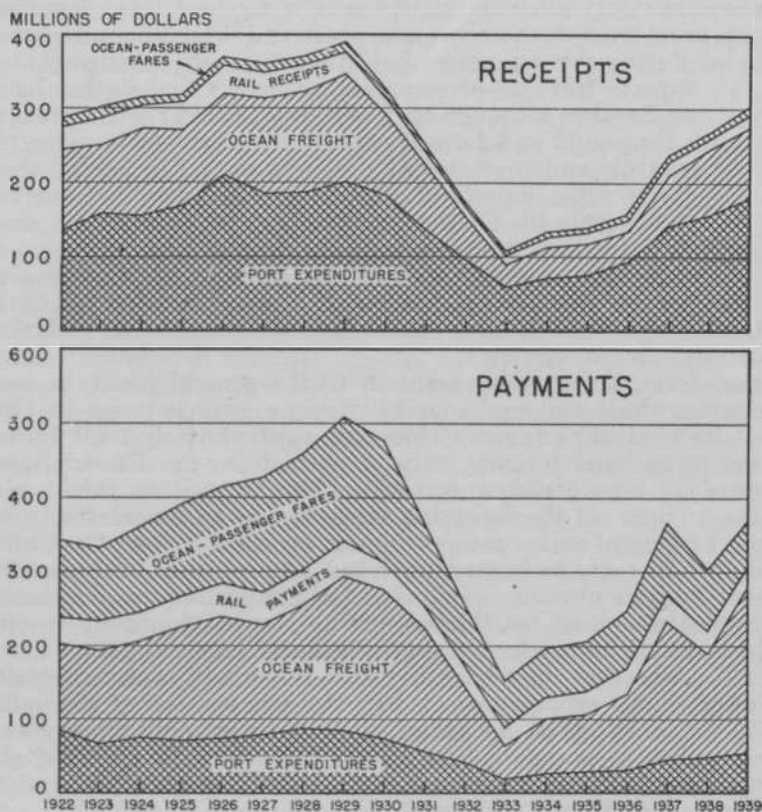


Chart 14.—Receipts from and payments to foreign countries for freight and shipping services, 1922-1939.

Except for 1919, 1920, and 1921, when the world was abnormally dependent on American shipping, payments to foreigners exceeded receipts in the interwar period. When freight and passenger-fare payments alone are considered, the excess of payments in the years after 1921 was even greater than appears in table I, since the largest item of receipts was the expenditures of foreign vessels in United States ports. These expenditures grew continually during the period with the increase in the portion of United States trade carried in foreign bottoms. After 1921 there was an almost uninterrupted decline in the percentage of both imports and exports carried in United States vessels, as shown in chart 15. The continuation of this trend during

¹⁹ The problems involved in determining international transportation payments and receipts are discussed in appendix B.

and after the depression accounts for the more rapid and relatively greater recovery in payments than in receipts after the low year of 1933.

The foregoing discussion indicates the relative inferiority and progressive deterioration of the American merchant marine after the collapse of the shipping boom resulting from the first World War. Many of the ships hastily constructed during the war period were fit only for tramp service and were unable to meet the subsidized competition of foreign operators with their newer, faster vessels moving on regularly scheduled runs. In the passenger business, especially, foreign vessels were predominant, as indicated by the fact that more than 80 percent of the fare payments of Americans traveling overseas in the boom years of the tourist traffic went to foreign shipowners.

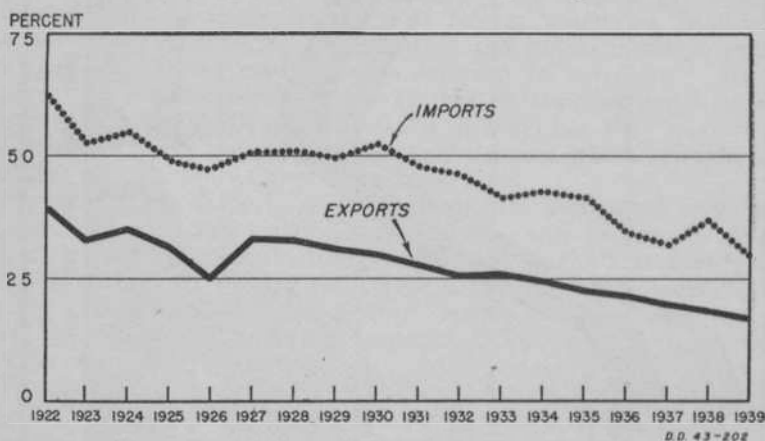


Chart 15.—Proportion of United States imports and exports carried in American-flag vessels, 1922-39.

American ships more and more sought the protection of coastwise trade, from which foreign vessels were excluded, and by 1939 only 23 percent of the United States oceangoing tonnage was engaged in foreign commerce, as compared with 61 percent in 1920 and 39 percent in 1930. Attempts were made to subsidize and otherwise assist American shipping, particularly under the Merchant Marine Acts of 1928 and 1936, but the portion of United States trade carried in domestic vessels continued to decrease through 1939, and the ratio of receipts to payments continued to decline.

Railroad receipts and payments have been relatively unimportant in amount, the excess of payments being accounted for largely by disbursements to Canadian roads for handling United States transit traffic and by the expenses in Canada of American-operated lines hauling domestic freight between Buffalo and Detroit.

Travel Expenditures

Travel by residents of the United States in foreign countries has constituted one of the most prominent and, on occasion, spectacular features of the economic and social relations between this country and

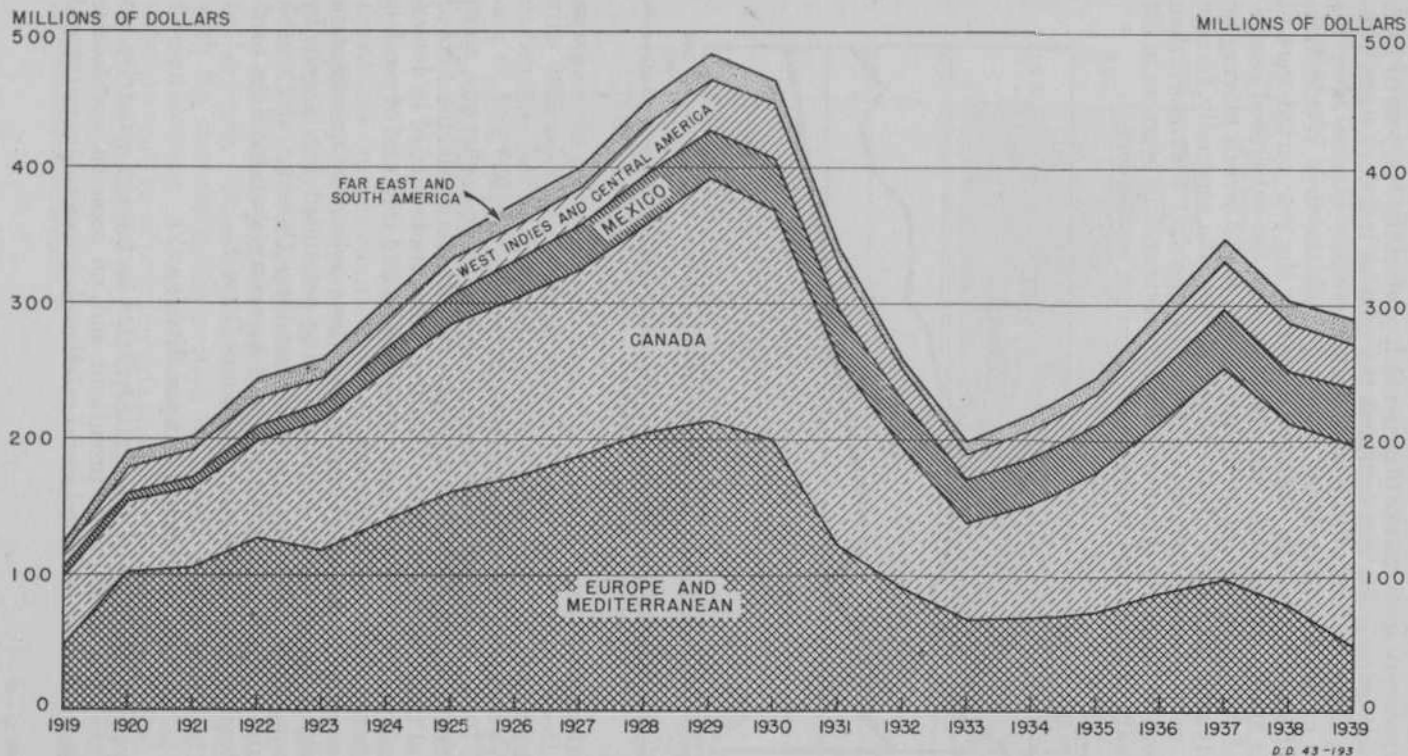


Chart 16.—Travel expenditures in foreign countries by residents of the United States, 1919-1939.

D.D. 43-193

other countries and one of the most consequential items in the balance of payments. In a broad sense, foreign travel may be said to represent the most, and indeed the only, important luxury "commodity" this country "imports" from abroad. Already a factor of some significance before 1914, the number of Americans and resident aliens traveling abroad grew with great rapidity in the twenties, and their outlays reached a maximum only slightly below the half-billion-dollar level in 1929.

During the depression these expenditures fell by 60 percent—from 1929 to 1933—and remained well below the 1929 level thereafter, but over the interwar period as a whole they aggregated more than \$6,000,000,000. This flow of travel money exercised a profound influence on the economic structure of foreign countries, stimulating the development of shipping facilities, the hotel industry, and all the numerous trades and services catering to travelers.²⁰ Similar outlays by foreign visitors to the United States were much smaller, reaching a peak of about \$140,000,000 in 1929, but they were distinguished by a sharp recovery in the early thirties, which brought them back to approximately the predepression level.

Foreign travel is perhaps most frequently associated with tours in oversea countries, particularly Europe, and cruises in distant waters. Such travel bulked large, especially in the first decade after the World War.²¹ In the peak year 1929, 384,000 residents of the United States departed for Europe, South America, and the Far East, and their expenditures aggregated \$230,000,000, or some 48 percent of the total in that year.

Foreign travel also includes, however, a vast number of trips to neighboring countries—Canada, Mexico, the West Indies, and Central America. The volume of this movement, especially over land borders, is difficult to measure and summarize in significant statistical form, since it includes a broad variety of travel, ranging from visits of a few hours to several months' duration, and for such different purposes as shopping and business, and visits to friends and relatives, cruises in nearby waters, and other forms of pleasure travel. It is noteworthy, however, that aggregate American travel outlays in these neighboring areas grew far more rapidly in the twenties than did expenditures for more distant journeys and that the former registered a sharper and more complete recovery after the great depression (chart 16).

Because of the luxury or pleasure character of most foreign travel and the obvious connection between commercial trips and business conditions, outlays for these purposes were keenly responsive to changes in basic economic activity. As indicated in chart 17, there was a rather close relationship between gross expenditures for foreign travel (including transportation charges) and national income. The sharper rise in the former in the twenties is basically a reflection of the elastic nature of the demand for travel, but it is also attributable

²⁰ Estimates of American travel expenditures abroad as carried in table I and here cited do not include fare payments and expenses on board foreign vessels (which are included in the freight and shipping account) and similar outlays for travel on American-flag vessels (which are not international transactions).

²¹ A detailed study of oversea travel was issued by the Department of Commerce in 1939. (Maffry, August. Oversea Travel and Travel Expenditures in the Balance of International Payments of the United States, 1919-38. U. S. Bureau of Foreign and Domestic Commerce, Economic Series No. 4, 1939.)

to the concomitant improvement in travel facilities, the tourist-promotion efforts of foreign countries, and the development of the travel habit on an ever-broadening scale. Faster and more luxurious liners were placed in service, particularly by foreign shipping companies vying with each other and frequently aided by government subsidies, while the growth in tourist and monoclass steamship accommodations helped to increase the number of travelers in the lower income groups, such as students and teachers.

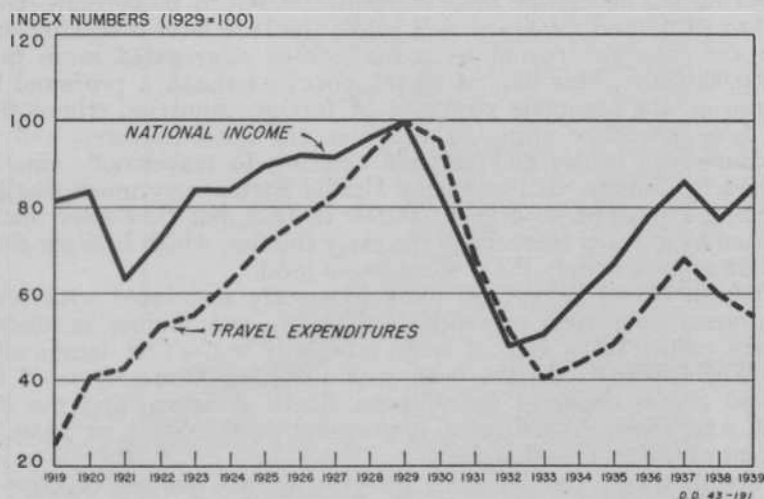


Chart 17.—Indexes of United States national income and expenditures for foreign travel: 1919-39.

Note.—For purposes of this chart, travel expenditures include ocean fares and expenses on board American and foreign ships but exclude outlays by emigrant aliens.

The relatively moderate decline in travel expenditures during the first year of the depression is probably explained by the fact that the personal savings of people able to travel had not yet been seriously impaired, while expectations that the recession would be mild were still entertained—there had been a temporary upturn in business about the beginning of the travel season—and the break from the strenuous boom period of 1929 served to free many people for travel who had previously been too preoccupied. In consequence of these and possibly other circumstances the number of persons departing for oversea destinations as well as to Canada in 1930 was actually somewhat greater than in the preceding year, though outlays per capita and the total volume of travel expenditures declined.²²

After 1930 the decline in American travel outlays was precipitous as the depression gained headway. Not only did the total volume of departures shrink, but there was a notable diversion from longer and more expensive trips to travel in nearby areas. Caribbean cruises as a substitute for costlier tours in Europe were primarily a depression-born development.

²² Extraordinary influences also helped to sustain the volume of travel in 1930 despite the onset of the business depression. For example, it was estimated that more than 50,000 Americans attended the decennial performance of the Passion Play at Oberammergau, and that 3,653 Gold Star Mothers went to France at Government expense.

Continuation of the fall in aggregate travel expenditures on into 1933, after the domestic economy had begun to recover, was probably a result of the increase in the cost of foreign travel resulting from the depreciation of the dollar, which had begun in April of that year. This factor undoubtedly contributed to the failure of travel to Europe to recover significantly in later years, inasmuch as the gold-bloc countries that long resisted the pressure to depreciate—France, Italy, Switzerland, Belgium, and the Netherlands—had previously been favored tourist areas. Germany, also retaining at least the nominal gold parity of its currency, endeavored to offset this handicap through special travel marks offered at greatly reduced rates, but travel to that country was affected by the revulsion with which the Nazi regime was commonly regarded in the United States. Political disturbances stemming from Germany exercised an increasingly restrictive effect on travel to Europe in the late thirties, although the business recession in the United States beginning in late 1937 was probably a factor of more immediate consequence in curtailing travel generally.

In contrast to the low level of travel to Europe after the depression, the upturn in American purchasing power was accompanied, as previously observed, by a marked revival in travel in non-European areas. Travel to Canada and Mexico was encouraged by the further growth in motor transportation, especially through the construction of better roads and the development of resorts and other vacation facilities. After 1929, moreover, air travel increased steadily within the Western Hemisphere. This development represented in part a diversion from other types of carriers, but it also opened new opportunities for pleasure and business travel by persons of adequate financial means but with limited time at their disposal. By the end of the thirties air transportation had also begun to play a modest role in travel to Europe and the Far East—an augury of its vast potentialities for the future.

Personal Remittances

Like travel expenditures, personal remittances have long been a characteristic feature of the United States balance of payments and have yielded a substantial excess of payments to foreigners over receipts. Personal-remittance payments, however, have shown a pronounced secular decline not exhibited by outlays for foreign travel.

Personal remittance payments are those made by individuals to friends or relatives for noncommercial reasons. Payments for goods and services and transfers of capital are excluded, although some funds transmitted directly abroad for deposit in foreign banks have undoubtedly been included in the data reported for this type of transaction. Personal remittances from this country are usually made through banks, travel and steamship agencies, and post-office money orders. The data in table I also include estimates for cash sent out by mail. Receipts include money carried on their persons by alien immigrants, collections of the head tax placed on these immigrants, and foreign money orders cashed in the United States.²³

²³ The composition of these items is discussed in more detail in appendix B.

The basic factor determining the long-run trend of personal remittances to foreigners is the size and character of the remitting group in this country, which is believed to consist almost solely of foreign-born residents. The number of foreign-born residents declined from 14,200,000 in 1930 to 11,800,000 in 1940.²⁴ Not only was the number of potential remitters in the United States declining, but their ties with the old country were growing continually more remote and their average remittances smaller. By 1940 about 55 percent of the foreign-born white population was over 50 years of age, and as early as 1930 over 60 percent of this group had been in the country for more than 20 years.

The downward trend was also influenced by other factors of a more temporary nature. Remittances in 1919 and 1920 were abnormally large because of the need for relief in Europe. Chaotic economic conditions, especially in Central Europe, in the immediate post-war years evoked a vast outflow of relief funds from the United States, of which increased personal remittances formed a substantial part.

Personal financial circumstances of the remitters must also have been a factor influencing the amount of funds sent abroad. Thus economic conditions in the United States were apparently responsible for the sharp drop in payments from 1929 to 1934, and even during the twenties there seems to have been a rough relationship between total wage and salary payments in the United States and personal remittances abroad.

Receipts of personal remittances are estimated at a substantially lower figure than payments, but are probably understated because of incomplete data.²⁵ Because of the inclusion of money brought in by alien immigrants, including head-tax collections, receipts during the interwar period bore a rather close relationship to the number of immigrants admitted but declined relatively less during the depression. The latter fact may be explained by the continually increasing per capita amount of money shown by alien immigrants, which was probably largely because of the growing proportion of business and professional people among them. Exchange restrictions and political dangers abroad, leading to smuggling of currency from foreign countries, also tended to increase the amount of cash carried on their persons by aliens arriving in this country. On the other hand, personal-remittance receipts via postal money order declined abruptly after 1929, probably a direct result of lowered incomes received by remitters, assumed to have been mainly American citizens residing abroad.

Institutional Contributions

Institutional contributions, another typical component of the United States balance of payments, are like personal remittances in that they represent gifts for the most part, but they arise out of different motivating factors. They comprise remittances, including shipments in kind, made by both religious and nonsectarian groups in the United States, for charitable, educational, missionary, and scientific purposes. Receipts of such remittances from other countries are considered negligible.

²⁴ According to census data there was a small increase of about 300,000 from 1920 to 1930, but this increase must have been accounted for mainly by arrivals before the Immigration Act of 1924, after which the number of immigrants was sharply reduced.

²⁵ See appendix B.

Institutional contributions were at a maximum of \$140,000,000 in 1919, as shown by chart 18. From that peak they declined rapidly to \$65,000,000 in 1925 and then more gradually to a low of \$27,000,000 in 1935. Under the impetus of war and political and racial persecution abroad, remittances, especially by Jewish and nonsectarian agencies, registered annual increases in succeeding years and reached a total of \$43,000,000 in 1939.

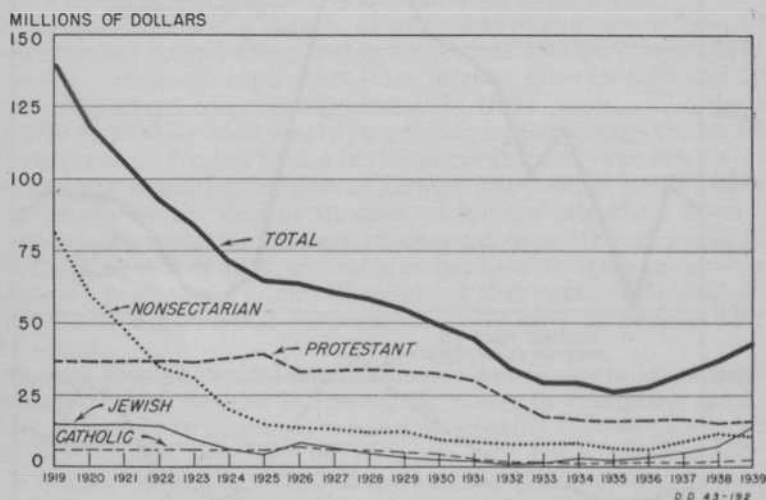


Chart 18.—Institutional contributions to foreign countries, 1919-39.

The abnormally high amounts in the early post-war years consisted primarily of contributions for relief and rehabilitation in Europe, the Near East, and, somewhat later, Japan, by nonsectarian agencies, such as the American Red Cross, the American Relief Administration, and Near East Relief. By 1925 contributions for relief had practically ceased, and nonsectarian expenditures after that date, until about 1938, were mainly for scientific and educational purposes.

Among the religious groups, expenditures by Jewish organizations were motivated largely by considerations similar to those that prompted contributions by the major nonsectarian organizations and tended to follow the same general pattern. Jewish contributions have been devoted mainly to the relief, rehabilitation, and resettlement of Jews in Europe and the Near East, and these needs were greatest in the early post-war years and after the resurgence of anti-Semitism in Nazi Germany and elsewhere.

Protestant and Catholic contributions, on the other hand, have been chiefly for the purpose of building up and maintaining religious missions abroad, principally in Asia—an activity which dates back to the early nineteenth century and is an established feature of American religious life. It is therefore not surprising that these remittances fluctuated less during the interwar period. Although there is evidence of a secular decline after 1925, the major influence seems to have been the depression, which reduced Protestant contributions from around \$33,000,000 or \$34,000,000 in 1926-29 to a level of about \$16,000,000 from 1934 onward. In the same period Catholic remittances fell from approximately \$6,000,000 to \$2,000,000.

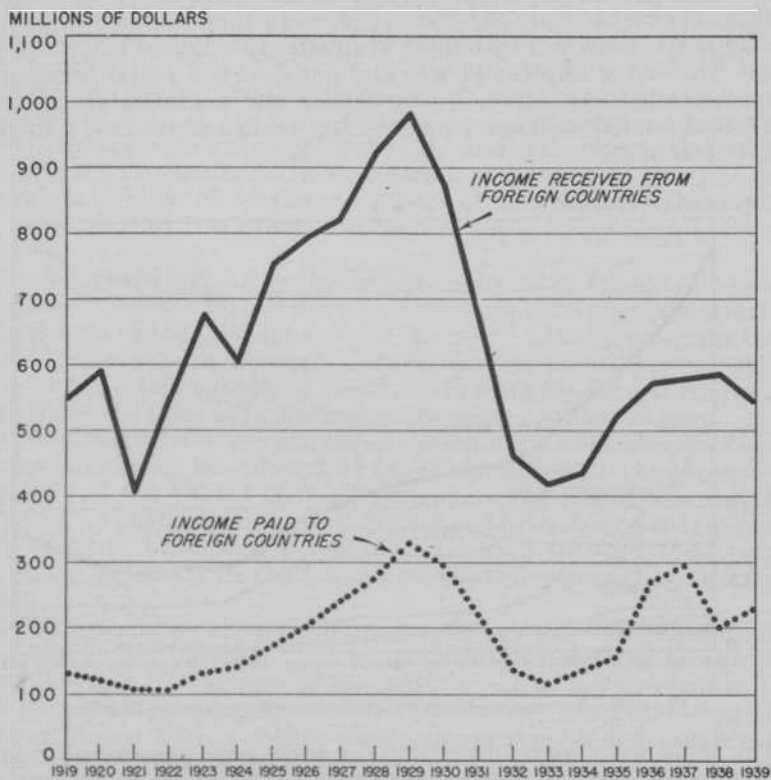


Chart 19.—Income received from American investments abroad and income paid on foreign investments in the United States, 1919-39.

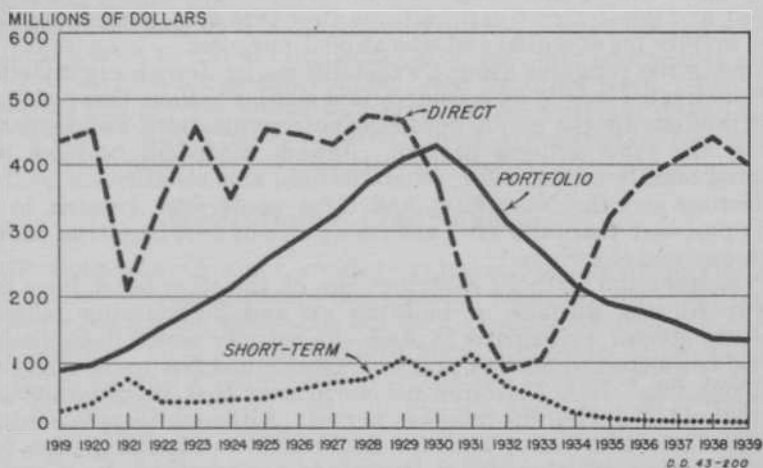


Chart 20.—Composition of income from American investments abroad, 1919-39.

D.D. 43-200

Interest and Dividends

Among the current items in the balance of payments, the international flow of income from investments was second only to merchandise trade in amount during the interwar period. Income payments exhibited a marked susceptibility to cyclical influences, as indicated in charts 19 and 20, though changes in the outstanding amount of investment involved were obviously also of basic importance.

The steadily increasing volume of payments to foreigners from 1922 to 1929 reflected largely the growing amount of foreign investments in this country, although high short-term interest rates in 1928 and 1929 were an important contributing factor in those years. The decline from 1929 to 1933—which was even greater, in percentage terms, than that in returns on United States investments abroad—was attributable in part to the rapid liquidation of foreign short-term funds but was caused chiefly by the decline in rates of income attendant upon the depression. Payment of interest on demand deposits was prohibited by the Banking Act of 1933, and rates on bankers' acceptances averaged well below 1 percent per annum throughout that year, while total dividends paid by all domestic corporations were only 38 percent of the 1929 amount.

Although foreign capital entered the United States in large volume beginning in 1934, the rise in income payments to foreigners must be attributed largely to increased returns on existing investments. Most of the new capital went into short-term assets, the earning power of which was virtually nil. The influence of the 1938 recession is clearly evident, the smaller payments in that year resulting from reduced income remittances on direct investments and common stocks.

Curiously enough, income from American investments abroad appears to have been even more susceptible to business conditions in the United States than were payments to foreigners, although inadequacies of the basic data preclude definitive conclusions on this point. The declines in receipts coincident with the business recessions of 1921, 1924, and 1927 were attributable solely to fluctuations in income from direct investments, as indicated by chart 20. A substantial portion of direct investment capital had been placed in enterprises producing raw materials and foodstuffs that exported their products to the United States,²⁸ and this factor would seem to account for the apparent relationship between direct investment income and business conditions in the United States.

A declining over-all rate of return on direct investments is indicated by the fact that income received in 1928 and 1929 was not substantially greater than in certain earlier years, notably 1920, 1923, and 1925. The establishment of a large number of new enterprises toward the end of the twenties, which added considerably to the amount of capital invested but did not at once contribute substantially to income received, was in part responsible for the failure of receipts to rise more markedly. Additional factors were the drastically reduced earnings of the Cuban sugar companies and, with that, of Cuban investments in general, the decline in primary prices, and large new investments

²⁸ Notably Cuban sugar enterprises. The proportion of capital in industries producing raw materials and foodstuffs was undoubtedly much greater in the early years of the period, as the major expansion in American manufacturing and, particularly, public utility holdings abroad occurred in 1927 to 1929.

in public utilities, many of which produced only very low rates of return.

The recovery in income receipts from direct investments after 1932 was almost solely a result of improved economic conditions, new capital investments having been more than offset by losses and sales and by declines in value resulting from exchange depreciation. Increases in income were registered from every major area except Europe and from all the larger industrial groups. The gain was particularly notable in returns from the petroleum and mining industries, presumably because of growing military demands. Data for 1935 to 1939 are shown in table 9.

TABLE 9.—*Income From Direct Investments, by Areas and Industrial Groups, 1935-39*

[In millions of dollars]

Areas and industrial groups	1935	1936	1937	1938	1939
Areas:					
Canada and Newfoundland.....	115	145	108	116	139
Latin America.....	95	115	178	173	124
Europe.....	75	80	65	73	72
Asia, Africa, and Oceania.....	35	40	59	78	65
Total.....	320	380	410	440	400
Industrial groups:					
Manufacturing.....	113	127	87	119	132
Distribution.....	(1)	(1)	31	26	29
Agriculture.....	14	18	20	19	19
Paper and pulp.....	2	2	1	3	4
Mining.....	58	74	116	106	87
Petroleum.....	85	109	105	110	68
Public utilities.....	41	42	45	50	53
Miscellaneous.....	7	8	5	7	8
Total.....	320	380	410	440	400

¹ Included in "Manufacturing."

Interest receipts from the American portfolio of foreign dollar bonds followed a course substantially different from that of returns on direct investments. The steady rise to 1930 reflects both the continually increasing amount of securities held and an increasing average rate of return. The latter resulted from the fact that holdings at the beginning of the period consisted largely of issues bearing relatively low interest rates, averaging only about 5 percent, which was lower than typical rates of most of the new issues of the decade.

The steep decline from the high point of \$429,000,000 in 1930 was largely the outcome of widespread defaults that began with Bolivia's failure to meet contractual sinking-fund payments in December 1930 and spread rapidly throughout much of Latin America and Europe in the following 3 years. German issues constituted the largest single national group of defaulted bonds, interest payments in dollars being suspended or reduced in 1933 and 1934. By December 31, 1933, 67 percent of the Latin American dollar bonds outstanding and 46 percent of similar European issues were in default as to interest. Interest due and unpaid from January 1, 1931, to March 1, 1934, (not all of which was due to Americans, however) amounted to \$187,000,000,

with an additional \$47,000,000 having been paid in script or funding bonds.²⁷

The repatriations of the depression years probably did not serve to reduce materially the amount of interest received by Americans, since they involved principally issues in default as to interest. Earlier, large repatriations of European issues and European purchases of Latin American bonds did, however, have the effect of reducing interest payments to the United States.

The wave of defaults subsided in 1934 and the continued, though more gradual, decline in interest payments after that date reflected the decrease in principal amounts outstanding through normal amortization and redemption operations.

The relative ability of direct- and portfolio-investment income to adjust to changing economic conditions is evidenced by the comparative declines in these items—82 percent and 24 percent, respectively—from 1929 to 1932. The advantage to the debtor country, in times of depression, of having obligations the service on which is adjustable, is evident. Although income from direct investments has often been blocked and substantial losses to investors have occurred through reorganizations of American companies operating abroad, direct investments weathered the depression with considerably lighter losses to investors, both of principal and interest, than did foreign bonds. Moreover, direct-investment holdings have not given rise to international controversy and ill will to an extent comparable to that which accompanied defaults on foreign dollar bonds.

Short-term assets abroad were an important source of income only when amounts invested were large and interest rates high. Peaks of \$106,000,000 and \$111,000,000 were reached in 1929 and 1931, respectively. In recent years, with the reduction in American balances in foreign countries and the decline in short-term rates, receipts from this type of investment have been negligible.

Government International Transactions

International receipts and payments on Government account, as set forth in the balance-of-payments statement (table I), embrace a wide variety of transactions. Some of these represent what might be considered usual and regular governmental operating expenses or receipts, including costs of diplomatic and consular representation, maintenance of military establishments abroad, and remittances related to the operation of the Panama Canal. On the whole, this class of transactions, designated simply "Other Government items," shows no well-defined trends and, aside from 1919, when military expenditures abroad were still heavy, remained relatively stable and comparatively unimportant in amount during the interwar period.

Far more important in size and variability were other types of official transactions, chiefly intergovernmental, arising out of various special circumstances. These transactions are entered in table I under the broad heading, "Government aid and settlements," inas-

²⁷ Institute of International Finance. Foreign Dollar Bond Defaults. Bulletin 70, May 14, 1934. P. 8.

much as they involved for the most part extension of financial assistance in some form, repayment of advances previously made, or other types of settlements. Many of these transactions were partly of a capital nature, but the practical difficulty of segregating payments of interest from payments of principal led to the inclusion of the total amount in the trade and service section of the balance-of-payments statement.

In 1919, the United States Government disbursed abroad almost \$3,000,000,000 largely in the form of loans and gifts to foreign governments. About \$675,000,000 of this amount represented the sale of surplus war materials and the furnishing of relief supplies on credit. Additional advances were made in 1920, although on a much diminished scale, and still smaller amounts in 1921, 1922, and (to Greece) in 1929. Cash settlements made by the Alien Property Custodian and the War Claims Arbiter represented the remainder of these payments in most years, although beginning in 1937 substantial sums were remitted to the Philippine Government as a refund of processing taxes collected in this country on coconut oil imported from the Islands.

Receipts, which amounted to approximately \$3,700,000,000 for the period 1919-39, represented chiefly collections of principal and interest on cash advances and credits made by the United States Government to foreign governments from April 6, 1917, to November 1, 1920, in the total amount of approximately \$10,000,000,000.²⁸ In general these payments were received under the provisions of various funding agreements negotiated by the World War Foreign Debt Commission in 1922 to 1926. The terms of these agreements varied considerably and involved "forgiveness," figured on a 4½-percent basis, ranging from about 20 percent for Great Britain and some other countries, to 53 percent for France, and 75 percent for Italy.²⁹

Payments on war debts were received from foreign governments until the middle of 1931, when the rapidly deteriorating economic situation, particularly in Central Europe, made suspension almost inevitable. Under the so-called Hoover moratorium, which was negotiated in recognition of this situation, no collections were made during the fiscal year ended June 30, 1932. Installments due in December 1932 were met by most debtor nations, but after that time receipts were negligible.

Although the war debts have been the subject of considerable discussion, much of it controversial, annual receipts from these debts formed but a small part of total United States national income, averaging 0.27 percent from 1919 to 1931. Their indirect effect, probably deleterious, on the domestic economy was exerted through the pressure on the balance of payments, although even here they accounted for only about 2.7 percent of total dollars used by foreigners. During the relatively prosperous years of the twenties, when the supply of dollars was plentiful, the pressure of these obligations on the dollar positions of the debtors was not serious. Such pressure as existed,

²⁸ In 1919, \$732,000,000 was received from the sale of surplus war materials, of which a portion represented sales on credit, and is included in the \$675,000,000 quoted as a disbursement.

²⁹ Moulton, Harold G., and Pasvolsky, Leo. *War Debts and World Prosperity*, 1932. P. 101.

however, was unevenly distributed, inasmuch as the United Kingdom, whose international position was weakened by overvaluation of the pound, was the only major debtor that had payments to make to the United States (in the years 1924 to 1931) in excess of its receipts from Germany and other countries on reparations and war-debts account.

Silver Movements

Except in 1919, when silver exports were swollen by large shipments to India under the Pittman Act at the relatively high war-inflated prices then prevailing, silver was only a small item in the balance of payments before 1934. During the intermediate years, from 1920 to 1933, gross annual movements in either direction were rarely in excess of \$100,000,000, and the net flow was generally less than \$35,000,000. Movements of silver during this time followed a fairly uniform pattern: Imports consisted primarily of newly mined silver from producing countries of the Western Hemisphere, chiefly Mexico, Canada, Peru, and Chile; while exports were preponderantly destined to Asia, mainly to China, which as the only major nation on the silver standard regularly absorbed large quantities of the metal for increased currency circulation in times of economic expansion, and to India, where silver has long been extensively hoarded by the natives.

The dollar value of silver movements before 1934 was affected by the long-run decline in the price of silver after the early post-war inflation, the generally downward trend being punctuated by three sharp breaks. The first of these came with the collapse of the post-war boom, the price of silver dropping from \$1.02 per fine ounce in 1920 to 63.1 cents in 1921. Thereafter the decline was influenced, on the one hand, by the rise of more than 50 percent in world silver production from 1921 to 1929 and by a general reduction in the monetary use of silver. The decision of the Government of India to dispose of a large part of its silver stocks, even though gradually over a period of years, had a particularly depressing influence on the price of silver and was attended by a second sharp break, from 69.4 cents in 1925 to 56.7 cents in 1927. From this point the decline was somewhat more gradual until the great depression, when the dwindling away of Chinese and Indian demand brought a collapse in the price of silver to only 28.2 cents in 1932.³⁰

The pattern of silver movements began to be modified in 1933, when anticipations of action by the United States in support of silver brought some advance in price and a substantial inflow of the metal, and the pattern was drastically changed with the passage of the Silver Purchase Act of 1934. Under that measure the United States Treasury was authorized and directed to purchase silver, at home or abroad, until the monetary value of the silver stock should be equal to one-third the monetary value of the gold stock. In an endeavor to comply with this requirement, the Treasury bought vast amounts of silver from both domestic and foreign sources in the following years, but its purchases were never able to keep pace with the flood of gold that moved to the United States during the same time, and by the end of

³⁰ Prices quoted in the above paragraph are averages per fine ounce quoted in New York for years specified, as shown in the Annual Report of the Director of the Mint.

1939 the desired 3:1 ratio was more distant than when the program was inaugurated.²¹

This program placed the Treasury in a dominant position in the world silver market and brought about an influx of silver on an unprecedented scale from foreign production and accumulated stores. From 1934 through 1939 silver imports aggregated more than \$1,000,000,000, most of which was acquired by the Treasury, while exports were reduced to negligible amounts. Under the stimulus afforded by these official purchases and attendant speculation, the price of silver fluctuated widely during the first 18 months of the program, the New York price for foreign silver rising from a low of 42 cents in April 1934, to a momentary speculative peak of 81 cents in April 1935. Thereafter the price moved irregularly downward, reaching 45 cents in January 1936. It remained at or near this level for the following 2 years but further declined to 43 cents in March 1938 and to 35 cents in the summer of 1939, subject to additional minor fluctuations.

During the years 1934 to 1939, when payments to other countries through more normal transactions were at low levels, as compared with those of the twenties, the United States purchases of silver placed a large volume of dollars in the hands of foreigners, but these amounts did not constitute without qualification an effective addition to the supply of dollars in the sense employed in this study. With respect to silver derived from new foreign production, chiefly in neighboring countries of this Hemisphere, little qualification is required, except to the extent that the heavy participation of American capital in foreign silver mines caused the returns to flow in part directly to domestic interests.

Inasmuch, however, as silver purchases, especially early in the program, were executed at a rate greatly in excess of new production and at a substantial rise in price, a large part of the silver acquired was attracted out of accumulated stocks or currency circulation in foreign countries. Since China was the only major nation still on the silver standard and thus committed to permit free movement of the metal, the drain on that country's reserves was particularly severe. It produced deflationary effects in China similar to those experienced by gold-standard countries undergoing an exodus of gold but rendered more severe by the concurrent exchange appreciation of the yuan and a consequent handicap to Chinese exports.

The exchange of silver for United States dollars, moreover, did not constitute current receipts for China susceptible of stimulating general purchasing power, except for the extraordinary profits accruing to speculators and smugglers, but represented the conversion of one type of capital asset into another. Under these circumstances, China abandoned the silver standard by successive steps in 1934 and 1935, adopted a paper-currency regime, and subsequently proceeded to a more orderly liquidation of its remaining stocks of silver.

From the standpoint of the effects on China, the flow of silver to the United States during these years might well be taken out of the current account and grouped with gold as a movement of monetary reserves, even though the disturbance to China originated not so much in its balance-of-payments position on other items as directly in the behavior of the price of silver.

²¹ The statement refers to the number of ounces of silver still required. The ratio of silver to gold in the monetary stock was actually somewhat higher in 1939 than in 1934.

THE CURRENT ACCOUNT AS A WHOLE

The preceding examination of the principal transactions making up the current account has revealed a variety of behavior patterns. Some of the items or subitems exhibited long-run declining tendencies during the interwar period, as agricultural exports, crude-petroleum imports, and personal remittances. Other items, such as imports of newsprint and wood pulp, manifested a secular increase. Most current transactions reacted strongly to changes in basic business conditions, although this characteristic was much more marked, for example, in exports of durable goods, imports of tin, travel expenditures, and returns on direct investments than in coffee imports or interest receipts on portfolio investments.

Many current items, however, were subject in greater or less degree to special influences having little to do with changes in demand and purchasing power. Thus, the low level of copper imports after 1932 reflected in part the excise tax of that year, institutional contributions were greatest in times of social and political disturbances at the beginning and end of the interwar period, and war-debt payments, during the time they were being met, were regulated by fixed schedules. But the heavy influx of silver after 1933 under the Silver Purchase Act was the outstanding example of the influence of noneconomic forces on balance-of-payments behavior.

Although individual items exhibited extremes of rigidity and flexibility and, in general, the varied patterns of movement characteristic of a dynamic world economy, current transactions in the aggregate followed the major fluctuations in business conditions. Since these fluctuations were generally world-wide in scope and because of the obvious connection between the supply and use of dollars, it is not surprising that gross payments and receipts on current account followed roughly parallel courses. There were, however, important divergences between the two series that may be briefly noted.

Receipts from current transactions tended in general to be considerably more stable than payments. During the virtually world-wide expansion from 1922 to 1929 receipts from foreign countries increased each year over the preceding, although by variable amounts, whereas on two occasions—1924 and 1927—payments registered a temporary decline. The difference was even more marked in 1938—while there was a decrease in both receipts and payments, the former fell by only 6 percent and the latter by 28 percent. In other words, fluctuations in the balance on current account, in the short run, were caused far more by variations in payments than by variations in receipts. The explanation for this contrasting behavior in the two series lies in part in the greater violence of fluctuations in the domestic economy than in other countries, as pointed out in the first chapter. It is probable, moreover, that short-run fluctuations in foreign countries did not occur simultaneously but tended to exert a mutually offsetting influence and thus to provide a more stable external market than that offered by the United States.

The difference between the behavior of receipts and payments on current account may also be attributed in substantial part to the lack of responsiveness of United States imports to changes in price. This factor, indeed, constituted a self-aggravating element of disturbance

in the balance of payments. A decline in the supply of dollars, for any reason, tends to exert a deflationary pressure on foreign prices, which, under other circumstances, might be expected to produce a relatively larger volume of imports into the United States and thus to compensate the initial decline in the outflow of dollars. Because of the nature of United States import demand, however, a fall in foreign prices only tends to reduce the supply of dollars further and to intensify the original disturbance. This perverse tendency toward aggravation rather than correction of international imbalance was a particularly serious factor during the great depression, when its effects were superimposed upon those produced by the falling off in economic activity in the United States.

During the great depression, however, there was a greater decline, both absolute and relative, in receipts than in payments on current account, in contrast to the more stable short-run behavior of the former. This fall in receipts reflected in part the world-wide scope of the depression and the variability of exports in response to such influences, but the decrease was greatly accentuated by commercial and exchange restrictions abroad. The greater decline in receipts than in payments formed part of a major structural change in the international transactions of the United States. Before 1931 receipts exceeded payments by an amount which, although highly variable, was generally upward of \$700,000,000. Thereafter, and until again interrupted by the previously mentioned disturbance in 1938, the excess of receipts was greatly reduced, and in the 3 years 1935 to 1937 gave way to an excess of payments. These shifts in the balance on current account were related to changes in capital movements, which are discussed in the following chapter.

CHAPTER III

CAPITAL MOVEMENTS

NOTE.—Chapter III was prepared by Robert L. Sammons, Assistant Analyst in Charge of the Balance-of-Payments Section, assisted, particularly in the computation of revised estimates of capital movements, by Milton Abelson. Acknowledgment is made to Dr. Arthur I. Bloomfield of the Federal Reserve Bank of New York for his comments and suggestions on early drafts of this chapter and for his contribution to the subject in "International Capital Movements and the American Balance of Payments: 1929-1940," an unpublished dissertation submitted to the University of Chicago, 1942.

One of the most striking features of the balance of payments of the United States in the interwar period was the movement of capital, both short- and long-term, which for magnitude of the sums involved and abruptness of changes in direction has not been surpassed in the experience of any nation.

During the first post-war decade, long-term capital from the United States furnished a large and, until 1928, increasing annual supply of dollar purchasing power to foreigners. These large capital outflows enabled this country to maintain a substantial export surplus without serious disturbances in the balance of payments. During the same period, moreover, American short-term capital was employed to a substantial extent in the direct financing of export trade, principally through the medium of the banker's acceptance, which grew steadily in importance.

The decade of the thirties was marked, first, by a net export of capital from the United States in 1931-33 (accounted for by short-term capital alone, since the net movement of long-term capital was inward), and, beginning in 1934, by a capital inflow of unprecedented proportions. The world-wide desire for liquidity and the severe banking crises both in this country and abroad were chiefly responsible for the capital withdrawals in the early period. Repatriations and redemptions of dollar loans and, after 1934, flight capital from abroad, were the primary components of the inward movement.

Magnitude of Capital Movements

In the period 1919-30 the United States provided \$11,600,000,000 to foreigners by way of subscriptions to new foreign issues and new direct investments abroad—an annual average of about \$965,000,000. During the same time, American short-term assets abroad increased by somewhat more than \$1,000,000,000. This outflow was offset in part by amortizations and retirements of about \$3,300,000,000 and net purchases by foreigners of foreign securities in an indeterminable but relatively small amount. The movement of American long-term capital was then sharply reversed as, with the virtual cessation of foreign lending after 1930, annual amortization receipts and continued foreign purchases of foreign securities in this market far outweighed such new lending as took place. A net return flow of United States long-term capital to the extent of \$1,200,000,000 was recorded for the period 1931-39; in addition, American investments abroad suffered large declines in value through operating losses in direct in-

vestments and defaults in foreign dollar obligations. Moreover, after 1931 there was a continual withdrawal of American short-term capital from abroad, the amount outstanding declining from almost \$2,000,000,000 at the end of 1930 to \$600,000,000 at the close of 1939.

The movements of foreign capital to and from the United States during the interwar period were also of great magnitude and were more consistent in direction than movements of American capital. In most years foreigners were net purchasers of outstanding American securities, such purchases amounting to over \$2,000,000,000 for the 21-year period. Likewise, foreign short-term capital moved to the United States during most of the period, with the notable exception of 1930-33, when foreign dollar balances were drawn down to the phenomenal extent of about \$2,700,000,000. Beginning in 1934, the inflow of flight capital resulted in rapidly increasing foreign balances in this country and at the end of 1939 they were placed at \$3,300,000,000, an increase of 575 percent from the amount reported as of the close of 1933.

The observation frequently is made that international capital movements take place as a result of interest-rate differentials in various countries and that these differentials are the result of the relative scarcity of capital in the borrowing country. The inapplicability of this reasoning to such abnormal shifts as the flow of flight capital to the United States after 1933 has been widely recognized, and it is also obvious that a simple interest-differential analysis is not sufficient to explain many individual transactions involving an international movement of capital.

A foreign investment that takes the form of a loan, in the usual sense of the word, represents an agreement concluded by lender and borrower and implies a willingness on the part of both to enter into the contract. However, much modern foreign investment is unilateral in the sense that the investor places funds abroad with no action, other than acquiescence, on the part of the capital-receiving nation. As will be noted in the following discussion of the various types of capital movements, investments under the control of the capital-exporting country seem to have been generally more subject to influences other than interest-rate differentials. The flow of "hot" money, the purchase of outstanding securities in expectation of capital appreciation or merely to diversify an investment portfolio, and the acquisition of many direct investment enterprises may be mentioned as examples. Many times such transactions result in an "uphill" capital movement, of which large inflows of foreign capital into the United States in the past 20 years are a significant illustration.

LONG-TERM CAPITAL MOVEMENTS

American lending in the decade following World War I included two rather distinct classes of loans. In the first place, large sums were loaned to countries, most of which were normally creditor nations, whose capital shortage was of a temporary nature, having resulted from relief and rehabilitation needs after the war and from the release of pent-up demand that had accumulated during the years of the conflict. Subsequent developments showed that many of these countries did not require long-term loans at all but did need large supplies of foreign exchange to tide them over a very critical period. The cur-

rency stabilization loans also resulted more from a need for foreign exchange than for capital in the pure sense, if the two concepts can be distinguished in logic or in practice.

Most of the foreign loans of the United States, especially in the period 1924-28, were contracted specifically for the purpose of long-term capital investment. Such loans were made to countries which, with the notable exception of Germany, had been typically debtor nations, although some, such as Canada and Japan, were in a transition stage. On the other hand, loans directed to alleviating immediate shortages of foreign exchange or for currency-stabilization purposes were confined almost solely to European countries.¹

New Issues

The course of events in the United States during the 13-year period following the first World War is probably unique in the history of capital-exporting nations. Although the transition of the country from debtor to creditor status was not so abrupt as is sometimes supposed, the rapidity with which it acquired foreign investments is unparalleled in the experience of any major creditor country in modern times.

Conditions in the early post-war years were peculiarly appropriate for a great outflow of American capital. Of the many factors facilitating this movement, the following were of particular importance:

1. Through the Liberty Loan campaigns a wide public market for securities had been built up in the United States.

2. The publicly offered foreign loans of the war period—particularly the large and, as it proved, "safe" issues of the Allied Nations—had begun to acquaint the investing public with foreign bonds.

3. Western Europe, which before the war had been an exporter of capital, was in the position of needing outside funds to purchase immediate necessities, stabilize currencies, and make permanent, or capital, improvements of both a public and private nature.

4. At the same time, the capital markets of the western European creditor countries were partly or completely closed to foreign issues, and it became necessary for borrowers in other countries to turn to the United States for their capital needs.

New issues for foreign account floated in the United States market provided the vehicle for most of the capital export in the twenties. With the exception of 1923, the net amount of new foreign security issues increased every year from 1919 to 1927 (table III). Over \$1,000,000,000 was made available to foreigners in this way in 1927 and again in 1928.² The rising trend in foreign issues continued until the middle of 1928, over 70 percent of the flotations in that year having occurred in the first 6 months. From this time the decline was precipitous and except for a spectacular but very temporary recovery

¹ According to Dr. Paul D. Dickens, loans for banking and currency purposes in the years 1920 to 1929 were important only in Europe, where they comprised about 39 percent of the total loans to provide new capital. Only \$2,000,000 of the loans to Latin American countries was so classified, and none of the loans to Canada or the Far East. Cf. Beard, Charles A. *The Idea of National Interest*. 1934. P. 556.

² Includes estimates for privately taken issues. In most years such issues were a relatively unimportant part of the total.

early in 1930 foreign capital issues thereafter were unimportant in the United States balance of payments.

General Influences Determining Volume of New Foreign Issues

Although the course of foreign-loan flotations in the United States was clearly related to conditions in the borrowing countries, as is shown later, domestic factors appear to have been largely responsible for their general movement and year-to-year variations. New foreign-bond offerings followed a path roughly parallel to that of new domestic corporate bond issues in the period 1919-31 (chart 21). There were, however, important deviations in the two series, especially in 1923 and in 1928-29, that indicated the operation of forces with special bearing on the volume of foreign issues. A clue to the nature of these forces is provided in chart 22, which shows the quarterly movements of foreign-bond flotations and domestic business activity as measured by the Federal Reserve Board index of industrial pro-

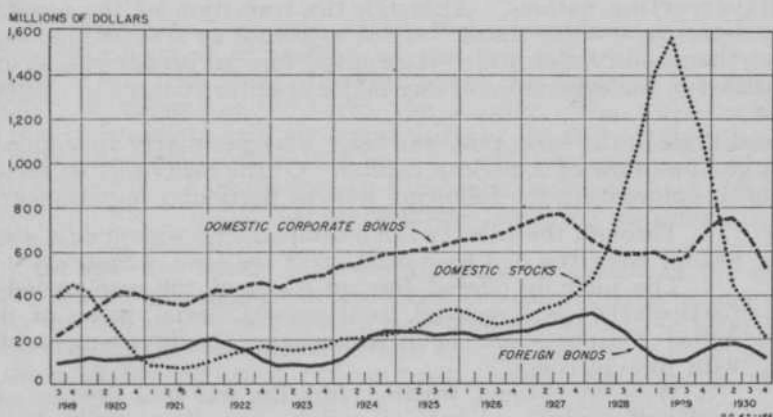


Chart 21.—Dollar volume of foreign bonds, domestic corporate bonds, and domestic stocks publicly offered in the United States (quarterly moving averages).

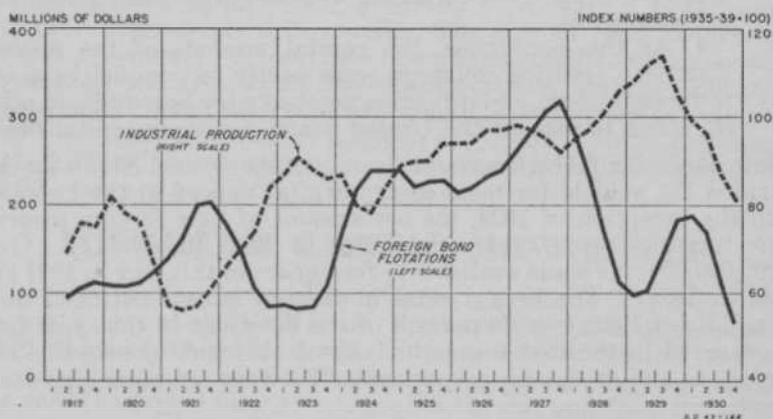


Chart 22.—Dollar volume of foreign-bond flotations and index of industrial production in the United States.

Note.—The bond series, a quarterly moving average, has been shifted one quarter to the left in charting. The index of industrial production is a quarterly average of seasonally adjusted monthly data.

duction. The apparent relationship was of an inverse character; foreign issues tended to increase in times of domestic business recession and to fall or to increase less rapidly under more prosperous conditions in this country.

The explanation seems to lie in the behavior of long-term interest rates, which generally tend to harden in the expansion phase of the business cycle and to decline in times of business contraction, and thus to discourage or encourage, respectively, borrowing by foreign entities. Such behavior was particularly true on the occasions mentioned, in view of the fact that rising interest rates in the United States were not accompanied by equivalent increases in foreign countries, with the result that the comparative advantage of borrowing in the American market was decreased.³ By contrast, domestic bond issues are not influenced to a similar extent by rising long-term interest rates, because such increases are usually accompanied by an accentuated internal demand for capital, resulting from prosperous business conditions, that tends to offset the depressive influence of higher interest rates.

The following discussion of new issues applies to foreign bonds only, without reference to public offerings of foreign stocks, which were of small importance except in 1928 and 1929.⁴ The years from 1919 to 1931 are divided into four periods for the purpose of analyzing foreign capital issues in the United States. While a multitude of forces was at work throughout these years influencing the course of foreign borrowing, certain major characteristics distinguish each period.

Foreign Security Issues in the Early Post-War Years, 1919-22

Despite extremely high interest rates in the United States, foreign bonds were offered in increasing amounts in this country during the years 1919 to 1922, rising from \$332,000,000 in the former year to \$617,000,000 in the latter, with more than 80 percent of the 1922 offerings occurring in the first half of the year. Long-term interest rates in the United States during 1920 and 1921 were not only higher but the relative advantage to foreign borrowers when compared with interest rates abroad was less than at any other time during the decade. Direct country-to-country comparisons are difficult and misleading because of differences in types of securities and taxation policies, but the trend after 1920 was more sharply downward in the United States than in foreign countries generally. Taking 1928 as 100, the following bond-yield indexes obtain for the year 1920: United States, 131; Canada, 135; United Kingdom, 125; France, 120; and Australia, 114.

Borrowing from the United States in the early post-war years arose largely from the abnormal demand of European countries for imports from the United States and other oversea countries. Although part of the necessary dollar exchange was provided by loans

³ Bond yields in the United States rose slightly from 1922 to 1923, while those in Spain, Australia, Canada, and the United Kingdom fell. A rise in the United States bond-yield index from 1928 to 1929 was accompanied by a fall in 8 countries, a smaller rise in 4, an equivalent rise in 2, and, significantly, a larger rise in 1 (Canada) of the 15 countries for which rates were examined. Canada was the only country that borrowed more from the United States in 1929 than in 1928.

⁴ These stocks were frequently outstanding issues, large blocks of which were bought up on foreign markets and reissued in the United States, usually in the form of "American shares"—a type of transaction more closely related to securities movements than to new capital issues.

from the Federal Treasury during 1919 and the early part of 1920, publicly offered loans to Europe exceeded those to any other region during these years. The list of borrowers included ex-Allies Belgium, France, and the United Kingdom; ex-neutrals Denmark, Norway, Sweden, and Switzerland; and one new country, Poland.

In addition to the imperative demand for dollar exchange, the depreciated condition of most European currencies lent additional attractiveness to borrowing in the United States. As in Norway, for instance, restoration of currencies to their old gold pars (which was anticipated in most countries from the end of the war) enabled individual borrowers to repay obligations with fewer local currency units than were received at the time the loans were made. In the later twenties, many, if not most, of the issues floated during this early period were repaid in full or refunded into obligations bearing lower interest rates.

With the rather sharp decline in long-term interest rates that took place in 1921-22, Latin American issues were offered in substantial amounts—\$230,000,000 in 1921 and \$224,000,000 in 1922.⁵ Foreign loans in 1921 and 1922 were also swollen by the first significant borrowing of Far Eastern countries; a \$100,000,000 issue of the Netherlands Indies was of particular importance.

Flotations of Canadian securities ranged from \$115,000,000 to \$194,000,000 a year during the 1919-22 period. Canadian issues, however, must be considered in a special class among foreign bond flotations in the United States because of the close economic relationships between the two countries and the high regard in this country for Canadian Government and Government-guaranteed securities.

To summarize, there was a substantial foreign demand for American capital in the early post-war period, despite unfavorable money-market conditions in the United States, principally because (1) European nations needed United States dollars to pay for essential imports, no matter what the cost of such borrowing might be, and (2) other foreign countries, normally debtors, were forced to turn to the United States for capital, the markets of European countries, in general, being closed to them.

Americans apparently were willing to furnish funds in spite of turbulent political and economic conditions abroad and the chaotic conditions of the foreign exchanges because (1) the rates offered were particularly attractive, yields at offering prices ranging from 5 to over 9 percent and averaging over 7.5 percent;⁶ (2) the borrowers were largely countries with unblemished debt records, several being normally exporters of capital and others, such as Denmark, having been consistently able to borrow abroad before the war on extremely favorable terms; (3) there was a deluge of statements from official, industrial, and banking sources setting forth the economic necessity to the United States of foreign lending; and (4) the 1919-20 post-war boom, though of short duration, "tended to revive confidence and to establish conditions more favorable to foreign security underwriting * * *."⁷

⁵ These figures, as well as most of the other data for the geographic areas mentioned, are taken from: Young, Ralph A. *Handbook on American Underwriting of Foreign Securities*. U. S. Bureau of Foreign and Domestic Commerce, Trade Promotion Series 104, 1930.

The data have since been revised in total, but not for individual borrowing countries.

⁶ *Ibid.*, p. 31.

⁷ *Ibid.*, p. 31.

As a result of these special circumstances, foreign bond flotations tended to vary positively rather than inversely with the business cycle in this early period. Foreign issues increased rather sharply as bond yields began to decline in the middle of 1921, but offerings at this higher scale continued only through the second quarter of 1922.

Slump in Foreign Security Underwriting, 1922-24

The 2-year period from the middle of 1922 to the middle of 1924 was one of comparative inactivity in foreign flotations. The beginning of the period was marked by rising business activity; the recovery that had begun in the latter part of 1921 reached a peak in the second quarter of 1923. This period was also marked by falling bond prices (rising yields) beginning in the last quarter of 1922 and continuing until the latter part of the following year.

Rising long-term interest rates in the United States in 1923 were accompanied by falling bond yields in other important countries, such as Canada, Australia, and the United Kingdom. Trends in the United States and several other countries may be compared as follows (1928=100):

	1922	1923
United States (60 high-grade bonds)	110	111
United States (30 medium-grade bonds)	129	132
Canada (Government bonds)	120	113
Australia (State securities)	112	105
United Kingdom (4 fixed interest securities)	104	98

Under these circumstances alone, new foreign issues would have been discouraged, but events in foreign countries probably had an even greater influence on the course of foreign offerings in the United States. The German economic and financial collapse, the French occupation of the Ruhr, constantly fluctuating foreign exchanges—especially those of European countries—and budgetary disequilibrium in many foreign countries were among the major factors.

Boom in Foreign Flotations, 1924-28

The 4-year period from the middle of 1924 to the middle of 1928 marked the height of foreign security underwriting in the United States (chart 21).^a Domestic economic conditions were peculiarly conducive to this large-scale outward movement of capital. Business activity, as measured by the index of production, continued on a high and generally rising level during these years; bank credit underwent a tremendous expansion; long-term interest rates, as measured by bond yields, declined; and the underwriting of domestic securities increased rapidly.

Conditions abroad were equally favorable to foreign lending by the United States. Prosperity prevailed in most countries, with national incomes rising and world trade increasing, although the dependence of these conditions on continued lending by the United States was apparently considerable. Restoration of the gold standard and stabilization of foreign currencies in general made both borrowers and lenders more willing to venture on the sea of international finance. In addition, the capital market of the United Kingdom was closed, in varying degrees at different times, to foreign issues, and the cost

^a The quarterly series employed in the charts comprises public offerings of bonds only, at par values less refunding.

of borrowing to non-Empire countries was higher in London than in New York.⁹

Whatever may have been the influence of these various factors on American foreign lending, considerable importance must be assigned to the competition between investment banking firms for this business and the abuses engendered thereby. Enticed by the prospect of commissions much higher than those available on domestic issues and faced with the necessity for a continuous flow of new securities to keep large staffs of bond salesmen employed, American investment bankers had their agents "sitting on the doorsteps" of prospective borrowers, as one observer put it, offering them money and many times persuading them to borrow more than they actually needed. The bonds were widely distributed, in turn, to the American investing public, which was attracted by the high yields obtainable and apparently willing to rely on the judgment of the selling bankers as to the safety of the loans.

This uncontrolled and extremely competitive method of foreign lending led almost inevitably to unwise, and frequently to wasteful, use of loan proceeds and to overborrowing by many countries. Evidence presented at hearings held before the Senate Finance Committee in 1931 and 1932 contains many references to such situations.¹⁰ Funds provided by loans to Cuba and Peru appear to have been spent in a particularly wasteful and extravagant manner. And regardless of the basic worth of many of the projects made possible by foreign loans, it was obvious as early as 1926 that many countries were borrowing far more than they could reasonably be expected to repay. This overborrowing was recognized by authorities in the borrowing nations themselves—in Peru and Germany, for instance—but these authorities were either unable or unwilling to stem the flow of American capital into their countries. Moreover, the governments of some countries that had been consistently large borrowers for several years were probably fearful of the shock to their economies likely to result from a sudden cessation of capital inflow.

The course of foreign-bond offerings during this boom period is shown in chart 21. After a record fourth quarter in 1924, flotations continued on a gradually increasing scale, usually varying from about \$200,000,000 to \$300,000,000 per quarter. The final quarter of 1927, however, witnessed foreign-bond issues of more than \$350,000,000, and in the second quarter of 1928 they further increased to \$450,000,000, an annual rate of almost \$2,000,000,000.

Most of the influences affecting foreign lending probably found their expression in comparative interest rates, as measured by the yield on long-term bonds, and such rates must have been lower in the United States than abroad. No exactly comparable series for different countries are available, but the behavior of various series of bond-yield averages in the United States is of significance in this connection.

For comparative purposes, average yields on 30 high-grade domestic corporate bonds (Moody's rating Aaa) have been selected as most nearly representing the trend in real interest rates in the United States.

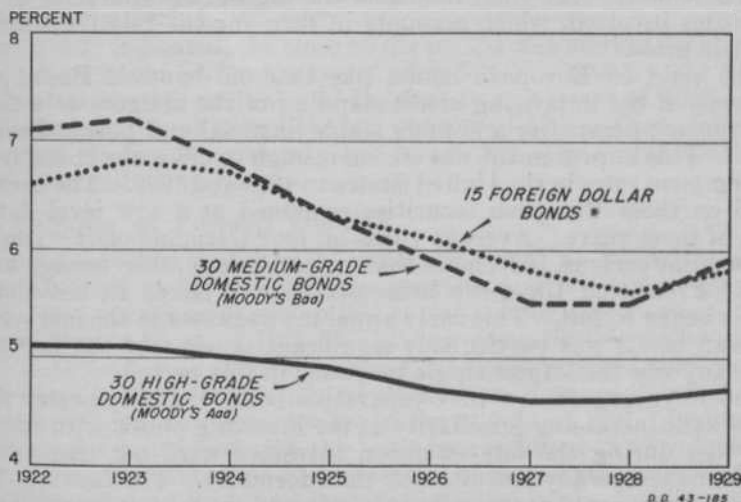
⁹ Royal Institute of International Affairs. *The Problem of International Investment*. 1937. Pp. 134-135.

¹⁰ *Sale of Foreign Bonds or Securities in the United States*. Hearings before Com. on Finance, U. S. Senate, 72d Cong., 1st sess., pursuant to S. Res. 19, pt. 3. 1932. Pp. 1267-1928.

The unsoundness of much of our lending in the twenties has received considerable attention. See especially: Lewis, Cleona (assisted by Schlotterbeck, Karl T.). *America's Stake in International Investments*. 1938. Pp. 376-387. Kuczynski, Robert R. *American Loans to Germany, 1927*. Pp. 123-125.

This series follows closely the trend of "basic" yields as computed by Durand, which represent the minimum yields available on the highest grade corporate bonds.¹¹ The period selected for comparison is 1922-29, which encompasses the boom period in foreign security underwriting.

From 1923 to 1928, the high and low years, respectively, the average yield on 30 Aaa bonds fell from 5.12 percent to 4.55 percent, a decline of 11.1 percent (chart 23). During the same period, the average yield on 30 Baa bonds—a medium-grade group—declined 24.3 percent, from 7.24 to 5.48. In terms of the ratio to high-grade yields, the drop was from 141 to 120.¹² The more rapid decline in the yield on lower grade securities is generally accounted for by the improved credit standing of the obligors, resulting from increased annual earnings, which provided a larger cover for the interest charges. The tendency of an increasingly speculative market to reduce the risk premium on lower-grade issues was also probably an important factor producing the changed relationship.



*Includes one sterling issue.

Chart 23.—Yields on selected foreign and domestic bonds, 1922-29 (annual averages).

Bond-yield averages compiled for a group of 15 foreign dollar bonds indicate that these securities did not fully share the appreciation in value of the domestic medium-grade issues (chart 23 and appendix A). Average yields on the foreign dollar issues declined by 16.7 percent, from 6.77 percent to 5.64 percent. In terms, again, of the ratio to domestic Aaa yields, the decline was from 132 to 124.

The index of yields on foreign dollar bonds is weighted heavily, however, by European issues that showed reductions in yields comparable with those registered by domestic medium-grade bonds. The

¹¹ Durand, David. Basic Yields of Corporate Bonds, 1900-42. National Bureau of Economic Research Technical Paper 3. 1942.

¹² During the same period the yield on long-term United States Government bonds fell from 4.35 to 3.33, or 23.4 percent. This behavior, however, may be ascribed to special factors not typical of the bond market in general, including the fall in Government bond prices in the early post-war years consequent upon heavy liquidations by the public and the rise in later years resulting from the Treasury's policy of rapid debt retirement.

particular European issues included, moreover, are those of governments with good credit standings; the more speculative bonds of Germany and eastern European countries are not included. The behavior of average yields on Latin American and Far Eastern bonds is, therefore, more significant, these bonds being more typical of new foreign issues in the 1924-28 period. From 1923 to 1928 average yields on four Latin American bonds and three Far Eastern issues fell by 14.1 percent and 10.6 percent, respectively. As these changes are not substantially different from those for domestic high-grade yields, the American market apparently was not, as has sometimes been assumed, becoming more favorably disposed toward foreign bonds during this period.

The Canadian and European issues included in the averages must be considered as exceptions to the foregoing generalization, although the decline in Canadian yields, from 5.33 percent to 4.79 percent, was of the same order of magnitude. The fluctuation in the average yield for the three component Canadian issues between 111 and 102 percent of the domestic Aaa yield indicated the high-grade character of the securities involved, which accounts in turn for the relative stability of their price.

The yield on European issues, like that on domestic Baa's, gave evidence of the improving credit standing of the obligors as a result of economic prosperity and more stable financial and political conditions. This improvement was strong enough to offset the rising trend in long-term rates in the United States in 1928 and 1929. The average yield on these European securities remained at a low level during both of those years. Average yields on four German bonds¹³ reached a low point early in 1927, more than a year before other foreign averages. From that time, the price of German bonds in the United States began to fall. This early apparent weakness in the market for German bonds was particularly significant in view of the fact that Germany was the largest single borrower in this period.

The foregoing review of comparative bond yields indicates that, despite the increasing familiarity of the investing public with foreign offerings during the late twenties, investors were not disposed to consider them as any less of a risk than formerly. The fact that new foreign issues could continue in increasing amounts must be attributed therefore to the maintenance of a high yield differential and the persuasiveness of salesmen of the investment banking fraternity. The situation was fraught with danger, for the whole international structure was dependent to a large extent on the supply of American long-term capital, and this supply was forthcoming only so long as these factors remained. The structure therefore collapsed when the rise of interest rates and the appearance of a speculative boom in equity securities turned the attention of Americans away from bonds to the then much more profitable business of selling and investing in stocks.

An accurate evaluation of all the factors underlying the foreign security underwriting boom of 1924-28 is of course impossible. Declining interest rates—absolutely if not relatively—and the growing importance of corporate loans as compared with government loans indicate a degree of normality in the character of the lending. This

¹³ Basic data for this series are not available before September 1925, and the series has therefore not been included in the global index. Details are given in appendix A.

aspect has also been brought out by the members of the Royal Institute, who showed that yields on new foreign loans in the United States were substantially lower than yields on new foreign (non-Empire) governmental loans in the United Kingdom.¹⁴ However, factors not functioning through the medium of interest rates, such as American bond salesmanship and the British embargoes on foreign loans that operated off and on during this period, cannot be disregarded.

Special mention should be made of the loans to Germany, which constituted the most conspicuous feature of the era. Scarcity of domestic capital in that country, resulting from inflation and high taxation to meet reparation requirements, led to large borrowings. Excessive public and semipublic expenditure, much of which was clearly unproductive, had the effect directly, and indirectly through the resulting rise in prices, of aggravating the shortage of capital available for investment in commercially profitable enterprise.¹⁵ According to German estimates, the United States supplied 67.5 per cent of a total of 6,000,000,000 marks borrowed abroad on long-term account in the period 1925-29.¹⁶

As already indicated, the close of the period was marked by a sharp rise in the amount of foreign issues offered in this country, the totals for the last quarter of 1927 and the first two quarters of 1928 being the highest on record except the last quarter of 1924. There followed an abrupt decline to extremely low levels, which persisted until the close of the following year.

The Collapse of Foreign Lending

The market for new foreign issues, sustained as it had been by extremely high yields and the sales-promotion activity of investment houses, was particularly susceptible to the sort of shock provided by the speculative boom of 1928-29. Rising domestic interest rates reacted unfavorably on the bond market, as yields reversed their downward trend in the early months of 1928. New issues of domestic corporate bonds had begun to decline in the middle of 1927. Beginning in the second quarter of 1928 the boom was reflected in new domestic stock issues, which reached \$1,400,000,000 in the fourth quarter of the year (the previous high had been \$530,000,000 in the fourth quarter of 1919) and \$2,300,000,000 in the hectic third quarter of 1929. Although many of these offerings were issues of investment trusts and holding companies and hence did not constitute a net drain on the capital market, the competition for funds had an extremely depressing effect on the market for new fixed-interest securities.

The much sharper decline in new foreign bonds as compared with domestic corporate issues was probably due, in addition to the influences previously mentioned, to the fact that conditions abroad were also becoming less propitious for foreign lending. Evidence of declining business activity began to appear in various countries in 1928 and early 1929. In Germany a definite recession began in the early months of 1928, which, besides exercising a depressing influence on

¹⁴ The Royal Institute of International Affairs. *The Problem of International Investment*. 1937. P. 135.

¹⁵ Schumpeter, Joseph A. *Business Cycles*. Vol. II. 1939. Pp. 714-722.

¹⁶ Cited by: Bresciani-Turroni, Constantino. *Inductive Verification of the Theory of International Payments*. Egyptian University Publication. [1933.] P. 6.

foreign confidence, served to bring short-term interest rates down to meet rising comparable rates abroad, especially in the United States. These factors, coupled with the uncertainty prevailing over reparations and the revision of the Dawes Plan, effectually put a damper on public loans to Germany, although short-term credits in substantial amounts were made available.

The decline in foreign underwriting, especially noticeable for German securities, was general. It was, however, offset in part by public offerings of American corporations for foreign purposes (included under "Direct investments," table III) and the extension of short-term credits by American banks. Canadian issues were an exception, registering a net increase in 1929 over 1928. This increase was largely in the Government-guaranteed group, high-class securities that fluctuate less in value than securities of lower grade, and which undoubtedly have a fairly substantial and constant institutional market in this country. Domestic municipal and farm-loan issues, which may be considered in about the same class as issues of Canadian municipalities and Provinces, likewise did not show the substantial decline registered in 1929 by domestic corporate and foreign offerings other than Canadian.

An improvement in the bond market occurred in the closing months of 1929, and, for domestic bonds, continued for about a year. Foreign-bond prices, however, reached a peak in March 1930, the New York Trust Co. series declining from 93.88 in that month to 81.53 by December. Stimulated by easier market conditions, foreign flotations—chiefly by Canada, Germany, and Argentina—were fairly substantial in the first half of the year. Thereafter, falling prices for foreign bonds in the United States, world-wide business depression, unfavorable fiscal situations, especially in Latin American countries, and disturbed political conditions in Bolivia, Brazil, Germany, and elsewhere served to curtail foreign financing in this market. The year 1931 witnessed the beginning of widespread defaults, which drove foreign-bond prices to extremely low levels (the New York Trust Co. series stood at 45.61 in December 1931) and marked the end of an era of foreign underwriting in the United States. Since that time foreign issues have been insignificant in amount and have consisted largely of refunding issues. The Canadian and Argentine Governments have been the principal borrowers.

Many explanations of the cessation of foreign lending have been offered. It is sufficient to note that the principal factors—defaults, political instability, exchange control—were the results of the world economic depression, which may have been stimulated, at least in its earlier stages, by the 1928–29 decline in foreign lending.

Direct Investments.

Extension of American enterprise to foreign areas, usually termed direct, or entrepreneurial, investment, also provided an important source of dollars during the interwar period. It is estimated that \$3,500,000,000 was furnished in this manner during the years 1919 to 1931, with the largest amount, \$602,000,000 being invested in 1929, the peak year of the domestic boom. These estimates, presented on an annual basis in table III, include public offerings of American and

semi-American corporations for foreign purposes as well as investments made directly by American corporations without recourse to the capital market.

Direct investments include all foreign enterprises controlled by American corporations or individuals or in the management of which Americans have an important voice. Extension of American industry to foreign countries, although not nearly so new a phenomenon as foreign security underwriting, like the latter became of much greater importance during the post-war years. In view of the varied nature of the enterprises constituting direct investments, both regarding their form and the manner of their establishment, and the unreliability of available data, a systematic and accurate appraisal of the influencing factors is impossible. The following account must be couched, therefore, in very general terms.

With respect to form of ownership, direct investments may be divided into three groups. First are the direct subsidiaries and other affiliates of American corporations whose chief field of operations is in the United States. The far-flung holdings of the Standard Oil Co. (New Jersey), Ford Motor Co., General Motors Corporation, and International Business Machines Corporation are well-known examples. Such investments are adjuncts to the domestic business of the parent company and are usually financed by the parent company without recourse to the capital market. They may represent enterprises organized and developed by the American company, or they may have been purchased as going concerns from foreign owners. Extension of industry through foreign subsidiaries and branches has been the most important form of direct investment.

Next in importance are American corporations organized for the specific purpose of operating abroad. Although this form of investment is much more common in British than in American experience, to illustrate the importance of this type of American investment mention need be made only of the American & Foreign Power Co., Inc., International Telephone and Telegraph Corporation, Cerro de Pasco Copper Corporation, International Railways of Central America, and the various companies operating sugar properties in Cuba or copper mines in Chile. This form of investment is sometimes combined with the first: American & Foreign Power Co., for instance, is a subsidiary of Electric Bond and Share Co., while the Chile Copper Co. and the Andes Copper Mining Co. are subsidiaries of the Anaconda Copper Mining Co. Most companies of this type, however, have been financed by public offerings of their own securities in the domestic market.

American holdings in such companies as Dome Mines, Ltd., International Nickel Co. of Canada, Ltd., Compañía Swift Internacional, S. A. C., and others illustrate the third form of holding—direct ownership by American individuals of stock of foreign corporations. The controlling shareholders were usually also the founders of the corporations, but Americans frequently purchased foreign securities publicly offered in the United States or procured large blocks of securities directly from abroad, either privately or on foreign exchanges.

Subsidiaries of American companies operating abroad are generally organized under the laws of foreign countries, or they may be

incorporated in this country. Various legal and taxation problems apparently determine the exact form of the investment.

Foreign enterprises also may be classed in three groups on the basis of the purpose of the investment. The first of these groups that may be distinguished comprises what is generally referred to as branch plants though broadly it includes foreign sales subsidiaries as well as manufacturing plants. Such enterprises are established either to substitute for, or to facilitate, exportation of goods manufactured in this country. Although theoretically such developments may indicate greater marginal efficiency of capital abroad, practically they have been induced by tariffs, uncertain exchange conditions, nationalism and accompanying "buy-at-home" movements, patent legislation, transportation costs, and similar considerations.¹¹ Most American investments in foreign manufacturing concerns are in countries well advanced industrially. Tariffs, especially the British imperial preference scheme, have been particularly important in this development.

The second of these groups includes American enterprises organized to develop foreign natural resources and raw materials. Often the object is to provide an assured source of raw materials for the parent company in the United States. The rubber plantations of the tire-manufacturing companies and the bauxite mines of the Aluminum Co. of America may be mentioned. Again, greater profits are anticipated from foreign enterprises than from similar domestic investments. American investments in Canadian mining and Caribbean agriculture are conspicuous examples of this incentive.

The third general type, like the others, is motivated chiefly by the possibility of greater profit from foreign enterprise, though it is not dependent on the location of a particular mineral deposit, soil, or climate. Investments in public utility systems, railroads, banks, insurance companies, and theaters are typical examples.

The rapid growth of American direct investments abroad in the twenties may be accounted for by various factors, all of which are essentially products of the prosperity and economic expansion of the decade. More than 40 percent of the increase from 1919 to 1929 was accounted for by public issues of American corporations for foreign purposes. This type of financing was resorted to especially for investments in Canada and Latin American countries; in the latter, issues of sugar, public utilities, and mining companies accounted for most of the total. These investments were possible for much the same reasons as was general foreign security underwriting. As a matter of fact, flotations of domestic corporations for foreign purposes are ordinarily included in the statistics of new foreign issues. It is not surprising, therefore, that such issues became prominent in 1925 with the beginning of the boom in foreign underwriting. Unlike foreign bonds, however, they continued at a high level through 1928 and 1929, reaching a peak of \$252,000,000 (net of refunding and discounts) in the latter year. These companies, unlike most foreign borrowers, were able to issue stocks and take advantage of the 1928-29 stock-market boom.

Most of the direct investments not financed by public issues were made from the ample funds of American corporations, whose un-

¹¹ In a broad sense, of course, the effects of all these influences are included in the term "marginal efficiency."

distributed earnings during the period 1922-29 averaged more than \$2,500,000,000 a year. The expansionist psychology that possessed American business in the twenties had its influence, and the resulting pressure for markets and assured foreign sources of supply was of great importance. Hence, the course of new direct investments was not so closely linked with vagaries of the bond market as were new foreign issues. When financed from accumulated earnings, such investments obviously are not dependent on the money market. American corporations operating solely abroad by having recourse to both the bond and stock market have usually been able to raise funds for foreign purposes so long as there was an active market for new corporate issues of either type.

The outflow of capital on direct investment account reached peaks in 1928 and 1929 of \$558,000,000 and \$602,000,000, respectively (table III). Although these figures must be considered as rough estimates, it may be recalled that in those 2 years the great public utility systems of the American & Foreign Power Co. and the International Telephone and Telegraph Corporation were undergoing rapid expansion, the Ford Motor Co., Ltd., began construction of its huge new plant at Dagenham, England, and General Motors Corporation acquired a controlling interest in Adam Opel A. G. of Germany. Many other similar transactions combined to swell the large totals of those years.

Substantial amounts of capital were placed abroad through direct-investment transactions in 1930 and 1931 and doubtless in subsequent years also, although the available annual data do not substantiate this opinion.¹⁸ American direct investments abroad declined from \$7,500,000,000 at the end of 1929 to \$7,000,000,000 at the end of 1940, a reduction of only \$500,000,000. The declines in Mexico and Cuba alone, accounted for chiefly by operating losses, reorganizations, and revaluations, amounted to over \$600,000,000, or more than equal to the estimated net amount of new direct investment during the 11-year period. Operating losses were undoubtedly large in other countries as well in the early thirties, and the exchange rates used in converting foreign currencies in 1940 were in general much lower than those prevailing in 1929. If the aggregates are correct, it follows, therefore, that net outflows of fairly substantial amounts occurred, at least after the worst phases of the depression.¹⁹ For instance, the foreign activities of American petroleum companies were considerably expanded during the decade. However, the outward movement of funds in these years was small as compared with that of the preceding decade and did not form an important source of dollar exchange to foreign countries.

The following features of significance for the future may be noted: (1) American direct investments abroad continued to increase when the more formal type of foreign lending was at a standstill; (2) continuing American interest and supervision over the operation of the

¹⁸ The annual figures for the movement of capital involved in direct-investment transactions for the years 1919-29 are not exactly comparable with those for 1930-39. In the former period, reinvested earnings were included in new direct investments abroad and also, on the receipts side, in returns from direct investments in foreign countries. However, since a large proportion of reinvested earnings of the second post-war decade was of an involuntary nature, reflecting exchange control and other restrictions, United States balance-of-payments compilations since 1930 have excluded unremitted earnings from both sides of the account, and no attempt to place the data on a comparable basis has been made in this study.

¹⁹ New capital furnished existing foreign subsidiaries is usually entered in the inter-company account, for which, unfortunately, no data were collected before 1935.

enterprises is required, that is, American control over how the funds "loaned" to the foreign country are spent; (3) such investments have not been confined to countries that are normally debtors but have been distributed throughout the world; (4) direct investments have created an international business community which may help in laying the basis for closer international economic cooperation in the future; and (5) this type of investment provides an avenue for exporting American technical and managerial services, which, if the interests of the debtor countries are properly safeguarded, aids tremendously in the industrialization of those countries and thus increases their productivity and raises their standard of living.

In addition, this form of investment has other advantages from the point of view of the "borrowing" country. First, most direct investments are of an equity character; unlike external bonds they do not carry contractual service obligations payable in foreign currencies. This has a twofold advantage to debtor countries, especially those that produce raw materials and are therefore particularly subject to the swings of the business cycle. For one thing, a business depression usually means that the foreign-owned enterprise will have little or no profit to remit and hence will not put a strain on already overburdened exchanges. It may even result in inward remittances; the owner of the property, if necessary, will probably furnish funds to keep it going in anticipation of a business revival. Here, however, the possibility of disinvestment must be recognized, for in times of depression, a parent company may withdraw funds provided by depreciation charges, which ordinarily would be used to maintain or build up the property. Moreover, such profits as do accrue are payable only in the local currency, and the owner rather than the borrower must therefore stand the loss in the event of currency depreciation. This feature is an additional protection to the currency of a debtor country in times of stress.

Secondly, unlike foreign lending through public issues, direct investments are not a monopoly of mature creditor countries but are distinctly a two-way affair. An individual company may be in a position to expand abroad long before the capital markets of its country are capable of absorbing foreign issues. Firms in Canada and the United States, for instance, were making direct investments across the border while borrowers in both countries were still raising funds in Europe by means of public subscriptions. Then, too, some American subsidiaries abroad, particularly in Canada, establish subsidiaries in a third country—a move that obviously strengthens the international position of the second country, especially when the public in that country is permitted an investment interest in such enterprises. The foreign subsidiaries of the Ford Motor Co. of Canada, Ltd., and Imperial Oil, Ltd., are examples, and many others could be cited.

Further, it has been historically true, although it need not have been so, that direct investments have been more productive than foreign bond issues, for through development of foreign natural resources and addition to industrial capacity they have strengthened the general economic position of the debtor countries. The profit motive of direct investments has operated to insure this outcome, whereas foreign loans floated in the United States have been largely those of governmental entities not limited by profit considerations in their expenditure of borrowed funds.

Data available on foreign direct investments in the United States during the interwar period are so fragmentary that estimates of annual movements cannot be made with any confidence. Apparently, however, these investments increased substantially over the period, their value in 1939 being estimated at \$2,000,000,000. Roughly approximated, the growth resulted in a demand for dollars ranging around \$25,000,000 to \$50,000,000 annually. The demand came chiefly from the United Kingdom, Canada, and the Netherlands, direct investments by those countries at the end of 1939 amounting to \$847,000,000, \$476,000,000, and \$216,000,000, respectively.

The motives underlying the investments of other countries are not different from those of American investments abroad. Canadian railroads have extended their systems into the United States, and foreign owners of trade-marks, patents, and manufacturing processes have set up subsidiaries to manufacture such varying products as whisky, dessert powders, soap, and rayon yarn. Other important foreign investments have been in the industrial-chemical and machinery fields. British insurance companies have long been important operators in this country, particularly in marine risks, and one of the leading petroleum companies in the United States is foreign-controlled.

Many of the investments represent enterprises of long standing, dating from the period when the United States was a debtor nation. Land companies, principally Dutch and British, founded in the past century, are still in operation in some western States. Of 205 foreign-controlled industrial enterprises in existence at the end of 1934 for which the dates of establishment are available, 21 were established before 1900, and the same is true of 47 of a total of 129 United States branches or affiliates of foreign insurance companies.

The prosperity of the twenties, high protective tariffs, and the repeal of prohibition were specific factors influencing the establishment of foreign direct investments in the United States from 1919 to 1939.

Redemptions and Repayments

A major item of international receipts by the United States on capital account during the interwar period was the repayment of foreign issues previously floated in this country. Ideally, this item includes (1) payments of issues in full, either at maturity or by call; (2) serial redemptions and purchases by sinking funds; and (3) repurchases by or for the account of the original obligors.²⁰ The third type of transaction cannot be segregated from movements of outstanding securities, and hence is not included under "Amortization" in table III.

With regard to the figures on amortization, a word of caution is in order. The data are not a measure of the contractual annual obligations of the debtors; that is, in the terms employed in this study, they do not measure an inflexible demand for dollars resulting from our status as a creditor nation. For instance, the figures do not include maturities that were met by refunding, and they do include

²⁰ Repayments by means of refunding, by outright conversion issues or otherwise, have traditionally been excluded from both new capital issues and amortizations. That practice has been continued in this study, though it may be noted that such operations may result in an entirely new set of bondholders and a substantial change in the nature of the obligations outstanding. Moreover, refunding operations have sometimes been accomplished only under difficulties.

redemptions before maturity. Furthermore, the widespread defaults occurring after 1930 served to lower the figures for the later years. The 1930 figure probably comes closest to representing the actual contractual requirements for redemption purposes at that time, as only a few maturities were refunded in that year, and even fewer issues were called before maturity. However, the actual requirements, as well as the amounts paid, decreased after that year because of large-scale repatriations during the thirties.

The relatively large amounts of amortization receipts in 1919, 1920, and 1921 represented chiefly repayments of Allied war loans, most of which matured in those years. The years 1925 to 1930 include sizable payments before maturity, attributable to general world-wide prosperity and the restoration of European currencies at rates substantially higher than when the loans were made. At the time of the sudden cessation of foreign lending in the United States, repayments had risen to roughly one-third to one-half of new issues annually. Beginning in 1931, however, repayments in each year exceeded the amounts of capital furnished on new issues, and by 1938 the former had declined to \$87,000,000—the lowest figure after 1923.

It is a truism that unless a creditor country continually increases its annual export of capital the time will come when repayments will exceed the net amount currently advanced. While this is true of foreign loans in the form of new issues, it does not apply to direct investments, which are of a more or less permanent nature. The insistence of American bankers on sinking fund provisions in most loan contracts served to increase annual repayments in the earlier years of the loans and made for a more rapid rise in the repayment figure. But since the obligations are contractual and are not influenced, except through default, by economic conditions in either the debtor or the creditor country they constitute a relatively inflexible item in the balance of international payments.

This characteristic of obligations incurred as a result of foreign lending through publicly offered bonds has important implications for future policy. The danger of saddling a large burden of inflexible obligations on an unstable international economic and financial system was amply demonstrated in the depression period. Only if adequate measures are taken to insure a continuing large volume of international transactions is it safe to permit a substantial amount of fixed-service international indebtedness.

Movement of Outstanding Securities

Capital movements involved in the international trade in outstanding securities must be differentiated in many ways from other long-term capital movements. First, and perhaps most important, is that this type of investment is often essentially short-term rather than long-term in character. As discussed later, an important motivating factor in the international securities movement is capital appreciation or speculation, which involves frequent purchases and resales. Rapid turn-over is also involved in international arbitrage in securities and in the purchase of foreign securities with "hot money," or flight capital. Foreign ownership is concentrated largely in the so-called

"market leaders," a circumstance tending to facilitate reselling. The principal indication, however, of the temporary character of these investments is the low ratio of net sales, or purchases, to gross trading (table 10). Then, like direct investments, but unlike new issues, foreign "lending" through security purchases is usually at the initiative of the lender. Moreover, such purchases are somewhat like demand loans, since the securities may be dumped back in the markets of the debtor country at any time.

TABLE 10.—*Transactions in Outstanding Securities Between the United States and Foreign Countries, 1919-39*

[In millions of dollars]

Year	Domestic securities			Foreign securities		
	Purchases from foreigners	Sales to foreigners	Net purchases (-) or sales (+)	Purchases from foreigners	Sales to foreigners	Net purchases (-) or sales (+)
1919.....	195	(1)	-195	39	(1)	-39
1920.....	258	(1)	-258	481	(1)	-481
1921.....	26	42	+16	227	32	-195
1922.....	34	61	+27	326	189	-137
1923.....	2 54	2 412	2 +358	(2)	(2)	(2)
1924.....	2 114	2 319	2 +205	(2)	(2)	(2)
1925.....	2 90	2 411	2 +321	(2)	(2)	(2)
1926.....	463	578	+115	105	260	+155
1927.....	624	594	-30	143	336	+193
1928.....	490	973	+483	483	389	-94
1929.....	917	1,295	+378	307	412	+105
1930.....	758	844	+86	326	731	+405
1931.....	450	536	+86	316	599	+283
1932.....	278	272	-6	205	351	+146
1933.....	580	760	+180	685	565	-120
1934.....	480	480	-----	405	510	+105
1935.....	970	1,305	+335	475	425	-50
1936.....	2,070	2,685	+615	540	595	+55
1937.....	2,014	2,274	+260	602	666	+64
1938.....	1,128	1,200	+72	403	393	-10
1939.....	1,098	2 1,027	2 -71	346	410	+64

¹ Included in figures for "Purchases from foreigners," which are net for these years.

² Transactions in domestic and foreign securities cannot be shown separately for the years 1923 to 1925. The figures shown under "Domestic securities" in these years, therefore, also include transactions in foreign securities.

³ Includes \$4,000,000 of foreign private takings of domestic obligations.

This "lender's initiative" leads directly to another differentiation—the two-way and, frequently, upstream character of this kind of capital movement. Typically, the international securities movement has been between creditor countries, and the movement into and out of the United States has involved chiefly the United Kingdom, Switzerland, the Netherlands, and Canada, although nationals of other countries have undoubtedly been operating extensively through agents in those countries. Security transactions have brought foreign capital to the United States during most of the years of the interwar period, although the United States had no need to borrow abroad. The countries that were supplied with funds, on a net basis, through the international securities trade usually had a surplus of capital and were exporters on new capital account.

American net purchases and sales of domestic and foreign securities are presented in table III. Apart from the first 4 post-war years, the data indicate a predominantly inward flow of capital resulting from

a net purchase by foreigners of both classes of securities. The influences at work were varied, however, and what appears in a sense as a regular feature was really the product of several somewhat divergent factors.

Gross movements, as shown in table 10, have been extremely large, and transactions in domestic securities after the early post-war years bulked considerably larger than transactions in foreign securities.²¹

For the first 4 years of the interwar period, 1919-22, the United States was a net purchaser of foreign securities. This was probably the result of speculation in foreign securities denominated in depreciated foreign currencies with the expectation of an exchange profit when these currencies were reestablished at their old parities. Although for the years 1923 to 1925 no separation was made between United States and foreign securities in the recorded data, the net movement of funds was inward, as it was during most of the ensuing period.

The dominant factor in the foreign-bond market²² during the whole interwar period after 1922 was the repatriation movement. Although there was considerable international trading in internal issues, especially those of Canada and the United Kingdom, and much speculation in foreign dollar bonds, the net inflow of funds recorded in most years probably resulted from the preponderance of repatriations over all other forces operating in the market.

In the decade of the twenties these repatriations were of a "normal" type. Many of the issues marketed in the early years of the decade were those of European countries, some of which were ordinarily creditor nations, that had been forced to borrow at the unusually high interest rates prevailing during this period. With the establishment of more settled economic and political conditions and the restoration of currencies, these securities became attractive investments for the nationals of borrowing countries, and debtors were able to repurchase obligations at figures substantially below their original values measured in terms of the currencies of debtor countries. A gradual decline in interest rates abroad also made these securities attractive.

The movement included a type of transaction that, strictly speaking, is not repatriation at all, but which has been so considered in most studies of the subject and was probably important during the twenties. Reference is made to the purchase by British and other investors of securities of other countries denominated in United States dollars. Besides providing a hedge against currency depreciation, which could have been accomplished by the purchase of United States dollar securities, these purchases afforded European investors the advantages of high yields applying especially to Latin American issues. Furthermore, during the late twenties, yields on foreign dollar bonds in New York were higher than on the same or substantially similar obligations in London.²³ It was thus obviously to the advantage of British and

²¹ Because of the nature of international security transactions, involving frequent purchases and resales of securities for arbitrage, speculation, and other purposes, only net movements are shown in table III.

²² It is assumed that most of the transactions in foreign securities represented the trade in foreign dollar bonds.

²³ Brown, William Adams, Jr. *The International Gold Standard Reinterpreted*, 1914-1934. 1940. P. 553.

See also: P. N. Kemp-Gee & Co. *Foreign Government and Other Dollar Loans Issued in the United States of America*. Ed. 5. 1929. P. xlii.

other European investors in foreign securities to make their purchases in the United States.

The interest in foreign dollar securities was so great as to prompt one prominent English brokerage firm, P. N. Kemp-Gee & Co., to begin in 1925 the publication of a rather elaborate handbook on Foreign Government and other Dollar Loans Issued in the United States of America. An additional incentive for purchases of these bonds was that many, if not most, of them were free from income tax in the country of issue and were also free from United States income tax if held by persons neither citizens nor residents of the United States. Thus an opportunity was provided foreigners to purchase securities payable in United States dollars without suffering the disadvantage of paying the United States income tax.

By contrast, the extensive repatriation movement of 1931-32 (which continued to a lesser extent in following years) occurred under decidedly abnormal circumstances, namely, that of the low prices of foreign bonds which had been induced largely by defaults. So long as this state of affairs prevailed, foreign bonds were particularly attractive to investors in debtor countries and, of course, represented an opportunity for obligors themselves to retire their bonds at great savings. Some countries, notably Germany and Chile, went to considerable lengths to encourage repatriations. Exchange controls that prevented security arbitrage and the payment of interest in dollars while permitting it in local currencies induced price disparities that also encouraged repatriations.

A net decline of \$5,000,000,000 in American holdings of foreign dollar bonds from 1929 to 1939, while redemption and sinking-fund payments for the 10 years totaled only \$1,700,000,000, gives some indication of the amounts involved in the repatriation movement. A total repatriation of between \$2,000,000,000 and \$3,000,000,000, par value, for the decade would seem to represent a conservative estimate.

As previously indicated, by far the largest transactions on a gross basis and in most years on a net basis as well have been the dealings between Americans and foreigners in American securities, chiefly common stocks. This was especially noticeable in 1926-29, when foreign purchases of American securities were induced by progressively rising stock prices and the resultant opportunities for capital profits, and in 1935-37, when huge inflows of flight capital sought profitable investment, among other places, in the stock market. Over the period the ratio of net sales or purchases to gross amounts has been lower for domestic securities than for foreign securities; this indicates a larger amount of speculative, or at least short-term, activity in domestic issues.

Only in 1919 and 1920 did Americans make large net purchases of outstanding domestic securities from foreigners. This trend apparently represented a continuation of the wartime liquidation of foreign holdings and was part of the process by which foreign countries sought to obtain dollars wherewith to make settlement for the abnormally large post-war imports from the United States. Although special factors accounted for the large inflows of 1926-29 and 1935-37, other factors were in operation over the entire period to produce the more or less consistent net foreign purchase of United States securities.

An obvious incentive to the purchase of these securities was the investment motive. Some purchases undoubtedly were made because American securities yielded higher returns than comparable foreign securities. Oftener, probably, they were made merely for the sake of diversification of portfolios, especially by institutional investors. The system followed in the Netherlands of issuing bearer certificates against American securities made American equities readily available to the Dutch investor. Annual data regarding foreign shareholders of three major American companies disclose increasing numbers over most of the period,²⁴ a development indicating the interest of foreign investors in these securities, inasmuch as speculators do not ordinarily take the trouble and expense to have securities registered in their own names.

International security transfers were also sometimes made for relatively less important reasons. Arbitrage in securities is one very commonly identified. Although of considerable theoretical importance, the volume of such transactions has probably not been large, especially in recent years. Similarly, a temporary decline or anticipated decline in foreign exchange rates will usually lead to the purchase, if recovery is anticipated, or sale of securities denominated in the currency involved. Historically, this may have been of more importance than arbitrage in the strict sense, especially in Canada.²⁵

The item "Net long-term movement" in table III reflects all of the known long-term capital movements in the balance of international payments of the United States during the interwar period. From 1919 to 1930, except for 1923, dollars were made available to foreigners in substantial amounts as the net result of long-term capital transactions. From 1931 to 1937, however, a movement of funds of almost equal proportions but opposite in direction occurred. The net figures for 1938 and 1939 are inconclusive.

It is impossible to predict what the course of private long-term capital movements would have been if the war had not intervened. With restoration of international confidence the United States might conceivably have returned to its role as an important international lender. Since September 1939, however, as during 1917 and 1918, government lending has dominated the scene. The relative position of government and private lending between nations in the future will be one of the major problems of post-war international finance.

SHORT-TERM CAPITAL MOVEMENTS

International transfers of short-term capital during the interwar years were distinguished by their large size and shifts in direction, with frequently disturbing influences on money markets and international transactions generally. No other development of the period was more prophetic of the deterioration and eventual collapse of the international financial system that produced them. The movements of short-term capital were composed of heterogeneous elements, and were caused by forces of varying nature and intensity. At times these shifts were predominantly of a "balancing" character in the sense that they represented a more or less passive building up or

²⁴ U. S. Bureau of Foreign and Domestic Commerce. *Survey of Current Business*. 1940 Supplement. 1940. P. 76.

²⁵ Bloomfield, Arthur I. *The Significance of Outstanding Securities in the International Movement of Capital*. Canadian Jour. Econ. and Polit. Sci. November 1940. Pp. 512-514.

drawing down of short-term claims or liabilities as a result of differences between the amount of dollars supplied and the amount used on trade, service, and long-term capital account. To a far greater extent, however, the movement of short-term funds was not merely passive or balancing but was occasioned by more active or autonomous forces.²⁶

It is a striking commentary on the complacent *laissez faire* attitude that characterized the twenties that only the barest data were collected on the volume and composition of international short-term funds. Under the wartime control of foreign-exchange operations, approximately complete data by countries and by months were compiled through the first half of 1919, but with the cessation of exchange control in June of that year compilation of these figures was stopped and for the following decade the available statistics on foreign assets and liabilities of American banks and other institutions are very defective. Only the total amounts outstanding at year ends, distributed according to main types of holdings, are known, and for the early years even this information is very incomplete or wholly lacking.

Nothing was directly recorded as to the geographic distribution of assets and liabilities, and only an approximation is available as to how large a part of total foreign balances in this country was for the account of central banks and other official agencies—balances that constituted an immediate claim on, and direct offset to, the gold stock of the country. The first monthly data on foreign funds in the United States, broken down by major countries, were for May 31, 1929, and as of March 31, 1931, corresponding information was obtained with regard to United States short-term claims on other countries. In both instances the information was reported only by leading New York banks, which, however, accounted for the greater part of the amounts outstanding. Finally, at the beginning of 1935, a system was instituted whereby all banks in the United States were required to report weekly their short-term foreign assets and liabilities, distributed geographically, as well as statistics on certain other types of capital transactions.²⁷

The Movement of Short-Term Capital in the Early Post-War Years

According to the early comprehensive reports mentioned, foreign short-term balances in the United States at the beginning of 1919 totaled \$1,214,400,000, and at the same time United States short-term assets abroad amounted to \$332,300,000. Slightly more than \$500,000,000 of the former amount represented sums due to this country's European Allies, chiefly France and the United Kingdom, consisting mainly of the residue of the large wartime credits granted by the United States Government, which were subsequently funded into the so-called war debts. The remainder represented largely accumulated dollar payments to other countries for goods and services supplied during the war to the United States and its Allies, the principal amounts being held as follows: European neutrals, \$324,700,000; Japan, \$157,900,000; and Argentina, \$87,900,000.

The next most nearly comparable figures, not distributed by countries, are as of July 1, 1921. By that time foreign balances in the

²⁶ The "balancing" aspects of short-term capital movements are discussed in chapter I.

²⁷ The problems of measuring short-term capital movements are further discussed in appendix B.

United States had been reduced to only \$403,000,000, while United States short-term claims on other countries had risen to \$1,176,500,000, a net change in each of more than \$800,000,000 and a total recorded outflow of \$1,655,000,000 during the 2½-year period. This vast movement reflected in part the withdrawal of Latin American and Far Eastern dollar balances in the form of gold after the United States embargo on gold exports was lifted in June 1919. The greater portion of the short-term movement, however, was clearly related to this country's tremendous export surplus to Europe, which was financed in part by the utilization of the dollar balances held by European countries at the end of the war and in part by extension of American credits on a huge scale. The outflow as calculated on the foregoing basis is, in fact, probably greatly understated, since it accounts for only about one-half of the "Unexplained items" shown in the balance-of-payments estimates for the first 3 post-war years.²⁸

Because of the inadequate data available, it is not known when American short-term credits to foreign countries reached their early post-war peak; but, in view of the fact that the depression beginning in the latter part of 1920 probably gave rise to some liquidation, it was doubtless some time before the middle of 1921. Certainly, the next short-term survey, applying to July 1, 1922, indicates a liquidation, outstanding American credits at that time having been reduced to \$863,500,000. During the same 1-year period foreign balances in the United States were increased to \$465,500,000, the net short-term outflow of the previous 2½ years thus being replaced by a net inflow of about \$375,000,000. The repayment of American advances and the concurrent inflow of foreign funds were together mainly responsible for the net influx of gold in the amount of \$340,000,000 during the fiscal year ended June 30, 1922.

Growth of Short-Term Balances in the Twenties

During the remainder of the twenties the volume of international short-term funds was greatly increased. At the end of 1929 leading American banks reported that sums due them or their customers by foreign countries totaled \$1,776,000,000 and that their liabilities to foreign countries aggregated \$3,030,000,000. These figures would indicate an inflow of foreign funds of some \$2,600,000,000 and an outflow of United States short-term capital of slightly more than \$900,000,000 during the 7½-year period from July 1, 1922.

While the inflow figure probably involves some overstatement because of the larger number of banks reporting for the end of 1929 than at the time of the 1922 survey, the outflow figure is definitely too low, for two reasons: (1) As indicated, the 1929 figures represent only sums reported by banks and do not include accounts receivable by exporting houses and other firms, which accounted for \$385,000,000 of the mid-1922 figure; (2) part of the amounts due American banks and businesses in 1922 represented unsound claims arising out of the post-war speculative boom and were subsequently written off, with the result that a simple comparison of the outstanding amounts on the two dates understates the net volume of new credits extended during the period.²⁹

²⁸ The short-term item is not entered in the balance-of-payments estimates for 1919 through 1922, since the available data cannot be placed on a calendar-year basis.

²⁹ Any write-offs of credits extended during the period would have similar effects in understating the outflow of American short-term capital.

According to the incomplete data made available by the various year-end surveys of short-term capital, American banking funds abroad increased each year, but by varying amounts. The rate of growth was relatively small through 1926 but rose sharply in 1927 and remained substantial in the following 2 years. Table 11 shows the composition of these short-term assets at the end of 1925 and, in somewhat greater detail, at the end of 1927 and 1929. The largest component of the 1929 total—one which accounted for all of the increase—was the item of acceptance credits, reflecting the rapid development of American bankers' acceptances as an instrument for financing United States exports and foreign business generally. Deposits abroad were relatively small and seemed to be no larger than necessary for current business operations, as was also true of overdrafts granted to foreign banks.

As compared with the growth in United States short-term assets abroad, foreign funds in the American market behaved in much more irregular fashion during the twenties. In 2 years, 1925 and 1928, there was a net reduction in foreign short-term holdings. The bulk of the increase during the decade appears to have occurred in 1926 and 1927, but the figures on annual changes are of doubtful validity. The data

TABLE 11.—United States International Banking Accounts, 1925, 1927, 1929, and 1931

[Year-end data, in millions of dollars]

Item	1925	1927	1929	1931
I. Due from foreigners:				
Deposits.....	193	222	210	113
Investments, advances, overdrafts, etc.:				
American funds invested in foreign money markets:				
By American banks.....	(?)	20	18	(?)
By customers of American banks.....	(?)	12	22	(?)
Total investments.....	(?)	32	40	(?)
Overdrafts by foreigners on American banks.....	(?)	176	206	(?)
Other short-term loans and advances to foreigners.....	(?)	365	278	(?)
Total investments, advances, overdrafts, etc.....	563	573	524	677
Acceptance credits.....	333	550	1,042	549
Total due from foreigners.....	1,089	1,345	1,776	1,339
II. Due to foreigners:				
Deposits.....	1,005	1,846	1,708	1,025
Investments, advances, overdrafts, etc.:				
Foreign funds invested in American money markets:				
Dollar acceptances purchased in the market.....	(?)	387	865	266
Undiscounted foreign-drawn acceptances.....	(?)	112	105	38
Treasury bills.....	(?)	434	62	39
Brokers' loans.....	(?)	97	217	51
All other.....	(?)	13	11	
Total investments.....	(?)	1,043	1,260	394
Advances from and overdrafts on foreigners.....	(?)	30	27	26
Total investments, advances, overdrafts, etc.....	276	1,073	1,287	420
Acceptance credits.....		29	35	20
Total due to foreigners.....	1,281	2,948	3,030	1,465

¹ Based on annual questionnaires to leading American banks by the Department of Commerce. The number of reporting institutions varied from year to year; hence changes in the year-end totals do not always correspond with annual movements as carried in the balance-of-payments estimates, which are based so far as possible on data reported by the same institutions for the beginning and end of each year.

² Break-down not available in form indicated for other years.

in table III show that only about two-thirds of the total inflow indicated by comparison of the mid-1922 and end-of-1929 figures on amounts outstanding can be accounted for by the annual movements from 1923 through 1929, calculated from more or less comparable data for successive year ends. The total as of July 1, 1922, however, is probably understated because of incomplete coverage.

The composition of foreign short-term claims on the United States, shown in table 11, is in striking contrast to that of American assets abroad. Whereas before 1914 the greater part of United States imports was financed in London,³⁰ foreign acceptance credits played only a small role in American foreign-trade financing after the first World War. Borrowings by American banks in the form of advances from or overdrafts on foreign banks were also negligible in the twenties. By far the greater part of foreign claims were in deposit accounts with American banks or were invested through the latter in the American money market—types of holdings of relatively minor importance in United States assets abroad.

It is interesting that the acceptance market in this country was financed to a substantial degree by foreign funds, holdings of American bankers' acceptances by foreigners at the end of 1929 totaling only slightly less than the volume of such credits extended to foreign countries and representing 50 percent of the total amount of acceptances outstanding. These holdings, especially undiscounted foreign-drawn acceptances, could be regarded, in a sense, as an offset to American claims in the form of acceptance credits, but they are properly regarded as distinct and separate liabilities of the accepting institutions in this country. It may also be noted that loans to brokers made for the account of foreigners increased sharply during the stock market boom of 1928-29. In fact, the volume of foreign funds put out in this form is greatly understated in the recorded data.³¹

The huge volume of foreign short-term funds in the United States had its origin in (1) the relatively large supply of dollars made available to foreign countries during the period of heavy lending abroad, and (2) the desire or willingness of foreigners to hold liquid assets in the form of dollar balances rather than to take them out in the form of gold.³² The disposition of foreigners to maintain short-term dollar assets was related in general to the strength of the international position of the United States after the first World War. Indeed, the very fact that the United States held large gold stocks and could

³⁰ Before 1914 more than 95 percent of American import credits were opened in sterling and advised to the beneficiary by London banks, which also accepted and paid the drafts for the account of the American bank. Cf. Ward, Wilbert. *Bank Credits and Acceptances*. 1931. P. 32.

³¹ American agencies of foreign banks made particularly heavy loans to brokers on their own account from funds deposited with them by their head offices or clients abroad. Since such agencies are necessarily regarded as domestic institutions, these funds are included with deposits due foreigners rather than with loans to brokers. The outstanding amount loaned by three agencies only, concerning which special information is available, was \$115,000,000 at the end of 1928 and \$53,000,000 at the end of 1929.

³² On this feature it might be argued that foreigners had other alternatives—to spend their dollars on additional purchases of goods and services or to acquire investments here. Such a contention would be unrealistic, however, for the particular foreigners holding dollar balances—chiefly central and commercial banks—were not themselves purchasers of such things in significant amounts but rather held dollar funds both as reserves and to meet the commercial or other needs of their clients and the general public. The public is ordinarily guided by specific considerations in its demand for dollars, largely related to the prevailing state of economic activity in foreign countries (discussed in chapter II). Only by stimulating business conditions through liberal credit policies could foreign banking systems encourage a more active demand for dollars, and the large supply of dollars thus made available was, in fact, partly responsible for the vigorous economic expansion abroad during the twenties (discussed in chapter V).

readily supply virtually unlimited quantities upon demand tended to make dollar balances tantamount to gold.

Beyond this general consideration, however, were various special factors and more definite purposes underlying the accumulation of foreign-owned balances in this country. For one thing, the very size and growth of our lending operations up to the middle of 1928 at times caused the dollar proceeds of loans to accumulate faster than they were actively demanded abroad, and thus resulted in what has been called a "backwash" in the form of short-term balances on foreign account. The concomitant growth of this country's creditor position arising from these loans required in turn the building up of a substantial volume of dollar funds to meet recurring interest and amortization charges. Of still greater importance, the fact that post-war international trade—especially the foreign trade of the United States—was largely financed in dollars necessitated the holding of dollar balances by foreign banks for current operating purposes. For example, the rapid growth of American acceptance credits to foreigners required that they maintain funds in this country with which to liquidate these credits as they matured.

Another important factor in the situation was the accumulation of dollar balances as part of the monetary reserves of foreign countries or for related purposes. As previously observed, little is known as to the actual size and behavior of this extremely important component of foreign short-term assets in the United States, although in June 1927 the Federal Reserve Board expressed the opinion that " * * * perhaps as much as \$1,000,000,000 of the operating reserves of foreign central banks is in the form of dollar exchange."² These holdings were largely connected with the development of the gold-exchange standard, under which monetary reserves were held partly or wholly in the form of claims on gold-standard countries rather than in gold and which was widely encouraged in the early post-war years as a means of reducing the monetary demand for gold. The holding of dollar assets for such purposes was further encouraged by the practice of the Federal Reserve banks in adding their guaranty to bankers' acceptances purchased for foreign central banks.

The contingent liabilities of the Federal Reserve banks on these items grew rapidly during the late twenties and reached a maximum of \$548,000,000 at the end of 1929. This indicates that more than half of the foreign holdings of dollar acceptances at that time was for the account of foreign central banks, which were thus able to combine in their dollar assets virtually complete safety and liquidity with attractive yields on acceptance credits.

Although minimum levels were needed for operating purposes, below which foreign-dollar balances could not fall without serious inconvenience, the aggregate was undoubtedly far in excess of absolute requirements and hence manifested considerable variability, depending upon changes in relative interest rates in American and foreign money markets, as well as other considerations. The reduction in these balances in 1925 and the accompanying outflow of gold, for example, appear to

² Federal Reserve Board. Federal Reserve Bulletin. Vol. 13. 1927. P. 392.

have been caused by the fall in interest rates in New York that began in 1924.³⁴

So far as may be judged by the behavior of gold movements, the outflow of short-term funds appears to have halted in the middle of 1925. Thereafter came a spectacular rise in foreign balances in the United States aggregating about \$1,500,000,000 for 1926 and 1927, according to the estimates for those years. The increase may be explained by the tremendous expansion in dollars made available by the United States on long-term and short-term capital account—a movement that reached a peak in the last half of 1927 and the first half of 1928. There are, however, certain peculiar aspects of these developments. The great increase in foreign dollar balances shown for 1927 seems to be in contradiction to the easing of interest rates in the middle of the year and to the large gold outflow that began about the same time. The explanation may lie in the strong probability that foreign balances in the United States were more completely covered in the short-term survey for the end of 1927 than for earlier dates, and hence the increase was overstated for that year and understated for earlier years.

During 1928 foreign short-term balances in the United States declined and gold moved out—a development more clearly consonant with the relatively low levels of interest rates prevailing in New York during the early part of the year despite some tightening of Federal Reserve credit policy. One element that can be specifically identified in this withdrawal was the conversion into gold by the Bank of France of part of its dollar funds during the months just before *de jure* stabilization of the franc on June 25, 1928. It also appears that proceeds of loans made to Argentina and Brazil in 1927, which had been temporarily held on deposit in this country and thus had accounted for part of the increase in foreign funds in that year, were taken out in the form of gold in the first and second quarters of 1928.

The extent of foreign short-term capital outflow during the early part of 1928 is obscured in the annual data by developments later in the year. Increasingly alarmed by the "excessive amount of the country's credit absorbed in speculative security loans,"³⁵ the Federal Reserve Board further tightened credit by raising discount rates and by open-market sales during the spring and summer. Whatever may be the merits of the theory of the absorption of credit by the stock market boom, the Board's policy, to say the least, strongly bolstered the rise in interest rates generally and rates on security loans in particular. An incidental result of these developments in the stock and money markets was a reduction in the outflow of American capital and a renewed influx of foreign funds. The inflow continued in 1929 as domestic credit conditions became still tighter and brought with it a heavy movement of gold during the first three quarters of the year, despite defensive measures abroad in the nature of higher discount rates imposed in London and other foreign centers.

³⁴ These short-term and gold movements were in part more specifically attributable to the Dawes loan to Germany in October 1924, of which the American tranche was \$110,000,000. Although most of the proceeds were eventually converted into gold for Reichsbank reserves, the larger part was held temporarily on deposit in this country, and these operations accounted for a portion of the rise in foreign dollar balances in 1924 and the decline in 1925.

³⁵ Federal Reserve Board. Sixteenth Annual Report. 1930. P. 2.

According to monthly data covering New York banks, available beginning March 31, 1929, foreign funds in the United States reached their peak in October—about the time of the stock market collapse (chart 24). The easier credit conditions that ensued lessened the attraction of the American money market for foreigners and led to some reduction in total foreign dollar balances. There also appears to have been a transfer of dollar funds from private into official accounts, as indicated by a rise of about \$100,000,000 during the last quarter in dollar acceptances held by the Federal Reserve banks for foreign central banks.

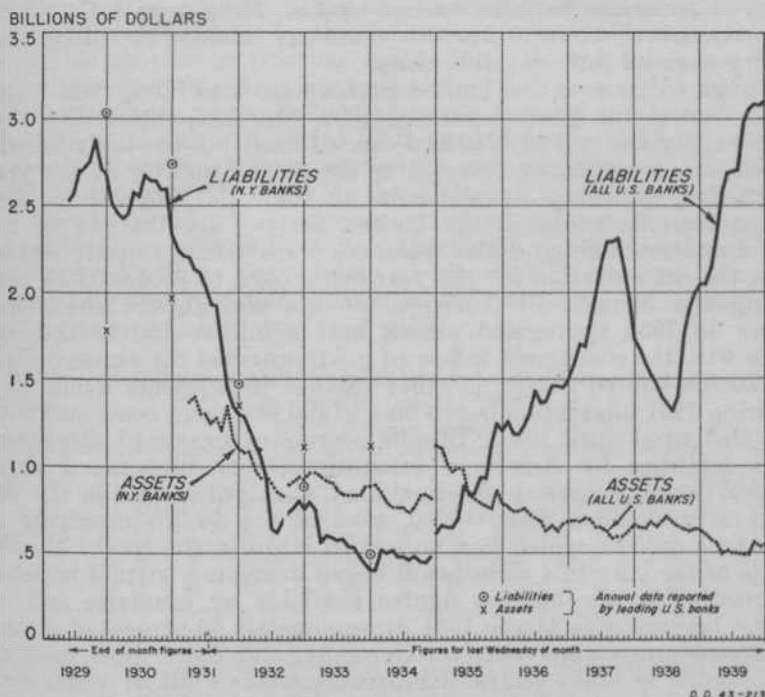


Chart 24.—Short-term foreign assets and liabilities of American banks.

Note.—Breaks in the series indicate improved coverage.

International Liquidation, 1930-33

The great depression that began at the end of 1929 brought a sweeping liquidation of the towering short-term credit structure that had been erected during the twenties. By the end of 1933, according to reports covering leading banks in this country, American balances abroad were only \$1,100,000,000, a reduction of almost \$700,000,000 during the 4 years, while foreign short-term assets in the United States had fallen precipitously—by \$2,550,000,000 to an outstanding total of less than \$500,000,000. These movements were thus offsetting to a degree, but the decline in foreign balances was by far the greater, the net outflow being in the order of \$1,850,000,000. Including the reflux of American currency notes previously held abroad, the reduction in the net short-term debtor position of the United States was, in fact, close to \$2,000,000,000.

Liquidation of short-term debts, however, did not set in with full force immediately upon the downturn in business. In fact, during the first year of the depression American banking balances abroad increased. Despite the decline in international trade, acceptance credits to foreigners were maintained at the end-of-1929 level, the percentage of United States exports so financed rising from 53 in 1929 to 72 in 1930; and American deposits, advances, and other short-term investments abroad, attracted by the renewed shift in relative interest rates, rose to their highest point at the end of 1930. An important element in this growth was the participation by a group of American bankers, headed by Lee, Higginson & Co., in an international short-term loan to Germany aimed at tiding that country over its financial difficulties.

Foreign balances in the United States were also fairly well maintained during the greater part of 1930. In fact, the decline that began toward the end of 1929 and carried over into the early months of 1930 was temporarily reversed in the second quarter of the year (chart 24), probably as a result of the brief revival in new foreign loan flotations in the United States. By the end of the year, however, foreign-dollar balances were being rapidly drawn down, the net reduction for the year being close to \$300,000,000. Including the increase in American credits abroad, the short-term outflow in 1930 aggregated almost half a billion dollars and, together with the concurrent inflow of gold, provided the excess dollars paid to the United States on other balance-of-payments items.

During 1931 liquidation began on a grand scale and continued with little abatement until 1932. Despite continuing grants of short-term credit facilities by American institutions, including the Federal Reserve banks, American funds abroad were pulled out to the net extent of more than \$600,000,000, most of the decline occurring in acceptance credits, which had bulked so large in the total. By the middle of the year this withdrawal began to create a virtual impasse.

According to the earliest figures available by countries and by months, beginning in March 1931, approximately 40 percent of American short-term claims were on Germany, and there were substantial amounts in other central European countries, all of which had previously depended heavily on external borrowing. The rapid deterioration of the economic and financial structure of these countries as the world depression deepened led to a general run on them by their creditors, which produced the mid-1931 crisis of illiquidity, characterized by exchange control and blocked balances, and in Germany, by the famous "standstill" agreements providing for a gradual repayment of a part of its short-term obligations.

Similar difficulties also arose in many countries of Latin America, which accounted for an additional 15 percent of United States short-term assets abroad at that time. By the middle of 1931, therefore, the greater part of American claims on foreign countries had been frozen, and thereafter funds could only be withdrawn gradually, and frequently at substantial loss because of the wide variety of depreciated exchange rates that developed, including the omnipresent black markets. The reduction in the total during 1932 was in the order of \$200,000,000, less than one-fifth coming out of Germany and Latin

American countries, the greater part being withdrawn from the United Kingdom and various other European countries.

The reduction in foreign balances in the United States proceeded far more rapidly during this time. The sharp fall that began in the last month of 1930 proceeded with little interruption for the next year and a half and aggregated almost \$2,000,000,000 by the middle of 1932, thus accounting for most of the decline during the depression years (chart 24). This reduction, however, came in two distinct phases. Until the summer and early fall of 1931 it was primarily a continuation of the drain already under way in the foreign-exchange reserves of the United Kingdom, Germany, Canada, and various other countries hard-hit by the depression in its early stages or in a vulnerable short-term position (table 12). During this time, there was relatively little change in the holdings of France, the Netherlands, and Switzerland, whose dollar balances amounted to almost half of the total at the end of 1930. This situation was abruptly altered, however, after the German exchange crisis in July and the breakdown of the gold standard in the United Kingdom in September. The blow to confidence in international financial stability resulted in the swift withdrawal of French, Netherlands, and Swiss balances, the decline in the New York dollar accounts of these countries alone aggregating nearly \$1,000,000,000 in the following 10 months and giving rise to a sudden exodus of gold.

TABLE 12.—*Short-Term Liabilities to Foreigners Reported by New York Banks on Selected Dates, 1929-33*

[In millions of dollars]

Date	United Kingdom	France	Netherlands	Switzerland	Germany	Italy	Other Europe	Total Europe	Canada	Latin America	Far East	All other countries	Total
May 31, 1929.....	337.4	771.6	87.1	94.1	163.1	150.4	318.9	1,922.6	302.9	203.9	54.9	41.4	2,525.8
Oct. 31, 1929.....	458.6	956.1	107.5	107.2	196.5	152.9	342.7	2,321.3	253.4	197.8	60.1	38.9	2,871.5
Mar. 31, 1930.....	223.1	890.7	94.0	118.6	191.6	151.9	299.9	1,969.8	204.2	168.0	53.7	25.0	2,420.7
Nov. 30, 1930.....	264.1	814.4	122.6	283.0	178.9	126.5	304.8	2,094.3	279.7	142.8	47.2	26.2	2,590.2
Aug. 5, 1931.....	104.6	749.9	118.7	230.7	50.7	80.7	203.0	1,538.3	151.1	151.3	51.4	28.1	1,920.2
Sept. 16, 1931.....	153.1	685.3	111.9	233.2	82.8	73.9	239.0	1,579.3	146.4	142.5	49.3	27.8	1,945.3
Nov. 4, 1931.....	117.9	596.1	44.8	79.5	38.0	46.0	109.8	1,031.9	157.3	117.6	43.5	28.0	1,378.3
May 11, 1932.....	196.8	303.8	29.2	99.7	35.4	24.2	62.1	751.2	110.2	105.3	42.9	12.5	1,022.0
July 13, 1932.....	94.5	57.2	18.5	83.1	30.4	22.2	56.3	362.2	97.3	95.4	33.4	11.0	599.3
Nov. 30, 1932.....	155.1	67.6	15.0	73.7	31.5	40.4	75.5	438.8	154.3	120.7	48.9	13.0	795.7
Jan. 18, 1933.....	225.8	68.0	15.0	85.1	31.3	37.9	63.1	526.2	90.1	123.1	40.3	13.1	792.8
Apr. 5, 1933.....	152.1	44.4	10.8	42.8	23.7	17.5	40.2	331.6	68.2	98.0	39.8	13.6	551.2
Dec. 20, 1933.....	50.9	26.7	7.7	12.5	16.5	9.6	31.8	155.6	86.2	95.0	41.3	10.3	388.4

By the middle of 1932 foreign funds in the United States must have been at minimum working levels, even at the prevailing low volume of international trade. In the latter part of the year British, Canadian, and Latin American balances increased slightly, although continental European accounts remained low. Intensification of the banking difficulties in the United States in early 1933, however, brought renewed apprehensions as to the future of the dollar, and the assets of practically all foreign countries were further reduced, largely through conversion into earmarked gold for eventual export. Operations of this nature were restricted, however, by the emergency meas-

ures taken in March and April, the effect of which was to suspend the gold standard. Foreigners nevertheless succeeded in gradually reducing their balances as earlier fears materialized in the depreciation of the dollar after April.

The withdrawal of short-term money by foreign countries just before and during the depreciation of the dollar was accompanied by some exodus of American funds—also motivated by considerations of safety and speculative profit—despite official measures designed to limit exchange operations to commercial and other legitimate transactions. It is perhaps partly because of the more devious channels through which flight capital moves under such conditions that the amount of the outflow does not appear to be fully reflected in the reported data on American banking balances abroad. The total of these balances, in fact, registered a slight decline during the year. The reported decline, however, was in short-term investments and advances and was occasioned largely by the repayment of previous credits to the Gold-diskontbank and the Reichsbank, whereas deposits in foreign countries as reported by American banks rose by more than \$100,000,000.

The Inflow of Capital, 1934-39

During the 6 years following the devaluation of the dollar early in 1934, there was an inward flow of short-term capital to the United States to the recorded extent of \$4,000,000,000—a movement even surpassing the tremendous shifts in liquid assets occurring during the twenties and the great depression. About 75 percent of this amount consisted of foreign-owned funds transferred to this country, principally because of disturbed monetary and political conditions in Europe. The balance, some \$895,000,000, represented the continued reduction of American short-term assets abroad that had begun in 1931.³⁶

Widespread exchange controls and generally unsettled world conditions rendered maintenance of foreign balances and extension of new foreign short-term loans extremely hazardous undertakings during this period. As a result, a continued, though gradual, liquidation of American credits took place, and by the end of 1939 short-term assets abroad amounted to only \$600,000,000. The liquidation process was slowed because of the freezing of assets, particularly in Germany and Latin American countries. The unusually large inflow of capital in 1935 was doubtless accounted for by repatriation of American capital that had gone abroad during 1933. Uncertainty as to the future exchange value of the dollar apparently had discouraged its return during 1934, although there may have been an unrecorded repatriation of American funds in that year, corresponding to the presumed unrecorded outflow in 1933.

As already indicated, financial and political instability was chiefly responsible for the large flight of capital from Europe after 1934. With the devaluation of the dollar, speculation was directed against the gold-bloc currencies, especially the French franc, which for some time had been overvalued against sterling and was then overvalued against the dollar as well.

However, though the pressure on the dollar was relieved immediately on devaluation in January 1934, as indicated by a sharp decline in

³⁶ The amounts cited in this section are recorded figures. In addition to the recorded inflow it is assumed that a large part of the residual item, which amounted to \$2,300,000,000 over the 6-year period, consisted of unrecorded imports of long- and short-term capital.

the discount on the forward dollar, its status was still uncertain throughout the rest of the year. As a result, the inflow of foreign funds was relatively inconsiderable, amounting to only \$126,000,000, and the premium on forward dollars that was to prevail during the ensuing 4 years did not appear until well into 1935.

With the devaluation of the Belgian currency in April 1935, the attack on other gold-bloc currencies was intensified. The French franc in particular suffered from this speculation, and large discounts on the forward franc appeared. These discounts, being far in excess of the comparative interest-rate differentials between Paris and New York, intensified capital export by making possible huge profits in the transfer of spot funds to New York and the coincident sale of forward dollars. The pressure on the forward franc was evidence of lack of faith in the future value of French currency, and the expectations of the market were realized in the devaluation of September 1936.

Relative stability in foreign exchanges followed for several months after the devaluation, but except for the months of October and November the flow of foreign funds to the United States continued at a substantial rate. In the spring of 1937 certain factors in the international markets, including the continued inflow of gold to the United States, led to widespread rumors that the price of gold might be reduced by the United States Treasury. This "gold scare," leading to large-scale dishoarding of gold in London and transfer of the proceeds to the United States, was responsible for exceptionally large inflows in April, May, and June. Renewed attacks on the franc during the summer months caused a continued inflow even after the gold scare had subsided, and foreign funds in the United States reached a high point of \$2,300,000,000 by the end of September.

The flow of foreign liquid funds, which had been consistently inward since 1934, turned sharply outward in the latter part of 1937. The greatest factor in this withdrawal was undoubtedly the "dollar scare" that appeared abroad in the fall of that year. Rumors of an impending further devaluation of the dollar as a counter measure against the current business recession in the United States appeared in foreign centers, and led to a flight from the dollar by foreigners owning deposits in this country. In addition, a part of the funds that had entered the United States during the gold scare of April, May, and June was undoubtedly repatriated when the fear of a reduction in the price of gold had subsided, and some of the outflow is considered to have represented this withdrawal. Moreover, it is assumed that to a limited extent foreign funds were drawn on directly to pay for exports from the United States, since it was customary for the British and others to accumulate funds annually in anticipation of heavy autumnal purchases of merchandise.

This decline in foreign balances coincided with the appearance of a substantial export surplus in our merchandise trade account. For the 10-month period ended in July 1938, the two were approximately equal at about \$1,000,000,000. The nature of the relationship was, for the most part, however, not one of cause and effect, since both developments were directly or indirectly the result of the business recession in the United States. The sharp decrease in United States imports and the fears of impending devaluation of the dollar were both clearly traceable to depressed conditions in this country. In a broad

sense, therefore, this capital movement may be considered as a balancing, or at least, an offsetting item, though not in the usual way in which movements of short-term funds are considered to redress the balance on current and long-term capital account.

From the middle of 1938, political conditions in Europe, especially the fear of war, were clearly the dominating factor in the movement of foreign funds. The outward movement was arrested in July, and under the stimulation of the Sudeten crisis the flow of funds to the United States was spectacularly resumed. In the two weeks ended September 21, during the negotiations that culminated in the Munich agreement, a phenomenal increase of \$266,000,000 in the liabilities of domestic banks to foreigners was reported, the inflow of foreign funds for the full month being in excess of \$350,000,000. This movement continued up to the outbreak of war, with exceptionally large amounts entering at the time of the second Czecho-Slovak crisis in March and April of 1939 and during the weeks in August immediately preceding the invasion of Poland.

By the end of 1939, as a result of the abnormal conditions prevailing during the decade, the United States was a net debtor on short-term account to the extent of \$2,600,000,000, in sharp contrast to a net creditor position on long-term account of an estimated \$4,500,000,000.

CREDITOR-DEBTOR POSITION OF THE UNITED STATES

In addition to the important direct role of capital movements in the balance of payments, changes in the international investment position of the United States resulting from these movements, and from other factors, also had significant influences through their effects on the interest and dividend items. Receipts and payments on interest and dividend account have already been discussed in chapter II, and the evolution of this country's creditor-debtor status is now reviewed briefly.

During World War I, largely as a result of loans floated for the account of the British and French Governments and the liquidation of foreign holdings of American securities, the international investment position of the United States underwent a swift change. A net debtor status of approximately \$3,700,000,000 in 1914 was transformed into a net creditor status, excluding intergovernmental debts, of the same amount by the end of 1919.³⁷

The rapid expansion of American assets abroad in the following decade, accompanied by a smaller growth in foreign claims on the United States, further increased this country's net creditor position to approximately \$8,800,000,000 at the end of 1930 (table 13). As a result of the extensive liquidation of foreign-owned assets, particularly short-term, in the ensuing 3 years, and despite a reduction of \$2,300,000,000 in American investments abroad during the same period, the net creditor position of the United States on international investments reached what was probably an all-time high—approximately \$9,500,000,000—at the end of 1933. The decline in American investments

³⁷ Lewis, Cleona. *America's Stake in International Investments*. 1938. P. 447.

Foreign claims on the United States for properties sequestered during the war have been eliminated in computing the net position in 1919.

abroad continued to the end of the period under survey, a reduction of \$3,500,000,000 being recorded from the end of 1933 to the end of 1939. Concurrently foreign capital again moved in heavy volume into the United States. As a result, this country's net creditor status was drastically reduced to only \$1,800,000,000.

Because of differing rates of income earned on various types of investments and relative changes in these rates, shifts in the composition of investments, as well as in the aggregate amounts outstanding, exerted a significant influence on the balance of international payments. For instance, net receipts of interest and dividends in 1939 were approximately the same as in 1933, despite the great change in the net creditor position of the United States in the meantime. This was largely because new foreign investments in the United States during this period included large amounts of short-term assets, the earning power of which was negligible, while the reduction in the United States investments abroad was concentrated in portfolio and short-term holdings, leaving the more profitable direct investment stake substantially intact.

TABLE 13.—*International Investment Position of the United States in Selected Years (Excluding War Debts)*

[In billions of dollars]

Item	End of year—			
	1919	1930	1933	1939
United States investments abroad:				
Long-term:				
Direct.....	3.9	8.0	7.8	7.0
Portfolio.....	2.6	7.2	6.0	3.8
Total long-term.....	6.5	15.2	13.8	10.8
Total short-term.....	.5	2.0	1.1	.6
Total long- and short-term.....	7.0	17.2	14.9	11.4
Foreign investments in the United States:				
Long-term:				
Direct.....	.9	¹ 1.4	¹ 1.8	2.0
Portfolio ²	1.6	¹ 4.3	¹ 3.1	4.3
Total long-term.....	2.5	5.7	4.9	6.3
Total short-term.....	.8	2.7	.5	3.3
Total long- and short-term.....	3.3	8.4	5.4	9.6
Net creditor position of the United States:				
On long-term account.....	4.0	9.5	8.9	4.5
On short-term account.....	⁴ -3	⁴ -7	.6	⁴ -2.7
On long and short-term account.....	3.7	8.8	9.5	1.8

¹ 1929 data.

² 1934 data.

³ Includes miscellaneous investments.

⁴ Net debtor position.

NOTE: All data for 1919 and the data for 1929 on foreign long-term investments in the United States are from unofficial estimates; other data are as estimated by the Department of Commerce. (See appendix A.)

CHAPTER IV

THE VARYING ROLE OF GOLD

Although the virtually world-wide use of gold as a monetary reserve during the interwar period would in itself give gold movements a significance quite different from that of other international transactions, their major role in the balance of payments is suggested by the sheer magnitude of the flow during that time. On occasion gold moved out of the United States in significant volume, but over the period as a whole there was a net inflow valued at \$10,813,000,000. These movements, as indicated by table 14 and chart 25, were, however, unevenly distributed geographically and from the standpoint of time during the interwar period.

Inasmuch as gold acquired by the United States from abroad during the interwar period represents purchases against which dollar funds were paid out, it might appear that these amounts should be included in the "supply of dollars" made available to other countries—a concept extensively employed in this study. Under certain circumstances, such an assignment might be justified. A substantial part of international gold movements has come directly from new production. From the standpoint of producing countries, gold forms a part of their regular export trade like any other commodity except that it commands an unlimited market—the world's central banks and treasuries—and, in general, has benefited by relatively fixed or rising prices regardless of the amount offered. Most of the world's new production has been sold in the first instance on the London market, but some countries—notably Canada and Mexico—have more or less regularly disposed of their current output in the United States. Purchases of newly mined gold, therefore, might well be considered as part of the supply of dollars provided by the United States to the producing countries, particularly after the great depression as world gold production expanded far beyond monetary needs.

Gold as a "Balancing" Factor

During most of the interwar period, however, gold flows into and out of the United States represented chiefly transfers from and into monetary reserves, and an appraisal of the role of gold in our international transactions must be concerned primarily with movements of this character. For purposes of international settlements the United States, except for minor and short-run restrictions, allowed gold to move freely and readily permitted the conversion of gold into dollar funds and, contrariwise, the transfer of dollar funds into gold. It is therefore appropriate to regard gold imports or exports as a "balancing item" in our international transactions rather than as a part of the dollars currently supplied to, or used by, foreign countries.

As the term "balancing item" suggests, gold movements in our interwar balance of payments represented in part drains on gold reserves required to cover differences between the amount of dollars supplied and the amount of dollars used through trade, service, and investment transactions. This was notably true with respect to the large inflows of gold that occurred concurrently with heavy declines in the supply of dollars in 1921, 1930-32, and 1938. To the extent that gold movements were caused by such developments, they are susceptible of explanation only within the framework of a general analysis of our international transactions as a whole, such as is undertaken in the next chapter.

Unfortunately, the behavior of gold during the interwar period cannot be completely and satisfactorily explained in such simple and systematic fashion. In brief, gold movements did not accurately reflect the prevailing state of balance or imbalance in the supply and use of dollars, nor did they conform to any particular pattern applying to the period as a whole.

For one thing, there were times when severe strains developed in our balance-of-payment relationships without giving rise to gold movements of commensurate magnitude. In fact, despite the great volume of international gold shipments that took place during the interwar period, there were only a few years in which foreign countries generally permitted gold to move freely as a medium for settling international accounts.

On the other hand, a very large part of the heavy gold movements that did take place reflected not so much the current state of disequilibrium in the general balance-of-payments position of the United States as the operation of special forces producing shifts of short-term capital in large volume. Broadly speaking, these transfers arose largely from changes in the preferences of foreigners as to the particular form and place in which they desired to hold their assets, and the concomitant gold movements therefore did not necessarily point to any corresponding disparity between the supply and use of dollars on trade, service, and long-term capital account.¹ Under such conditions, any attempt to explain gold movements, or their absence, solely or chiefly in terms of the balance-of-payments position as a whole would be unrealistic. The explanation must be sought in large part in the various special influences mentioned above.

Gold Movements in the Early Post-War Years

The heterogeneous and varying character of the influences determining the movement of gold in the early post-war years and during the interwar period as a whole is revealed most clearly against the background of the way gold was assumed to function under the international gold standard. A summary statement of the essential features of this standard, under extremely simplified conditions, is given in the following quotation from the report of the Gold Delegation of the League of Nations, presented in July 1932:²

The normal features of the gold standard in its simplest form would be the acceptance of gold without limit by Governments at a fixed price for minting

¹ In such circumstances, gold movements may be regarded as balancing with respect to short-term capital rather than to dollars supplied and used on current and long-term capital account. These relationships are discussed in chapter I.

² League of Nations. Report of the Gold Delegation of the Financial Committee. 1932. P. 10.

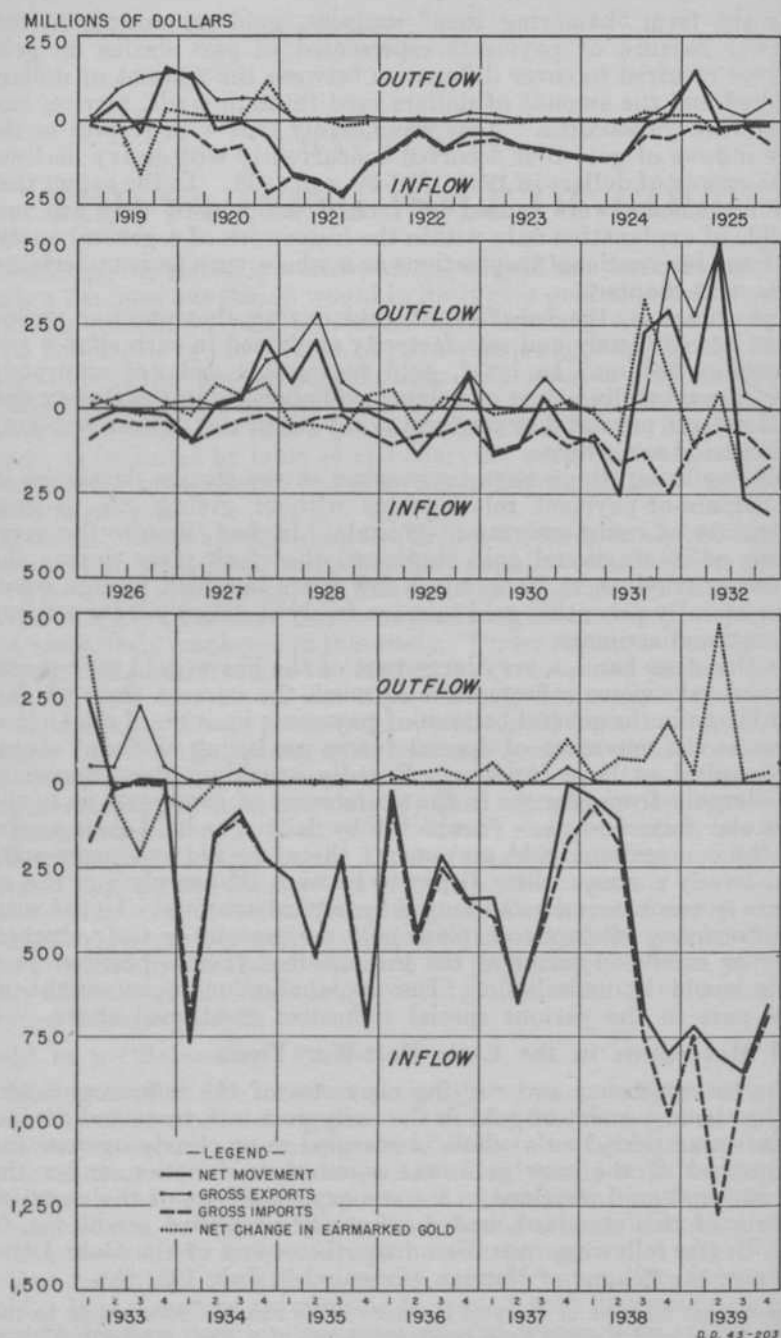


Chart 25.—Gold movements to and from the United States, 1919-39, by quarterly periods.

Note.—Does not include changes in gold earmarked abroad for United States account after January 1933.

TABLE 14.—*Gold Imports and Exports, by Principal Countries, for Specified Periods, 1919-39*¹

[In millions of dollars]

Period and country ²	Amount	Period and country ²	Amount
IMPORTS		IMPORTS—continued	
January 1920-June 1922, total	1,231.4	April 1936-December 1937—Continued.	
United Kingdom	507.9	Netherlands	81.3
France	233.8	Switzerland	62.0
Sweden	99.9	Japan	246.5
Other Europe	71.5	British India	117.0
Canada	78.9	Philippine Islands	42.6
Latin America	71.9	Canada	171.5
British India	32.0	Mexico	77.4
Other Asia	65.4	Other Latin America	63.7
July 1922-June 1924, total	701.1	January 1938-December 1939, total	5,554.2
United Kingdom	357.2	United Kingdom	3,035.3
Netherlands	57.8	Netherlands	504.6
Germany	54.4	Belgium	180.6
France	43.5	Other Europe	302.1
Canada	78.5	Canada	689.5
Latin America	47.3	Japan	334.3
October 1928-September 1929, total	323.9	Other Asia	173.9
United Kingdom	96.5	Latin America	193.7
Germany	46.8	Australia	113.4
Canada	90.4		
Argentina	66.3	EXPORTS	
October 1929-June 1932, total	1,192.5	January 1919-December 1920, total	690.3
Japan	358.2	Japan	195.5
Other Asia	142.8	Hong Kong	71.6
Argentina	172.3	China	67.4
Brazil	87.9	British India	41.1
Other Latin America	177.8	Other Asia	26.2
Canada	134.2	Argentina	146.6
Europe	109.9	Mexico	28.6
July 1932-March 1933, total	389.3	Other Latin America	48.6
United Kingdom	123.2	October 1924-June 1925, total	241.4
France	46.6	Germany	86.9
Netherlands	38.0	British India	67.3
Canada	45.4	British Oceania	26.6
British India	44.7	July 1927-September 1928, total	706.7
Japan	14.4	France	318.9
Other Asia	43.0	United Kingdom	41.1
Latin America	22.4	Other Europe	82.4
January 1934-June 1934, total	852.4	Argentina	130.8
United Kingdom	440.1	Brazil	58.0
France	189.0	Other Latin America	27.9
Netherlands	75.0	October 1929-December 1929, total	106.7
Asia	55.1	France	65.4
Canada	47.5	United Kingdom	21.1
Latin America	31.3	July 1930-September 1930, total	92.0
July 1934-December 1935, total	2,075.3	France	65.3
France	1,035.8	Canada	22.6
United Kingdom	386.2	October 1931-June 1932, total	1,204.1
Netherlands	255.3	France	758.5
Canada	134.5	Netherlands	161.5
British India	113.6	Switzerland	137.8
Latin America	74.4	Belgium	99.3
April 1936-December 1937, total	2,714.7	January 1933-December 1933, total	366.7
United Kingdom	1,070.5	France	246.1
France	613.7	United Kingdom	48.8
Belgium	94.3	Other Europe	69.7

¹ Changes in earmarked gold are not available on a country basis.² Country from which shipped or to which consigned; in a few instances does not represent country on whose account transaction occurred.

into coin, the free circulation of gold coin as full legal tender and the unrestricted import and export of gold.

Were gold the only medium of exchange, its movement from one country to another, whether in the original stages of distribution from the mines, or later as redistribution becomes necessary between trading countries, would in itself produce local changes in the quantity of money in circulation and hence would have a direct effect upon prices. The influences of gold movements in such circumstances may perhaps best be described by means of an imaginary illustration. We may imagine a country the value of whose exports, owing to an unusually abundant harvest, appreciably exceeded that of her imports. The excess of exports, we may assume, was paid for by an import of gold. This gold would then pass into circulation in the country receiving it, and conditions would be created likely to result in an increase in the total money income of the population of that country, and, in consequence, in the demand for (and the prices of) the goods upon which this income was expended. This increase in domestic prices would have made foreign goods, the prices of which had not risen proportionately, more attractive to buy, and the domestic goods less attractive to the foreigner. The commodity imports of the country would therefore tend to increase and its commodity exports to decrease. This process might continue until a new equilibrium between imports and exports was established. If it continued beyond that point, the excess of imports would have to be paid for (falling temporary loan accommodation) by an export of gold. The original gold influx would thus set in motion a train of events leading to a new equilibrium of values and to a reverse movement of gold.

Meanwhile, in the country from which the gold had been received a contrary sequence of events would have been started; money incomes and prices would have been reduced, exports have been stimulated and imports checked. The influence of gold movements in such circumstances would thus be not only automatic but also reciprocal.

The report of the Gold Delegation describes the illustration as "imaginary and abstract" and adds:

In fact, a primitive gold standard, under which gold was the only form of currency in use, has never existed among more advanced nations as an international system. In all countries which adopted gold as the basis for their currency during the nineteenth century, some system of banking was already in operation and some medium of payment other than metallic coin in use. But, although the existence of other means of payment and of an elaborate credit structure modifies the sequence of events and renders it at once more complex and more subject to deliberate control, it does not fundamentally alter the forces at work.

The general suspension of the gold standard following the outbreak of the first World War was commonly regarded as a necessary but temporary measure taken under the extreme pressure produced by the conflict on international trade and finance, and the virtually unanimous desire and intention were to return to the gold standard as soon as possible after peace was restored. Accomplishment of this aim, however, was delayed for several years.

As early as mid-1919 the United States removed the ban it had imposed on gold exports during the war and was thus the first major country to reestablish the gold standard. Such action by a single country, however, was not enough to give the standard international status. The chief immediate effect of our adherence to the gold standard was to provide a ready and unlimited market for foreign gold reserves liquidated in order to obtain much-needed dollar exchange. The gold standard in this country also served as a crude guide to foreign countries in determining the gold parities subsequently selected for their currencies.

Post-war economic conditions abroad, particularly in Europe, precluded an immediate restoration of the gold standard throughout the

* *Ibid.*, P. 10.

world at large. Foreign countries were understandably reluctant to reassume the responsibilities of a free gold standard until they had achieved a greater degree of stability internally and externally. In France, huge budget deficits, currency inflation, and a strong flight of capital out of the country were the main difficulties. Germany was faced also with currency inflation and a flight of capital and, in addition, with demands for the prompt payments of vast reparations—factors of instability that reached their climax in the collapse of the German economic and financial structure under the French and Belgian occupation of the Ruhr in 1923. The United Kingdom, while avoiding inflation on the scale experienced by many continental European countries, inherited from the war a relatively high price and wage structure, which threw doubt on its ability to restore and maintain the pound sterling at its old gold parity. Other countries were also confronted with varying difficulties in returning to the gold standard and were naturally inclined to await the lead of the major powers.

In these circumstances, gold movements in the early post-war years did not have the "normal" characteristics imputed to them under a gold-standard regime. The first large movements, in fact, were of a highly abnormal and special character, consisting of a heavy outflow in 1919 and 1920, at a time when foreign demand for United States goods was at its highest peak. This demand, however, emanated chiefly from Europe, whereas the export of gold was confined almost exclusively to the Far East and Latin America, with which the United States had import surpluses greatly inflated by the post-war price rise. As mentioned in the preceding chapter, these countries also had accumulated substantial dollar balances during the war, and these were partly withdrawn after the United States lifted its embargo on gold exports.

If the gold stocks of European countries had been made freely available to bankers and importers for the settlement of international accounts, there would undoubtedly have been a heavy gold movement to the United States immediately after the war. Such shipments as did occur were made directly by foreign governments for specific purposes or under official limitations. In 1919 the German Government deposited \$173,000,000 in gold in payment for American foodstuffs to the account of the United States in London, where it was temporarily held under earmark, and the United Kingdom made small shipments to this country on its own account to relieve the pressure on sterling exchange. Additional gold exports from the United Kingdom were made possible in late 1919 by the authorization of export licenses for newly mined South African gold sold in the London market.

Gold from these sources, together with special shipments from the United Kingdom and France to meet debt maturities, constituted most of this country's gold receipts in 1920. By the end of the year the outflow of gold to the Far East and Latin America had ceased and the influx became general from all areas, although shipments from Europe predominated. The inward movement lasted until the end of 1924. The exceptionally heavy inflow of \$686,000,000 in 1921 was clearly attributable to the excess of merchandise exports, which remained abnormally swollen despite the collapse of prices, and to the exhaustion of other means of dollar financing, to wit: The cessation of United States Government lending; depletion of foreign dollar balances; and

the end of easy short-term export credits, together with repayments of credits previously extended. The strength of the general balance-of-payments position of the United States was undoubtedly a factor in the continued net influx of gold, which remained above the \$200,000,000 level during each of the following 3 years, but the movement appears to have become increasingly related to the building up of dollar assets by other countries, including the establishment of balances in connection with the stabilization of foreign currencies.

Gold Movements Under the International Gold Standard

The various difficulties and deterrents standing in the way of exchange stabilization and reestablishment of an international monetary standard in the early post-war years were gradually overcome or, in some respects, ignored. Strangely enough, the first major country besides the United States to return to gold, in the form of the gold-exchange standard, was Germany, whose old currency regime had been most completely wrecked. This was accomplished in October 1924 through international action embodied in the Dawes Plan, providing for the creation of a new monetary and central banking system in Germany and, of major importance, for external financial assistance in the form of a \$200,000,000 loan. Of this amount, \$110,000,000 was floated in the United States. Such cooperation was dictated not only by Germany's own acute needs but also by the desire of the victorious powers to place reparation payments on a more assured basis as quickly as possible.

In the following year, 1925, the United Kingdom, disregarding the dangers inherent in its high and rigid cost and price structure and guided by mistaken considerations of financial prestige, restored convertibility of the pound at its old gold value.

By 1926 a determined French Government at last succeeded in restoring fiscal order and arresting currency inflation. The return of public confidence brought a strong reflux of capital and, confronted with the unpleasant prospect of a sharp appreciation in the exchange value of the franc, the Government hastily effected a *de facto* stabilization in December at about one-fifth of the old exchange rate on the dollar and formally stabilized at this level in June 1928. Repatriation of private French capital previously shifted abroad provided the Bank of France with huge foreign balances, chiefly in London and New York, the shifting of which became one of the principal causes of international gold movements in succeeding years.

In the meantime, or shortly afterward, most of the other European countries returned to the gold standard or the substitute gold-exchange standard, and a concurrent movement in this direction took place throughout the rest of the world.

The periods during which the leading commercial nations of the world adhered to the gold or gold-exchange standard are shown in chart 26. By about the middle of the twenties the gold standard had reacquired the international status it had lost during the war, and it again lost this position shortly after 1930. It is true that various individual countries, including the United States, restored convertibility somewhat earlier. It is also true that during the thirties France and other gold-bloc countries resisted the pressure to leave the standard long after the United Kingdom and the United States had done so, and the United States in the meantime had returned to a modified form

of the gold standard with the dollar at a 40-percent discount below its old parity. Adherence to the standard by one or a few countries,

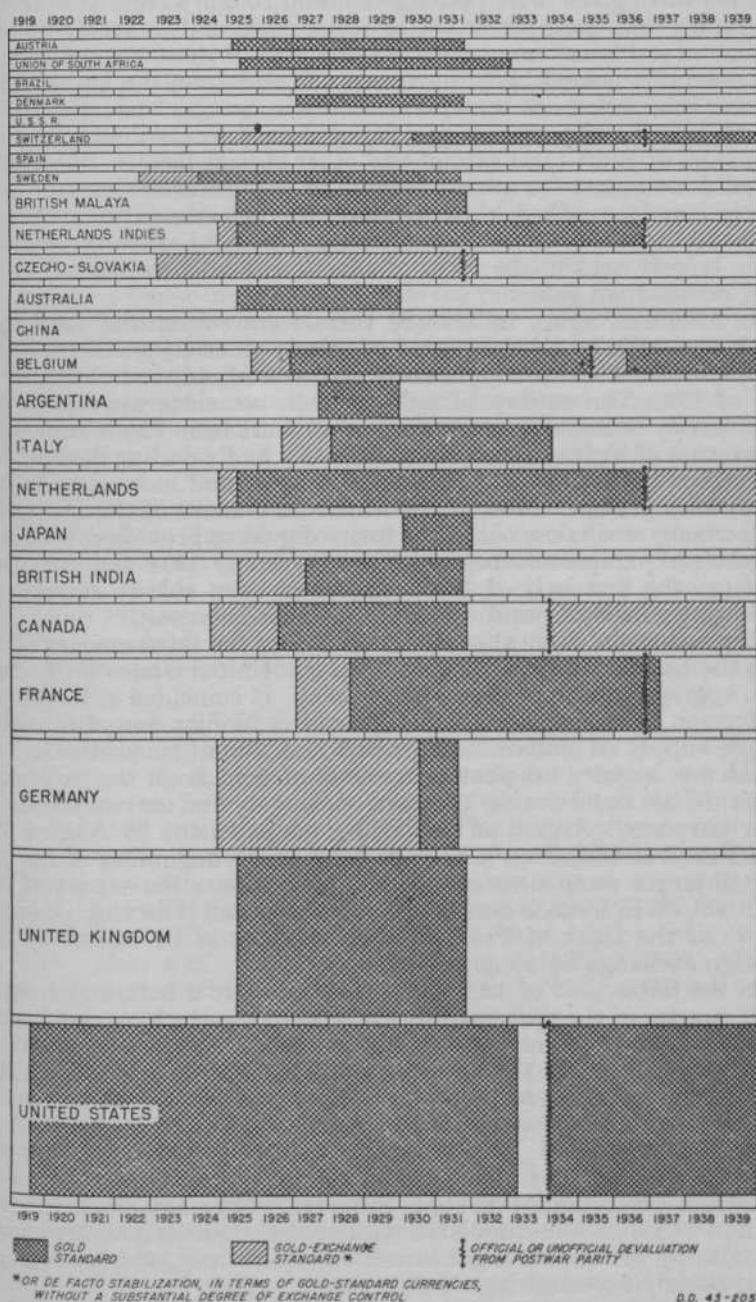


Chart 26.—Tenure of the international gold or gold-exchange standard during the interwar period. (Based on relative share in world trade in 1926-29 of countries listed.)

however, was not sufficient to make of it an international instrument or to provide the principal mechanism governing gold movements.

Only during the brief period extending roughly from 1925 to 1930, therefore, was gold permitted to move more or less freely within a system of stable exchange rates in settlement of international balances. Interestingly enough, gold movements to and from the United States during this period can be explained only in part by basic disequilibria in our balance-of-payments position and must be attributed largely to transfers of short-term capital and other special factors. The failure of gold movements to mirror balance-of-payments strains more accurately may be ascribed in part to the fact that international currency reserves, especially those of countries on the gold-exchange standard, were largely held in the form of short-term balances, including dollars, rather than gold.

In 1925 and again in 1927-28 there were substantial outflows of gold, separated by a brief period of relative inactivity; thereafter the gold movement was predominantly and strongly inward until the middle of 1931. The outflow of gold on both occasions appears to have been partly in response to an outflow of short-term funds following a relaxation of Federal Reserve credit policy and a decline in short-term interest rates in the United States, but other and more specific influences were present. Most of the American tranche of the Dawes loan to Germany was taken out in the form of gold to provide cover for the Reichsbank, shipments beginning in December 1924 and continuing through the first half of 1925. India was also able to acquire gold following a marked improvement in its trade balance.

The movement from the middle of 1927 to the third quarter of 1928 was the heaviest outflow of gold from the United States in the twenties, aggregating more than \$700,000,000. It coincided with the peak in foreign-bond flotations, which provided foreign countries with an ample supply of dollars. Argentina and Brazil in particular were enabled to acquire substantial amounts of gold from the proceeds of large dollar loans during this period, largely for currency-stabilization purposes. Argentina resumed gold payments in August 1927, and Brazil stabilized on a *de facto* basis at the beginning of the year. A still larger component of the gold outflow was the export of some \$318,000,000 to France over the 15-month period, reflecting chiefly the desire of the Bank of France to convert part of its extremely large foreign-exchange holdings into gold.

In the latter part of 1928 the outflow came to a halt, and from the final quarter of the year until the collapse of the stock market boom in October 1929 gold moved steadily inward. This reversal was due chiefly to changes in the flow of capital as described in chapter III; that is, the curtailment in foreign dollar bond flotations and the influx of foreign funds attracted by the speculative rise in securities and by high money rates. The bulk of the incoming gold was drawn from the United Kingdom and Canada, though other countries also felt the strain. Substantial amounts came from Germany, from which an outflow of funds was stimulated not only by conditions in this country but also by protracted negotiations on reparations, and from Argentina, already experiencing a fall in export prices.

Gold Movements During The Great Depression

The easier credit conditions that followed the collapse of the stock market in 1929 brought a temporary slackening in gold imports and a

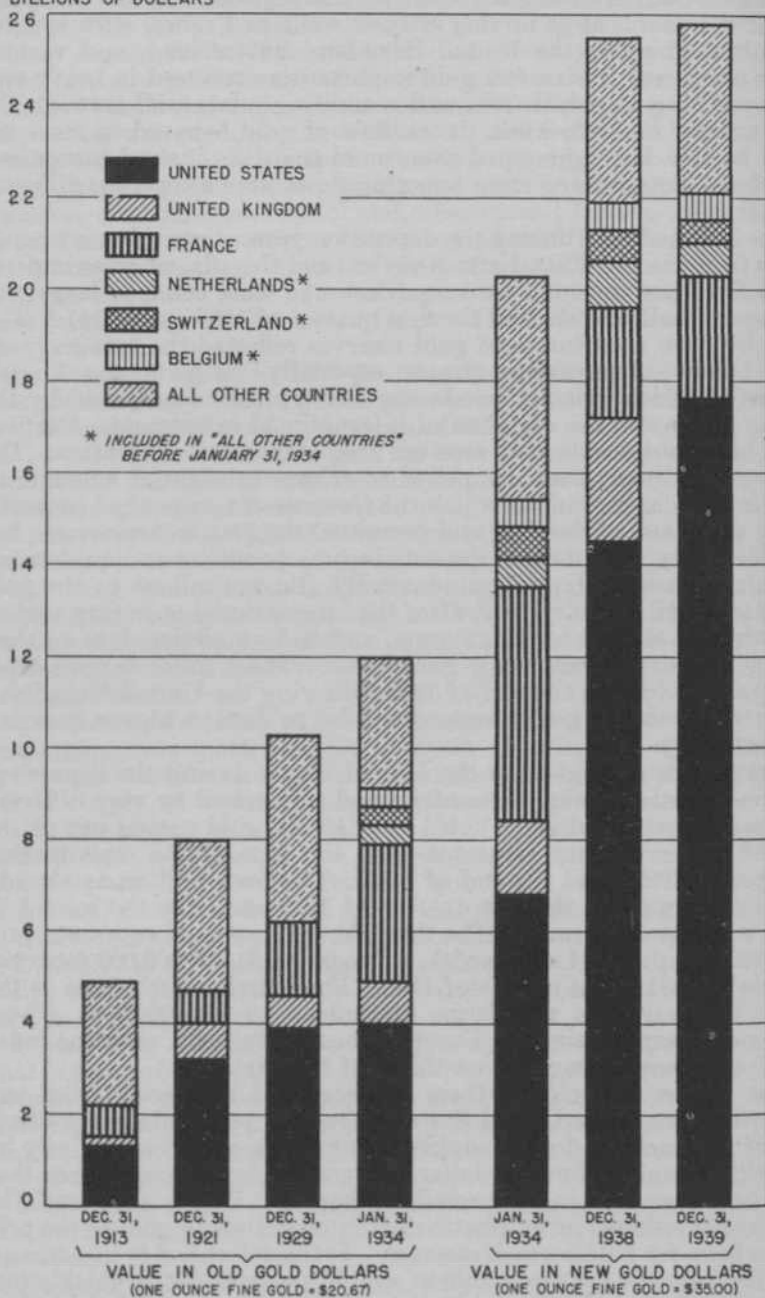
brief gold outflow of slightly more than \$100,000,000 in the last quarter of the year. Most of this amount went to France, with smaller quantities going to the United Kingdom, Switzerland, and various other countries. Thereafter gold imports were resumed in heavy volume, reaching a peak in 1931 and remaining substantial through the first quarter of 1933, while the outflow of gold behaved in more erratic fashion but aggregated even more than the inward movement. The forces determining these opposing flows were altogether different in character.

The influx of gold during the depression years stemmed overwhelmingly from the Far East, Latin America, and Canada, whereas imports from Europe were small by comparison and were confined largely to the second half of 1932 and the first quarter of 1933 (table 14). The vast drain on non-European gold reserves reflected the extremely severe balance-of-payments strain, especially vis-à-vis the United States, to which primary producing countries were subjected by the fall in prices and the cessation of international investment. Particularly heavy shipments were received from Japan and Argentina. The latter had already been compelled to release substantial amounts of gold in 1929, as a result of which the Government suspended convertibility at the end of the year and permitted the peso to depreciate; but in 1931 heavy additional shipments became necessary to liquidate accumulated debts. Japan, paradoxically, did not adhere to the gold standard until January 1930, after the international monetary regime had already started to disintegrate, and had no sooner done so than it began to experience heavy gold losses. These losses became especially severe toward the end of 1931 following the United Kingdom's departure from the gold standard and led to Japan's also suspending convertibility.

The exodus of gold from the United States during the depression involved another group of countries and was caused by very different circumstances. As may be noted in chart 25, gold moved out of the United States on four occasions from the time of the stock-market collapse in 1929 until the end of 1933. The first outflow, as already mentioned, came in the last quarter of 1929 and, like the second in 1930, was relatively small. The third, however, was of enormous proportions (by pre-1934 standards), aggregating \$1,200,000,000 from the middle of 1931 to the middle of 1932. The fourth, which came in the following year, was also large, amounting to \$367,000,000. These movements were destined to Europe almost exclusively, with one country, France, accounting for two-thirds of the total.

The outflow of gold on these occasions did not result from any disequilibrium in the United States balance of payments in the direction of an excess of dollars supplied, but it was caused exclusively by the withdrawal of foreign dollar balances under circumstances that have been described in the preceding chapter. Briefly expressed, the movements reflected an emphatic shift from dollars to gold as the preferred form for holding cash reserves. If the dollar had been esteemed as equivalent or even preferable to gold in the twenties, it quickly lost this status during the financial crisis of the summer and fall of 1931. Foreign holders of dollar balances preferred to take no chances on repeating the losses they had incurred on sterling assets when the pound depreciated. This attitude underwent some modification in the second

BILLIONS OF DOLLARS



D.D. 43-208

Chart 27.—World monetary gold stocks, distribution by principal countries at selected dates.

Note.—Does not include gold in circulation and certain unreported or irregularly reported holdings, some of which have been very large in recent years.

half of 1932 with temporarily improved prospects for business recovery in the United States.

Gold previously purchased and held under earmark for foreign account in the amount of almost \$400,000,000 at the middle of the year was reduced by some \$320,000,000 in the following 5 months, apparently not by exportation but by conversion into dollars for current requirements or for additions to balances. This reduction in earmarked gold coincided with the brief period of gold imports from Europe and, in view of the much smaller increase in foreign dollar balances in the latter part of 1932, was more truly indicative of the direction of balance-of-payments strain at that time than was the preceding heavy volume of gold exports.

The brief upturn in foreign confidence in the dollar was soon reversed, however, by the domestic banking crisis culminating in the early part of 1933. Foreign countries renewed heavy earmarking of gold in the first quarter and shipped their holdings later in the year after the dollar had begun to depreciate.

Changed Status of Gold in the Thirties

The devaluation of the dollar at the end of January 1934 inaugurated a new and unique period in the history of international gold movements. During the following 6 years gold imports into the United States, on a gross basis, aggregated some \$11,250,000,000. This enormous inflow was offset to the extent of \$1,100,000,000 by the increase in earmarking for foreign account, but physical exports were negligible. Gold shipments to the United States began in tremendous volume immediately after devaluation, amounting to almost \$700,000,000 in the first 2 months alone, when extraordinary arbitrage profits were afforded by the slowness with which the dollar-franc and other exchange rates were adjusted to the new American gold price of \$35 per fine ounce.

This slowness, however, reflected the relative strength of foreign demand for dollars on other accounts and the practical limitations on the amount of shipping space immediately available for gold shipments, without which the dollar would have more quickly fallen to its newly selected parity. The continuing strength of foreign demand for dollars responsible for gold movements thereafter was attributable only in part, and that chiefly in 1938 and 1939, to this country's position on trade and other current transactions. Most of the gold influx was caused by the vast movements of capital from Europe to the United States under the circumstances already set forth in chapter III.

It is pertinent to recall, however, that gold underwent a transformation during the thirties that made these enormous shipments possible. During the decade following the first World War the failure of gold production to keep pace with the growing monetary needs of the world economy was a subject of much discussion. While the price of gold was unchanged in terms of the dollar and the pound, the much higher level of prices and costs in general had served to render gold mining less profitable and, hence, to reduce output and at the same time to expand the required credit base. As a matter of fact, world monetary gold stocks were actually substantially larger after the war than in 1913 (chart 27), largely because of new pro-

duction and the withdrawal of gold from general circulation and from private hoards during the conflict. On the other hand, the reserve problems of foreign countries were aggravated by the often-discussed maldistribution of gold resulting from the gravitation of much of the world's stocks to the United States during and after the war.

These conditions underwent some change during the early years of the depression after 1929, as prices and costs declined and the fixed price for gold permitted a larger profit for producers, and the situation was profoundly altered after depreciation of the pound sterling and the dollar increased the price of gold. These developments affected gold stocks in two ways. In the first place, there was an immediate increase in the value of all gold stocks in terms of depreciated currencies. The gold-bloc countries, which had long held out against depreciation of their own currencies and had thereby suffered serious impairment to their competitive position in world trade, benefited in this respect at least by enhancement of the exchange value of their gold reserves. In the second place, the world output of newly mined gold was enormously stimulated after the gold-producing countries depreciated their currencies.

The most notable exception to the increase in output—at least until about 1937—was in South Africa, the largest producing area. There the advantage afforded by the increased price of gold was directed toward working low-grade ores and thus lengthening the life of the mines. In terms of quantity, world gold production slightly more than doubled, from a total of 19,200,000 ounces in 1929 to 39,500,000 ounces in 1939. Because of the rise in the price of gold, output in terms of dollars rose even more strikingly, from about \$400,000,000 to slightly less than \$1,400,000,000 annually during the same period.

As a result of these changes, the world's stock of monetary gold at the end of 1939,⁴ in terms of new gold dollars, was more than five times as large as it was in 1913 and more than three times the amount in 1921, in old gold dollars. The increase from the beginning of 1934 through 1939 alone was greater than the total amount accumulated by central banks and treasuries up to 1913, again in terms of new and old gold dollars, respectively. The relative scarcity of gold in the twenties was thus changed to an evident plethora in the late thirties. While retaining its attraction as a medium for holding monetary reserves, gold tended to become more and more an assured means of obtaining dollar exchange in large volume. On a percentage basis, the maldistribution of gold was intensified by the heavy flow of gold to the United States from 1934 to 1939, which exceeded the value of new gold production abroad during this period by about \$3,800,000,000 and for the period 1930-39 by almost \$1,000,000,000 (calculated at \$35 per fine ounce). In absolute terms, however, the gold-reserve position of foreign countries considered as a whole, with notable individual exceptions, was easier in 1939 than it had been 10 years earlier, because of the general revaluation of their stocks and the lower level of world prices after the depression.

⁴ Exclusive of gold held in the active portion of the United States Exchange Stabilization Fund and by similar funds of other countries.

CHAPTER V

BALANCE-OF-PAYMENTS EXPERIENCE OF THE UNITED STATES, 1919-39

Lack of Stability and Continuity

The foregoing analysis of the principal types of transactions between the United States and other countries discloses no straight and simple line of development throughout the years 1919 to 1939. Aside from such changes as the declining proportion of foodstuffs and the increasing proportion of manufactures in exports, which were clearly in evidence long before the first World War, there was little that can be described as a secular or long-run trend in United States foreign trade during the interwar period. There was likewise nothing gradual or regular about this country's development and experience as a supplier of international investment capital.

Few generalizations can therefore be made regarding the international position of the United States during the interwar period as a whole—except to note the lack of stability and continuity. Because of this variability, the interwar years may be divided into four periods which correspond approximately to major cyclical changes: (1) The early post-war years culminating in the depression of 1920-21, (2) the period of recovery and prosperity extending throughout most of the remainder of the twenties, (3) the great depression of the early thirties, and (4) the years of belated and uncertain upturn from 1934 to the outbreak of the second World War.

The first and third periods were years of transition during which the world economic structure underwent profound transformation. Both were followed by somewhat longer periods of generally upward movement in international transactions and a fair degree of continuity in underlying forces and major outward characteristics.

POST-WAR BOOM AND DEPRESSION, 1919-21

The Problem of Post-War Readjustment

Under the most favorable conditions, the transition to a peacetime economy after the sudden cessation of hostilities in November 1918 was bound to entail a profound readjustment in the whole system of international transactions built up during the war years. The heavy draft by Europe on war materials produced by American industry quickly disappeared after the Armistice. On the other hand, the demand for American foodstuffs and other essentials was certain to rise and remain strong during the early years of relief and reconstruction in the starved and devastated areas of Europe, but here, too, it was inevitable that exports of such items would decline after

economic life in these areas was restored and as a more nearly normal trade with other oversea sources of supply was resumed.

Moreover, the extension of cash advances by the Government of the United States to its Allies, which were the main offset and support to the huge export surplus after the entry of the United States into the war, could not be continued indefinitely. Similarly, the pegging of foreign currencies—notably the pound sterling and the French franc, which had been made possible by this great flow of dollar credits—had to be given another underpinning or abandoned altogether.

These and related problems of adaptation in the international sphere were accompanied by gigantic tasks of readjustment in the domestic economy—the demobilization and absorption into civilian life of 4,000,000 men who had been called to service; reconversion of industry to peacetime production with many more millions of new jobs required for former war workers; reduction in Government outlays; removal of official controls, and in general the institution of new directive forces over the whole economic system. All of the other former belligerents and many of the ex-neutrals faced similar problems, vastly augmented in most European countries by the physical impairment of their productive capacity.

Haste to Return to Normal

The general policy followed by this country in meeting both the internal and external problems of readjustment was to depart as swiftly as possible from wartime controls and institutions and to allow events thereafter to follow their own course—to demobilize rapidly and leave to private industry the task of providing employment; to reduce public expenditure promptly and depend on the emergence of purchasing power from other sources; to drop price controls and let prices find their own levels; to abandon the pegging of exchanges and let them also find their own levels; to cease supplying Government credits to Europe and invite private capital to fill the need or, that failing, to permit whatever readjustment might occur in exports and imports.

All of the components of the wartime economic structure could not, of course, be liquidated at once. However, the control of prices—one of the most important restrictions in the domestic economy—ceased automatically and immediately upon termination of hostilities, although even during the war this control had been far from complete and fully effective. Demobilization of the armed forces required more time, but was executed with remarkable rapidity and was virtually complete within 12 months after the Armistice. Cancellation or adjustment of war contracts was also carried out swiftly.

Government expenditures remained high for a brief time, entailing a deficit of more than \$4,300,000,000 in the first half of 1919, but a surplus had already emerged by the end of the year. Official control over the sterling and franc exchange rates was withdrawn in March 1919, and the whole system of rates grouped around the dollar-sterling-franc nucleus came to an end. Government credit advances to Europe remained large during the early months after the Armistice but were quickly limited to the extent required by previous commitments and virtually ceased early in 1920. The Government's views on the latter question and, indeed, on the entire field of international

economic relations were set forth at some length in a letter of January 28, 1920, from the Secretary of the Treasury to the President of the United States Chamber of Commerce, extracts from which follow:¹

The Treasury is opposed to further governmental aid beyond that outlined * * * with respect to the extension of interest on the Allied Government obligations held by the Government of the United States and to the supplying of relief to certain portions of Europe. The Governments of the world must now get out of banking and trade. Loans from Government to Government not only involve additional taxes or borrowings by the lending Government with inflation attendant thereon, but also a continuance by the borrowing Government of control over private activities which only postpones sound solutions of the problems.

The Treasury is opposed to governmental control over foreign trade and finance and even more opposed to private control. It is convinced that the credits required for the economic restoration and revival of trade must be supplied through private channels; that as a necessary contribution to that end the Governments of the world must assist in the restoration of confidence, stability, and freedom of commerce by the adoption of sound fiscal policies; and that the reparations commission must adopt promptly a just and constructive policy.

* * * Such matters as the suggestion of further governmental loans by the United States, the cancellation of some or all of the obligations of European Governments held by the United States Government * * * and the deferring of obligations of foreign Governments held by the United States to liens created in favor of loans hereafter made for reconstruction purposes, are clearly not appropriate for consideration * * *.

From the moment of the cessation of hostilities the Treasury of the United States has pursued a policy of looking toward the restoration as promptly as possible of normal economic conditions, the removal of governmental controls and interferences, and the restoration of individual initiative and free competition in business. It has insisted upon strict economy in governmental expenditure and upon the maintenance of taxes at a level which, with the salvage of war materials and supplies, etc., will insure the prompt retirement of the floating debt of the United States and the establishment of a fund adequate for the retirement of the funded debt in the course of a generation. The Treasury long since, with the cooperation of the Federal Reserve Board, removed the embargo on the export of gold, thus enabling American citizens and, indeed, the nations of the world, to the extent that they find credit here, to finance their purchases throughout the world in cash.

Rightly or wrongly, a different policy has been pursued in Europe. European Governments have maintained, since the cessation of hostilities, embargoes upon the export of gold. The rectification of the exchanges now adverse to Europe lies primarily in the hands of European Governments. The normal method of meeting an adverse international balance is to ship gold. The refusal to ship gold prevents the rectification of an adverse exchange. The need of gold embargoes lies in the expanded currency and credit structure of Europe. Relief would be found in disarmament, resumption of industrial life and activity, and the imposition of adequate taxes and the issue of adequate domestic loans.

Such things as international bond issues, international guaranties, and international measures for the stabilization of exchange are utterly impracticable so long as there exist inequalities of taxation and domestic financial policies in the various countries involved; and when these inequalities no longer exist such devices will be unnecessary.

* * * The remedy for the situation is to be found not in the manufacture of bank credit in the United States for the movement of exports, a process which has already proceeded too far, but in the movement of goods, of investment securities, and, in default of goods or securities, then of gold into this country from Europe; and in order that such securities may be absorbed by investors our people must consume less and save.

The United States could not, if it would, assume the burdens of all the earth. It cannot undertake to finance the requirements of Europe, because it cannot shape the fiscal policies of the governments of Europe. * * * Lamentable as would be the effects upon our industrial life and upon Europe itself of the continued

¹ In Annual Report of the Secretary of the Treasury on Finances for the Fiscal Year Ended June 30, 1920. 1921. Pp. 81-84.

maintenance of an exchange barrier against the importation into Europe of commodities from the United States, this country cannot continue to extend credits on a sufficient scale to cover our present swollen trade balance against Europe, while paying cash (gold and silver) to the countries of Central and South America and the Far East with which it has an adverse balance on its own and international account. The consequence of the maintenance by Europe of this barrier will be to force the United States to do business with those countries with which it is able to do business on a cash basis. The only other policy which the United States could adopt would be the policy of reestablishing embargoes on gold and silver and of inflating its own currency to the same extent that the currencies of Europe are inflated, with a view to lowering its exchange to a parity with theirs. This would involve taxing the whole people for the benefit of our exporters and the benefit of Europe and submitting to have imposed on the United States domestic financial policies adopted by Europe but quite contrary to those heretofore adopted by the United States. It would mean a world-wide inflation, the abandonment of the gold standard, and, ultimately, chaos.

If the peoples and governments of Europe live within their incomes, increase their production as much as possible, and limit their imports to actual necessities, foreign credits to cover adverse balances would most probably be supplied by private investors, and the demand to resort to such impracticable methods as government loans and banks credits would cease.

Domestic Factors of Instability

Although the desire to resume a normal peacetime way of life was compelling, and the disturbed currency and budget situation in Europe imposed formidable obstacles to effective international cooperation, the difficulties and dangers inherent in attempting a swift transition by the essentially negative expedient of abandoning wartime controls and practices were seriously underestimated. The domestic problems of reemployment and restoration of production were met in short order and with only minor initial upsets but were quickly followed by a most disturbing boom-and-depression sequence with profound effects on the international transactions of the United States.

In its most violent aspects the post-war boom, which extended from about the middle of 1919 to the middle of 1920, was largely a speculative price rise of a self-propelling and, ultimately, self-destroying character. Prices rose largely because they were expected to rise, reflecting both hedging purchases by producers and consumers and buying of a more patently speculative nature. The accumulation of stocks inherent in this process, together with other restrictive influences, inevitably led to its undoing. The mechanism was thus thrown into reverse, the liquidation of stocks and anticipations of further declines combining to produce an even more violent price collapse.²

Behind this great speculative excess, however, was a coincidence of more basic factors making first for expansion and then for contraction. These influences, as they affected the American economy, were of both internal and external origin. While their effects cannot be segregated, some of the principal aspects of the domestic situation may be briefly noted before reviewing the behavior of international transactions during the period.

There was, first of all, a tremendous deferred demand in the United States for both capital and consumers' goods. Reconversion of industry to peacetime production required a rapid and extensive reequipment and modernization of plants and the replenishment of inventories, setting in motion a flow of capital expenditure temporarily far above

²The mechanism of the post-war boom and recession is analyzed more fully in: League of Nations. *Economic Fluctuations in the United States and the United Kingdom, 1918-1922, 1942*. Pp. 18-20.

normal. Demand for consumers' goods of which production had been curtailed during the war—automobiles, clothing, housing, and other items—was likewise strong and was fortified by the huge volume of individual savings accumulated during the war. These savings were largely in the form of Liberty bonds, which at that time could be readily sold or used to secure bank loans. Purchasing power was further increased during this critical period by the continued excess of public expenditure, which, as mentioned above, could not be immediately eliminated, and by the easy-credit policy pursued, despite its inflationary influence, to facilitate flotation of the Victory loan in 1919.

Although the fall in prices and production that came in the summer of 1920 was largely the natural and inevitable reaction from previous speculative excesses, changes in basic conditions also made for a decline. The sudden release of deferred demand for capital and consumers' goods immediately following the war had entailed spending at a rate much faster than could be maintained, even though there still remained a large volume of unsatisfied wants. Special factors, particularly the sharp rise in costs, brought an early halt to the construction boom, and the volume of new building declined steeply throughout 1920.

Moreover, fiscal and credit policies, which had continued to be highly inflationary in the early stages of the post-war boom, were reversed and remained strongly deflationary throughout the depression. The Federal budget yielded an excess of receipts of more than \$500,000,000³ in the fiscal year 1920-21, while the Federal Reserve rediscount rate was raised to its highest point of 6½ percent in March 1921 and was only gradually reduced thereafter. The behavior of the Government bond market illustrates the unfortunate way in which financial policy tended to aggravate rather than moderate the cyclical movement. Throughout 1919 and during the early part of 1920 the Treasury had rendered support through open-market purchases, thus contributing to the ease with which wartime savings could be converted into cash and encouraging inflationary spending. During the depression, however, when need for reviving demand was greatest, the Treasury withheld support, and Government bonds could be liquidated only with heavy losses.

Behavior of International Transactions

In addition to deferred demand in the United States, the war left a vast demand in foreign countries for producers' and consumers' goods, enormously intensified in Europe by urgent requirements for relief and reconstruction. For reasons of an essentially temporary nature this demand was focused on the United States. European industrial production had been reduced far below normal by a number of factors, including deterioration and destruction of plants, loss of trained manpower, dearth of raw materials, and political unsettlement.

Moreover, the shortage of ocean shipping—which persisted for well over a year after the Armistice, as evidenced by the high freight rates prevailing and the consequently inflated shipping items in the balance of payments for 1919 and 1920—prevented Europe's serious deficiencies in agricultural goods from being satisfied from more distant overseas countries. For the time being, therefore, American producers and

³ After deducting \$422,000,000 in debt retirement from expenditures.

exporters found themselves in a somewhat monopolistic position, which provided additional impetus to the rise in prices.

The external demand for United States goods was supported, with respect to the dollar exchange required, by a number of short-run factors, including particularly Government credits, which remained heavy during 1919, as already mentioned; Army and Navy and other Government outlays abroad, which also were large until the repatriation of American armed forces was completed; and a large outpouring of personal remittances, stimulated by heavy incomes in this country, the desperate plight of relatives and friends abroad, and the depreciation of foreign currencies.

The inflationary impact of domestic and foreign demand on the American economy was not effectively compensated by increased imports, which remained far below exports because of Europe's impaired export capacity, the impossibility of an instantaneous expansion of primary production, and the shipping bottleneck. Moreover, the increase in prices, reflecting speculative demand for foodstuffs and raw materials, influenced the value of imports even more than that of exports. Changes in the composition of imports render generalization difficult, but the rise in quantity after 1918 appears to have been of much less consequence. A case in point is the spectacular rise in price of sugar, as noted in chapter II.

The break in the business cycle, which came in the summer of 1920, was followed by a swift fall in foreign trade. The decline in imports, according to recorded monthly totals, came first, beginning in September, and is explained chiefly by the end of the speculative price boom. Import prices, as measured by annual averages, fell by 47 percent from 1920 to 1921, whereas quantity decreased by only 16 percent. Curiously enough, the value of exports, as recorded, was well maintained throughout 1920, totaling more in the last quarter of the year than in the same period of 1919; the definite decline did not come until early in 1921. The recorded figures for this period, however, seem to contain serious overvaluations, and definite evidences of weakness in exports appeared much earlier. Moreover, a heavy volume of shipments on consignment—another reflection of unsound speculative ventures—proved unsalable and much of it was actually returned to this country.

As with imports, the fall in dollar value of exports was largely a price phenomenon.⁴ The collapse in prices, however, was attended and partly caused by several more basic factors, which brought about a reduction in volume of exports. As already noted, some of the extraordinary advantages which had been enjoyed by the United States in the export market were of a short-run character.

In the meantime the United Kingdom, in particular, had begun to recover its export capacity and to offer more competition to American manufactures, while the acute shipping shortage was relieved in 1920 and a larger volume of agricultural shipments from other areas became possible. Exports of pork, beef, and dairy products were especially affected, falling sharply in 1920 from their wartime levels. In addition, after the most critical and immediate relief needs were met, foreign demand tended to become more cautious and thus contributed to

⁴ Exports of manufactures declined even more sharply in quantity than in price from 1920 to 1921, demonstrating their particular susceptibility to cyclical fluctuations, but the quantity of other main groups of exports was either well maintained (crude materials and manufactured foodstuffs) or actually increased (crude foodstuffs).

the decline in prices, although the physical volume of United States agricultural exports remained far above the pre-war level for several years.

The decline in exports was accentuated by the inescapable necessity of adjusting the amount of dollars used by foreign countries to conform more closely with the smaller amount currently supplied by the United States through trade, service, and long-term capital transactions. Although the estimates, as shown in table II, are subject to a substantial margin of error, the excess of receipts over payments by the United States on these accounts appears to have been well over \$1,000,000,000 in the first post-war year, despite the large sums made available for a time by Government credits and other outlays abroad. These sums dwindled to relatively low levels in 1920, however, and in the following year the outflow of dollars was drastically cut by the halving of United States imports and other current payments.

An appreciable contribution to the supply of dollars to foreign countries during these years was made by the flotation of foreign bond issues in the American market—a course which, as indicated in the previously quoted statement of the Secretary of the Treasury, received official support as a substitute for Government credits. Additional dollar funds were provided by purchases of outstanding securities, both American and foreign, from European investors and by the establishment of new direct investments abroad. Long-term capital outflow through these channels was not without an offset, however, for at the same time foreign countries were required to make heavy amortization payments on loans floated in the United States market before this country's entry into the war. The net movement on long-term account was far below the previous rate of Government lending.

The exchange problem confronting foreign countries in their transactions with the United States during this period, therefore, was that the volume of dollars which they currently used had to be reduced (1) not merely in accordance with the decline in the flow of dollars currently supplied by the United States, but also (2), sooner or later, by the additional amount of the initial gap. That difficulties were encountered in making a prompt adjustment is evidenced by the fact that the excess of dollars used remained over, or at least near, the billion-dollar level through 1921. This huge excess was not eliminated until after a further reduction of more than \$600,000,000 in United States exports the following year and a rise of about the same amount in United States imports, stimulated by the revival in domestic business conditions. The means employed in covering the dollar deficit—since, as always, the gap had to be bridged in some manner—also attest to the difficulties of adjustment during the early post-war years.

The Balancing Items—Gold and Short-Term Capital Movements

Although the principal facts emerge clearly enough, available data do not suffice to explain fully how the disparity between dollars used and dollars supplied in 1919-21 was met. For that matter, the excess of dollar payments—aggregating almost \$4,000,000,000 for the 3-year period according to the present balance-of-payments estimates—may not have been measured accurately.

It has been pointed out that the recorded export values for 1920, and possibly other years, appear to contain serious overvaluations. As has also been mentioned, unduly optimistic expectations on the part of American exporters as to the ability of foreign countries to absorb and pay for goods at the high prices then prevailing led to large consignment shipments, many of which proved unsalable, and in addition substantial amounts of exports were refused acceptance by foreign buyers, especially after the sharp fall in prices beginning in 1920.⁶ Recorded export values for these years therefore do not serve as an accurate measure of payments made by foreign countries to the United States on merchandise account. For this reason, as well as because of various other possibilities of error in the estimates, the total excess of dollar payments to this country may be overstated, but there can be no doubt that it was very large.

The excess of dollars used over dollars supplied on current account and long-term capital account was met by a reduction in foreign liquid assets—that is, dollar balances and gold stocks—and by short-term credits from American sources.

As a result of this country's heavy wartime purchases from primary producing areas and the large credits made available to the Allies, the end of hostilities left substantial dollar balances to the account of foreigners. The subsequent behavior of these balances cannot be traced in detail—and in particular cannot be calculated on a calendar-year basis⁷—but during the 2½ years from the beginning of 1919 to the middle of 1921 they were reduced by \$811,000,000. Although by the latter date foreign dollar balances amounted to only \$403,000,000, they were probably further reduced during the second half of 1921, in view of the foreign dollar requirements already described.

In addition to drawing down their previously accumulated dollar balances, foreign countries were heavily financed through short-term borrowings in the United States. The expansion in such credits during the 2½-year period mentioned was \$844,000,000, or about the same amount as the reduction in foreign balances in this country. The total outflow of short-term funds during 1919, 1920, and the first half of 1921 thus aggregated \$1,655,000,000.

In relation to the size of the dollar problem, gold was at first employed to a minor degree as a means of obtaining dollar exchange to cover foreign requirements. In fact, as pointed out in chapter IV, the gold movement was predominantly outward in 1919 and 1920. This apparent anomaly is explained by the fact that, although the United States had an enormous export surplus to Europe during these 2 years, it had an import excess in trade with the rest of the world (table 15). In addition, non-European areas had accumulated large balances in this country during the war which, after the removal of the gold-export embargo by the United States in June 1919, were taken out partly in the form of gold.

On the other hand, European countries, fearful that the tremendous demand for exchange would drain them of their reserves, maintained nonconvertibility of their currencies for a longer period and permitted gold exports only under restrictions or for special purposes.

⁶ A rough attempt to allow for such losses, however, has been made in the "Miscellaneous services and adjustments" item of table II.

⁷ These items are therefore shown as "Not available" for the early post-war years, which contributes to the large size of the "Unexplained items" as shown in tables I and II.

Such measures were sharply criticized by the Secretary of the Treasury who, as previously quoted, considered that interference with free gold movements prevented a "rectification of the exchanges." By the latter part of 1920, however, the dollar shortage had become so severe as to require, despite these restrictions, an increasingly large flow of gold from Europe. At the same time, the value of United States imports from other areas fell off, chiefly as a result of the collapse of primary prices, and gave way to a sizable export surplus in 1921. The gold outflow to these areas was thus reversed, swelling the net flow of gold to the United States in 1921 to \$686,000,000—the greatest net movement recorded in any year before the devaluation of the dollar in 1934.

TABLE 15.—United States Exports (Including Reexports) and General Imports, by Regions, 1919-21

[In millions of dollars]

Region	1919			1920			1921		
	Ex-ports	Im-ports	Bal-ance	Ex-ports	Im-ports	Bal-ance	Ex-ports	Im-ports	Bal-ance
Northern North America.....	731.1	500.2	+230.9	914.3	614.6	+299.7	520.6	337.6	+183.0
Southern North America.....	545.8	657.6	-111.8	944.3	1,048.0	-103.7	529.1	417.2	+111.9
South America.....	441.7	687.5	-245.8	623.9	761.0	-137.1	273.3	295.6	-22.3
Asia.....	771.7	1,107.7	-336.0	871.6	1,396.7	-525.1	532.6	617.9	-85.3
Oceania.....	125.6	88.6	+37.0	171.6	80.0	+91.6	112.8	35.5	+77.3
Africa.....	97.9	112.2	-14.3	165.7	150.3	+15.4	72.8	40.4	+32.4
Total, non-Europe.....	2,713.8	3,153.8	-440.0	3,691.4	4,050.6	-359.2	2,041.2	1,744.2	+297.0
Europe.....	5,206.5	750.5	+4,456.0	4,536.6	1,227.8	+3,308.8	2,443.8	764.9	+1,678.9
Grand total.....	7,920.4	3,904.4	+4,016.0	8,228.0	5,278.5	+2,949.5	4,485.0	2,509.1	+1,975.9

Foreign Exchange Rates

The release of gold in large volume by foreign countries scarcely effected a "rectification of the exchanges" in the manner desired by the Secretary of the Treasury, who presumably expected that gold outflows should give rise to measures of credit and fiscal restriction abroad that would curb foreign demand for dollars and permit restoration of exchange rates to their old parities. On the contrary, exchange quotations on foreign currencies, which inevitably declined after the unpegging of rates on the pound and franc, remained low, and rates on a number of countries declined further in 1921.

In a fundamental sense, however, this very depreciation of foreign currencies helped to produce the required "rectification" in this country's balance-of-payments position, in that the higher cost of the dollar to foreign importers tended to discourage purchases from the United States. (For reasons set forth in chapter II, however, the depreciation of foreign currencies probably had little, if any, stimulative effect on the dollar value of United States imports.) The lowering of foreign exchange rates thus helped to reduce the amount of internal deflation and depression that other countries had to endure in order to bring their international transactions into balance.⁷ The United Kingdom and various countries with affiliated currencies subsequently lost these

⁷ This is not to deny, however the necessity of halting the inflation that France and other continental countries were undergoing, chiefly for internal reasons growing out of huge budget deficits.

benefits when they returned to their old gold parities, thus shouldering the deflationary burden at a later stage.

In this connection it may be noted that the depreciation of foreign currencies during this early post-war period apparently was not accompanied at that particular time by widespread flights of capital, which have exercised such an evil influence under fluctuating exchanges in recent years.* This was probably because of the prevailing expectations that foreign currencies, including even some of those most hopelessly depreciated, would ultimately be restored to their pre-war parities—a situation that tended to stimulate a speculative flow of funds to, rather than away from, countries with depreciated currencies. Such results could scarcely be anticipated in any future situation combining heavy dollar requirements and a fluctuating and uncontrolled exchange market.

Evaluation of Early Post-War Experience

Readjustment of the international transactions of the United States from war to peace conditions inherently involved extremely serious problems, but the difficulties of transition were greatly aggravated by the violent boom and depression of the first 3 post-war years. The following are among the most unfortunate consequences of these wide cyclical fluctuations on this country's international trade and financial relations:

1. The simplest and most obvious effect was that foreign countries (as well as individuals and enterprises in the United States) wasted a substantial part of their accumulated reserves and incurred additional heavy liabilities, in obligations to the United States Government and by other long- and short-term borrowings, through intense competition on a high and rising market for goods the supply of which could not be immediately and adequately expanded. American exporters similarly lost heavily through overoptimistic evaluation of foreign demand.

2. The speculative boom of 1919–20 brought into being a great deal of overcapitalized, excess agricultural production in this country that made no substantial contribution to immediate post-war requirements but quickly became a glut on the market. While it would be a gross oversimplification to explain the "farm problem" solely or chiefly in these terms, the land boom, which began in the late stages of the war and reached much higher peaks in 1919 and 1920, added greatly to the difficulties of readjustment to the declining export market in later years.

3. While some regrouping and downward adjustment of prices after the war was perhaps inevitable, the drop of more than 40 percent in the general level of dollar prices imposed a heavy burden on all debtors. In the balance-of-payments relations of the United States this meant that the heavy volume of indebtedness incurred by foreign countries at wartime and post-war boom prices had to be carried at a substantially lower price level. The so-called transfer problem—by which is meant in

* Germany was perhaps the principal exception, but its situation was aggravated by the reparations question. In France the flight of private capital did not assume serious proportions until somewhat later.

the present connection the acquisition of sufficient dollars by foreign countries to meet debt service to the United States—was thus aggravated. In addition, the effect of lower prices was to stimulate overindebted primary producers to increase their output still more—the most obvious way by which the individual producer can seek to maximize his income.

4. Another long-run consequence of the price fall was to increase the deflationary difficulties of foreign countries that, however unwise their policy may have been, desired to restore their currencies to pre-war gold parities. In the United Kingdom, the most important country in question, prices as expressed in sterling had risen more than dollar prices in the United States during the war. Restoration of a viable international balance required that this disparity be removed, if the pound was to be returned to its former exchange relationship with the dollar. Despite the difficulties of reducing costs (not only wages but also and especially the large volume of fixed charges incurred by British industry during the war and post-war boom) the adjustment in prices could doubtless have been satisfactorily made if dollar prices had remained relatively stable. The sharp fall in American prices, however, greatly increased the problem.

The major problems in the early post-war experience of the United States, in both its internal and external aspects, resided not so much in the technical difficulty of readjusting production to peacetime conditions as in the sudden release of pent-up demand and, shortly afterward, the equally sudden weakening of this demand and of its financial supports. The imprudent attempt to restore markets forthwith to the unrestrained play of the abnormal forces then prevailing was bound to have unhappy consequences.

In view of the impatience of the public and the Government alike to be done with wartime restrictions and to return to normal, it is not easy to suggest what alternative courses could have been followed with any chance of general acceptance. What was needed can be stated, however, with assurance. The basic requirements certainly included the following: (1) Continued control over both the price and distribution of goods until the most pressing internal and external requirements had been met; (2) a more gradual release of accumulated purchasing power, including foreign dollar balances, in such a way as to support an orderly and sustained expansion in the domestic and international economy; (3) continuation of official lending to foreign countries, although on a declining scale, until private finance was ready to assume the risks. Such policies would have promoted a smoother transition from war to peace and would have avoided or mitigated the unfortunate results stemming from the post-war boom and depression.

For the longer run, however, the United States was confronted with a most perplexing problem of readjustment, the difficulties of which were often not adequately grasped either by the authors or the critics of this country's policies. The problem may be stated as follows: The very forces that had transformed the United States in a few war and post-war years into a great creditor nation imposed enormous difficulties in the way of an early adaptation to that position through a change in the balance of trade.

During the war the United States had greatly expanded its capacity for, and hence its dependence on, a huge volume of exports, both agri-

cultural and industrial. At the same time the heavy demands of war and the separation from former sources of supply had brought the development of certain domestic industries that produced goods previously imported and were ready to defend their positions, at least through demands for tariff protection, while the scope of goods that might be imported in significant amounts was already largely limited to essential materials and foodstuffs by previous tariff legislation and internal economic developments. Under these circumstances an adjustment in the trade balance to accommodate a return flow of debt service payments could probably have been accomplished without serious disturbance to the export structure and the whole internal economy only over a relatively long period of years through (1) continued investment of American capital abroad, though eventually on a gradually declining scale, and (2) a positive effort to promote imports on a selective basis.

There was in fact a continued outpouring of capital in increasingly heavy volume during most of the first post-war decade, but there was nothing gradual about its curtailment, and public policy was directed toward restricting rather than encouraging imports. The ultimate adjustment to the changed creditor position of the United States after the first World War was therefore not merely postponed, as was desirable, but was rendered more difficult and was effected under disastrous conditions. These later developments will be traced in the following sections.

A PERIOD OF UNCERTAIN BALANCE, 1922-29

Recovery and Prosperity

The end of the post-war depression inaugurated a period of sustained economic expansion for the world as a whole, from which short-run financial and economic crises in some countries or chronic difficulties in others stand out only by way of exception. However insecure its foundations may have been and whatever the causes of its ultimate collapse, the era from 1922 to 1929 was marked by an unparalleled growth in production and consumption of economic goods.

In the United States, industrial production turned definitely upward in the fall of 1921, following signs of business recovery earlier in the year, and in 1922 output was only slightly below that of the peak year 1920. There followed a period of relatively steady progress, led by the machinery and automotive industries, which brought a further increase of 50 percent in production by 1929. Industrial output passed through a recession of some severity in 1924 and a minor decline in 1927, but these temporary set-backs produced only slight deviations from the strong upward trend in national income. The chief exception to the general pattern of rising prosperity was agriculture, where a further moderate expansion of production was accompanied by chronic price weakness and a relative decline in the exchange value of farm produce for other goods as compared with the pre-war relationship. In contrast to the experience of other major groups, farm income remained depressed at levels around 25 percent less than those of 1919-20.

Unlike its part in the boom-and-depression sequence immediately following the war, foreign trade does not appear to have played a

role of any consequence in initiating recovery in the United States after 1921. So far as international transactions were a factor influencing the upturn in the world economy, the stimulus seems rather to have come from the American side, with a strong increase in imports accompanying the revival in domestic production and a smaller rise in new capital investment abroad. Exports, on the other hand, declined further from 1921 to 1922. The decline, however, was confined to the first quarter of 1922 and was apparently caused by a number of special factors rather than by general economic conditions abroad.⁹

Although Latin America remained in a depressed state in 1922, and the situation in Central and Eastern Europe underwent further deterioration, most other countries experienced a recovery roughly coinciding with that of the United States, not only in their internal economic situation but also in their foreign trade and exchange positions.

Economic expansion abroad after the post-war depression was no less rapid than in the United States, so far as may be judged by the rise in foreign trade, industrial production, and national incomes. This comparison requires qualification, however, because production in Europe had fallen to a low level by the end of the war and part of the subsequent expansion represented only the recovery of lost ground. Further qualification is required, moreover, because of the uneven rate of progress in different countries, as shown in part by the comparisons of national income and industrial production in charts 28 and 29.¹⁰

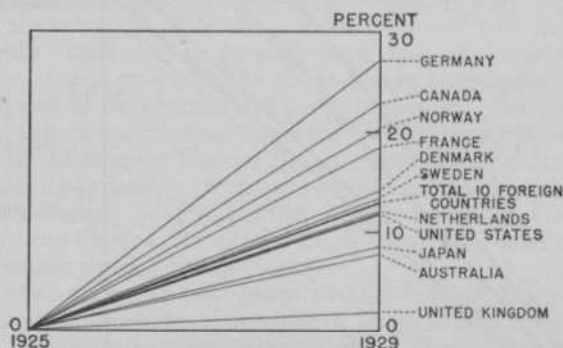


Chart 28.—Percentage increase in national income in the United States and selected foreign countries, 1925 to 1929. (Based on foreign-currency values converted to dollars.)

The percentage increases shown in charts 28 and 29 are affected to some extent by the selection of base years, and the relative position of the various countries would be somewhat different had other base years been used. For example, German industrial production was comparatively high in 1922 under the stimulus of the depreciating mark but was virtually paralyzed in the following year with the occupation of the Ruhr and the final stages of currency collapse. The increases in national income plotted in chart 28, moreover, reflect variations in

⁹ Among these special factors were: (1) Previous heavy overstocking of American goods from orders placed during the post-war boom; (2) fall in coal exports attributable to cessation of strikes in British mines and the outbreak of coal strikes in the United States; (3) decline in wheat exports due to a bumper crop in Italy and diversion of United Kingdom imports to other sources of supply; (4) reduction by almost \$50,000,000 in British takings of American leaf tobacco. A decline of about 5.6 percent in the general level of export prices was also a factor.

¹⁰ See also charts 13-A, 13-B, and 13-C.

both the internal and external values of currencies. The expansion shown for Norway and Denmark, for instance, is attributable to the heavy discount on their currencies in the base year 1925. Subsequent stabilization of these currencies at their pre-war gold parities increased the value of their national incomes as converted into dollars but in fact imposed a heavy deflationary burden on their economies. In terms of their own currencies, national income is estimated to have fallen by about 19 percent in Norway and 10 percent in Denmark from 1925 to 1929.

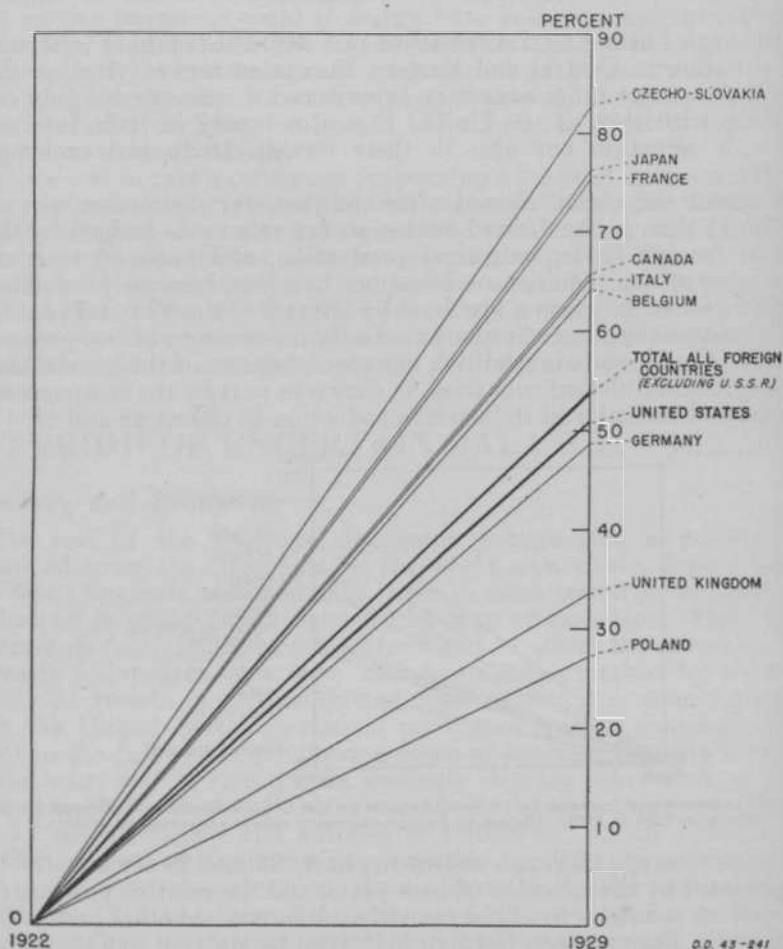


Chart 29.—Percentage increase in industrial production in the United States and selected foreign countries, 1922 to 1929.

In some countries, notably France, Belgium, Czecho-Slovakia, Canada, and Japan, there was a marked economic expansion over the period as a whole, even though occasional set-backs occurred. Despite the declining tendency in primary prices, a rapid economic growth also took place in more predominantly agricultural countries. In a few countries, however, there was only moderate expansion after 1922, the

United Kingdom being the most important. British industrial production rose somewhat, but national income and foreign trade showed little or no increase. While various factors contributed to the lag in economic progress in the United Kingdom during this time, it is generally recognized that the return to the pre-war gold parity in 1925 constituted a serious overvaluation of the pound sterling at the relative price levels then prevailing and imposed a heavy deflationary burden on the British economy. The weakened position of the United Kingdom and its consequences for the international transactions of the United States are described in more detail in later sections.

Strength of the International Position of the United States

The internal vigor and growth of the United States during the twenties was matched and supported by its position in the world economy. Important elements of its international strength were the increase in its monetary reserves resulting from the heavy influx of gold during and after the war and the concurrent change from a debtor to a creditor status. Of still greater significance in the subsequent evolution of its position was the continuing strength of foreign demand for dollars.

The strength of this demand was reflected, for one thing, in the large and increasing amounts of dollars used in payment of current-account items. In absolute terms, the largest and most rapidly growing payments were made against purchases of United States merchandise exports. During the early part of the period requirements of foodstuffs to cover the deficiencies in European production were urgent, and the decline in these needs after the middle twenties was far outweighed by a vigorous expansion in foreign purchases of American manufactured goods, which proved to be particularly responsive to the rise in purchasing power and industrial growth abroad.

The greatest proportionate increase among receipts on current account was in returns on United States investments abroad, including the intrinsically inflexible payments of interest on the growing volume of long-term loans. War debts also entailed a substantial volume of payments to the United States, although the annual amounts remained relatively stable during the period.

Besides the excess of payments to the United States on current account, foreign countries employed a large and growing volume of dollars in long-term capital transactions. These were to a large extent contractual amortizations of previous dollar loans. In addition, foreigners made heavy purchases of American securities, resuming investment interests and practices long antedating the World War. They also repatriated a sizable volume of foreign dollar bonds more recently floated in the United States. The exceptional capacity of the New York stock market to attract speculative buyers from all over the world was also evident at times, especially during the boom of 1928-29.

Another manifestation of the strong international position of the United States was the desire of foreigners to hold their liquid assets in the form of dollars. In its simplest form this desire was expressed in the hoarding of United States currency, large amounts of which were drawn abroad during the early years of currency depreciation in Europe. Far more important, however, were the foreign-owned dollar balances built up here, partly for the account of individuals but chiefly

for foreign central and commercial banks. The growth of these banking funds mirrored the newly acquired importance of New York as a repository for foreign monetary reserves under the gold-exchange standard and as a clearing center for international commercial and financial transactions.

Payments to foreigners on current account likewise rose swiftly from 1922 to 1929, and, in fact, roughly paralleled the increase in receipts for goods and services. Although severely restricted in composition by an extremely high tariff policy, which was in manifest conflict with the country's claims as a creditor nation, imports expanded in keeping with the strong rise in United States industrial production. Still larger proportionate increases were registered in American travel expenditures abroad and in interest and dividend payments on foreign investments in the United States, which were again growing after having been reduced during the war. Notwithstanding these increases in payments, the current account continued to show over the entire period a large excess of receipts.

Despite the strong foreign demand for dollars, there was no serious imbalance in our international position during the greater part of the 1922-29 period, as was indeed evidenced by the ability of foreigners to accumulate substantial short-term balances in the United States. The explanation lies in the heavy outflow of American capital for investment abroad, which was on a generally growing scale until the middle of 1928. This outflow of capital was not, however, merely a coincidental and fortuitous offset or a passive adaptation to an independently determined excess of receipts on merchandise trade and other current transactions. It may have been so to some extent, but this does not provide a satisfactory explanation of our balance-of-payments relationships during the period. The search for a more complete explanation is rendered difficult by the very multiplicity of forces at work, the absence of severe disturbances until near the end of the twenties, and the more or less autonomous functioning of the world economy during this time.

It is precisely these features, on the other hand, which lend special interest and importance to the 1922-29 period. At other times during the interwar years there were violent cyclical changes, fluctuating exchange rates, and, especially in the thirties, a high degree of control over trade and financial transactions by many foreign governments. Under such conditions, balance-of-payments problems and adjustments may stand out rather clearly. At least by comparison, the period 1922-29 exhibited a substantially greater stability in foreign exchange rates and a more regular course of production and trade, despite continuing variations and disturbances in several important countries in the early years. Moreover, governmental influence on international transactions was limited in the main to broad economic and financial policies with relatively little direct state intervention.

Out of the entire interwar period only during the years from 1922 to 1929 could one expect to find balance-of-payments relationships regulated chiefly by the autonomous forces of the market and perhaps to detect some sort of natural or semiautomatic "balancing mechanism," whereby changes in the flow of dollars at one point were offset, without undue disturbance, by compensating changes elsewhere in our international transactions. The principal questions with respect to the period relate therefore to the means by which international bal-

ance was maintained for a time and the reasons for its ultimate collapse. The outward characteristics of the United States balance of payments in these years, as already briefly summarized, suggest that the answer to these questions should be approached through an examination of two major relationships: (1) The approximately equal rise in receipts and payments on current account and (2) the connection between the excess of receipts on current account and the net outflow of long-term capital.

Relationship Between Receipts and Payments on Current Account

Although capital movements played a critical role in the United States balance of payments, dollars paid out on trade and service transactions constituted about 83 percent of total payments from 1922 to 1929 and thus formed the major offset to receipts from other countries. The fact that both payments and receipts on current account exhibited, without any substantial direct control, a strong and approximately equal increase is therefore of elementary importance in the evolution of the international transactions of the United States during this period. There were, to be sure, certain deviations from these upward trends, as in 1924 and again in 1927, when payments declined slightly in the face of a continued rise in receipts, but over the period as a whole the increases were of approximately the same magnitude. From 1922 to 1929 dollars supplied on current account rose by \$1,979,000,000, or 45 percent, and dollars used by \$2,123,000,000, or 42 percent.

The analysis in chapter II has shown that the different goods and services making up the current account were all subject in greater or less degree to special influences, but the analysis has also indicated that, except under the impact of abnormal and powerful forces, payments and receipts on current transactions, in the aggregate, moved rather closely in response to changes in basic economic conditions at home and abroad. Certainly the fact that industrial production and incomes in foreign countries, considered as a unit, increased by about the same proportions as in the United States accounts to a great extent for the approximately equal rise in receipts and payments on current account during the 1922-29 period. Whether this parallelism was attributable chiefly to a chance coincidence in economic progress at home and abroad or reflects a more definite relationship and interdependence is a matter for consideration.

Economic expansion in the United States in the twenties unquestionably rested chiefly on such primarily internal factors as the phenomenal development of the automobile industry, the heavy volume of building construction, and the inflationary stimulus of the growth in consumer installment financing. Similarly, economic expansion in foreign countries was attributable to factors that would have made their influence felt even though transactions with the United States had not increased—for example, the reconstruction and rationalization of European industry after the war, the industrialization of younger countries, and the opening up of new territories to production. To be sure, American equipment and capital played a significant role in this development, but the greater part of the financial and material resources required undoubtedly came from elsewhere, including, of course, each country's own internal contribution.

By comparison with such factors, trade and service transactions between the United States and foreign countries would appear, upon

superficial observation, to have exercised only a minor influence on the growth of economic activity at home and abroad. The increase in United States receipts on current items directly accounted for only about 9.2 percent of the rise in total national income from 1922 to 1929. During the same period, out of the aggregate expansion in national income only about 8.6 percent was expended on increased purchases of foreign goods and services. These transactions represented an even smaller percentage of the aggregate income of foreign countries, possibly only about half as much, although data necessary for precise measurement are not available.

On the basis of such comparisons the connection between the growth in receipts and the growth in payments on trade and service items would seem remote indeed. The ratios mentioned are, however, a gross understatement of the repercussions of international transactions on the economy of both this country and other countries, and, by the same token, they exaggerate the problems of adjustment under conditions as they existed in the twenties.

In the first place, money received from exports and services does not forthwith exhaust its effects on domestic incomes but enters into the stream of money payments. In addition to those who derive income directly from foreign sources, others obtain employment and income indirectly as a result of exports and other transactions. These include persons engaged in supplying food, clothing, and other goods and services to workers employed in producing goods for export; makers of machinery, equipment, and plants used in export industries; and persons employed in other related activities, such as transportation, brokerage, and insurance. Similar situations prevail, of course, with respect to the ultimate influences of American purchases from foreign countries. As one illustration, sums spent by American travelers abroad—which reached nearly \$500,000,000 in 1929—pass promptly from railways, hotels, and shopkeepers to employees, grocers, and clothiers, and thus stimulate the economic life in general of foreign countries.

Hence, the mere ratio of the dollar volume of international transactions to domestic income is clearly a gross understatement of the influence of the former on the latter. While allowance must be made for the usual delays between receipts and disbursements of individual incomes and for various "leakages"—additions to savings, repayment of debts, and increased imports and other payments abroad—the cumulative effects on national income of a rise in receipts from exports or other transactions is unquestionably much larger than the amount of the initial increase. Accurate measurement of these effects is, unfortunately, impossible, but it may at least be concluded that the total annual income of this country directly and indirectly derived from exports and other current transactions was several times the \$6,266,000,000 figure that these items averaged during the 1922-29 period, and that the rise of almost \$2,000,000,000 in these receipts during that time contributed a far larger amount to the growth in national income. Similarly, American purchases of foreign goods and services produced ultimate effects abroad substantially greater than the mere magnitudes of the items would suggest.

Variations in foreign purchases from the United States or in United States purchases from foreign countries also produced further indirect effects that at times profoundly influenced trends in general

economic activity at home and abroad. In addition to the cumulative effects of the spending and respending of funds derived from exports and services, an increase in foreign purchases tended, through its influence on prices and business prospects, to call forth a larger volume of expenditure from domestic sources, and was a key factor on occasion in initiating recovery and expansion. The following quotation provides an illustration of the special impact that events abroad exercised on the domestic economy at strategic moments—one which was no doubt frequently paralleled by the influence of developments in the United States on the economic life of other countries:

* * * The revival of 1924 seems to be one of several in American history which were greatly influenced by events and conditions abroad. The Dawes Plan was adopted on August 16, 1924. The British pound was appreciating and sentiment abroad was improving. Especially important was the accident of large crops in the United States with small crops in Europe. As a result, the price of wheat in December, 1924, was nearly 60 percent above December, 1923, and the price of hogs also rose. Between July and October, the adjusted index of the value of exports increased from 85 to 119 (1923-25=100), and exports during the last four months of the year were the largest in the peacetime history of the country.¹¹

In summary, under the conditions prevailing in the twenties, foreign trade and service transactions appear to have exercised an equilibrating influence whereby the general trends in economic activity at home and abroad were brought into line with each other and compensating adjustments made to changes in the flow of dollars supplied and dollars used. This does not suggest that in all or most circumstances maintenance of international balance requires merely a parallel development between the internal economic activity of one country and that of other countries.¹²

In the evolution of the United States balance of payments from 1922 to 1929 such parallelism, in conjunction with the outflow of American capital, apparently was an important part of the balancing mechanism although, for reasons subsequently discussed, the relationship would have been more viable and less subject to shock if there had been a larger increase in imports.

Offsetting Relationship Between Capital and Current Items

The proximate factors responsible for the behavior of capital transactions have been discussed in chapter III. Their relation to other items in the balance of payments and their significance in the evolution of the international position of the United States from 1922 to 1929 remain to be examined.

As a point of departure, the simplest and most obviously true statement that can be made regarding the role of capital movements in the twenties is that the additional dollars supplied through the outflow of capital from the United States rendered possible the excess of receipts in this country on trade and other current items. In view of the limitations imposed by the American tariff and other factors de-

¹¹ Slichter, Sumner H. *The Period of 1919-1936 in the United States: Its Significance for Business-Cycle Theory*. Review of Economic Statistics, February 1937. Pp. 10-11.

¹² At times the basic situation may require or permit a different line of development. For instance, the fall in the price of Cuba's principal export, sugar, after 1924 necessitated a decline in its imports and, as the "natural" mechanism whereby this was accomplished, produced a general downward trend in Cuban incomes in opposition to the rising trend in the world at large. In the United Kingdom, the decision to restore and maintain the pound at its pre-war parity produced an unbalanced situation in its international accounts, which required, in the absence of other measures, a deflationary pressure on its internal economic activity.

termining the course of trade and service transactions, there is scant likelihood that outpayments on current account would have been significantly larger in the absence of an outflow of capital. Under such circumstances, the full effects would have fallen on exports and other items of receipts, probably involving a continuation of the decline that had been under way from the middle of 1920 until early 1922. While these effects would doubtless have been felt throughout the entire gamut of export trade, and debt service charges as well, exports of farm goods were in a particularly vulnerable position after 1925. The agricultural depression of the twenties might therefore have been more quickly precipitated into the crisis that eventuated in the early thirties. For better or worse, the supplying of dollars through new loans and other investments abroad prevented, or rather postponed and ultimately intensified, a large and perhaps painful readjustment, which otherwise would have had to be made in both the international transactions and internal economy of the United States.

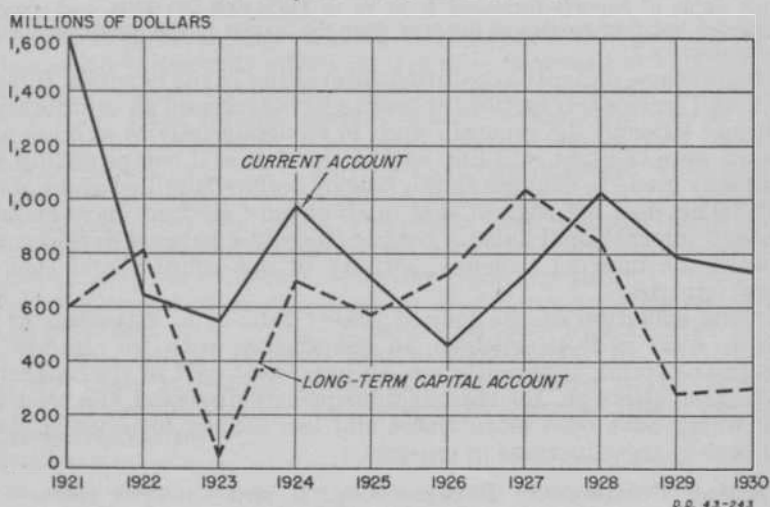


Chart 30.—Net receipts on current transactions and net payments on long-term capital transactions, 1921-30.

Although the generally offsetting nature of net inpayments on current account and net outflow of long-term capital is a self-evident feature of the United States balance of payments during the twenties, the year-to-year movements in the two series were not strikingly close (chart 30). Capital outflow was for the most part substantially smaller than the current-account balance through 1925, increased sharply in relation to the latter in the next 2 years, and then fell precipitously in 1929 in the face of a much smaller decline in net current receipts. Because of these differences and the difficulty of tracing processes of an inherently obscure nature, discovery of a precise and smooth mechanism relating the two balances cannot be expected.

The question as to the connection between the current and capital items has commonly been posed in this form: Does trade follow the loan, or does the loan follow trade? In other words, does the movement of capital vary for reasons not directly related to the balance-of-payment position but create changes in demand that cause com-

pensating adjustments in trade and service items? Or do the latter vary for independent reasons and give rise to a chain of events causing capital to move in an offsetting manner? While the causal factors may have operated in both these directions to some extent, the American balance-of-payments experience during the twenties indicates that fluctuations in both the current-account balance and the long-term capital balance were chiefly determined by common forces or were otherwise related in such a manner that neither the one nor the other could be regarded as an independent or causal factor.

Direct Ties Between Capital and Trade

At times the movement of capital and the movement of goods were part of the same transaction. So-called tied loans—loans for which borrowers are contractually obligated to spend the proceeds in the lending country—were rare in the American experience, though funds were in fact frequently borrowed for the specific purpose of purchasing goods in this market. However, so far as may be judged by the direct evidence available and by more general information concerning the types of borrowers, the acquisition of funds for expenditure in the United States was apparently not the primary purpose behind most of the foreign loans floated here. Rather, the original borrowers presumably converted the loan proceeds into other currencies via the international banking mechanism, and the dollar funds thus became part of the general supply of dollars currently made available to meet foreign demands.

In the establishment of new American direct investments abroad the movements of capital and goods have often been even more inseparably bound together than in foreign dollar loans. In fact, when American owners supply plant equipment and materials from this country, the movement of goods is actually the movement of capital. The rapid growth of American branch factories abroad during the twenties suggests that shipments of this nature must have been common. Establishment of other types of direct investments in foreign countries also frequently involved the application of distinctively American techniques and hence the use of American machinery and equipment.

The outflow of direct investment capital, however, has not always automatically and immediately taken the form of American goods. The building up of all such investments necessarily entailed substantial outlays for local labor, materials, transportation charges, and other expenditures in foreign countries. Sometimes the equipment required was obtained from a third country. One large American-owned public-utility enterprise, for example, obtained from its manufacturing subsidiaries in Europe a substantial part of the equipment and apparatus needed for its operating subsidiaries, chiefly in Latin America.¹³

Finally, a large number of American-owned enterprises in foreign countries were not newly constructed but were purchased as going concerns. A few examples may be given. General Motors Corporation purchased Vauxhall Motors, Ltd. (United Kingdom) in 1925 and Adam Opel, A. G. (Germany) in 1929. The Anaconda Copper Mining Co., in association with the W. A. Harriman interests, purchased a participation in Polish mining enterprises from German owners, the mines being in territory awarded to Poland from Germany after the

¹³ On the other hand, the Brazil Railway Co., financed in Europe, purchased most of its equipment in the United States.

first World War. Several of the Latin American subsidiaries of International Telephone & Telegraph Corporation and of American & Foreign Power Co. were incorporated in the United Kingdom and were acquired from their British owners.

In short, a large, although indeterminate, part of the outflow of American capital for direct investment abroad did not entail a corresponding and immediate purchase of American goods but tended to become part of the general supply of dollars currently accruing to foreign countries. In such investments, as in the greater part of foreign dollar bond flotations, the utilization and transfer of funds through the purchase of American goods and services must obviously be explained in terms of a more indirect and general relationship.

Indirect Connections Between Capital and Trade

A logical assumption as to the manner in which capital transfer not directly related to the export of merchandise increased the export surplus, or the total balance on current account, is that the disbursement of the funds abroad tended to raise or support the general level of purchasing power and economic activity in foreign countries and thus to promote or permit a larger volume of purchases from the United States.

In some countries the purchase of goods and the procurement of capital from the United States were so intimately bound up in the whole process of economic expansion that it would not be valid to assign a causal role to either capital or trade. In other words, the processes of industrialization and general economic development created a demand for goods, both producers' and consumers', which the United States was in a favorable position to supply, and at the same time they gave rise to capital requirements beyond the capacity of local sources, which the United States was also well able to meet. This would appear to have been true in Canada, which borrowed \$1,261,000,000 in the United States from 1922 to 1929 and received in addition a heavy volume of direct investment capital.¹⁴

Even in Canada continuation of expansion in economic capacity at such a rapid rate as occurred was dependent on the influx of capital from the United States. In many other countries still less self-sufficient financially, American investments played a much more distinctly causal role in stimulating a rise in production and purchasing power with an attendant increase in imports. This was true of most Latin American countries, where American as well as European capital was heavily invested. For example, Colombia, with a population of less than 8,000,000 in the twenties floated loans totaling \$173,000,000 in the United States from 1922 to 1929. In addition, a large part of United States direct investments in that country, which aggregated \$124,000,000 at the end of 1929, were made during this period. "There was a great boom. Competitive railway building and other public works sent up wages by leaps and bounds; imports vastly increased; food was imported where before it had been produced locally."¹⁵

¹⁴ The amount borrowed does not include some \$253,000,000 floated by American and semi-American corporations for operations in Canada; this sum is included in the direct investment estimates.

United States direct investments in Canada at the end of 1929 are estimated at slightly more than \$2,000,000,000, but a substantial part had been made before 1922.

¹⁵ Committee on Finance and Industry Report (Macmillan Committee). London. 1931. P. 80.

The United States Government also made indemnification payments to Colombia of \$5,000,000 annually from 1922 through 1928 under the treaty of 1914 as amended and ratified in 1922.

Many times foreign dollar loans did not serve to increase the productive capacity of borrowing countries but were used for such purposes as covering deficits in their current budgets, as in several of the Latin American countries, or for expensive developments of a social rather than economic character, as happened to a large extent in Germany. In all such loans, nevertheless, disbursement of the proceeds tended to expand or inflate foreign incomes and thus to give rise to heavier demands for goods and services in general, including those purchased from the United States.

In most countries, individually considered, fluctuations in borrowings from the United States were not closely reflected in the course of their imports from this country. Only in Canada, whose purchases from the United States constituted a dominant place in its total imports, did the connection seem to stand out clearly. In other countries the relationship was blurred by the multiplicity of influences affecting import capacity, including changes in the quantity and price of their exports and in borrowings from other countries.

Variations in the flow of American capital to individual countries tended to be reflected more in their total imports than in their imports from the United States.¹⁶ Under these conditions, the stimulative effects of capital investment were not confined to the borrowing countries but spread from them to third countries and thus tended to raise the general level of foreign production and incomes and to increase total foreign demand for American goods and services.

Response of Capital and Current Transactions to Domestic Factors

The influence of year-to-year changes in the flow of capital likewise does not stand out clearly in the movement of total United States exports or in total receipts on current account from abroad, both of which showed a fairly regular increase from 1922 to 1929. The absence of a close parallelism does not conflict, however, with the statement that the outflow of capital tended to raise the level of economic activity in foreign countries and the general volume of their payments to the United States. Rather, it points to the very significant fact that annual variations in the movement of long-term capital were more closely related to changes in the volume of dollars supplied than in the volume of dollars used on current account. As has already been noted, receipts on current transactions exhibited a more even increase than did payments, fluctuations in the latter being chiefly responsible for changes in the balance on current account.¹⁷

The connection between capital movements and payments on current account and the reasons therefor emerge clearly from an inspection of chart 31, which is based chiefly on relationships developed in chapters II and III. Briefly expressed, when domestic economic activity rose, as measured by the index of industrial production, there was an increase in imports and in total dollars supplied on current account and a decrease or a definite slowing down in foreign dollar

¹⁶ Comparisons between the flow of capital and that of goods from the United States to individual countries are further handicapped by lack of accurate data, by country, on annual movements of direct investment capital.

¹⁷ The probable explanation of this contrasting behavior is discussed in chapter II (cf. section on The Current Account as a Whole).

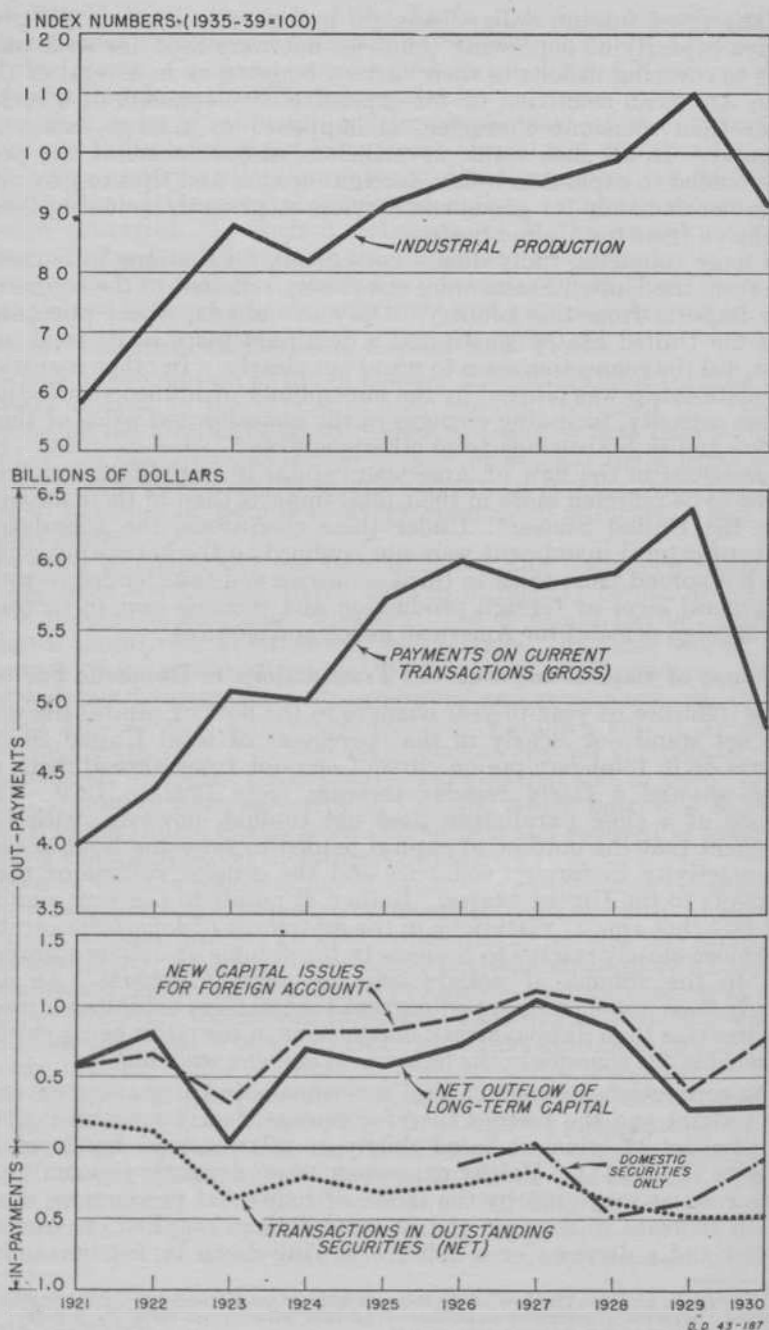


Chart 31.—Index of United States industrial production, gross payments to foreigners on current account, and long-term capital transactions.

Note.—Net outflow of long-term capital includes amortization payments and receipts and transactions in United States direct investments abroad not separately plotted.

bond flotations. When, on the other hand, domestic economic activity declined, as in 1924 and 1927, payments on current account fell and foreign loan issues rose. Changes in the flow of payments on current transactions and changes in the outflow of American long-term capital were thus compensating, with the result that the year-to-year movement in the total supply of dollars made available to foreign countries exhibited greater regularity than either of the two major components taken separately.¹⁸

Another noteworthy aspect of the relation between capital movements and the current account, also revealed in chart 31, is that the net inflow of foreign funds through transactions in outstanding securities before 1930 likewise tended to fluctuate with changes in domestic business conditions, varying positively with changes in the index of industrial production and in the opposite direction to new foreign dollar bond flotations. This response of foreign investors to changes in the American business situation is what might have been expected, especially in their purchases of domestic issues. Unfortunately, the latter cannot be segregated in the security transactions data for 1923 to 1925, but their behavior in subsequent years is interesting. A small net liquidation of American securities by foreigners occurred during the mild recession of 1927, but their purchases rose to almost \$500,000,000 net in 1928 with the development of the stock-market boom and remained high in 1929 as reflected in the figure for that year, even though there may well have been extensive liquidation after the collapse of the boom in October.

Abrupt Fall in Capital Outflow

Although both the outflow of American capital in the form of subscriptions to foreign dollar loans and the inflow of capital from abroad for the purchase of domestic and foreign securities behaved in a manner roughly compensating for variations in the volume of dollars supplied on current account, the relationship was far from perfect (charts 30 and 31). It was not until near the end of the period, however, that the deficiencies in the relationship began to produce serious effects.

From 1927 to 1929 dollars supplied against imports and services rose by \$543,000,000, whereas new foreign-loan flotations in the American market declined by \$700,000,000 and the inflow of capital from abroad for security purchases rose by \$320,000,000—a net change in the last two items combined of more than \$1,000,000,000. Capital movements were far more responsive to the drawing power of the stock-market boom than were imports to the concomitant rise in basic economic activity, a situation tending to upset the balance in international transactions to a dangerous degree. That the strain did not become more serious immediately may be attributed in part to the fact that the outflow of direct investment capital rose by about \$250,000,000 from 1927 to 1929, reflecting the general spirit of optimism and business expansion during these years.

While the speculative rise in share prices appears to have been the immediate factor primarily responsible for the decline in foreign

¹⁸ The responsiveness to changes in domestic business conditions thus bears out the earlier suggestion that fluctuations in the current and capital accounts were largely attributable to the influence of a common force.

dollar bond flotations, as suggested by the fact that the latter rose again for a time after the collapse of the boom, other more basic influences tended to curtail the outflow of American capital in the late twenties. As shown in chapter III, these deterrents included the development of unfavorable political and economic conditions in various countries and the notorious overindebtedness of many borrowers, notably Germany and a number of Latin American countries, resulting from the reckless speed with which their issues had been solicited and sold during the preceding heyday of foreign lending.

There is one additional consideration of fundamental importance: The very fact that the maintenance of international balance had come to depend in large measure on an outflow of American capital was in itself a factor tending toward instability and collapse. Any interruption in the outflow, even though due to temporary causes, was likely to produce economic and exchange disturbances on such a scale as to impair the prospects of foreign investments in general, thus preventing a full resumption of investment activity and leading to further and protracted dislocations in the world economy.

Balancing Items and Central Banking Policy

Under the international gold, or gold-exchange, standard generally adhered to in the latter part of the twenties, disparities between the supply and use of dollars of sufficient size to cause substantial transfers of gold and short-term funds were supposed to give rise to appropriate credit measures calculated to reinforce the natural influences tending to restore balance. This requirement resulted not from any moral or legal obligation but from the nature of the gold standard. The latter, in its simplest terms, means the maintenance of stable exchange rates within a regime of general freedom for the public to engage in transactions requiring the purchase or sale of foreign exchange. Stable exchange rates between countries obviously could not be assured without protection of gold and exchange reserves against undue depletion and also against undue increase at the expense of other countries' holdings.

It follows, therefore, that under the international gold standard—or any monetary regime aimed at maintenance of fixed exchange rates combined with freedom for individual transactions—a net loss of gold and exchange reserves in significant and continuing amounts requires the contraction of internal purchasing power in order to reduce purchases from other countries. Conversely, a net increase in gold and exchange reserves of a substantial and prolonged nature requires an expansion of internal purchasing power to prevent a severe and possibly dangerous depletion in other countries on the gold standard.

In point of fact, central banking policy at home and abroad does not appear to have played a very active or effective role in maintaining balance in the international transactions of the United States during the 1922-29 period. The explanations are in part of a seemingly contradictory nature: (1) Until near the end of the period there was no severe and protracted strain in the general balance-of-payments position of the United States; (2) some of the strains that did develop, especially in other countries, were far too severe to be dealt with satisfactorily by the techniques available to central banking systems in influencing the course of economic activity; and (3) it

would seem that definite mistakes which might have been avoided were made in the field of money and banking policy both in the United States and abroad. The pertinent facts regarding these points may be briefly noted.

It is an eloquent commentary on the strength of the balance of payments of the United States—or, more precisely, the relative strength of foreign demand for dollars—that at no time during the 1922-29 period was there an excess of dollars supplied over dollars used sufficient to produce any important evidence of strain. Only in the 3 years, 1922 and again in 1926 and 1927, do the estimates indicate an excess of payments over receipts on current and long-term capital account, and in each of these years the excess was small by comparison with the accumulated gold reserve of the United States. It was particularly inconsequential, moreover, in view of the ready disposition of foreign countries to augment their short-term balances in this country.

As long as the outflow of long-term capital from the United States continued in large volume there was likewise little evidence of severe strain in the direction of an excess of dollars used over dollars supplied. Serious dislocation developed on two occasions. The first was in 1923 when a combination of exceptional domestic prosperity and unfavorable political conditions in Europe temporarily reduced the net outflow of long-term capital far below the usual level of the twenties. The other began in the middle of 1928 when, as previously described, the stock-market boom in combination with various other factors again sharply reduced the net outflow of long-term capital and brought what proved to be a definite curtailment in new United States investment abroad.

It is true that during the 1922-29 period the United States continued to receive gold on balance from other countries, the net inward movement aggregating \$410,000,000. Only in the years referred to in the preceding paragraph, however, was the inflow primarily attributable to a disparity between dollars supplied and used on current and long-term capital accounts. At other times, gold movements, both into and out of the United States, were largely caused and offset by shifts in short-term balances, as discussed in chapters III and IV. The general evolution of our position during the period as a whole may be summed up by observing that (on the basis of the incomplete annual movements shown in table I) the net rise in foreign balances in the United States exceeded by more than \$200,000,000 the net gain in United States gold stocks from abroad combined with the rise in United States short-term claims on other countries.

In contrast to its position on long-term investments, the United States became a substantial net debtor on short-term account: At the end of 1929 foreign dollar balances aggregated \$3,030,000,000 against \$1,776,000,000 in United States short-term claims on other countries. Although potentially capable of causing temporary embarrassment to the United States if they were to be withdrawn suddenly, foreign balances did not constitute a basic threat to financial stability in the United States because of its much larger gold stocks.¹⁹ On the other hand, the heavy accumulation of foreign-owned dollar

¹⁹ United States short-term claims abroad were, in fact, more of a potential threat to foreign stability because they were largely held in countries with far weaker gold positions.

funds may be taken as evidence of the absence of any severe and protracted strain in our general balance-of-payments position during the greater part of the 1922-29 period.

Contrasting Money and Banking Policies in Britain and France

Examination of the country of ownership of foreign dollar balances, however, points to the fact that developments during the twenties had been less satisfactorily balanced than would appear from the mere total of such funds. According to a break-down available for \$2,673,000,000 of foreign balances in New York banks at the end of 1929, French holdings alone amounted to \$924,000,000, or 35 percent, whereas British and German short-term claims were only \$302,000,000 and \$205,000,000, respectively.²⁰ Furthermore, the United Kingdom and Germany owed heavy amounts on short-term account against which their gold holdings were relatively small and were hence in a vulnerable short-term position. France, on the other hand, held the largest gold stock, \$1,631,000,000, outside the United States and also had heavy short-term balances in other countries, including claims on both the United Kingdom and Germany as well as the United States.

The contrasting gold and short-term positions of the United Kingdom and France, as well as the widely divergent trends in their internal economic activity, observable in charts 28 and 29, may be attributed largely to the different currency and exchange policies pursued in the two countries.

The return of the pound sterling to its gold parity in 1925 constituted a substantial overvaluation on the basis of relative prices and other relationships then prevailing, while the franc, on the other hand, was undervalued when it was subsequently stabilized at one-fifth its pre-war parity. As a result of these exchange maladjustments and various other factors, including the continued outflow of British long-term capital, the balance-of-payments position of the United Kingdom during the twenties exhibited chronic weakness. British prices and production were subject to continued deflationary pressure, resulting both from the impaired competitive position of British industries in world trade and from a restrictive credit policy necessary to restore a more tenable position in its international accounts and to protect gold reserves.

The situation was aggravated by the presence of large French balances built up in London during the flight from the franc; the inflow of these funds had helped to give an undue appearance of strength to the pound at the time of the United Kingdom's return to the gold standard but became a constant threat of instability after the franc in turn was stabilized. The Bank of England was therefore compelled to rely on the maintenance of relatively high interest rates as a means of attracting and holding foreign balances.

At the end of 1929 short-term assets held in London on foreign account, as computed by the Macmillan Committee, amounted to the equivalent of \$2,200,000,000, against which claims on foreign countries in the form of sterling bills accepted on foreign account aggregated about \$850,000,000.²¹ While foreign balances in London were

²⁰ Federal Reserve Bulletin. May 1937. P. 420.

²¹ The \$850,000,000 does not include British short-term claims of other types, data for which are not available.

Committee on Finance and Industry Report (Macmillan Committee). London. 1931. Pp. 112-113.

substantially lower than in the United States, the British gold stock was only slightly more than \$700,000,000, or about one-sixth that of the United States at that time.

The deflationary pressure in the United Kingdom, with a consequent depressing influence on world prices generally, might have been alleviated somewhat if France had actively pursued an expansionist monetary policy. Such a policy would seemingly have been called for by the large volume of French gold and exchange holdings in the late twenties.

These balances originated, however, not merely from France's excessively strong balance-of-payments position following stabilization of the franc at its undervalued level but also, and probably in major part, from the flight of French private capital during the period of depreciation. Reconversion of these private claims into francs just before and during the period of *de facto* stabilization was undoubtedly the principal source of the heavy foreign exchange holdings of the Bank of France, which alone were equivalent to more than \$1,400,000,000 at the time of the legal return to the gold standard in June 1928.

A reduction or redistribution of French gold and foreign exchange assets would have required either a sudden renewal of long-term investment abroad in heavy volume or a rapid internal rise in money incomes and prices sufficient to reverse the country's balance on current account. These results could scarcely have been readily and safely induced by central banking policy alone on a scale large and rapid enough to affect the situation significantly, although there was a substantial further increase in French currency circulation, production, and national income after 1927, accompanied by a decrease in exports and a rise in imports.

"Sound Credit" Policies in the United States

Central banking policy in this country during the twenties was predicated partly on the belief that much of the gold stock of the United States was subject to withdrawal by foreign countries and hence did not constitute a safe basis for a large expansion of credit.

By the late twenties there was good reason for regarding part of the foreign balances as a potential claim on the then further expanded gold reserves of this country, but, as seen in retrospect, apprehensions concerning the scale of such withdrawals were greatly exaggerated. This was certainly true at the beginning of the period when the view was expressed that "the great supply of specie now in the Federal Reserve Banks and aggregating in the neighborhood of \$3,000,000,000 is not normally the property of the United States and must eventually be expected to go back in part to the countries which are seeking to reestablish themselves upon a specie basis."²²

By the end of the early post-war deflation foreign balances in this country had been reduced to bare working levels, the United States had accumulated heavy short-term and long-term claims abroad, and the strength of its current balance-of-payments position was manifest. While an element of uncertainty was injected because foreign countries had not yet returned to gold, it is not apparent how stabilization of their currencies could have been expected to alter the basic

²² Federal Reserve Bulletin. January 1922. Pp. 3-4.

situation and enable them to draw gold from the United States in substantial amounts.

During the 1922-29 period, therefore, the credit policies of the Federal Reserve system were not closely related to the country's gold or gold and short-term position. The principal determinants of policy were the views of the Federal Reserve authorities as to the requirements for maintaining "sound credit conditions" in domestic business. Only in connection with the liberalization of credit in 1924 and 1927 were international considerations of some importance, but on both of these occasions such policy was perhaps more emphatically dictated by the need to check recession in internal business activity.

Even though the Federal Reserve Board was guided primarily by domestic considerations, its policies were not in open conflict with the requirements of international balance so long as they supported or permitted a steady growth in business activity and national income at home.²³ The chief question that might be raised is whether a more aggressive policy of credit expansion could have been safely followed with a view to supporting a higher level of prices and money incomes in the United States, thus helping to meet the foreign demand for dollars and relieving the strain on foreign exchanges and the general world deflationary pressure that developed in the latter part of the twenties.

In 1928 and 1929, however, the Federal Reserve Board inaugurated a progressive tightening of credit in direct conflict with the requirements of international stability. This policy was pursued in the belief that credit was being absorbed in speculative security transactions to an alarming extent. In the international sphere it had the effect of adding the attraction of high money rates to the lure of the stock market for foreign funds, thereby imposing a further drain on the gold and exchange resources of foreign countries in general and the United Kingdom in particular. Defense of reserve positions thus led to a general world-wide tightening of credit at a time when serious price weaknesses were already evident.

The threat to international stability, although not overlooked, was regarded as a regrettable but necessary risk to be run in rectifying an unsound domestic situation. That the tightening of interest rates was actually required in the interest of domestic business is questionable. The policy clearly did not succeed in its primary objective of diminishing speculative fervor on the stock exchange or in lessening the impact of the eventual crash. Of greater consequence is the fact that it resulted not in any alleviation of credit for business in general but in further stringency and that the policy was persevered in after the volume of new construction had fallen and other signs of business decline were in evidence. While the question is subject to different interpretations, to the extent that central banking policy was a factor contributing to the downturn in domestic economic activity it also made a further forceful contribution to the upset in international balance by reducing the supply of dollars paid out on current account.

²³ An exception was in 1923 when the Federal Reserve banks, beginning in the spring, followed a policy of moderate credit restriction that was instrumental in halting the vigorous rise in business under way since the post-war depression. By the middle of 1924, notwithstanding a reversal of Federal Reserve policy in the meantime, industrial production had fallen by 19 percent and wholesale prices by 10 percent from their 1923 peaks (based on monthly averages). Although other influences were partly and perhaps primarily responsible for inaugurating this recession, the need for reinforcing them by central banking policy remains highly questionable.

Review of Balance-of-Payments Experience, 1922-29

The analysis of transactions between the United States and other countries from 1922 to 1929 has brought out certain relationships that tended toward the maintenance of international balance and stability during the greater part of the period and which, despite serious weaknesses, may be characterized as constituting a "balancing mechanism." The principal features of these relationships may be recapitulated as follows:

1. The general upward trends in economic activity at home and abroad were interrelated and roughly parallel, although there were divergences growing out of special situations in some countries. Both as a result and as a means whereby the rates of expansion at home and abroad were kept in line, receipts and payments on merchandise trade and other current transactions exhibited, in the aggregate, a strong and approximately equal growth.

2. Transactions on current account, however, consistently registered an excess of receipts over payments, the excess varying from year to year primarily because of fluctuations on the payments side in response to changes in domestic business activity. Receipts, on the other hand, showed a somewhat smoother rise than payments, probably because variations in economic conditions in foreign markets were differently timed and tended to balance out into a more even rate of progress for foreign countries as a whole and also partly because of the contractual nature of debt service payments to the United States.

3. Excess receipts on current account were offset, over the period as a whole and in most years, chiefly by the net outflow of long-term capital from the United States. This movement reflected the abundance of investable funds made available by the high levels of national income and savings in the United States and the foreign demand for outside capital for economic reconstruction and currency stabilization, general economic development, and, unfortunately, other less productive or necessary purposes.

4. Outflow of capital and export of merchandise were often directly related as counterparts of the same transactions. Far more important were the effects produced by the disbursement of American capital abroad in supporting and stimulating economic activity and consumption in foreign countries at levels higher, sometimes much higher, than could have prevailed otherwise. Foreign purchases of American goods and services were thus sustained in larger volume than would have been possible in the absence of capital outflow.

5. The net outflow of long-term capital, though fluctuating rather widely, showed a strong upward trend during most of the period, reaching a maximum in 1927-28. The year-to-year variations were apparently closely related to changes in domestic business conditions, the outflow tending to decrease in good years and increase in bad years.

6. Fluctuations in the balance on current account and in the net outflow of long-term capital, both influenced largely by

changes in economic activity in the United States, therefore tended to offset each other and prevent the development of severe and protracted strains during the greater part of the period.

7. The offsetting relationship between variations in the current account and in the capital account, however, was far from perfect, changes in the latter being of much greater amplitude. In 1923 the net outflow of long-term capital fell to negligible amounts, but thereafter it rose somewhat irregularly and in 1926 and 1927 yielded a considerable excess over net receipts on current transactions. The ease thereby produced in the international exchange mechanism in those years was sharply reversed in 1928 and 1929, when a severe fall in net outflow of long-term capital far outweighed changes in the balance on current account.

The last point brings out the chief structural weakness in the balance-of-payments position of the United States during the 1922-29 period: namely, the dependence upon the behavior of a highly unstable factor—outflow of long-term capital—for the maintenance of a satisfactory balance between the supply and use of dollars. As has been noted, receipts and payments on merchandise trade and other current items are not ordinarily subject to sharp fluctuations, in the aggregate, except in keeping with changes in basic economic conditions. While during the twenties economic conditions also appeared to exercise a more or less systematic influence on long-term capital movements, the latter were inherently less stable and, under the circumstances described, constituted a particularly unreliable source of dollars.

It is perhaps a rather obvious conclusion that the international position of the United States in the twenties would have been much sounder if American investments abroad, especially flotation of foreign dollar bonds, had been undertaken with great caution and more continuity and if the total volume of dollars supplied had consisted somewhat less of capital funds and more of payments for goods and services. A smaller but more regular outflow of capital would have required attitudes and practices quite different from those that actually prevailed—more self-discipline by the various elements making up the capital market, the exercise of official restraints to rule out obvious excesses in loan flotations, and, if necessary, active participation by governmental institutions with a view to regularizing the flow of funds and preventing the development of severe strains and deflationary pressure. A more conservative investment policy necessarily would have meant a lower level of exports, unless imports had been permitted in larger volume than was possible under the high-tariff policy of the United States.

The dangers inherent in the structural instability of the United States balance of payments during the twenties were accompanied and aggravated by an unfortunate distribution of balance-of-payments strength and weakness among other countries, the most critical point being the pressure on the United Kingdom resulting from overvaluation of the pound. After the difficulties in the way of internal deflation in the United Kingdom were intensified by the weakening of the world price structure and by undervaluation of the franc, the wiser

course might well have been to reduce the gold parity of the pound. Such a devaluation would have permitted an expansionist credit policy and encouraged a rise in British production.

Under the circumstances that developed in the late twenties, maintenance of international and, hence, national stability would have required that central banking policy in the United States seek to mitigate insofar as possible the abrupt fall in the outflow of long-term capital and at least to avoid, except for the most compelling reasons, any action susceptible of adding to deflationary pressure. The restrictive credit policy followed by the Federal Reserve Board in 1928 and 1929 must be regarded as doubly unfortunate inasmuch as it was diametrically opposed to these objectives and was of very doubtful necessity in the interest of domestic economic stability more narrowly considered.

A final question concerns the connection between the strains arising in the balance-of-payments relations of the United States with other countries during the late twenties and the world-wide decline in economic activity which constituted the great depression. The curtailment of American lending and the increased flow of foreign capital to the United States with the concomitant general rise in interest rates undoubtedly exercised a powerful deflationary impact on foreign countries and in turn reacted unfavorably on the domestic business situation. But too many elements of disturbance and instability were present in the world economy to permit ready allocation of major responsibility to the decline in capital outflow alone. The break in business in the United States in particular must be attributed primarily to internal factors, with the final shock administered by the collapse of the stock market in October 1929.

The basic question, however, is not so much what particular disturbances were immediately responsible for the downturn in economic activity, but rather what caused the depression to be so severe and prolonged with such devastating effects on the world economic system. Here the essential points relating to the behavior of the United States balance of payments during the twenties as a causal factor in the depression of the thirties are: (1) The levels of income and production at home and abroad had become adjusted to an unequal exchange of goods and services offset by an outflow of capital from the United States; (2) especially in view of the lending excesses which had gone before, this outflow of capital could not continue in the face of any serious impairment in confidence and business prospects; and, hence, (3) a general recession in world economic activity was bound to cause a particularly severe decline in the supply of dollars and to necessitate difficult and disturbing readjustments in balance-of-payments relationships. These developments during the great depression are traced in the following section covering the years 1930 through 1933.

THE GREAT DEPRESSION, 1930-33

Fall in World Production and Trade

The years 1930 to 1933 constitute a period of transition during which the international trade and financial relations of the United States underwent a striking transformation under the impact of the great depression. However obscure the causes may have been, the general

effects of the depression on economic activity throughout the world were abundantly clear. Industrial output declined abruptly, the index of industrial production for all countries (excluding the U. S. S. R.) falling from 100 in 1929 to 87 in 1930, to 75 in 1931, and to a low of 64 in 1932.²⁴ Prices of industrial products, after stubborn resistance, also declined substantially. The effects on primary production, particularly agricultural, were expressed not so much in curtailed output as in an accentuation of the secular decline in prices and growth of unused stocks. Total stocks of primary commodities, according to the League of Nations world index, had risen by 30 percent from 1925 to 1929 and grew by another 23 percent to the middle of 1932.²⁵

Reflecting the combined influence of dwindling industrial output and falling prices in general, national incomes at home and abroad declined drastically. Business anticipations, after reluctantly abandoning early false hopes of a brief and mild recession, gave way to deepening gloom.

The physical volume of world trade was fairly well maintained in foodstuffs and raw materials, which declined by only 11 and 18.5 percent, respectively, from 1929 to 1932, but the quantity of manufactured products decreased by more than 40 percent. In terms of dollars, the fall in world trade was swift and deep, from 100 in 1929 to 81 in 1930, 58 in 1931, and 39 in 1932. To be sure, part of this decline, particularly after September 1931, reflected the depreciation of the exchange values of foreign currencies vis-à-vis the dollar; but for a world indebted to the United States in terms of its own currency, the measure is pertinent. As was inevitable under such circumstances, the pressure on debtor countries, as well as on internal debt structures, became intolerable, producing widespread defaults and serious credit and monetary disturbances.

Especial Severity of the Depression in the United States

The strains produced by the depression would have been severe in any event, but they were enormously aggravated by the disproportionately heavy fall in business activity in this country. It has indeed been asserted that the depression was essentially of United States origin. While the initial causes of the depression were too complex for any such ready allocation of responsibility, the charge has much to support it in that the American economy responded to the original disturbances with especial severity and thereafter appeared to be the chief drag on world recovery. The disparity was of the greatest significance in the evolution of the United States balance of payments after 1929 and exercised a powerful influence on world economic, financial, and commercial history in the thirties.

The foregoing reference to the greater severity of the depression in the United States is based solely on the extent of decline from the peak year 1929. Whether or not the depression was absolutely more severe in the United States than in other countries is a different and more doubtful matter. Many foreign peoples probably suffered more acutely because of their initially lower living standards. With respect to the influence on variations in international transactions, however, it is the degree of change in basic economic activity, and not the absolute level, that is of primary concern. On this point,

²⁴ League of Nations. *World Production and Prices, 1938-39*. 1939. P. 103.

²⁵ *Ibid.* P. 101.

the evidence is clear that economic activity declined more swiftly after 1929 and fell to a lower level in the United States than in foreign countries as a group. This is shown by the annual data on industrial production at home and abroad plotted in chart 2 (chapter I). As reflected in monthly figures,²⁶ production both in this country and abroad began to level off in the middle of 1929 and to fall in the last quarter. By the final quarter of 1930 it was 26 percent below the 1929 average in the United States as compared with a decline of some 13 percent abroad, and by the last quarter of 1931 the decrease from 1929 was about 40 and 21 percent, respectively.

The low points were reached in the summer of 1932. In the 3-month period from June through August industrial production in the United States was off by 51 percent as compared with the 1929 level, whereas output abroad had fallen by some 31 percent. Then came an upturn in the autumn, which proved to be a definite revival in foreign countries but which was interrupted in the United States by a renewed decline at the end of the year. It was not until the second quarter of 1933 that production in this country again turned strongly upward.

Although the sharper fall in industrial production in the United States than abroad is a valid and basic consideration for purposes of this study, to speak of the trend in foreign countries as a group is a broad generalization—one which became increasingly unreal in later years as wide divergences appeared. The two major areas where industry was most depressed were (1) the United States and Canada and (2) Germany and several smaller neighboring countries, particularly Austria, Czecho-Slovakia, and Poland. Even in these other countries, however, the decline in industrial production was not as precipitous as in the United States. The heaviest stage of the depression in Germany and other Central European countries did not set in until after external pressure on their banking and monetary structures had become irresistible. In most other industrial nations the decline in production did not exceed 20 percent on the average during the worst year, and in some countries, notably the Scandinavian, it was far less.

Much the same relative trends are revealed by a comparison of the various national income series plotted in charts 5, 12, 13-A, 13-B, and 13-C, chapter II.

Collapse of Trade and Service Transactions

The downturn in domestic business in the fall of 1929 was immediately followed by a sudden and prolonged drop in United States purchases from other countries. From a total of \$4,400,000,000 in 1929, imports fell more than \$1,300,000,000 in 1930 and an additional \$1,000,000,000 in the following year. It was not until 1933 that a slow and labored increase began. The physical volume of imports followed, as usual, a course closely paralleling the decline in industrial production, but the fall in total value was accentuated by the exceptional weakness of prices of raw materials, which made up such a large proportion of the aggregate.

Part of the decline in imports was undoubtedly caused by the new and heavier duties embodied in the tariff of 1930, but how large a

²⁶ Monthly data on industrial production in the United States are taken from: Federal Reserve Bulletin August 1940. Pp. 764X765. The data for foreign countries are from: Wall, Norman J. Monthly Index of World Industrial Production 1920-1935. U. S. Dept. Agriculture Prelim. Rept. 1936. Supplementary tables. (Processed.)

part is difficult to say. Several general facts suggest that the restrictive effect of the new duties was relatively far less than that of the depression. For one thing, the fall in quantity of imports was somewhat less than that of industrial production. Moreover, the drop in imports subjected to heavier duties was not impressively greater than that in other commodities. Nevertheless, the unfortunate consequences of this additional barrier to trade at a time when foreign countries were already undergoing a heavy loss of gold to the United States should not be minimized.

The decline in United States exports started earlier than the decline in imports and proceeded somewhat more gradually in the early stages of the depression. Because of the larger totals involved, however, the absolute decline of \$1,400,000,000 in 1930 was slightly greater than that in imports, reducing the export surplus to \$782,000,000, as compared with \$842,000,000 in 1929. Further sharp declines in exports of \$1,400,000,000 in 1931 and \$800,000,000 in 1932 reduced the surplus to less than \$300,000,000 in the latter year.

The reaction of exports to the depression was similar to that of imports in certain respects. Shipments of crude materials, including the important item of cotton, were well maintained on a quantity basis, falling by only 5 percent from 1929 to 1931 and increasing slightly above the 1929 level in 1932. But prices sagged as sharply as those of similar import classes and were chiefly responsible for the fall of more than \$600,000,000 in the value of crude material exports from 1929 to 1932. The greater part of the decline in exports was in finished manufactures, which fell by 75 percent, or more than \$1,900,000,000 from 1929 to 1932, and was far more the result of smaller quantities than of lower prices. This behavior, at least in the early stages of the depression, can be explained largely by the high income elasticity of demand for many leading export manufactures, but also by the resistance to price declines manifested by finished goods. Later, however, depreciation of foreign currencies and restrictive commercial policies abroad became increasingly strong barriers to United States exports. These developments will be traced subsequently.

Initially, service transactions appear to have resisted the depression much more strongly than merchandise trade. Whereas from 1929 to 1930 exports fell by 27 percent and imports by 30 percent, both receipts and payments on all other current transactions fell by only 10 percent. This difference is attributable to various special factors affecting service transactions: The resistance of ocean freight rates to adjustment; the expectation of the traveling public that only a brief slump was in prospect; and, of particular importance in receipts from abroad, the contractual nature of interest on international indebtedness. By 1931, when interest obligations began to be broken through default, the fall in service transactions became almost as precipitous as that in merchandise trade.

Cessation of American Lending

For a brief time after the collapse of the stock market in October 1929 a revival in the outflow of American capital seemed possible. An undue interest in speculative stocks had been a major force interfering with bond flotations, and the end of the boom tended to render conditions more favorable for such issues. Both domestic and foreign bond flotations in the American market showed definite signs of re-

vival in the first half of 1930. Domestic corporate issues were higher in the first and second quarters, in fact, than at any time in the twenties. Foreign dollar issues did not recover so sharply but moved well above the 1929 low. There was thus some basis for hope that a renewal of American lending might help to reverse the unfavorable turn in world business conditions.

Such hopes were quickly disappointed. Any benefits that may have ensued from the small upturn in new foreign flotations were quickly submerged by the rising tide of the depression. The discouragement to further lending was reinforced by strong political disturbances and uncertainties in Latin America and Europe, and by the second half of 1930 new foreign flotations began a swift decline from which they never recovered. The sharpness of the fall in long-term issues was tempered somewhat by a continued outflow of American short-term funds. This outflow, however, was on a lower scale than in previous years, and much of it consisted of special credit arrangements improvised in an effort to bolster the reserve positions of other countries.

Provision of American capital in the form of direct investments abroad also declined precipitously after 1929. This outflow is estimated at not more than \$300,000,000 in 1930, or at about half the 1929 rate, and further declined to near the \$200,000,000 level in 1931. Thereafter new investments of this type sank to insignificant amounts.

The brief upturn in foreign-bond flotations in the first half of 1930 accounted for a slight increase in net outflow of long-term capital to approximately \$300,000,000 for the year. Thereafter the net movement was sharply reversed as new American investment abroad declined while the inflow of foreign long-term capital continued. The larger part of the inflow was, more accurately, the return flow of American money previously placed abroad. This consisted in part of contractual amortization payments on foreign dollar bonds, which in 1930 amounted to some \$300,000,000 but subsequently declined with the beginning of a wave of defaults. In addition, there was heavy repatriation of outstanding foreign securities as buyers abroad, who had concentrated on American stocks during the boom of 1928 and 1929, turned their interest chiefly to repurchases of foreign issues.

World Shortage of Dollars

The fall in purchases of foreign goods and services and the virtually complete cessation in new investment abroad resulted in an extraordinarily rapid and severe shrinkage in the supply of dollars currently made available to foreign countries. As indicated by table II, the amount of dollars paid out or transferred in this manner dropped from a level of about \$7,400,000,000 for the 3 years 1927 to 1929 to a mere \$2,400,000,000 in 1932 and 1933—a reduction of 68 percent over a span of only 3 years.

This drastic decline in United States purchases from foreign countries and in the world supply of dollars must rank as one of the most severe disturbances to the world economy during the period, directly depressing business activity abroad and producing foreign-exchange problems of unparalleled dimensions. This does not imply that the origin of the world depression was exclusively or chiefly in the United States and that the behavior of foreign economies was merely a passive and forced reaction. Unfavorable economic and political conditions abroad, superimposed on the already over-bor-

rowed position of many countries, presented a grave deterrent and ultimately a prohibitive barrier to further investment of American capital. Moreover, it would be difficult to divide responsibility between this and other countries for the disastrous fall in prices, particularly of primary goods, which were an important element in the decline in value of imports. Finally, the depression and other disturbances abroad in turn reacted most unfavorably on business activity in the United States.

In a study of these complex relationships, attention might first be centered on the shrinkage in foreign payments to the United States as the disturbing element and then directed to the effects on the domestic economy. In fact, however, the abrupt fall in dollars supplied was by far the more active disturbance, and conditions in the United States were primarily responsible for the decline, at least with respect to current transactions. The principal considerations supporting this conclusion may be summarized as follows:

1. The curtailment and eventual stoppage of the outflow of American capital, which had accounted for 20 percent of the total supply of dollars in 1927 and 1928 and 14 percent in 1929, was alone sufficient to create serious problems of readjustment.

2. The decline in economic activity in the United States was sharper and deeper and revival was longer delayed than in foreign countries, which, in conjunction with the new tariff of 1930, produced a particularly severe and prolonged decline in United States imports.

3. Fixed payments due the United States for service on war debts and foreign dollar bonds aggregated about \$900,000,000 in 1929, and the contractual amounts due in years immediately following were probably of about the same magnitude. The volume of dollars supplied foreign countries and available for other purposes, if these obligations were to have been met in full, declined from \$6,500,000,000 in 1929 to \$1,500,000,000 in 1932—a fall of 77 percent in 3 years.²⁷

4. With few exceptions, foreign currencies were under pressure vis-a-vis the dollar throughout the greater part of the depression—a position leading to a steady drain of gold and exchange reserves of foreign countries to the United States. By contrast, the dollar was under pressure only during brief periods (specifically during the several months following the United Kingdom's departure from the gold standard and again for a short time before, and in anticipation of, the depreciation of the dollar). Moreover, this pressure emanated from an outflow of short-term capital, which produced a temporary but heavy exodus of gold from the United States, rather than from the position on current and long-term capital account. The movements of short-term funds and gold, traced in detail in chapters III and IV, were partly offsetting, but the prevailing condition is indicated by the fact that the net reduction in foreign gold reserves and dollar balances through payments to the United States and through liquidation of American short-term

²⁷ Cf. table 1, in Summary and Recommendations.

credits was in the order of \$2,600,000,000 during the 4 years 1930-33.

5. Finally, the pressure generated by the shortage of dollars was reflected in the reactions of foreign countries to the resulting strains in their balance-of-payments positions.

Adjustments to Shortage of Dollars

Foreign countries endeavored in several ways to make the necessary and inevitable adjustments to the decreasing supply of dollars. They could meet the excess of their dollar requirements over the currently accruing supply in part by drawing on their previously accumulated gold stocks and dollar balances or by borrowing dollar funds from American sources. They were limited, however, in the use of their gold and dollar reserves by the amounts on hand and by the inability and unwillingness of the authorities to exhaust them under the minimum reserve requirements of the various national monetary systems. Recourse to borrowing in the United States was also limited by the extent to which American banks would respond to the foreign demand for funds and by the extent to which foreign and American authorities were willing to enter into special financial arrangements.

In fact, the extension of new dollar credits soon ceased and previous credits were rapidly liquidated, while, as mentioned above, foreign countries were subjected to heavy losses from their reserves. Covering the excess of foreign dollar requirements in these ways was therefore at best only a temporary expedient suitable for tiding over short-run and relatively small deficiencies. Adjustment to strains as prolonged and severe as those that developed during the great depression required sterner measures capable of curtailing foreign dollar requirements to a level consistent with the reduced supply. There were six principal methods by which this reduction in foreign dollar requirements might be accomplished:

1. By deflation of foreign incomes and depression of foreign business activity, thereby decreasing the demand for goods and services in general as well as for American goods and services.

2. By a general increase in the tariffs of foreign countries, which would cut down their total imports, including imports from the United States. Within limits, such action could be taken in some countries without necessarily curtailing domestic business activity to a like extent and would definitely stimulate their local industries, at least in specific lines, to produce commodities previously obtained abroad.

3. By the establishment of preferential tariff systems among groups of foreign countries designed to divert their external purchases away from the United States and foster trade with each other.

4. By obtaining concessions or defaulting on their debt-service obligations to the United States.

5. By depreciation of foreign currencies, which would entail a consequent increase in the cost of the dollar on the exchange market and discourage purchases from the United States. (For reasons related to the inelasticity of United States import demand, a cut in the cost of foreign currencies could not be expected to induce a higher dollar volume of imports into this

country, but rather to reduce it and thus place a still heavier burden of contraction on United States exports.)

6. By direct intervention of foreign governmental authorities in the trade and foreign exchange mechanism through institution of licensing systems for import and exchange transactions, thereby forcibly reducing purchases from the United States.

Of these major possibilities of adjustment, only the first two were consistent with the principles of the world trade and financial system as it was generally understood and accepted at the time the depression began. Moreover, the second conflicted with the spirit of the system, although general tariff increases were commonplace in recent commercial history and beyond question were strongly sanctioned by American policy. Preferential tariff treatment, however, was in violation of the most-favored-nation principle, which had won fairly wide acceptance and was energetically supported by the United States.

Reductions in debt-service obligations to the United States were a possible form of relief for some countries, but such relief was obviously limited and could be obtained only at the cost of an impairment of their international credit standing. Depreciation of the currency, while regarded as one of the prerogatives of national sovereignty, involved at least a change of established parities and, unless immediately followed by revaluation at a lower level, a departure from the international gold standard. Direct trade and exchange control constituted the most violent change of all from the principles of *laissez faire* and free enterprise, which the leading commercial countries had endeavored to maintain and respect in considerable measure and to which they at least rendered lip service.

The reluctance to resort to the extreme measure of exchange control prevented foreign countries from obtaining the relief that might have been achieved by reducing or eliminating the flow of foreign capital to the United States—specifically, by cutting down on purchases from this country of outstanding foreign and domestic securities. Net foreign purchases of such securities had averaged more than \$400,000,000 in 1928 and 1929, and, in principle, a considerable saving in the use of dollars could have been effected at this point. These purchases, however, represented the sum total of many individual transactions and, at least initially, did not reflect the considered policy of foreign governments (although, subsequently, reprehensible practices developed in Germany and certain other countries in connection with repatriation at low prices of their defaulted securities from the United States). In the second place, under the conditions then prevailing, it was perhaps as logical to expect foreign buyers to increase as to decrease their security purchases, thereby aggravating instead of alleviating the shortage of dollars.

Limitations to Adjustment Through Deflation

Since deflation and, as a somewhat more dubious measure, general increases in tariffs were the only methods consonant with the financial and economic orthodoxy of the period whereby foreign countries could reduce their demand for dollars, a realistic appraisal of the requirements and limitations of adjustment along these lines is pertinent.

It has been noted that the amount of dollars currently supplied by the United States to foreign countries through purchases of goods and services and new investment abroad declined by some two-thirds from the 1927-29 level to 1932-33 and that, deducting the amount required to meet contractually fixed obligations, the flow of dollars available for other purposes fell by slightly more than three-fourths over this period.

In view of the limits on gold and short-term credit resources, foreign payments to the United States had to be reduced in keeping with the volume of dollars supplied. Since purchases of American goods and services might be expected to vary in rough correspondence with trends in the internal economic activity of foreign countries, they would have had to enforce a most rigorous deflation if the adjustment was to be made without resort to defaults and other unorthodox methods. This does not mean that the rest of the world would have had to compress incomes by such extremes as two-thirds or three-fourths. As already discussed, many leading American export items are subject to a high income elasticity of demand, rising relatively rapidly in times of business expansion and falling swiftly in times of recession, while other exports, especially agricultural goods, are particularly variable in price. With full allowance for such qualifications, however, and without any attempt at mathematical precision, the burden of adjustment imposed by the falling supply of dollars was manifestly far greater than could have been borne by deflation alone.

There are practical limits beyond which deflation cannot be carried without producing violent social disorders. Because of the high American standard of living in the late twenties, the United States was presumably able to stand a sharper depression than were other countries, yet the fall in national income from \$83,300,000,000 in 1929 to \$40,000,000,000 in 1932 was attended by grave social difficulties. Even more convincing were developments in Germany, where the sudden compression of national income by 40 percent during the same period brought on a state of near chaos which, to say the least, greatly advanced the fateful rise of the Nazi party. The unfortunate role of the United States in the international economy during this time was not, of course, directly or mainly responsible for the collapse in Germany, which was suffering from serious internal weaknesses and also from heavy financial and economic pressures by third countries. The German experience with deflation shows, however, the dangers inherent in any deflationary process that places too great a strain on economic, social, and political structures.

There are somewhat similar limits to the use of general tariff increases as a means of adjustment to balance-of-payments disturbances. Many foreign countries, far less self-sufficient than the United States, are dependent on outside sources of supply for indispensable food-stuffs and raw materials as well as manufactured goods. Since the United States is an important producer and exporter of a wide range of these goods, general increases in foreign tariffs could scarcely have accomplished the purpose of restricting purchases from the United States without at the same time literally starving and crippling foreign economies.

Even had foreign countries been able to permit or enforce more severe deflationary policies and to curtail imports more sharply, they

could not have successfully adjusted their balance of payments unless short-term capital had remained at least a neutral factor in the international situation. Sudden withdrawals of credit and flight of capital from weakened countries enormously aggravated their difficulties. These violent capital disturbances, superimposed on more basic strains, were often the immediate factor compelling resort to depreciation, exchange control, and other methods of adjustment that had been rejected earlier in the depression.

Cumulative Effects of Trade Curtailment Abroad

The course of events abroad, the accumulation of economic and financial pressure, and the methods of adjustment varied widely from country to country during the depression. The strain first became severe in primary producing countries because of the rapid acceleration of the decline in prices received for their exports and the curtailed inflow of investment capital. Argentina and Australia suspended the gold standard as early as December 1929, allowing their currencies to depreciate,²⁸ and various other primary producing countries soon followed. Among more industrialized countries, the general reaction to the fall in prices was at first an upping of tariffs in an effort to maintain as far as possible the prices received by their own farming classes.

As the depression deepened and prices and trade further declined, balance-of-payments pressures became more widely felt and drains on gold and exchange reserves became increasingly severe. In 1931 the exchange crisis developed with full intensity in Central Europe, marked especially by the withdrawal of short-term credits from Germany and the imposition of exchange control in that country in July. In the following months the short-term position of the United Kingdom rapidly grew worse, leading to suspension of the gold standard in September. The pound was followed in its fall by most of the other British Empire currencies, with a further decline against gold by those that had already depreciated, and also by the Scandinavian currencies. These currencies were, with minor variations, henceforth attached to sterling.²⁹ After approximately 1 year on the gold standard under increasingly adverse conditions attended by heavy losses of gold, Japan also depreciated in December 1931.

This phase of the depression was marked by a rapid extension of exchange control throughout most of Central and Eastern Europe and Latin America; a further raising of tariff barriers and, particularly in France and other countries which had determined not to depreciate, by direct quota limitations on imports. A notable event was the abandonment of free trade by the United Kingdom through adoption of a general tariff in March 1932. This action was followed a few months later by the Ottawa agreements for preferential tariff arrangements favoring trade within the British Empire. During the latter part of 1931 and early 1932 there also began a wave of defaults on external debts, including a substantial part of the dollar

²⁸ The Uruguayan peso had begun to fall in the spring of 1929 but was not heavily depreciated until after the Government formally abandoned the gold standard near the end of the year.

²⁹ The Canadian dollar depreciated less than the pound and was held stable with the United States dollar after the latter was revalued in January 1934. The South African pound did not depreciate until the end of 1932 and was thereafter linked to the pound sterling.

bonds floated by Latin American and many other countries. Following the Hoover moratorium, the close of 1931 likewise brought the beginning of the end of war-debt and reparations payments.

Although the basic disturbance generated by the drastic reduction in dollar payments to a world heavily indebted to the United States could scarcely be overstated, it would be erroneous to suppose that the various measures taken by foreign countries along the lines outlined were directly and consciously prompted in all or most instances by the shortage of dollars. In the early stages of the depression, tariff increases and exchange depreciation were undertaken largely in an effort to counteract or mitigate the effects of the fall in prices, to which, of course, the swift decline in business activity in the United States and the reduction in capital outflow were powerful contributing factors.

As losses of gold and exchange reserves to the United States and other strong balance-of-payments countries assumed increasingly critical proportions, the defensive measures taken by individual countries were for the most part of general applicability, frequently accentuated by protectionist and nationalistic interests beyond the actual necessities of the moment, and thus tended constantly to enlarge the area of pressure and restriction. In brief, the disturbing effects of the decline in dollars supplied by the United States became inextricably merged with the whole interplay of restrictive forces intensifying the downward course of world trade during the depression. A case in point is afforded by the tariff adopted by the United Kingdom in 1932, which happened to bear with particular severity on its imports from Germany and led to retaliatory measures by the latter.

The cumulative effects of trade and exchange restrictions abroad quickly reduced international commerce far below the corresponding level of internal activity in the various national economies and produced a state of near-strangulation for countries heavily dependent on imports and exports. Few countries, however, possessed either the economic and financial strength or the disposition to reverse these trends and reopen the channels of trade by unilateral action. Under the circumstances it was inevitable that a more direct approach to the problem should have been taken by pairs and groups of countries, able and willing to trade with each other, without opening their commercial and financial systems to unsupportably heavy one-sided payments to other countries. The forms assumed by these arrangements were many and varied. Especially noteworthy was the network of bilateral clearing and compensation agreements which, beginning in late 1931, rapidly spread over most of Europe and the Near East and came to be most vigorously exploited by Germany in its relations with smaller countries. Less narrowly bilateral and less complicated in their provisions were the preferential tariff arrangements made within groups of countries, among which the Ottawa agreements were of greatest scope and importance.

These various bilateral and plurilateral arrangements, although contrary to the spirit and frequently to the letter of the most-favored-nation clause, were founded on the practical consideration summed up in the phrase "Buy from those who buy from us." They caused trade to move along new and far more costly channels and would have been the antithesis of reason under a smoothly functioning multilateral

trading system, but under the circumstances prevailing they succeeded in averting complete stagnation. While these exclusive and preferential arrangements were not necessarily directed against the United States in particular but rather emerged from the general chaos into which international exchanges had fallen, an inevitable consequence was a relative decline in foreign-country imports from the United States as compared with their total trade and a narrowing of the gap between dollars supplied and dollars used.

Failure of International Efforts to Revive Trade

Restoration of world trade along broader lines permitting greater freedom and international competition would have required, as its first and most indispensable condition, prompt and vigorous economic revival in the United States and, beyond that, concerted effort by all major nations to combat depression, modify trade barriers, and restore a more normal flow of capital. The most ambitious attempt along international lines was the World Monetary and Economic Conference, which met in London in June and July 1933, under the auspices of the League of Nations. The United States has been widely credited, both at home and abroad, with responsibility for the failure of the conference to achieve any significant results, first, by undertaking a policy of deliberate depreciation of the dollar only a few weeks before the conference was scheduled to convene, and, secondly, by refusing to enter into any engagements at the conference for the prompt restoration of exchange stability.

It is undoubtedly true that there was nothing in the balance-of-payments position of the United States compelling depreciation of the dollar, and, except for this development, certain agreements in the international sphere might have been formulated and generally accepted. As far as any action susceptible of genuinely ameliorative effects was concerned, however, there is good reason to consider that the conference was foredoomed to failure. The preliminary proposals and the speeches of the various delegates show an overwhelming preoccupation with superficial effects rather than basic causes. Attention was directed toward restoration of the gold standard and elimination of trade and exchange barriers by direct action rather than by a common effort to combat the disruptions and disequilibria primarily responsible for these conditions. What may be regarded as the final judgment of the League of Nations' experts on the international efforts made at that time is expressed in the recent volume "Commercial Policy in the Interwar Period: International Proposals and National Policies":³⁰

* * * At the beginning of the depression there was a quite inadequate knowledge of the concerted measures between countries, or even within each country, by which recovery from a major depression might be brought about. * * * The proposals put forward with international authority for maintaining some measure of freedom in trade relations were directed rather against one of the secondary effects of the depression, namely the drift towards isolationism, than against the depression itself. And when constructive proposals for restoring economic activity—for instance, the cheap money policy recommended by the London Conference Preparatory Committee—were made, agreement on them could not be reached.

There was indeed in those early days no plan for concerted action to relieve the depression; the machinery for executing a plan, had there been one, was

³⁰ League of Nations, 1942, pp. 144-147.

embryonic; there was no accepted corpus of doctrines for national action. *Sauve qui peut*.

The momentum of the depression was such that it could only have been arrested by courageous and constructive policies carefully timed and unhesitatingly applied by at least the major industrial countries acting in unison * * *.

The breakdown of the Monetary and Economic Conference of 1933 (when some constructive proposals were put forward) was of fateful consequence for the subsequent course of economic policies. The world's hopes of finding a basis on which international trade could be revived were turned to that Conference. The very magnitude of those hopes served to enhance the psychological effect of the Conference's failure, which helped to confirm every country in the belief that it must solve its depression problems and plan for recovery itself, as best it could. But while recognizing the adverse psychological effects of that failure, it remains of course true that neither currency measures alone (in the narrow sense of that term) nor the reduction of trade barriers would have sufficed to restore economic activity or to put the international financial mechanism into working order. Indeed, no proposals which failed to deal with, for instance, the problem of short-term capital movements and the breakdown of the world system of multilateral settlements, could have proved more than a temporary palliative. To some extent it is true to say that the disequilibria in international trade were the cause of the trade barriers rather than caused by them and that to deal with the barriers alone would have meant mistaking effect for cause.

The shortcomings in the international efforts to revive world trade were largely those mentioned by the President in his famous message to the London Conference announcing this country's refusal to enter into an agreement for currency exchange stabilization.

Effects of Dollar Depreciation

As to the actual effects of the depreciation of the dollar during 1933 and its stabilization in January 1934 at about 59 percent of the old gold parity, formulation of any definite judgment is singularly difficult. Currency depreciation is usually assumed to promote exports and retard imports. Inasmuch as the volume of dollars supplied by the United States had been chronically less than the volume used in payments to this country, even after depreciation of the pound and many other currencies, reduction in the exchange value of the dollar might appear to have aggravated the shortage of dollars. This result appears, at first glance, to be borne out by the trade figures for 1934, which show a much stronger rise in exports than imports and a consequent increase in the export surplus by some \$250,000,000 over 1933. There had already been a substantial depreciation in 1933, however, and the export surplus in that year was slightly smaller than in 1932. The explanation lies partly in the fact that while the dollar was depreciating and up to the time of stabilization importers tended to build their stocks in anticipation of still higher costs for foreign goods, whereas foreign buyers of American exports tended to postpone their purchases until the dollar had reached its lowest point. The temporary character of these influences may help to explain also why the export surplus was again reduced in 1935. Behind the movements in the trade totals during these years, however, trade in different commodities or with different countries followed confusingly varied courses.

Exports of manufactures and semimanufactures, which had fallen sharply through 1932, appeared to respond vigorously to the stimulus afforded by depreciation. Dollar prices of these goods had declined less than those of other products and after depreciation increased little or only moderately. They thus became more attractive to foreign buyers, and physical quantities and aggregate dollar values of exports

of manufactures and semimanufactures began a steady increase. Exports of crude materials and crude and manufactured foodstuffs behaved quite differently. Whatever increase there was in total dollar value of these exports was distinctly a price phenomenon, since physical quantities were sharply reduced on the whole. The competitive benefits conferred by depreciation apparently were more than offset by the increase in prices of agricultural goods under the domestic recovery program.

The influence of depreciation on exports was also narrowly confined by the network of trade restrictions and controls abroad, which were generally tightened, and by the further depreciation of many foreign currencies, especially those of Latin American countries. The dollar was at a small discount below its predepression relation with the pound sterling, however, and was some 40 percent below its old ratio to the currencies of France, the Netherlands, Belgium, Switzerland, Italy, and other countries which banded together in an effort to maintain their gold parities. After depreciation, exports to the members of the gold bloc at first rose more sharply than those to other countries, as might have been expected, but the increases were soon nullified by counteractive measures in the gold-standard countries. That the stimulus to exports was thus contained does not demonstrate that the dollar was not undervalued but only that foreign countries were able largely to offset the effects in one way or another. There can be little doubt that the dollar was undervalued with respect to the gold-bloc currencies in particular and that the deflationary pressure on the gold-bloc countries was thereby greatly increased; but in view of the widespread depreciation that had already occurred elsewhere, it is more correct to say that these currencies were overvalued with respect to those of the rest of the world in general, including the dollar.

With respect to imports, depreciation of the dollar probably did not have the retarding effects that might have been expected on more general *a priori* grounds. In the first place, the unresponsiveness of United States import demand to changes in price must be taken into account as noted in chapter II; imports consist predominantly of essential raw materials and foodstuffs and price changes exercise relatively little influence in the aggregate on the total quantities purchased. To the extent, apparently substantial, that depreciation of the dollar tended to raise dollar prices of these goods rather than lower prices in foreign currencies to the producer, the depreciation of the dollar resulted in a larger rather than a smaller aggregate volume of dollar payments to other countries. A second important consideration is the relationship between depreciation and domestic recovery. Whether the decline in the dollar was a necessary condition for business revival in the United States is a matter that cannot be decisively proved or disproved, but it undoubtedly did facilitate a sorely needed price reflation even though the effects abroad may have been temporarily deflationary. Under the circumstances that have been described, nothing was more essential to world recovery than an upturn in economic activity in the United States.

Summary of Experience, 1930-33

The principal conclusion that may be drawn from the foregoing survey of the international transactions of the United States during

the great depression is simple and obvious: Whatever may have been the other factors contributing to the break-down of the world economy, an orderly and integrated international society could not be expected to survive a contraction in the supply of dollars on the scale that occurred after 1929.

The reasons for the decline, although by no means exclusively internal, resided largely in (1) the exceptionally severe decline in business activity in the United States, with effects on imports accentuated by an ill-considered and ill-timed increase in the tariff and (2) the misguided international investment practices of the preceding decade, which had created a particularly vulnerable dependence abroad on an outflow of capital from the United States.

Gold and short-term funds could serve as temporary stopgaps, as they did under more normal conditions, but they were wholly inadequate to offset an imbalance of such magnitude as developed during the depression. Deflation, the prescribed method of adjustment under the gold standard to balance-of-payments pressure, would have had to be pushed to an intolerable degree in foreign countries to bring their use of dollars into balance with the curtailed amount supplied.

It was inevitable that many foreign countries should have ceased to depend on internal contraction as a means of adjustment to external pressure, left the gold standard, and embarked on programs of domestic expansion. And it was also inevitable that most of them should have resorted to additional and more direct measures of curtailing imports and that these measures should have fallen with particular severity on imports from the United States in order to redress the balance. Under these conditions many approaches to the problem aimed at immediate restoration of the international gold standard and removal of trade restrictions and discrimination were more concerned with the outward manifestations than with the basic causes of disorder.

READJUSTMENTS AND NEW DISTURBANCES, 1934-39

Following the revival that started in most countries in 1932-33, world economic activity again moved strongly upward, although, broadly expressed, the subsequent expansion did little more than restore in a very uncertain and unequal way the level of output attained before the great depression. World industrial production, as measured by the League of Nations index (1929=100), had fallen to 63.8 in 1932 but recovered to 77.7 in 1934 and thereafter advanced swiftly to 103.7 in 1937, or to a point slightly above the predepression level.³¹ The recession beginning in late 1937, however, brought an 11-point reduction in the index for 1938, from which there was only an incomplete recovery by the beginning of the war in 1939. Primary production, of course, had not declined in keeping with the collapse of industry in the early thirties, nor did it rise so spectacularly in later years. But economic conditions in primary producing countries, through changes in prices and unsold stocks, were strongly affected by changes in the principal consuming markets in industrial areas.

³¹ Series used excludes the U. S. S. R. The League of Nations index including the U. S. S. R. shows a rise of 19.4 percent from 1929 to 1937.

The upswing in world economic activity during the thirties, however, was very unlike that in the first decade after World War I. Some of the basic differences of particular relevance to the international position of the United States may be briefly noted.

Disintegration of the World Economy

Developments after the great depression were characterized, for one thing, by far greater disparities in the trends and levels of economic activity in various countries than was true of the twenties. In the earlier period, as previously discussed, production and incomes increased throughout most of the world, even though fairly wide differences prevailed in the rates of expansion. In the latter period any semblance of uniformity over the world at large was lost. Most countries, of course, achieved at least some advance from the low points reached during the depression, but the extent and timing of recovery varied enormously. The resulting disparities stand out clearly in table 16, which shows for various countries the percentage change from 1929 to 1935-38 in industrial production, national income, and, for purposes of comparison with the other series, cost of living. The countries included in the table are in five groups, four of which are based on currency relationships, although in each country there were numerous other significant and sometimes more important factors. Germany and Japan, however, are grouped because of their most important feature in common—the concentration of their economic endeavors in preparation for war. Italy is also included with the latter two countries, although it was one of the original members of the gold bloc and might have been placed in that group.

TABLE 16.—*Economic Conditions in Selected Countries, 1935 to 1938 as Compared with 1929*

[Percentage change from 1929]

Country	Physical volume of industrial production				National income				Cost of living			
	1935	1936	1937	1938	1935	1936	1937	1938	1935	1936	1937	1938
Sterling-bloc countries:												
United Kingdom.....	+5.6	+15.8	+23.6	+15.5	+5.5	+12.1	+20.9	+14.5	-12.8	-10.4	-6.1	-4.9
Sweden.....	+23.0	+35.0	+49.0	+46.0	+2.5	+10.1	+24.2	+29.4	-8.2	-7.1	-4.7	-2.2
Norway.....	+7.6	+18.2	+29.6	+29.1	-7.4	+6.4	+21.2	+32.9	-9.0	-6.6	-1	+3.1
Denmark.....	+25.0	+30.0	+36.0	+36.0	+9.5	+13.5	+18.9	+24.3	-6	+9	+4.5	+6.0
Finland.....	+22.0	+39.0	+55.6	+55.6	+2.7	+13.4	(1)	(1)	-18.6	-18.5	-14.2	-12.4
Union of South Africa.....	+44.0	+67.0	(1)	(1)	(1)	(1)	(1)	(1)	-11.8	-11.5	-9.5	-6.2
New Zealand.....	+21.0	+29.0	+20.0	(1)	+1.9	+15.5	+25.6	+45.7	-16.6	-13.9	-8.1	-5.4
Latin American paper-currency countries:												
Chile.....	+20.1	+23.9	+31.6	+36.9	(1)	(1)	(1)	(1)	+32.4	+43.6	+61.7	+68.7
Mexico.....	+6.2	+12.5	+24.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
War-economy countries:												
Germany.....	-6.0	+6.3	+17.2	+26.2	-17.8	-6.4	+3.1	+9.5	-20.0	-19.2	-18.8	-18.4
Japan.....	+40.6	+30.2	+68.9	+74.7	+24.7	+36.9	+71.8	+88.9	-16.4	-12.2	-3.9	+10.1
Italy.....	-6.2	-12.5	-4	-1.5	(1)	(1)	(1)	(1)	-23.4	-17.4	-9.3	-2.0
Gold-bloc countries:												
France.....	-26.9	-21.7	-18.1	-23.9	-30.9	-24.0	-14.9	-9.1	-13.1	-8.8	+11.3	+25.5
Netherlands.....	-9.8	-8.6	+2.8	+4.1	-26.5	-24.8	-20.2	-16.6	-18.9	-21.4	-18.2	-17.5
Belgium.....	-17.8	-13.3	-2.8	-21.3	(1)	(1)	(1)	(1)	-20.1	-15.3	-8.2	-6.2
Poland.....	-16.7	-7.5	+8.6	+18.0	(1)	(1)	(1)	(1)	-40.3	-42.3	-38.3	-39.4
Dollar countries:												
United States.....	-20.9	-6.4	+2.7	-20.0	-33.1	-22.1	-14.2	-22.9	-18.9	-18.0	-15.3	-16.7
Canada.....	-9.0	+2.0	+12.0	+1.0	-34.3	-25.6	-15.7	-17.5	-20.8	-19.1	-16.8	-15.9

¹ Not available.

² Fiscal year ended June 30.

³ Fiscal year ended March 31 of following year.

Industrial expansion was rapid, on the whole, in the countries of the sterling group and also in the two Latin American countries shown. In several of these countries, however, industry was on a new and narrow footing, so that any increase appears large on an index basis; and Denmark, New Zealand, Chile, and Mexico in particular remained more dependent on primary production than on manufacturing.

There can be no doubt, unfortunately, as to the large and steady gains made by Germany and Japan. While the impetus in both countries came from production for war purposes, their currency policies were widely divergent, Germany attempting to maintain the fiction of gold parity under rigid exchange and trade controls and Japan resorting to sharp depreciation, with substantial freedom for commercial transactions until after 1937. Italy, although also on a war footing, showed the strain of its campaigns in Ethiopia and Spain, including the effects of sanctions applied by other nations in an effort to deter the Italian Government from the former undertaking, and also the results of its experience as a member of the gold bloc.

The gold-bloc countries, which had united to defend the gold parities of their currencies after the dollar was depreciated in 1933, suffered a marked deterioration in their economic activity. The position of France was particularly weak; high internal costs and expectations of further depreciation tended to prevent any genuine recovery even after the relatively high exchange value of the franc was eventually cut in September 1936. Production also slowly revived in the Netherlands, which, however, employed deflation as a means of adjusting internal prices and costs more successfully than did France and achieved a much stronger increase in industrial output after the guilder was devalued. Belgium, because of its greater dependence on export markets, had felt the restrictive effects of currency overvaluation even more strongly than France and accordingly succumbed to the pressure to depreciate much earlier (April 1935); thereafter production increased somewhat but remained well below the 1929 level.³²

In the United States and also in Canada, whose economic activity is sharply affected by conditions in this country, industrial production rose even more strikingly than in most other countries from 1932 to the post-depression peak in 1937. Output almost doubled, in fact, over these 6 years. However, because of the extraordinary depth to which North American industrial production had fallen and the delayed upturn, which did not definitely set in until 1933, the ensuing expansion left the level of output as compared with 1929 substantially below that achieved by most other countries with the exception of those forming the gold bloc.

Increased Government Participation in Economic Life

A second important difference as compared with the world-wide economic expansion of the twenties lay in the extent to which the upturn in the thirties was dependent upon and controlled by official pol-

³² Unfortunately, no general measures of economic activity, such as national-income estimates or an index of industrial production, are available for Switzerland, which, like the Netherlands, appears to have been relatively more successful than France in meeting the situation but, nevertheless, suffered from the general handicaps common to the gold-bloc countries.

icy. This was most notably true of the war-economy countries, Germany and Japan, where the government "contribution" to the rise in production and incomes in the form of military outlays and official controls over production and consumption were dominant factors from the beginning in a strong and steady expansionist movement. While the demand emanating from these countries tended to increase production and prices of raw materials procured from other areas, notably minerals, the armaments boom did not become a decisive factor elsewhere until shortly before or after the outbreak of open hostilities in Europe in 1939.

The influence of government finance and controls was expressed in other ways, however, particularly through unemployment relief and public works. The dependence of recovery in the United States upon such measures was suggested by the recession which began in the latter part of 1937 following a sharp reduction in Federal expenditures, although various other causal factors were also at work. The United Kingdom afforded the most important exception to the general pattern, recovery in that country being founded primarily upon a heavy volume of housing construction to meet previously accumulated needs and upon other types of production for the home market. This development was greatly facilitated by the policy of easy money and credit expansion which became possible after deflationary pressure on the pound was removed. Even in the British experience, however, the hidden subsidies provided by its new tariff of 1932 should not be overlooked, and these were a factor of considerable consequence also in most other countries.

Low Level of World Trade

A third major distinguishing characteristic of the years leading up to the second World War was the failure of international trade to recover in keeping with the general expansion in most national economies. The index of physical volume of world trade as computed by the League of Nations (1929=100) had fallen to 74.5 for 1932. The rise from that point was slow and uncertain and did not carry beyond 96.5 in 1937, the year of maximum post-depression prosperity for the world in general. The following year the index fell 11 points below the 1929 level. In terms of current dollars, world trade fell in 1932 to only 39 percent of its 1929 value and thereafter recovered, at first slowly and then more quickly, to a maximum of 78 percent in 1937, followed by a fall to 68 percent the next year.³³ As measured in sterling, the index fell to 54 percent in 1932, the higher figure reflecting the earlier depreciation of the pound, but was similar to the dollar value index in later years. None of these measures is entirely satisfactory, but the general lag in world trade is clear.

A principal factor accounting for the failure of world trade to attain pre-depression levels was the crystallization of the various national recovery measures adopted during the depression. These meas-

³³ The reference is to dollars of current value in the years mentioned. Attempts to measure trade in old gold dollars are apt to be seriously misleading.

ures in general included encouragement of production for home markets and severe import restrictions, adopted both as a stimulus to internal expansion and as a means of adjustment to balance-of-payments pressure. The consequent wide gaps that developed between internal economic activity and imports in most foreign countries have already been noted in chapter II.

A second factor accounting for the relative decline in world trade was the particularly low level of United States imports during most of the thirties. As indicated in table 17, foreign countries tended in general to maintain a steadier and higher flow of imports than did the United States, despite the sharper growth in trade barriers abroad. Trade between foreign countries, excluding their imports from the United States, was maintained at a somewhat higher level still, since their commercial policies tended to divert their purchases away from the United States to other sources of supply. The behavior of United States imports was important, however, not so much because of their weight in the mere computation of the world aggregate as because of the general restrictive effects engendered by the low level of dollars supplied. These effects during the highly critical period of economic decline in the early thirties have already been examined, and the situation as it evolved in later years remains to be reviewed.

TABLE 17.—Imports of All Countries, the United States, and All Foreign Countries, 1929-38

[Indexes of value in current dollars]

Year	All countries	United States	All foreign countries		European countries		Non-European countries	
			Total	Excluding imports from United States	Total	Excluding imports from United States	Total	Excluding imports from United States
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	81.0	69.6	82.6	84.5	85.3	86.3	78.0	80.8
1931.....	58.4	47.5	59.9	62.7	64.6	66.6	51.8	54.7
1932.....	39.2	30.1	40.5	42.5	43.0	44.4	36.2	38.6
1933.....	43.3	32.9	45.0	47.6	47.5	49.1	40.6	44.5
1934.....	56.3	37.6	59.0	62.7	61.3	64.3	54.9	59.4
1935.....	57.8	46.5	59.4	62.6	60.1	62.5	58.0	62.7
1936.....	61.9	55.1	62.9	66.2	63.6	66.3	61.9	66.0
1937.....	76.9	70.1	77.9	80.8	78.4	81.3	77.1	79.7
1938.....	67.1	44.6	70.3	72.5	70.5	72.3	69.8	72.9

Changed Balance-of-Payments Structure

The international transactions of the United States in the 1934-39 period also underwent striking changes in composition and behavior as compared with the twenties. Our balance-of-payments position remained strong in that there continued to be an extremely lively demand for dollars most of the time, but otherwise it presented a very different pattern. The principal characteristics of the later period are as follows:

1. Both payments and receipts on current account rose rapidly to a peak in 1937, the increase being even faster than that ex-

perienced from 1922 to 1929, but 1938 brought a set-back from which there was only an incomplete recovery in 1939. The rise in 1934 and later years, moreover, represented only a partial revival from the low points reached during the depression, and at the maximum, current transactions remained far below the levels reached in the late twenties.

2. Receipts on current account had declined even more than payments during the depression and increased somewhat more slowly thereafter, except for a sudden rise in 1934. An excess of payments was therefore registered in the 3 years 1935-37—a sharp contrast to the balance-of-payments structure of earlier years. The subsequent decline, however, was far heavier on the payments side and produced a renewed large excess of receipts.

3. New long-term investment of American capital abroad was almost negligible (although probably understated in the estimates for direct investments) and was greatly outweighed by the withdrawal of capital previously placed abroad, chiefly through continuing amortization receipts and resale of outstanding foreign dollar bonds.

4. Foreign long-term capital continued to move into the United States in large volume, as it had during the twenties, and on occasion rose to far greater amounts than ever before. The net movement of long-term capital was therefore strongly inward as contrasted with the heavy outflows before the great depression.

5. Short-term capital also moved into the United States in great volume, the inflow of foreign-owned funds being joined to the continued repatriation of American balances abroad, which had been incompletely liquidated during the depression and had temporarily increased at the time of the flight from the dollar.

6. As a result of the foregoing factors, gold moved into the United States on an unprecedented scale, never aggregating less than \$1,000,000,000 a year and sometimes rising to far greater totals.

In terms of dollars supplied and dollars used, there continued to be a large excess of receipts over payments on current and long-term capital account, the difference rising to the billion-dollar level in 1938. For two major reasons, however, this computation is much less satisfactory as a measure of imbalance in international transactions in recent years than for earlier periods.

The first relates to the changed status of gold after general currency depreciation set in, a feature discussed in chapter IV. Although the vast shipments of gold to the United States that began in 1934 were largely passive in character, reflecting the relative strength of foreign demand for dollars, gold came to be prized not only as a medium for holding monetary reserves but also as a ready and regular means of obtaining dollar exchange. It clearly served this purpose for most

of the gold-producing countries of the Western Hemisphere, whose output—increasing from \$64,000,000 in dollars of the old parity in 1929 to \$171,000,000 in 1934 and \$283,000,000 in 1939 in new gold dollars—was chiefly marketed in the United States. Even with respect to gold originally held as monetary reserves, the attitude of foreign countries underwent considerable modification. The most extreme example was furnished by Japan, whose gold shipments to the United States, aggregating some \$580,000,000 from 1937 through 1939, came chiefly from previously accumulated stocks. These shipments reflected Japan's deliberate policy of acquiring essential industrial materials and equipment and not balance-of-payments disequilibrium in any usual sense of the term.

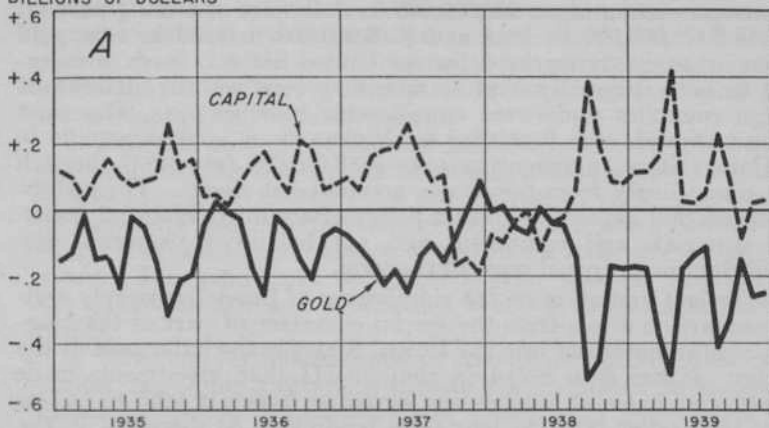
The second limitation on the significance of the dollar supply-and-use comparison arises from the special character of part of the long-term capital movement into the United States in the latter half of the thirties. It has been noted in chapter III that investments made through purchases of outstanding securities basically tend to be less stable than other types of long-term holdings. As discussed in the following section, the unstable nature of the influences underlying these transactions in recent pre-war years was especially pronounced, with the result that a substantial but indeterminable part of the capital inflow through security purchases during this period might appropriately be regarded as short-term rather than long-term.

The massive inflow of gold throughout the period and the abrupt shift in the balance on current account after 1937, together with the underlying disruption of world economic unity and the substantial degree of Government intervention, all suggest that an endeavor to find any natural or semiautomatic forces tending toward maintenance of international stability and balance during these years would be fruitless. However, this country's dealings with the greater part of the world during at least part of the period were not as unbalanced and chaotic as would appear on the surface.

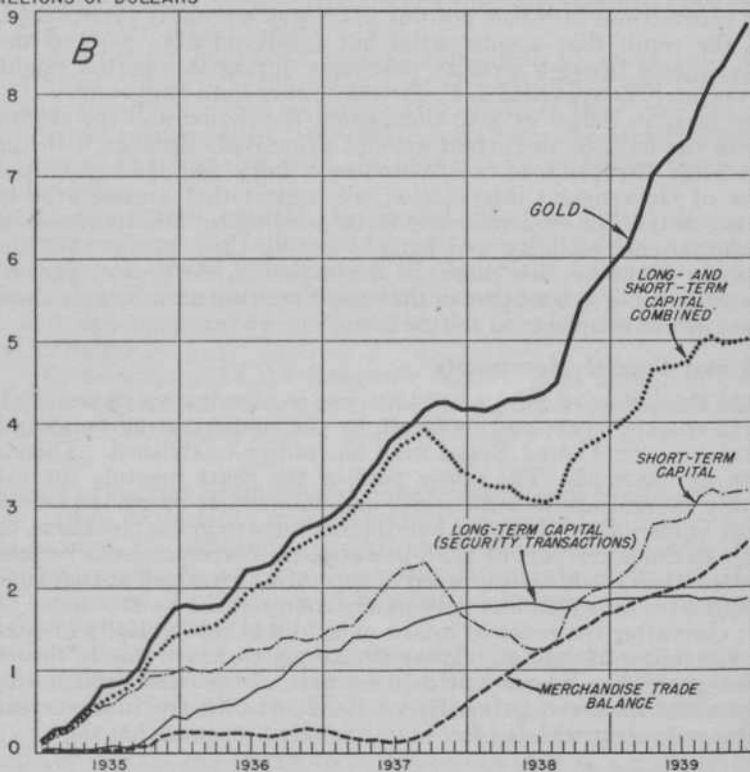
Gold and Capital Movements

That the inflow of gold after 1934 was predominately determined, both in the aggregate and in detail, by the concurrent movement of capital into the United States may be readily established. This is shown by chart 32. The upper part of the chart presents the net monthly movements in both series and shows that every important change in the inflow of capital had its counterpart in the movement of gold. In the latter part of 1937, however, the correspondence became less close when the net withdrawal of capital which began at that time and extended into 1938 was only partly compensated by an exodus of gold; thereafter the renewed inflow of gold was substantially greater than the inflow of capital. These deviations are more clearly shown by the cumulative figures in the lower part of the chart, which also indicate that they were primarily attributable to the rise in the export surplus coincident with the fall in imports that set in at that time.

BILLIONS OF DOLLARS



BILLIONS OF DOLLARS



D.O. 43-217

Chart 32.—A, Net inflow of capital and gold, and, B, cumulative net inflow of capital and gold and cumulative excess of merchandise exports, 1935-39, by months.

Note.—Gold movements include changes in gold earmarked in the United States for foreign account but do not include gold held abroad for United States account. Capital movements do not include certain transactions for which data are available on an annual basis only and are further incomplete because of the unrecorded inflow of funds from abroad.

The fact that the inflow of capital entailed such large and continuing transfers of gold might be accepted, under more usual circumstances, as evidence of chronic balance-of-payments disequilibrium. The basic circumstances, however, were far from normal, both as to the changed status of gold and as to the causal factors responsible for the influx of capital. While due account must be taken of amortization payments to the United States, even though they were reduced by defaults, and of the continued interest of foreign investors in American securities, the greater part of the movement must be ascribed to monetary and political instability in Europe and took the form of an increase in foreign dollar balances or speculative security transactions. The summary statement in table 18 shows that more than three-fourths of the capital inflow from 1935 through 1939 came from Europe. The major constituents of this movement were as follows:³⁴

1. A heavy outflow of capital from the creditor countries of the former gold bloc (France, the Netherlands, and Switzerland) in 1935 and the first 9 months of 1936, largely in anticipation of the depreciation of the currencies of these countries and the continuation of the capital outflow from France during the early part of 1937.

2. The accumulation of this capital in the United Kingdom and the United States (the Netherlands and Switzerland being transit countries for part of the French capital).

3. A movement of funds from the United Kingdom to the United States, offsetting part of the inflow of capital to the United Kingdom.

4. The withdrawal, in the last quarter of 1937 and the first half of 1938, of a portion of the foreign capital that had taken

TABLE 18.—*Net Inflow of Capital Into the United States, by Countries or Areas and by Classes of Transactions, 1935-39*

[In millions of dollars. Minus sign indicates net movement from United States]

Country or area	Banking balances ¹		Security transactions		Total
	Increase in foreign funds in United States	Decrease in United States funds abroad	Purchases by foreigners of domestic securities	Purchases by foreigners of foreign securities	
Europe:					
United Kingdom.....	379.0	268.9	328.1	125.5	1,101.3
France.....	261.4	88.6	76.6	42.1	468.7
Netherlands.....	195.1	18.0	227.7	29.4	470.3
Switzerland.....	377.3	6.1	344.7	45.0	773.0
Germany.....	-20.4	177.9	-28.2	30.6	165.9
Italy.....	19.6	15.8	-4.9	27.6	58.0
Other Europe.....	472.6	30.9	60.4	189.0	752.9
Total, Europe.....	1,684.6	606.2	1,004.4	495.2	3,790.1
Canada.....	176.0	62.6	-2.6	-7.6	229.4
Latin America.....	219.2	50.1	30.1	184.0	483.4
Far East.....	325.7	-25.1	87.6	42.8	431.0
All other countries.....	62.4	-6	14.3	11.3	87.4
Grand total.....	2,467.8	693.3	1,133.7	725.7	5,021.2

¹ Includes brokerage balances. The movements in these balances were relatively small.

³⁴ As summarized in the 1937 issue of *Balances of Payments*, published by the League of Nations, with the exception of the parenthetical words inserted in paragraphs 4 and 5.

refuge in the United States, chiefly owing to the stock market decline in New York and the (fear of further) depreciation of the dollar.

5. A fresh inflow of capital to the United States (beginning) in the autumn of 1938, owing to political insecurity in Europe and the advance in stock prices in the United States.

Capital movements from non-European countries, part of which was actually on European account, also consisted predominantly of short-term funds, chiefly in the form of increases in foreign dollar balances but including in addition some further reduction in United States claims abroad.

Adjustments on Current Account

Although apparently little related to the huge influx of capital from Europe, there was a substantial adjustment in the balance on current account in the years 1935 to 1937, as compared with its status in the twenties. During these 3 years, for the first and only time in the inter-war period, current transactions yielded a small excess of payments over receipts.

Under other circumstances capital movements on the scale experienced from 1935 to 1939 might have been expected to produce important stimulative effects on the domestic economy and in turn to encourage imports and other payments on current account, as did investments of American capital in foreign countries during the twenties. While internal economic activity did expand and a small excess of payments on current account did appear from 1935 to 1937, the influx of foreign capital into the United States was apparently not an important factor in these changes. The capital was held largely in liquid form or employed in stock market transactions, and was not directly expended on a significant scale in new investments of an income-generating character.

It is true that this capital inflow served to increase the sum of investable funds available to banks or to American sellers of securities. And the attendant influx of gold expanded the credit base of the entire banking system to such an extent as ultimately to cause apprehension regarding the ability of the monetary authorities to control inflation and to induce an increase in member bank reserve requirements and the sterilization of incoming gold in 1936 and 1937. The inflow of foreign capital and gold, however, was scarcely the efficient cause of the expansion in total bank credit and the rise in production and money incomes during this period. The monetary gold stock of the United States was adequate at all times, even before revaluation, to support the growth of credit during the thirties; and a policy of extreme monetary ease was required and pursued in the interest of business recovery and was not dependent upon the rise in banking balances and gold stocks produced by the influx of capital from abroad.

The problem confronting the American banking system in particular and the economy in general was not a shortage of credit facilities but a dearth of borrowers able and willing to employ funds in business expansion. Certainly other factors, including particularly heavy Government expenditures in many forms, exercised far more influence over the upturn in business than did the accumulation of idle

foreign-owned balances or the expansion of banking reserves already far in excess of minimum requirements.

In consequence of the low levels at which the American economy was functioning during the years of labored recovery from the depths of the depression, the physical quantity of imports did not again reach the 1929 peak until 1937. In value terms, imports were further reduced as compared with predepression levels by the slow and incomplete recovery in the prices of many primary products. The aggregate volume of dollar payments on trade and other current transactions would have been even lower than it was in these years, had it not been for several special developments.

One of these factors, entirely fortuitous in nature, was the drought, which affected large areas of the Midwest in 1934 and 1936 and gave rise to uncommonly large imports of grain and other agricultural goods.

Another development was the silver-purchase program, under which purchases of foreign silver reached a maximum of \$415,000,000 in 1935, or one-fifth as much as total merchandise imports in the same year, and were near or over \$100,000,000 in other years. A large part of this silver, however, came out of the currency and banking system of China. These withdrawals, which soon caused that country to abandon the silver standard, had the immediate effect of depressing rather than stimulating Chinese purchasing power.

A third factor was the reciprocal trade agreements program inaugurated in 1934. While supremely important in tending to moderate the high-tariff policy of the United States, the effects of the program on either imports or exports cannot be accurately appraised in quantitative terms.

Although the upturn in business in the United States, together with the special factors enumerated, brought an increase in imports and other current transactions from the low point reached in 1933, the emergence of an excess of payments on current account in 1935 to 1937 reflected chiefly the adjustments made in foreign countries to the reduced flow of dollars supplied by the United States after 1929. These adjustments had originated under the compelling forces generated by the depression, as discussed in the section dealing with that period.

Broadly speaking, the adaptations made by foreign countries had the effects of encouraging their internal economic activity and of promoting commercial exchanges among themselves, both of which tended to lessen their dependence on the United States as a market and source of supply. These general results stand out clearly in the various charts showing the national incomes and industrial production of foreign countries with their total imports and imports from the United States.³⁵ There was, however, considerable variation in the success with which foreign countries adapted themselves to the changed conditions of the world economy in general and to the reduction in the supply of dollars in particular. The results depended largely on their exchange and monetary policies and on other important conditioning factors peculiar to each country or group of countries.

³⁵ Cf. charts 2, 12, 13-A, 13-B, and 13-C, chapter II.

Varying Character of Adjustments in Foreign Countries

In general, the most successful adaptation was achieved by countries that depreciated their currencies and thereafter were able to pursue policies of monetary ease or to adopt more positive measures of economic expansion without the necessity of defending rigid gold parities. The members of the sterling bloc were, on the whole, outstanding. They not only attained, for the most part, their pre-depression levels of production and income by 1935 but also maintained virtually complete exchange stability among themselves, once the realignment of their currency ratios had been made during the depression, without depending on exchange controls or other intricate measures of direct intervention in the trading mechanism.³⁶

Many of the American Republics also staged a rapid recovery from the depression and had achieved a relatively high degree of internal prosperity by the mid-thirties, marked by a vigorous expansion in domestic industry and building construction in the larger countries, especially Mexico, Brazil, Argentina, and Chile. This adaptation was rendered possible by the sharp exchange depreciation of most of their currencies, which tended to restrict imports and, if not to promote exports, at least to mitigate the internal effects of the low prices which they fetched on world markets.

In addition to depreciation, most of the Latin American countries maintained exchange restrictions and other forms of direct control, which were frequently so administered as to limit purchases from the United States and favor imports from other areas. Another important aspect of the curtailment in use of dollars by these countries was the continued default on debt service of most Latin American dollar bonds—an "adaptation" seriously abused on occasion and carried beyond the actual limits imposed by the shortage of exchange. Despite widespread exchange control and other measures, however, the Latin American currencies did not in general attain any such degree of exchange stability in the thirties as characterized the internal relationships of the sterling bloc.

The course of events in countries which endeavored to retain their old gold parities after the rest of the world had depreciated was of a very different order. As previously noted, the gold-bloc countries—particularly the leading member, France—remained seriously depressed in 1935 and continued so until they at last submitted to devaluation. These countries were subjected to considerable pressure in their foreign-trade positions, which they countered on the import side largely by higher tariffs and quota limitations. The major difficulty, however, appears to have resided in their inability to carry out policies of general monetary and economic expansion without further distorting their price relationships with other countries and producing even heavier flights of capital.

Germany, while assuredly no longer on the gold standard after imposing exchange restrictions in mid-1931, attempted to maintain at least the nominal parity of the reichsmark. Although subjected to many of the same pressures as the gold-bloc countries, Germany succeeded in a program of vigorous internal expansion by ever more

³⁶ The only important exceptions were Denmark, which practiced exchange control regularly after 1931, and New Zealand, which imposed exchange restrictions in December 1933, following a rapid internal expansion and adoption of cost-raising social legislation.

severe control over all aspects of the internal and external economic and financial mechanism. Despite the depths to which it had plunged during the worst years of the depression, by 1935 German industrial production had been pushed up near the 1929 level.

Although by the middle of the thirties many foreign countries, with the notable exception of those forming the gold bloc, had achieved considerable economic recovery and expansion, carried out mainly along national lines and accompanied by various preferential trading devices, a number of them faced definite limitations in the extent to which they could free themselves from dependence on foreign trade in general and on trade with the United States in particular. Canada furnishes an outstanding example. Canadian manufacturing production was better maintained in general than that of the United States during the depression and subsequent years, but possibilities for execution of an independent business-recovery program were narrowly restricted by Canada's close trade relations with the United States—in 1929 the United States took 46 percent of Canada's exports and supplied 69 percent of its imports. Through the preferential features of the Ottawa agreements and by virtue of the relatively less depressed conditions in oversea countries, these percentages were reduced to 35 and 56, respectively, by 1935, but the course of production and incomes in Canada still remained closely dependent upon conditions in this country.

Various other countries also found their possibilities for recovery inextricably bound up with the state of business in the United States. This was notably true of predominantly raw-material-producing areas, in which possibilities of trade reorientation and industrial development were limited. For example, the countries of southeastern Asia, whose rubber, tin, and other products were consumed so largely in the United States, could do relatively little along independent lines or by way of establishing new markets for their goods. Some of the Latin American countries were in a similar position, and primary producing countries in general, regardless of what currency or credit policies they might follow, could not hope for full recovery without a revival in world markets and especially in the United States.

Renewed Upswing in International Transactions

From 1935 to 1937 it appeared that the latter condition was being fulfilled. Business activity in the United States moved out of the period of vacillating revival which had characterized 1933 and 1934, progressed into a more sustained recovery in 1935, marked by only a minor set-back in the spring, and then staged one of the most vigorous expansions on record. From the middle of 1935 to the middle of 1937 industrial production increased by some 44 percent and carried somewhat beyond the 1929 level. This expansion was accompanied by a strong increase in both price and quantity of imports and by a considerable increase in most other current transactions. In consequence, aggregate payments on current account in the year 1937 increased by almost \$1,200,000,000, or about 35 percent, above the 1935 level.

One of the remarkable aspects of the rapid upswing during this brief period was the way in which the volume of dollars used by foreigners on current-account transactions rose in keeping with the increase in dollars supplied, the growth in receipts in this country

being about \$1,300,000,000 from 1935 to 1937. If it had appeared during the last stages of the depression that American exports were being strait-jacketed by the complicated network of trade and exchange restrictions and preferential arrangements abroad, this expansion, facilitated by the growing number of reciprocal trade agreements concluded with other nations, demonstrated that foreign demand for American goods remained lively and was still susceptible of increasing as the volume of dollars made available to foreign countries rose.

It is noteworthy, however, that agricultural goods on the whole failed signally to recover their lost markets—a condition attributable to a combination of circumstances: The prevalence of droughts throughout much of the interior of the United States during this period, the maintenance of high farm prices which impaired the competitive position of American agricultural products on foreign markets, the increase in output of cotton and other commodities in other countries, and the apparent preference of foreign countries to utilize their dollar availabilities for the purchase of other types of goods.

Part of the increase in exports from 1935 to 1937 may be attributed to the growing military demands of foreign countries rather than to the operation of normal economic forces. The strength of this influence is suggested by the heavier weight of war-related items, such as iron and steel products and chemicals, in the composition of exports. The importance of military demand at this time, however, should not be overestimated. With the exception of such distinctively military items as firearms and explosives, of which exports were negligible, commodities required for war purposes are also peacetime essentials and, as pointed out in chapter II, are ordinarily exported in rapidly increasing volume in times of rising prosperity. Their relative importance was enhanced, moreover, by the failure of agricultural exports to recover after 1933. Although Japan and Europe were the most important centers of armaments demand, the increases in exports to these countries from 1935 to 1937, amounting to 42 and 32 percent, respectively, were substantially lower than the expansion of 58 percent in shipments to Canada and of 71 percent in those to Latin American countries.

In brief, developments during the short period 1935–37 offered considerable evidence that the inevitable readjustment in the international transactions of the United States had been substantially completed and that a new balance was in fair way of achievement. This balance entailed, at least for a time, the maintenance abroad of various restraints on United States exports. But despite these restrictions, foreign demand for American goods and services remained flexible and capable of rapid expansion. The parallel growth in payments and receipts on current account suggested that the mutually stimulating and equilibrating influences of economic expansion at home and abroad which had been operative during the twenties were still powerful even though more subject to control by national policies. There was also room for hope that returning prosperity in the United States might lead to a more natural balance between the supply and use of dollars and, in conjunction with the reciprocal trade agreements program, gradually reduce the direct barriers to United States exports and restore a fuller measure of freedom in international transactions.

These trends were obscured by the heavy flow of capital from

Europe and the concomitant influx of gold, but here also the situation showed definite signs of improvement. The deflationary burden carried by France, Switzerland, and the Netherlands was lifted by the depreciation of their currencies in September 1936. This action was accompanied by the tripartite currency arrangement between the United States, the United Kingdom, and France, and subsequently adhered to by Belgium, Switzerland, and the Netherlands, under which these powers declared their intention to "maintain the greatest possible equilibrium in the system of international exchange" and to avoid "any disturbance of that system" by their monetary policies. The declarations also stressed the importance of "action being taken without delay to relax progressively the present systems of quotas and exchange controls with a view to their abolition" and expressed the hope that no country would "attempt to obtain an unreasonable competitive exchange advantage and thereby hamper the effort to restore more stable competitive relations".³⁷

Recrudescence of Balance-of-Payments Pressure

Whatever hopes there may have been in the late thirties of achieving a durable balance in this country's international position were, of course, illusory and futile because of the imminence of the second World War. Any discussion of such matters as equilibrium, disturbances, and adjustments in international transactions in the years immediately preceding the war is likely to appear unrealistic or irrelevant. As political and military crises in Europe increased and the probability of war became more apparent, the flow of capital and gold to the United States assumed even more tremendous proportions than during the earlier stages when they were primarily related to the monetary difficulties of the gold bloc.

Other developments in the late thirties not primarily related to the approaching war, however, demonstrated once again the peculiar instability characteristic of the balance-of-payments relations of the United States. The rise in business activity in this country, which appeared to assume the proportions of a major boom during 1936, leveled off in the following year. In the fall of 1937 industrial production began the sharpest drop on record, and by the end of the year most of the increase from the middle of 1935 had been wiped out. The decline then became more gradual and was halted in May of 1938, after which there came another sharp rise that carried back to and slightly beyond the mid-1937 peak by the end of 1939.

The drop in domestic business activity in the latter part of 1937 was immediately followed by a sharp decline in imports, accentuated in agricultural products by the abundant American harvests which followed the end of the drought. In the second quarter of 1938 imports aggregated only \$454,000,000, compared with \$858,000,000 in the second quarter of 1937—a reduction by almost one-half in 12 months' time. During the full year 1937 imports were \$1,100,000,000 lower than in the preceding year, a fall of 37 percent, and total payments on current account were lower by \$1,250,000,000.

In sharp contrast to this behavior, exports and other current receipts items declined by only about \$250,000,000 in the aggregate from 1937

³⁷ Excerpts from the statement issued by the Secretary of the Treasury, September 25, 1936. Annual Report of the Secretary of the Treasury for 1937. Pp. 258-259.

to 1938. In consequence, the balance on current account changed sharply from a small excess of payments to a heavy excess of receipts, amounting to almost \$1,000,000,000 in 1938. The shift in the balance on current account beginning toward the end of 1937 did not immediately give rise to an increase in gold imports, being offset by the outflow of capital which occurred at that time. By the summer of 1938, however, capital was again moving inward in large volume, and the influx of gold was resumed in doubly heavy amount.

Maintenance of exports at a high level despite the drastic fall in imports reflected the relatively light effects of the 1937-38 recession on most foreign countries. There was a mild recession in the United Kingdom and a somewhat more severe set-back in two of the former gold-bloc countries, France and Belgium, and in Canada, attributable both to the influences engendered by the decline in the United States and to various special factors more or less peculiar to each country. Production in the Scandinavian countries, on the other hand, was well maintained, and in Germany, Japan, and most other countries industrial activity decreased only slightly and temporarily at most and appears to have been little affected by events elsewhere.

Failure of the 1937-38 recession in the United States to have more perceptibly serious international repercussions may be attributed in part to the fact that the decline in domestic business activity, although extremely severe, was arrested in fairly short order. Vigorous anti-depression action by the Government, including an increase in public works outlays and an expansion of the credit base, were probably the primary factors in checking the downswing; but maintenance of relatively good export markets was also a stabilizing influence. As a result, import demand again improved slightly in the second half of 1938, although it was not until after the outbreak of the war in Europe the following year that the value of imports again moved close to the 1937 level.

The major reason, however, that the recession produced only mild effects on other countries appears to be that they resorted little or not at all to deflation as a means of adjustment to the pressure on their balances of payments. On the contrary, the tendency was definitely in the opposite direction. Most countries, including many dependent on primary production, at least took measures to offset direct effects on the volume of internal credit produced by the drain on their gold and exchange reserves and endeavored to maintain easy money conditions. A still more important influence was the increasing flow of public expenditure abroad on armaments. In the war economies, of course, production was maintained at forced draft, while by the latter part of 1938 military outlays in the United Kingdom, France, and other countries had become substantial enough to have a stimulating effect.

The ability of the war-economy countries to maintain or increase production presents no mystery in view of the iron controls that they exercised over their internal and external trade, and other countries with effective exchange restrictions were also insulated to a substantial degree against outside influences.

In countries permitting greater freedom of transactions the ability to follow policies of expansion in face of the contraction in the United States, whether specifically for anticyclical reasons or in preparation

for war, was the result of two factors: (1) The enhanced position of their reserves, reflecting the expansion in production and value of gold and their generally stronger balance of payments position in the middle thirties, enabled many countries to endure a prolonged drain before taking measures to counteract the loss; (2) inasmuch as most countries had not reestablished their currencies at fixed gold parities, they were generally free to absorb part of the external pressure by allowing their currencies to depreciate. While the outflow of capital from the United States was under way during the "dollar scare" from the latter part of 1937 to the middle of 1938, the United Kingdom, France, and other European countries did not experience any downward pressure on their reserves and exchange rates, which rather tended to rise. But the currencies of Argentina, Brazil, Mexico, and most other Latin American countries, which had tended to strengthen during the preceding period of international trade expansion, depreciated sharply after the recession in the United States began and remained low in the following 2 years.

Appraisal of Balance-of-Payments Experience, 1934-39

Despite the tragic culmination of the 1934-39 period in World War II, the experience of those years throws considerable light on the behavior of our international transactions under varying conditions. The major conclusions correspond roughly to the chronological sequence of developments during the period.

1. The inflow of foreign capital, normally attracted to the United States in substantial and regular volume for purposes of investment, assumed inordinately large and disturbing proportions in times of monetary or political instability abroad—a propensity suggesting the inevitability of exchange restrictions in foreign countries unless a greater general stability can be assured in the future.

2. Apart from the heavy influx of capital, the position of the United States on international account in the mid-thirties indicates that after serious economic recession and monetary crises foreign countries were able in the main to adjust themselves to a relatively small volume of dollars supplied by the United States and yet attain a substantial degree of internal prosperity. The experience also indicates, however, that a low level of dollar transactions is likely to be accompanied by trade barriers and exchange controls bearing with particular severity on this country's exports and by a general disintegration of the world economy into more independent national units and trading blocs.

3. The marked rise in both payments and receipts on current account up to 1937 shows that, although the dependence of other countries on a large volume of exchanges with the United States had been lessened, the mutually stimulative influences of expanding economic activity at home and abroad were still active and that foreign demand for American goods remained strong.

4. The period furnished another manifestation of the unfortunately high degree of instability which has characterized

the international transactions of the United States because of the peculiar susceptibility of the domestic economy to wide fluctuation.

5. Since foreign countries could have maintained exchange stability with the dollar only by keeping their internal life attuned to the fluctuating fortunes of the American economy, many of them found it preferable or indeed unavoidable to follow independent policies aimed at maintaining their domestic activity on a more even keel and to let their exchange rates fluctuate or to apply more direct methods of keeping their international accounts in balance.

6. The amount of depreciation and trade restriction required abroad after 1937 was mitigated, however, by the relative abundance of gold supplies and by the willingness of foreign countries to release, and of the United States to accept, gold in large volume. While the greater part of the gold inflow during the 1937-39 period was caused by capital transfers of uncertain tenure, that part which offset the excess of receipts on current account represented, in essence, the amount of dollars required to prevent further appreciation of the dollar under the conditions of profound imbalance caused by the fall in United States imports in the latter part of 1937. If, despite these conditions, the attempt had been made to maintain complete exchange stability, the amount of dollars that would have been required, in the form of gold purchases or special credits, would have been much larger still.

7. By way of final conclusion, based on the experience of the entire interwar period and strongly reinforced by events toward the end of the period, it is clear that—whatever may be the other requirements—stability in international economic relations generally and in foreign exchange rates in particular cannot be assured solely or chiefly through technical financial arrangements but must be firmly based on a vigorously and regularly functioning domestic economy.

APPENDIXES

A. NOTES ON CHARTS AND TABLES

CHART 1:

Based on table II at back of volume.

CHART 2:

Physical volume of total imports of foreign countries.—Series for 1929-38 is constructed from indexes for Europe, Canada, and the "Rest of World," excluding the United States, as published by the League of Nations, Review of World Trade, 1938, pp. 64, 68. These three indexes are assigned weights (Europe, 63.9; Canada, 3.7; and "Rest of World," 32.4) derived from value of each area's imports for 1925-29. Series for 1925-29 is League of Nations index of physical volume of total world trade, same source, p. 60. Inclusion of the United States does not impair series appreciably as a measure of imports of foreign countries before 1929.

Physical volume of imports of foreign countries from the United States.—Index of quantity of United States exports, Statistical Abstract of the United States, 1941, p. 532, and earlier annual volumes; shifted from 1923-25 to 1929 base.

Sources of all other series plotted in chart 2 are as shown for charts 4, 5, 6, 9, and 12.

CHART 3:

Consumption of raw materials and foodstuffs.—Source as shown in footnote 1, p. 29.

Value of industrial production.—Source as shown in footnote 2, p. 29. Data adjusted to exclude U. S. S. R.

National income.—Estimates in foreign currencies are converted to dollars at average rates of exchange for 1929. Sources for United States and 11 foreign countries are as shown for charts 5 and 13-A to 13-C. Estimates for 12 additional countries—Austria, Bulgaria, Czecho-Slovakia, Estonia, Finland, Greece, Hungary, Ireland, Poland, Rumania, Switzerland, and Yugoslavia—are from the League of Nations, World Economic Survey, 1938-39, p. 84.

CHART 4:

Industrial production in the United States.—Federal Reserve Bulletin, August 1940, p. 764. Index shifted from 1935-39 to 1929 base.

Industrial production in foreign countries.—Series for 1925-38 is the League of Nations index of world industrial production, excluding the U. S. S. R., World Production and Prices, 1938-39, p. 103, adjusted to exclude the United States. Series for 1920-25 is from Monthly Index of World Industrial Production, 1920-1935, by Norman J. Wall, U. S. Department of Agriculture, Preliminary Report, 1936. The two series are spliced at 1925 by applying the percentage 0.7454 to the Department of Agriculture index.

CHART 5:

National income.—Data for 1929-39 are estimates of the Department of Commerce. Data for 1919-28 are derived from estimates by Simon Kuznets, National Income and Capital Formation, 1919-35, National Bureau of Economic Research, Inc., 1937; data for 1909-18 from estimates by W. I. King, The National Income and Its Purchasing Power, published by the same bureau, 1930.

Imports.—Dollar value of general imports, Statistical Abstract of the United States, 1941, p. 523.

CHART 6:

National income at constant prices.—Index derived from estimates by the Department of Commerce for 1929-39 (original base 1935-39); and from estimates by Simon Kuznets for 1919-28 (source as shown in notes on chart 5).

Industrial production.—Federal Reserve Bulletin, August 1940, p. 764. Index shifted from 1935-39 to 1929 base.

Quantity of imports.—Statistical Abstract of the United States, 1941, p. 532, and Foreign Trade of the United States, Calendar Year 1935, pp. 38-39. Index shifted from 1923-25 to 1929 base.

CHART 7:

Sources as shown for quantity of imports in chart 6.

CHARTS 8-A to 8-D:

Quantity and value of imports.—Statistical Abstract of the United States, 1941, pp. 613-644, and earlier volumes.

Output of related products.—Federal Reserve Bulletin, August 1940, pp. 826-880. Indexes shifted from 1935-39 to 1929 base.

Industrial production.—Federal Reserve Bulletin, August 1940, pp. 764. Index shifted from 1935-39 to 1929 base.

CHARTS 9, 10-A, and 10-B:

Total imports of foreign countries.—Department of Commerce, Foreign Commerce Yearbook, 1939, p. 312, and earlier volumes. World import totals are adjusted to exclude United States imports. Figures for 1933-38 are converted from old gold dollars to current dollars.

Imports of foreign countries from the United States.—Value of United States exports, Statistical Abstract of the United States, 1941, pp. 545-549, and earlier volumes.

CHART 11:

Statistical Abstract of the United States, 1941, p. 713, and earlier volumes.

CHART 12:

National income.—Estimates for 11 countries, from sources as shown for charts 13-A to 13-C, are converted from original currencies into dollars at annual average rates of exchange. Index is computed from the sums of these dollar values, which are as follows (in billions of dollars): 1924, 62.2; 1925, 65.5; 1926, 65.1; 1927, 70.3; 1928, 73.0; 1929, 74.0; 1930, 70.5; 1931, 59.9; 1932, 46.4; 1933, 57.5; 1934, 76.0; 1935, 80.6; 1936, 88.0; 1937, 91.6; 1938, 90.3. Estimates for Germany covering 1924 and for New Zealand covering 1924 and 1925 are extrapolated on basis of aggregate for other countries. Estimates for Australia and New Zealand are converted from a fiscal-year to an approximate calendar-year basis by averaging successive pairs of fiscal-year figures.

Total imports.—Data for 11 countries are from official foreign sources and from Foreign Commerce Yearbook of various years. Original foreign-currency values are converted into dollars at annual average rates of exchange.

Imports from United States.—Series plotted in chart 12 is derived from import statistics of the 11 countries rather than from United States export statistics. The two sources, however, yield similar results, especially on an index basis, as shown in table 19. The generally higher dollar totals derived from foreign sources are attributable chiefly to the inclusion of shipping and insurance costs in the import valuations of most foreign countries, whereas United States export statistics are on an f. o. b. basis. Table 19 also indicates that the trend in United States exports to the 11 countries was representative of the trend in total United States exports.

TABLE 19.—United States Total Exports and Exports to 11 Countries and Imports of 11 Countries From the United States¹

Year	United States total exports		United States exports to 11 countries		Imports of 11 countries from United States ²	
	Millions of dollars	Index (1929=100)	Millions of dollars	Index (1929=100)	Millions of dollars	Index (1929=100)
1924.....	4,591.0	88	2,994.5	94	2,906.6	89
1925.....	4,909.8	94	3,115.6	98	3,274.8	100
1926.....	4,808.7	92	3,062.7	96	3,175.5	97
1927.....	4,865.4	93	3,111.2	98	3,192.4	98
1928.....	5,128.4	98	3,203.3	101	3,184.9	98
1929.....	5,241.0	100	3,183.1	100	3,265.1	100
1930.....	3,843.2	73	2,320.2	73	2,487.9	76
1931.....	2,424.3	46	1,476.3	46	1,544.4	47
1932.....	1,611.0	31	1,027.7	32	1,029.2	32
1933.....	1,675.0	32	1,048.0	33	1,083.4	33
1934.....	2,132.8	41	1,286.0	40	1,387.4	42
1935.....	2,282.9	44	1,355.0	43	1,359.1	42
1936.....	2,456.0	47	1,462.2	46	1,527.0	47
1937.....	3,349.2	64	1,920.0	60	1,964.7	60
1938.....	3,094.4	59	1,770.2	56	1,880.8	58

¹ The 11 countries are those covered by chart 12, namely, United Kingdom, Canada, Australia, New Zealand, Denmark, Norway, Sweden, France, Netherlands, Germany, and Japan.

² Original data in foreign currencies converted into dollars at annual average rates of exchange.

CHARTS 13-A to 13-C:

Total imports and imports from the United States.—Official foreign sources and Foreign Commerce Yearbook, various issues.

National income.—From various official and private estimates, as follows:

United Kingdom: Clark, Collin, *National Income and Outlay*, p. 88; *The Conditions of Economic Progress*, p. 174; figures represent gross national income. Estimate for 1938 from the *London Economist*, April 12, 1941, based on official white paper.

Canada: Dominion Bureau of Statistics estimate of "Income produced."

Australia: Clark, *The Conditions of Economic Progress*, p. 172.

New Zealand: Clark, op. cit., pp. 39, 173, adjusted to include interest paid abroad on State and local debt.

Germany: Clark, op. cit., p. 97. Clark used the figures given in *Statistisches Jahrbuch für das Deutsche Reich* after adjusting them to include public services.

France: Figures for 1922-34—Clark, op. cit., pp. 99, 107; for 1935-38, extrapolated on the basis of series carried in *League of Nations, World Economic Survey*, 1938-39, p. 84.

Netherlands: Figures for 1922-36—Central Bureau of Statistics, *De Nederlandsche Conjunctuur*, special issue, October 1939, entitled *Enkele Berekeningen Over Het Nationale Inkomen Van Nederland*. Figures for 1937 and 1938—Extrapolated on the basis of series in *League of Nations*, loc. cit.

Sweden: Figures for 1922-36—Clark, op. cit., p. 87; series consists of total income adjusted to exclude imputed income. Figures for 1937 and 1938—Series extended on the basis of estimates contained in a special study by the Swedish Department of Finance.

Denmark: *Statistisk Aarbog*, various years.

Norway: Clark, op. cit., pp. 143, 175. Represents total national income as adjusted by Clark to include direct taxes.

Japan: Figures for 1922-29—Monthly Circular of Mitsubishi Research Bureau, March 1934, compiled by S. Hijikata; figures for 1930-38, Japan Economic Federation, *National Income of Japan*, October 1939, pp. 48, 101.

CHART 14:

All series are revised estimates of the Department of Commerce. See appendix B.

CHART 15:

Statistical Abstract of the United States, 1941, p. 504. Based on cargo tonnage data.

CHART 16:

All series are revised estimates of the Department of Commerce. See appendix B. Estimates are exclusive of fare payments and expenses on board ship.

CHART 17:

National income.—Sources as shown for chart 5.

Travel expenditures.—Revised estimates of the Department of Commerce. See appendix B. Series plotted includes fare payments and expenses on board American and foreign ships.

CHART 18:

U. S. Department of Commerce, Balance of International Payments of the United States in 1940, p. 77.

CHART 19:

Based on table I, at back of volume.

CHART 20:

Revised estimates of the Department of Commerce. See appendix B.

CHART 21:

Domestic corporate bonds and stocks.—Compiled from monthly data published in the Commercial and Financial Chronicle.

Foreign bonds.—Revision of data originally published by the U. S. Department of Commerce in Handbook of American Underwriting of Foreign Securities, 1930, and American Underwriting of Foreign Securities in 1930, 1931.

Data for both domestic and foreign issues are nominal amounts, less refunding, with no deduction for discounts and commissions. Four-quarter moving averages were computed from the monthly figures.

CHART 22:

Index of industrial production.—Federal Reserve Bulletin, August 1940, pp. 764-765.

Foreign bond flotations.—Sources as shown for chart 21. Index is lagged (that is, shifted to the left in plotting) one quarter in view of the lapse of time that ordinarily ensues between loan negotiations and actual flotation of the issues.

CHART 23:

Yields on domestic bonds.—Moody's Aaa and Baa as published in the Survey of Current Business, November 1937, p. 19.

Yields on foreign dollar bonds.—Specially compiled for this study. The monthly average yields obtained are given in table 20. (The German series is not available before September 1925 and for this reason has not been included in the global average or in the average for European issues.) The data presented are arithmetic averages of monthly yields on each issue, the latter based on the mean of the high and low price for each month as reported annually in the Commercial and Financial Chronicle. Yields are computed to maturity unless the bonds were selling above the call price; yields of such bonds are computed to the earliest call date.

Using only issues listed on the New York Stock Exchange, it has not been possible to obtain data for 15 issues, properly distributed geographically, outstanding from 1922 to 1929. Substitutions were made for issues of Chile, Norway, and Belgium, as indicated in the following tabulation, but yields on the issues substituted were not substantially different from those on the issues supplanted. The effort to maintain comparability over the 8-year period also led to the inclusion of a few issues closer to maturity or call than was preferable. The following

issues are included in the averages, each given equal weight. All are issues of national governments unless otherwise indicated.

Europe (other than Germany):	
United Kingdom.....	5½'s of 1939
City of Lyons.....	6's of 1934
Switzerland.....	8's of 1940
Norway.....	8's of 1940 (for 1922-23)
	6's of 1932 (for 1924-29)
Belgium.....	7½'s of 1945 (for 1922-27)
	6's of 1934 (for 1928-29)
Latin America:	
Chile.....	8's of 1941 (for 1922)
State of Rio Grande do Sul.....	7's of 1942 (for 1923-29)
Cuba.....	8's of 1946
City of Rio de Janeiro.....	5's of 1944
Canada:	
Dominion of Canada.....	5's of 1931
Canadian Northern Railway Co.....	6½'s of 1946
Montreal Tramways.....	5's of 1941
Far East:	
State of Queensland.....	7's of 1941
Netherlands Indies.....	6's of 1947
City of Tokio.....	5's of 1932 (sterling issue)
Germany:	
German Government.....	7's of 1949 (Dawes loan)
City of Berlin.....	6's of 1950
Central Bank of Agriculture.....	7's of 1950
Allgemeine Elektrizitäts-Gesellschaft.....	7's of 1945

TABLE 20.—Foreign-Bond Yield Averages, 1922-29

[Percent per annum]

Month	1922	1923	1924	1925	1926	1927	1928	1929
FIFTEEN FOREIGN BONDS								
January.....	6.84	6.77	6.92	6.39	6.22	5.94	5.63	5.71
February.....	6.76	6.77	6.87	6.37	6.15	5.93	5.62	5.76
March.....	6.62	6.68	6.90	6.40	6.20	5.89	5.59	5.88
April.....	6.49	6.66	6.83	6.44	6.18	5.88	5.50	5.84
May.....	6.48	6.61	6.80	6.32	6.19	5.87	5.59	5.87
June.....	6.53	6.67	6.69	6.28	6.11	5.87	5.70	5.87
July.....	6.59	6.75	6.61	6.31	6.12	5.85	5.69	5.89
August.....	6.53	6.81	6.45	6.31	6.12	5.79	5.71	5.82
September.....	6.47	6.79	6.43	6.22	6.10	5.73	5.65	5.92
October.....	6.61	6.84	6.44	6.23	6.09	5.70	5.63	-----
November.....	6.83	6.95	6.41	6.26	6.03	5.75	5.66	-----
December.....	6.70	6.99	6.43	6.24	6.00	5.74	5.78	-----
Monthly average.....	6.62	6.82	6.65	6.31	6.13	5.83	5.64	5.84
FIVE EUROPEAN BONDS ¹								
January.....	6.87	7.03	7.11	6.23	6.13	5.73	5.35	5.20
February.....	6.75	7.00	6.95	6.30	6.05	5.72	5.33	5.33
March.....	6.58	6.83	7.00	6.39	6.22	5.70	5.30	5.54
April.....	6.42	6.72	6.80	6.40	6.20	5.66	5.17	5.31
May.....	6.39	6.75	6.78	6.27	6.25	5.62	5.26	5.31
June.....	6.48	6.86	6.62	6.25	6.18	5.60	5.41	5.34
July.....	6.61	6.95	6.46	6.24	6.25	5.56	5.38	6.41
August.....	6.50	7.12	6.22	6.22	6.22	5.46	5.33	5.25
September.....	6.41	7.05	6.22	6.10	6.17	5.41	5.33	5.28
October.....	6.65	7.04	6.21	6.10	6.09	5.37	5.23	-----
November.....	7.00	7.19	6.16	6.17	5.94	5.42	5.25	-----
December.....	6.84	7.18	6.27	6.17	5.84	5.43	5.35	-----
Monthly average.....	6.63	6.98	6.57	6.24	6.13	5.56	5.31	5.33

See footnote at end of table.

TABLE 20.—*Foreign-Bond Yield Averages, 1922-29—Continued*

[Percent per annum]

Month	1922	1923	1924	1925	1926	1927	1928	1929
FOUR LATIN AMERICAN BONDS								
January.....	7.48	7.41	7.56	7.33	7.08	6.79	6.48	6.60
February.....	7.44	7.55	7.55	7.26	6.99	6.80	6.49	6.56
March.....	7.30	7.46	7.53	7.30	6.93	6.74	6.44	6.62
April.....	7.15	7.47	7.54	7.35	6.94	6.71	6.28	6.70
May.....	7.18	7.39	7.51	7.25	6.94	6.76	6.37	6.68
June.....	7.14	7.45	7.37	7.15	6.86	6.74	6.54	6.68
July.....	7.20	7.55	7.43	7.23	6.82	6.73	6.60	6.62
August.....	7.33	7.52	7.34	7.21	6.84	6.70	6.53	6.68
September.....	7.19	7.49	7.36	7.09	6.82	6.62	6.39	6.77
October.....	7.33	7.57	7.40	7.11	6.85	6.62	6.42	6.71
November.....	7.39	7.62	7.40	7.07	6.84	6.70	6.48	7.22
December.....	7.33	7.71	7.55	7.05	6.82	6.70	6.56	7.14
Monthly average.....	7.29	7.52	7.44	7.20	6.89	6.72	6.46	6.75
THREE CANADIAN BONDS								
January.....	5.90	5.52	5.56	5.10	4.97	4.98	4.61	4.94
February.....	5.89	5.43	5.54	5.04	4.96	4.95	4.60	5.08
March.....	5.78	5.43	5.55	4.99	4.98	4.87	4.65	5.08
April.....	5.63	5.51	5.51	5.04	4.95	4.87	4.67	5.17
May.....	5.61	5.47	5.49	4.95	4.97	4.85	4.79	5.32
June.....	5.66	5.46	5.39	4.91	4.92	4.90	4.83	5.24
July.....	5.04	5.53	5.28	4.96	4.96	4.91	4.80	5.25
August.....	5.48	5.54	5.17	5.02	4.97	4.85	4.99	5.09
September.....	5.42	5.51	5.10	4.94	5.04	4.78	4.87	5.44
October.....	5.49	5.53	5.10	4.97	5.04	4.75	4.86	5.36
November.....	5.59	5.60	5.09	5.03	4.99	4.77	4.86	5.52
December.....	5.57	5.62	5.14	4.97	4.94	4.68	5.04	4.92
Monthly average.....	5.64	5.51	5.33	4.99	4.98	4.85	4.80	5.20
THREE FAR EASTERN BONDS								
January.....	6.85	6.72	7.12	6.71	6.46	6.13	5.98	6.17
February.....	6.72	6.68	7.14	6.62	6.39	6.09	5.98	6.11
March.....	6.61	6.64	7.22	6.65	6.43	6.08	5.90	6.24
April.....	6.57	6.60	7.24	6.70	6.35	6.16	5.82	6.25
May.....	6.57	6.50	7.22	6.55	6.33	6.10	5.91	6.29
June.....	6.67	6.54	7.21	6.52	6.19	6.15	5.93	6.31
July.....	6.68	6.55	7.11	6.55	6.12	6.11	5.91	6.37
August.....	6.58	6.59	6.92	6.55	6.12	6.06	5.95	6.35
September.....	6.67	6.71	6.87	6.54	6.08	6.04	5.98	6.33
October.....	6.73	6.84	6.88	6.52	6.11	6.00	6.00	6.37
November.....	7.05	6.98	6.83	6.54	6.16	6.02	6.07	6.43
December.....	6.76	7.09	6.76	6.53	6.22	6.03	6.19	6.34
Monthly average.....	6.71	6.95	7.04	6.58	6.25	6.08	5.97	6.30
FOUR GERMAN BONDS ¹								
January.....					7.32	6.56	6.67	6.76
February.....					7.23	6.51	6.61	6.75
March.....					7.29	6.53	6.59	6.89
April.....					7.23	6.52	6.57	6.88
May.....					7.17	6.54	6.63	6.95
June.....					7.03	6.62	6.66	6.87
July.....					6.91	6.60	6.67	6.91
August.....					6.91	6.61	6.66	6.97
September.....				7.48	6.85	6.57	6.67	7.05
October.....				7.31	6.81	6.60	6.67	6.97
November.....				7.24	6.78	6.78	6.71	7.10
December.....				7.34	6.65	6.73	6.78	7.01
Monthly average.....					7.01	6.60	6.66	6.93

¹ Nine-month average.² Excluding German issues.³ Not included in the global average.

CHART 24:

Monthly data, 1929-34.—Federal Reserve Bulletin, May 1937, pp. 420-429. The chart is an adaptation and continuation of a chart carried in this source, p. 399.

Monthly data, 1935-39.—Derived from U. S. Treasury Department Bulletin, various monthly issues, and Statistics of Capital Movements Between the United States and Foreign Countries and of Purchases and Sales of Foreign Exchange in the United States, various quarterly issues.

Annual data, 1929-33.—From reports of leading United States banks to the Department of Commerce.

CHART 25:

Gold exports and imports.—U. S. Department of Commerce Monthly Summary of Foreign Commerce.

Changes in earmarked gold.—Federal Reserve Board, Federal Reserve Bulletin, December 1940, p. 1292, and earlier issues; Annual Report, 1937, p. 81, and earlier reports.

CHART 26:

Data from various official and unofficial sources. The share of each country in world trade in the period 1926-29 is based on League of Nations, Memorandum on International Trade and Balance of Payments, 1913-1927, and subsequent issues.

CHART 27:

Federal Reserve Bulletin, September 1940, pp. 925-927; 1000-1007.

The data, especially after 1934, are subject to several important qualifications. Excluded from gold reserves are unreported holdings of central banks and governments, gold in circulation, and gold held in the active part of the United States Exchange Stabilization Fund and in similar funds of other countries. (United Kingdom gold holdings appear nonexistent at the end of 1939 following transfers to the British Exchange Equalization Account from the Bank of England.) Included are estimated holdings for a number of countries based on official reports for earlier dates. Gold owned by central banks and governments was probably several billion dollars higher at the end of 1939 than the total indicated in chart 27.

CHART 28:

Based on national-income series described in notes to charts 3, 5, and 13-A to 13-C.

CHART 29:

United States.—Sources as shown for chart 4.

United Kingdom.—London and Cambridge Economic Service, Monthly Bulletin, May 23, 1931, p. 159. Series is adjusted to exclude agriculture and building.

All other countries.—Supplementary tables to Monthly Index of World Industrial Production, 1920-1935, by Norman J. Wall, U. S. Department of Agriculture, Preliminary Report, 1936; with original sources and derivation of estimates as stated therein.

Total, all foreign countries.—Source as shown for chart 4.

CHART 30:

Based on table I, at back of volume.

CHART 31:

Industrial production.—Source as shown for chart 4.

Gross payments on current transactions and net outflow of long-term capital.—Based on table I, at back of volume.

New capital issues for foreign account and transactions in outstanding securities.—Based on table III, at back of volume.

CHART 32:

Capital movements.—Derived from U. S. Treasury Department, Bulletin, various monthly issues, and Statistics of Capital Movements between the United States and Foreign Countries and of Purchases and Sales of Foreign Exchange in the United States, various quarterly issues.

Gold.—Department of Commerce, Monthly Summary of Foreign Commerce of the United States, various monthly issues, and Federal Reserve Board, Annual Report, various years.

Merchandise.—Monthly Summary of Foreign Commerce of the United States, various issues.

TABLE 1:

Annual amount of dollars supplied is as shown in table II. Estimated debt service due the United States in 1929 includes \$234,000,000 on war debts, and \$276,000,000 for amortization and \$400,000,000 for interest on foreign bonds held in this country.

TABLE 2:

Source as shown in footnote 6, p. 22.

TABLE 3:

Derived from League of Nations, International Trade Statistics 1938, p. 111.

TABLE 4:

Statistical Abstract of the United States, 1930, pp. 556-591, and 1938, pp. 523-561.

TABLE 5:

Statistical Abstract, 1939, pp. 547-585, and earlier volumes.

TABLE 6:

Source as shown for table 3.

TABLE 7:

Statistical Abstract, 1941, p. 520.

TABLE 8:

Statistical Abstract, 1940, pp. 521-574, and earlier volumes.

TABLE 9:

Sammons, Robert L., and Abelson, Milton, American Direct Investments in Foreign Countries—1940, U. S. Department of Commerce, 1942, p. 30.

TABLE 10:

Department of Commerce compilation. See appendix B for general sources of data.

TABLE 11:

Source as shown for table 10.

TABLE 12:

Federal Reserve Bulletin, May 1937, pp. 420-422.

TABLE 13:

All 1919 data and 1929 data for foreign long-term investments in the United States are from Lewis, Cleona, America's Stake in International Investments, 1938. Other data from compilations of the Department of Commerce.

TABLE 14:

Derived from Monthly Summary of Foreign Commerce, December 1939, p. 31, and earlier issues.

TABLE 15:

Statistical Abstract, 1931, pp. 500-501. Exports to northern North America and to Europe adjusted for grain exports to Europe by way of Canada, according to figures given in Statistical Abstract, 1931, p. 502.

TABLE 16:

Industrial Production—

United States: Federal Reserve Bulletin, August 1940, pp. 764-765.

United Kingdom, Sweden, Norway, Denmark, Finland, Chile, Mexico, Germany, Japan, Italy, France, Netherlands, Belgium, Poland: League of Nations, Statistical Yearbook 1939-40, p. 164.

Union of South Africa, New Zealand: League of Nations, World Production and Prices, 1938-39, p. 39.

Canada: *Ibid.* Index excludes building and electric power generation.

National income.—Sources as shown for charts 13-A, 13-B, and 13-C.

Cost of living.—League of Nations, Monthly Bulletin of Statistics, July 1939, pp. 343-344.

TABLE 17:

Indexes computed from basic data in Foreign Commerce Yearbook for 1939, p. 312, and earlier volumes, and in Statistical Abstract, 1941, p. 541.

TABLE 18:

Federal Reserve Bulletin, December 1941, pp. 1287-88, and U. S. Treasury Department Bulletin, various issues.

TABLES I, II, and III:

The derivation of the data shown in these tables is discussed in appendix B.

B. NOTES ON BALANCE-OF-PAYMENTS ESTIMATES

Changes in methods of computing balance-of-payments estimates since the Department's first bulletin on the subject, covering 1922, was published inevitably led to figures that are not comparable over the years. The various retrospective tables published from time to time, as in the annual bulletins for 1932 to 1937, necessarily were affected by this defect and were therefore dropped. In the meantime, a number of special studies were undertaken with a view to deriving more accurate and comparable data on the international transactions of the United States. These studies, a number of which have been published, dealt with American investments abroad, foreign investments in the United States, foreign travel, international insurance transactions, institutional contributions, personal remittances, government transactions, short-term capital movements, and other related subjects.

In connection with this analysis of the balance of payments during the inter-war years, it was necessary to extend the work of revision to all other types of transactions not previously recomputed and to bring to completion as consistent and comparable a statement as possible for the period. The revised estimates are shown in table I, arranged on a dollar supply and dollar use pattern in table II, and supported by a more detailed statement of capital transactions in table III. The estimates contain many imperfections, partly because of lack of time to explore every possible source of information but to a much greater extent because of the lack of satisfactory basic data for some of the items. Despite these qualifications, the figures are believed to be reasonably comparable throughout the period and to present on the whole a fairly correct summary of the international transactions of the United States.

An adequate statement of the methods employed in computing the estimates, supported by the great mass of factual data on which they are based, would alone require several volumes. Such an exposition is impracticable at this time, but the following notes set forth in concise form the principal methods and sources of data used in computing the more important items.

Current Transactions

MERCHANDISE TRADE

The data for merchandise exports and imports are the unadjusted data as published annually by the Department of Commerce in Foreign Commerce and Navigation of the United States. Exports include reexports of foreign merchandise, and imports include imports entered for immediate consumption plus entries into bonded warehouses. Actual payments and receipts involved in merchandise trade are not accurately reflected in the recorded data; estimates of the necessary adjustments are included under "Miscellaneous adjustments and services."

FREIGHT AND SHIPPING

The derivation of the freight and shipping estimates may be best explained with the aid of a detailed statement of the component parts in a recent year. The composition for 1937 is shown in table 21.

Items 1a and 6.—Estimates of earnings of United States and foreign vessels in the carriage of this country's foreign trade for the years 1926 to 1939 were obtained from the Maritime Commission and predecessor organizations. The data for 1937 are shown in table 22. For balance-of-payments purposes, only earnings of United States vessels in carrying exports (a receipts item) and of foreign vessels in carrying imports (a payments item) are included in the freight and shipping account. Before 1926 corresponding figures were estimated from recorded data concerning cargo tonnages carried by United States and foreign vessels and average freight rates extrapolated on the basis of trade reports and Lloyds' index of freight rates.

Item 1b.—The figure was based on data compiled by the Finance Division of the Maritime Commission covering operations of subsidized vessels for 1938 and 1939. It was estimated at 2.5 percent of total revenues of United States flag vessels from the carriage of United States exports and imports.

Items 2 and 7.—Passenger-fare receipts and payments represent the series previously published by the Department of Commerce, extended to cover 1939, and include expenditures on board ship as well as fare payments proper. (See discussion of travel expenditures).

TABLE 21.—*Composition of Freight and Shipping Account, 1937*

[In millions of dollars]

Item	Amount
Receipts:	
1. Freight received on ocean traffic: ¹	
a. United States exports.....	65.2
b. Cargo carried between foreign ports.....	3.7
Total.....	68.9
2. Ocean passenger fares ²	9.3
3. Charges and other expenses of foreign vessels in United States ports.....	142.2
4. Rail traffic:	
a. Freight on intra-Canadian traffic carried by American railroads.....	1.6
b. Freight on United States exports carried within Canada by American railroads.....	3.7
c. Freight on Canadian exports and imports carried through the United States.....	7.9
d. Freight on Mexican exports and imports carried through the United States.....	2.5
Total.....	15.7
Total receipts.....	236.1
Payments:	
6. Ocean freight paid on United States imports.....	180.4
7. Ocean passenger fares ²	96.7
8. Charges and other expenses of American vessels in foreign ports.....	45.6
9. Rail traffic:	
a. Freight on United States transit traffic routed via Canada on Canadian railroads.....	18.2
b. American railroad operating expenses in Canada.....	18.6
Total.....	36.8
Total payments.....	365.5

¹ Includes a small amount of Great Lakes traffic.

² Includes passenger expenditures on board ship.

TABLE 22.—*Estimated Freight Earnings by United States and Foreign Vessels in the Carriage of United States Exports and Imports, 1937*

[In millions of dollars]

Class of freight	United States imports		United States exports		Total	
	Earned by United States vessels	Earned by foreign vessels	Earned by United States vessels	Earned by foreign vessels	Earned by United States vessels	Earned by foreign vessels
Ocean freight:						
Dry cargoes.....	66.9	172.4	53.1	125.6	120.0	298.0
Tankers.....	14.2	10.0	10.4	76.5	24.6	86.5
Total ocean freight.....	81.1	182.4	63.6	202.1	144.6	384.6
Great Lakes freight.....	.8	3.9	1.7	6.8	2.5	10.7
Total freight.....	81.9	186.4	65.3	208.9	147.2	395.3

NOTE: Discrepancies in addition are caused by rounding of figures.

Item 3.—Port expenditures of foreign vessels, except bunker fuel purchases, were estimated in all years as a fixed percentage of the gross revenues of such vessels resulting from the carriage of freight and passengers to and from the United States. Bunker fuel sales were recorded beginning in 1928. Estimates of such sales in earlier years were derived by extending the recorded series back

on the basis of such factors as the volume of United States foreign trade carried by foreign vessels and domestic prices of bunker coal and oil.

Items 4 and 9.—The estimates were based on information furnished by American railroads operating in Canada, published data on freight rates, information taken from freight density maps, revenue freight data published by the Canadian Government, and unpublished records of the Department of Commerce on Canadian and Mexican exports and imports in transit through the United States.

Item 8.—Except for bunker fuel purchases, port expenditures of American vessels abroad were computed on the basis of the Maritime Commission data for 1938 and 1939 previously mentioned. Foreign bunker fuel purchases were computed by deducting recorded domestic purchases, as published in Monthly Summary of Foreign Trade, from estimated total purchases. The resulting average percentage of gross revenues in 1938 and 1939 was employed in calculating the estimates for earlier years.

TRAVEL EXPENDITURES

Payments and receipts arising out of travel with noncontiguous areas were treated in detail in a special study on Oversea Travel and Travel Expenditures in the Balance of International Payments of the United States, 1919-38, by August Maffry, published by the Department of Commerce in 1939. That study presents revised estimates from the beginning of the interwar period. The only further change of consequence made for purposes of this study was the allocation of ocean passenger fares and outlays on board ship to the freight and shipping account rather than to the travel account.

The flow of international payments growing out of travel between the United States and Canada and between the United States and Mexico is considerably more difficult to estimate than oversea travel expenditures because of the more varied nature of traffic over the land borders and the absence of satisfactory statistical records. The nature of the basic data available and the methods of computing past estimates are indicated in the various annual studies of the Department of Commerce on the United States balance of payments.¹

Institution of exchange control in Canada following the outbreak of war in 1939, together with other measures more specifically designed to yield better information on that country's travel receipts and payments, has provided an abundance of more accurate and detailed statistical data on the subject, especially on typical rates of expenditure per capita. While these data were first available for 1940, it became evident that the travel item in the United States-Canadian balance of payments had been greatly overstated in previous years. The estimates for United States travel outlays in Canada in 1939 were accordingly cut from \$256,000,000, as published in the balance-of-payments bulletin for that year, to only \$149,000,000, as carried in the 1940 bulletin. Receipts from Canadian travelers in the United States were also reduced, although not so sharply, from the original estimate of \$93,000,000 for 1939 to a revised estimate of \$70,000,000.

For purposes of this study, a complete revision of the United States-Canadian travel account was therefore necessary, not only to eliminate serious disparities from year to year in the data and methods formerly used but also to lower the general level of past estimates. In general, the method followed was to remove so far as possible various statistical irregularities in the basic records of volume of travel and to recompute more appropriate annual average rates of expenditure for the various classes of travel. These averages were based on the results for 1940 and such general factors as trends in cost of living, national income, and travel outlays in other areas over the interwar period.

Information on travel payments between the United States and Mexico is still very inadequate, especially on the heavy volume of traffic along the border. The revisions incorporated in the estimates were based on a careful scrutiny of all statistical and other relevant data bearing on travel between the two countries, and an endeavor was made to apply uniform methods over the entire interwar period.

PERSONAL REMITTANCES

Before 1937, so-called immigrant, or personal, remittances to foreign countries were based principally on reports received from United States Government representatives abroad, supplemented by information from a few of the chief remitting

¹ Cf. especially *The Balance of International Payments of the United States in 1939*, pp. 51-68.

agencies in this country and by private estimates. In recent years, however, estimates have been reached by a progressive adjustment of the base figure established for 1931; the yearly adjustment was effected on the basis of comparative annual data supplied by principal private remitting agencies and published figures of post office money orders cashed abroad.

The resulting figure for 1937 was \$144,000,000, or \$13,400,000 in excess of the sum of the reported total sent abroad by private remitting agencies (\$100,700,000) and total post office money orders cashed abroad (\$29,900,000). The difference presumably represents currency sent out through the mails and money carried out by alien emigrants.

The relative importance of the various items composing personal remittance receipts is indicated by the following breakdown of the 1939 total:

	<i>Millions of dollars</i>
Money shown by immigrants.....	20.4
Foreign postal money orders cashed in the United States.....	14.5
Receipts from head tax on immigrants.....	1.0
Total.....	35.9

Money shown by immigrants upon entry into the United States for 1938 and 1939 was a special compilation on a calendar-year basis of the Office of Research and Education Services, Immigration and Naturalization Service, Department of Justice. For the years 1919 to 1937 the calendar-year figures were estimated by averaging the data for two consecutive fiscal years as published annually in the Statistical Abstract.

Similarly, foreign postal money order receipts were estimated on a calendar-year basis from fiscal-year data published in the Annual Report of the Postmaster General. For this purpose, it was assumed that all such receipts represent personal remittances. Although this assumption may not be completely justified, these money orders probably do represent items not adequately covered in other balance-of-payments estimates.

Receipts from the head tax on immigrants are published annually in the Statistical Abstract under the heading "Miscellaneous taxes" in the table on receipts of the national Government.

INSTITUTIONAL CONTRIBUTIONS

The estimates for institutional contributions to foreign countries are based on data furnished the Department of Commerce by all the principal institutions engaging in such transactions. In the computation of these estimates, 1937 was used as a base year (1931 for Catholic remittances); annual aggregates for identical organizations were used to compute chain relatives extending forward to 1939 and backward to 1923 for Protestant agencies, to 1924 for Catholic, to 1922 for Jewish, and to 1926 for nonsectarian. The relatives for certain years for which available data were not adequate were interpolated. The final estimates were based on base-year data adjusted by means of the chain relatives.

In the absence of data for the early post-war years, it was assumed that remittances were approximately the same as in the nearest year for which an estimate was possible. For certain nonsectarian contributors, data from various published and unpublished sources were employed to arrive at estimates for the years 1919 to 1925.

It was assumed that similar contributions received in the United States are negligible.

INTEREST AND DIVIDENDS

Receipts of income from abroad were estimated separately for portfolio, direct, and short-term investments. For the years 1930 to 1939 interest on foreign dollar bonds was based on an issue-by-issue compilation made by the Department of Commerce. For years before 1930 estimated rates of return were arrived at by adjusting the computed rate for 1930, 5.89 percent, backward on the basis of the weighted average yield of new foreign securities as published in the Handbook on American Underwriting of Foreign Securities. Arbitrary rates of 5.0 and 5.1 were used for 1919 and 1920; the rates thus obtained were applied to the estimated annual average of foreign dollar bonds held in this country.

For the years 1929 to 1939 the return on direct investments is substantially as reported in the annual balance of payments bulletins, with certain minor revisions appearing in American Direct Investments in Foreign Countries—1940.

The general methods employed are set forth on page 37 of that bulletin. Data for years before 1930 have been extensively revised on the basis of data regarding profits of American concerns operating abroad as reported in Moody's manuals.

As indicated on p. 103, footnote 18, income for years before 1930 includes profits not remitted; data for 1930 to 1939 exclude reinvested earnings.

Receipts of income from short-term investments represent rough estimates based on the average amount of such assets outstanding in each year and an assumed average rate of return determined from an inspection of various short-term interest rates abroad. Previous estimates for the years 1926 to 1939 were adjusted in accordance with revisions of the short-term capital item made for this study. Estimates for years before 1925 are original in this study.

Separate estimates for payments to foreigners were made for bonds, stocks, and short-term assets. Bond-interest payments were based largely on data from withholding tax returns filed with the Bureau of Internal Revenue, although somewhat arbitrary estimates were made for early years. Dividend payments (including some miscellaneous income items) for 1937, 1938, and 1939 were also based on withholding tax data. Estimates for 1919 to 1936 were derived by employing an index of total dividends paid out by all domestic corporations (national income series) and were adjusted to take account of changes resulting from the international securities movement. Short-term interest payments, like corresponding receipts, were based on estimated average holdings and average annual rates determined from available data regarding short-term rates in the New York money market.

GOVERNMENT TRANSACTIONS

In general, information concerning transactions of the United States Government was received directly from the departments and agencies concerned, although published reports were relied on extensively, especially for earlier years. Unlike most of the service transactions, the Government account is almost completely composed of recorded data, with the expenditures of foreign governments in the United States the only important component based only on estimates. An extensive investigation of this account, which has not been published, was undertaken by the Department of Commerce in 1939-40, and the revised figures used in this study are the product of this research. Information concerning costs of foreign representation in this country were received from the respective governments in 1927 only; data for other years were estimated on the assumption that such expenditures varied directly with changes in similar American disbursements abroad.

The nature of the division between "Government aid and settlements" and "Other government items" is probably sufficiently indicated on pp. 83-84. The division differs from previous methods of presenting this account in the annual balance-of-payments statements in that settlements under treaties, conventions, and the like, were combined with settlements arising out of World War I to form the first group. Receipts and disbursements of the executive establishments and expenses for foreign representation in the United States are included in the "Other" items.

Capital Transactions

NEW ISSUES

The annual volume of new issues includes new foreign securities sold both publicly and privately, exclusive of issues of direct investment companies. The estimates are net of commissions, discounts, and refunding, and are based upon data previously published by the Department of Commerce,² with revisions. Also included are private takings of foreign securities, and advances of the War Finance Corporation from 1919 through 1922.³

² Handbook on American Underwriting of Foreign Securities; American Underwriting of Foreign Securities in 1930; American Underwriting of Foreign Securities in 1931; annual bulletins on The Balance of International Payments of the United States, 1932 to 1939.

³ The War Finance Corporation loans, although not made directly to foreigners, were made to firms and banks in the United States, which in turn granted credits to foreigners for the purchase of American commodities. Inasmuch as calendar-year short-term data are not available for this period and as most of the War Finance Corporation credits were for a period of more than 1 year, they have been included in the series of privately taken issues as shown in table III. The annual amounts advanced were as follows (in millions of dollars): 1919, 1; 1920, 45; 1921, 29; 1922, 10.

AMORTIZATION RECEIPTS FROM FOREIGN COUNTRIES

Retirements in part or in whole, through sinking fund operations or redemptions, of issues of foreign securities originally sold in this country are referred to as amortization receipts. Estimates of this item for 1919, 1920, and 1921 are inadequate in that they relate only to complete redemptions of maturing foreign government (national, provincial, and municipal) bonds,⁴ and include neither sinking fund receipts on such bonds nor sinking fund or redemption receipts on corporate bonds. For later years, the amortization estimates include both sinking fund and redemption operations for all classes of issues, although the figures for the twenties probably understate actual receipts.

TRANSACTIONS IN OUTSTANDING FOREIGN AND DOMESTIC SECURITIES

Compilation of international security transactions in the United States balance of payments underwent a gradual evolution from estimates based on reports from 26 financial institutions to those based on reports from practically all institutions conducting an international business in securities. Data were collected on an annual basis by the Federal Reserve Bank of New York for the years 1919 through 1923, and by the Department of Commerce thereafter until 1935, when the Treasury Department and the Federal Reserve banks undertook to collect weekly figures, with a certain amount of geographic detail.

From the beginning, the security transactions data compiled by the Department of Commerce related to outstanding securities only; flotation of foreign securities in this country was the subject of a separate inquiry. In the late twenties respondents were requested not to include foreign bond sinking fund and redemption transactions inasmuch as these data were also compiled separately. At about the same time an attempt was made to eliminate confusion concerning the definition of the term "foreign" as used in the questionnaire, the term being defined to embrace all concerns and persons resident abroad, including foreign branches of American companies. Similarly, the term "American" was defined to include branches of foreign firms or banks located in this country.

Until the early thirties the published statistics of security transactions, particularly of transactions in foreign or domestic securities considered separately, represented chiefly estimates made by reporting institutions. Not until weekly reports were requested in 1935 were the data based on detailed records kept by the reporting institutions. The data reported to the Treasury through the Federal Reserve Bank of New York from that time on included sinking fund and redemption transactions and new bond flotations. These are excluded from security transactions in table III and appear elsewhere under their proper heads.

The statistics of security transactions collected by the Federal Reserve Bank of New York were published in the Federal Reserve Bulletin and in the Treasury Department's Statistics of Capital Movements Between the United States and Foreign Countries and of Purchases and Sales of Foreign Exchange in the United States for the period from 1935 through the third quarter of 1938, and thereafter have appeared in the monthly Bulletin of the Treasury Department.

DIRECT INVESTMENTS

Beginning in 1930, the net movement of funds associated with American direct investments abroad is composed of: (1) New direct investments, including public offerings of securities of American and semi-American corporations for foreign purposes; (2) sales of, or other cash realizations from, existing investments including amortizations of publicly offered securities of direct investment companies. In addition, the net movement of funds on intercompany account is included since 1938.

For the years 1919 to 1929, inclusive, a considerably less exact method was employed. The net increase in the value of American direct investments abroad from December 31, 1918, to December 31, 1929, was estimated at \$2,972,000,000. Known new investments, including public offerings of securities, amounted to \$1,766,000,000, leaving \$1,206,000,000 to be accounted for. The last figure was apportioned to each of the years on the basis of an index of the number of new investments established during those years and still in existence at the end of 1929.⁵ This method of computation had the effect of including reinvested earnings as capital outflow, a proper procedure, since such reinvested earnings are also included in receipts of interest and dividends for those years.

⁴ Except for the following repayments to the War Finance Corporation (in millions of dollars): 1919, 1; 1920, 9; 1921, 31; 1922, 42; 1923, 1; 1924, 1.

⁵ Dickens, Paul D. American Direct Investments Abroad, 1938. United States Department of Commerce, 1938. Pp. 47-49.

No figures relating to the movement of foreign direct investment capital into and out of the United States are presented inasmuch as available data are fragmentary.

AMORTIZATION PAYMENTS TO FOREIGN COUNTRIES

Bond-redemption and sinking-fund payments to foreigners in connection with their holdings of United States corporate bonds during the interwar period were estimated on the basis of known amortization payments to foreigners during 1935. Inasmuch as it is assumed that the par value of aggregate holdings did not vary greatly between 1919 and 1939, yearly amortization estimates, rounded to units of \$5,000,000, show only one change, during 1933.

SHORT-TERM CAPITAL MOVEMENTS

The earliest data on the international short-term balances of the United States were compiled by the Federal Reserve Board in connection with its wartime exchange-control functions. The information was collected weekly from February 1918 through June 1919 and was subsequently published in the Federal Reserve Bulletin.^{*} Less comprehensive data, as of July 1, 1920 and July 1, 1921, were collected by the Federal Reserve Bank of New York, while the Department of Commerce circularized banks and business firms for international accounts-receivable and accounts-payable data for July 1, 1921, and July 1, 1922. Although these various sets of figures constitute a valuable adjunct to available balance-of-payments information for these years, they were not incorporated into the balance-of-payments statement since they are mid-year rather than year-end data.

The earliest available calendar-year, short-term data relate to the year 1923, when in response to a questionnaire inquiry of the Department of Commerce 88 financial institutions reported deposits due to foreigners. Similar data are available for 1924 and 1925, and to these were added foreign investments in domestic acceptances purchased through Federal Reserve banks. Data relating to American banking balances abroad were not obtained until 1925, and for 1923 and 1924 changes in amounts due from foreigners were based only on acceptance credits granted in this country to foreigners, data for which are available in bulletins of the American Acceptance Council.

After the middle twenties the Department of Commerce obtained fairly comprehensive data from financial institutions for the items "Due from foreigners" and "Due to foreigners" under the following heads: (1) Deposits; (2) investments, advances, overdrafts, etc.; and (3) acceptance credits.

The data previously published by the Department for the years up to 1934 were considerably revised, particularly with reference to changes in the volume of acceptance credits granted by Americans to foreigners. The difficulty and confusion associated with the balance-of-payments classification of acceptance credits led to the substitution of the acceptance figures of the American Acceptance Council for those reported by respondents as having been granted to foreigners. Changes in the volume of acceptances outstanding for the following purposes were adopted as representative of changes in the total volume of acceptance credits granted to foreigners from the early twenties through 1934: (1) Financing exports from the United States; (2) providing dollar exchange; and (3) financing goods stored in foreign countries or shipped between foreign points.

Beginning with 1935 the international short-term assets and liabilities of banks and brokers in the United States have been reported weekly to the Federal Reserve Bank of New York.[†] The movement of short-term capital was computed from changes in the data so reported combined with changes in the following items, some of which were included before 1935: (1) Accounts of the Philippine Government with the United States Treasury; (2) commercial balances—unpublished data compiled by the Federal Reserve Bank of New York; (3) Reconstruction Finance Corporation and Export-Import Bank loans to foreigners; and (4) other accounts. Changes in commercial balances on a calendar-year basis were available for the first time in 1933.

^{*} December 1921, pp. 1400-1412.

[†] The figures include funds placed abroad for the account of domestic clients and correspondents. References to published sources are included in the section on Transactions in Outstanding Foreign and Domestic Securities.

CURRENCY MOVEMENTS

The annual net movements of United States currency (movements of foreign currency into and out of the United States are assumed to be negligible and approximately balancing in amount) include movements through banking channels as reported by the Federal Reserve banks of New York and Atlanta and estimates for unrecorded net exports, principally through the mails and in the form of currency carried by persons leaving the United States for travel or residence abroad. Total unrecorded currency exports to Europe for the period May 1923 to the end of 1934 are assumed to be equal to the excess of recorded imports during that period, less a deduction of \$100,000,000, the estimated amount returned during the period from currency held abroad on May 1, 1923. On the assumption that 1928 and 1929 were "normal" years, in which all currency carried or mailed out was returned, unrecorded exports in those years amounted to 5.5 percent of combined tourist expenditures and immigrant remittances. This percentage was used to distribute \$294,000,000 of the total estimated unrecorded outflow of \$330,000,000 during the period, the balance of \$36,000,000 being distributed according to the annual variations in the recorded outflow. For years subsequent to 1934, the unrecorded outflow of capital to Europe was considered to be 5.5 percent of total tourist and immigrant payments, plus a small allowance for unrecorded outflow resulting from other factors.

For all other countries (except the Dominican Republic, for which the recorded data apparently also reflect the actual net movement, and Cuba, for which special estimates based on the tourist movement were made) it was assumed that exports and imports of currency were approximately equal; unrecorded exports, therefore, were estimated to equal the net recorded excess of imports.

TABLE I.—United States Balance of International Payments, 1919-39

[In millions of dollars]

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
	7,920 3,904	8,228 5,278	4,485 2,609	3,832 3,113	4,167 3,792	4,591 3,610	4,910 4,227	4,809 4,431	4,865 4,185	5,128 4,091	5,241 4,399	3,843 3,061	2,424 2,091	1,611 1,323	1,675 1,450	2,133 1,655	2,283 2,047	2,456 2,423	3,349 3,084	3,094 1,960	3,157 2,318
	+4,016	+2,950	+1,976	+719	+375	+981	+683	+378	+680	+1,037	+842	+782	+333	+288	+225	+478	+236	+33	+265	+1,134	+859
	1,109 818	1,119 848	394 334	286 341	302 332	315 361	318 391	370 415	360 417	372 460	390 509	325 477	247 306	171 255	108 154	133 196	139 206	158 247	236 306	267 303	303 367
	+291	+271	+60	-55	-30	-46	-73	-45	-57	-88	-119	-152	-119	-84	-46	-63	-67	-89	-130	-36	-64
	56 123	67 190	76 200	61 243	71 260	77 303	83 347	110 372	114 400	121 448	139 483	129 463	94 341	65 259	66 199	81 218	101 245	117 297	135 348	130 303	135 290
	-67	-123	-124	-182	-189	-226	-264	-262	-286	-327	-344	-334	-247	-194	-133	-137	-144	-180	-213	-173	-155
	40 732	63 579	49 393	48 269	65 309	57 325	47 355	50 348	49 343	50 338	51 339	43 300	28 262	17 199	17 178	19 151	20 155	22 170	28 170	37 152	36 144
	-692	-516	-344	-221	-244	-268	-308	-298	-294	-288	-288	-257	-234	-182	-161	-132	-135	-148	-142	-115	-108
	-140	-118	-106	-93	-84	-71	-65	-63	-61	-58	-55	-49	-45	-35	-30	-30	-27	-28	-33	-38	-43
	544 130	588 120	405 105	544 105	676 130	602 140	752 170	793 200	821 240	922 276	982 330	876 295	674 220	460 135	417 115	436 135	521 155	568 270	577 295	584 200	541 230
	+414	+468	+300	+439	+546	+462	+582	+593	+581	+647	+682	+581	+454	+325	+302	+301	+366	+208	+282	+384	+311
	1,212 2,844	214 286	98 86	175 48	255 21	293 31	187 19	201 22	227 14	229 31	234 63	250 41	121 36	99 9	20 5	2 1	1 1	1 1	1 49	4 21	2 18
	-1,632	-72	+12	+127	+234	+172	+168	+179	+213	+198	+171	+215	+85	+90	+15	+1			-48	-17	-16
	9 772	9 140	11 82	15 69	22 66	24 71	24 73	25 77	27 73	28 81	27 89	27 87	26 90	25 87	27 78	30 72	31 89	31 95	31 78	31 77	42 81
	-763	-131	-71	-54	-44	-47	-49	-52	-46	-53	-62	-60	-64	-62	-51	-42	-58	-64	-47	-46	-39
	239 89	114 88	52 63	63 71	72 74	110 74	99 64	92 69	76 55	87 68	83 64	54 43	27 29	14 20	19 60	17 108	19 415	9 123	9 97	7 213	14 91
	+150	+26	-11	-8	-2	+36	+35	+23	+21	+19	+19	+11	-2	-6	-41	-91	-396	-114	-88	-206	-77
	-79	-68	-98	-30	-14	-18		+1	-30	-60	-30	-2	+14	+16	+28	+56	+69	+74	+123	+80	+64
	3,209 5,727	2,174 2,437	1,085 1,467	1,192 1,269	1,463 1,290	1,388 1,394	1,510 1,484	1,642 1,566	1,674 1,633	1,809 1,819	1,906 1,962	1,710 1,767	1,231 1,389	876 999	702 819	774 911	901 1,293	980 1,231	1,140 1,436	1,140 1,307	1,137 1,264
	-2,518	-263	-382	-77	+173	-6	+26	+76	+41	-10	-56	-47	-158	-126	-117	-137	-392	-251	-296	-167	-127
	11,129 9,631	10,402 7,715	5,570 3,976	5,024 4,382	5,630 5,082	5,979 5,004	6,420 5,711	6,451 5,997	6,539 5,818	6,937 5,970	7,147 6,361	5,553 4,815	3,555 3,480	2,481 2,322	2,377 2,269	2,907 2,566	3,184 3,340	3,436 3,654	4,489 4,520	4,234 3,267	4,314 3,582
	+1,498	+2,687	+1,594	+642	+548	+975	+709	+454	+721	+1,027	+786	+735	+175	+159	+108	+341	-156	-218	-31	+967	+732
	+291 -127	-95 +145	-667 -19	-239 +4	-294 -1	-258 +42	+134 -32	-98 +26	-6 +160	+392 -120	-175 +55	-280 +2	-145 +321	+441 -454	+174 -1	-1,134 -44	-1,739 +19	-1,116 -31	-1,586 +315	-1,973 +316	-3,574 +556
	+164	+50	-686	-235	-295	-216	+102	-72	+154	+272	-120	-278	+176	-11	+173	-1,178	-1,720	-1,147	-1,271	-1,657	-3,018
	-169	-554	-588	-822	-45	-700	-570	-821	-987	-1,310	-636	-364	+128	+251	-48	+185	+116	+477	+276	+40	+113
	-215	-278	-4	+7				+95	-50	+463	+358	+66	+66	-26	+165	-15	+320	+600	+245	+57	-86
	-384	-832	-592	-815	-45	-700	-570	-726	-1,037	-847	-278	-268	+194	+22	+77	+200	+436	+777	+521	+97	+27
	(¹)	(¹)	(¹)	(¹)	-82	-109	-46	-36	-349	-231	-200	-191	+628	+22	+35	+96	+424	+55	+45	+27	+211
	(¹)	(¹)	(¹)	(¹)	+49	+228	-60	+455	+934	-117	+196	-288	-1,255	-67	-454	+126	+648	+376	+311	+317	+1,259
	(¹)	(¹)	(¹)	(¹)	-23	+119	-106	+419	+585	-348	-4	-479	-637	-444	-419	+222	+1,072	+431	+356	+344	+1,470
	-384	-832	-592	-815	-78	-581	-676	-307	-452	-1,196	-282	-777	-443	-221	-342	+422	+1,508	+1,208	+877	+441	+1,497
	-1,278	-1,905	-316	+408	-175	-178	-135	-75	-423	-104	-384	+330	+92	+75	+61	+415	+368	+157	+425	+249	+789

For 1933 includes -\$40,000,000 and that for 1934 includes +\$30,000,000, representing the net transfer of funds in security arbitrage operations. These transactions cannot be divided between domestic and foreign securities in

TABLE II.—World Supply and Use of Dollars, 1919-39¹

[In millions of dollars]

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
foreign																					
	3,904	5,278	2,509	3,113	3,792	3,610	4,227	4,431	4,185	4,091	4,399	3,061	2,091	1,323	1,450	1,655	2,047	2,423	3,084	1,960	2,318
	818	848	334	341	332	361	391	415	417	460	509	477	366	255	154	196	206	247	366	303	367
	123	190	200	243	260	303	347	372	400	448	483	463	341	259	199	218	245	297	348	303	290
	732	579	393	269	309	325	355	348	343	338	339	300	262	199	178	151	155	170	170	152	144
	140	118	106	93	84	71	65	63	61	58	55	49	45	35	30	30	27	28	33	38	43
	130	120	105	105	130	140	170	200	240	275	330	295	220	135	115	135	155	270	295	200	238
nts	2,844	286	86	48	21	31	19	22	14	31	63	41	36	9	5	1	1	1	49	21	18
	772	140	82	69	66	71	73	77	73	81	89	87	90	87	78	72	89	95	78	77	81
	89	88	63	71	74	74	64	69	55	68	64	43	29	20	60	108	415	123	97	213	91
nd ser-	79	68	98	30	14	18			30	60	30	2									
ments	5,727	2,437	1,467	1,269	1,290	1,394	1,484	1,566	1,633	1,819	1,962	1,757	1,389	999	819	911	1,293	1,231	1,436	1,307	1,294
ments	9,631	7,715	3,976	4,382	5,082	5,004	5,711	5,997	5,818	5,910	6,361	4,818	3,480	2,322	2,269	2,566	3,340	3,654	4,520	3,267	3,582
	371	500	567	666	317	823	824	921	1,114	1,019	415	775	190	81	83	17	53	47	13	53	
id	94	154	111	153	148	182	268	351	351	558	602	294	222	16	17	17	12	12	15	15	
signers	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	15	15	15	15	15	15
ates of	234	739	179	110																	7
outflow	719	1,413	877	949	485	1,025	1,112	1,292	1,485	1,597	1,037	1,089	432	87	98	49	68	74	28	68	78
g-term	10,350	9,128	4,853	5,331	5,567	6,029	6,823	7,289	7,303	7,507	7,398	5,907	3,912	2,409	2,367	2,615	3,408	3,728	4,548	3,335	3,657
coun-																					
	7,920	8,228	4,485	3,832	4,167	4,591	4,910	4,809	4,865	5,128	5,241	3,843	2,424	1,611	1,675	2,133	2,283	2,456	3,349	3,094	3,157
	1,109	1,119	394	286	302	315	318	370	360	372	390	325	247	171	108	133	139	158	236	267	303
	56	67	76	61	71	77	83	110	114	121	139	129	94	65	66	81	101	117	135	130	135
	40	63	49	48	65	57	47	50	49	50	51	43	28	17	17	19	20	22	28	37	36
	544	588	405	544	676	602	752	793	821	922	982	876	674	460	417	436	521	568	577	584	541
nts	1,212	214	98	175	255	203	187	201	227	229	234	256	121	99	20	2	1	1	1	4	2
	9	9	11	15	22	24	24	25	27	28	27	27	26	25	27	30	31	31	31	31	42
	239	114	52	63	72	110	99	92	76	87	83	54	27	14	19	17	19	9	9	7	14
nd ser-							1						14	19	28	56	69	74	123	80	64
lpts	3,209	2,174	1,085	1,192	1,463	1,388	1,510	1,642	1,674	1,809	1,906	1,710	1,231	870	702	774	901	980	1,140	1,140	1,137
lpts	11,129	10,402	5,570	5,024	5,630	5,979	6,420	6,451	6,539	6,937	7,147	5,553	3,655	2,481	2,377	2,907	3,184	3,436	4,489	4,234	4,314
United																					
of out-	335	581	285	134	82	120	221	296	285	361	276	300	257	172	155	114	219	181	225	103	102
					358	205	321	270	163	389	483	491	369	140	20	135	285	670	324	62	
nflow	335	581	285	134	440	325	542	566	448	750	759	791	626	312	175	249	504	851	549	165	102
g-term	11,464	10,983	5,855	5,158	6,070	6,304	6,962	7,017	6,987	7,687	7,906	6,344	4,281	2,793	2,552	3,156	3,688	4,287	5,038	4,399	4,416
(-)	+1,114	+1,855	+1,002	-173	+503	+275	+139	-272	-316	+180	+508	+437	+369	+384	+185	+541	+280	+559	+490	+1,064	+759
ancing																					
t; of	(²)	(²)	(²)	(²)	-82	-109	-46	-36	-349	-231	-200	-191	+628	+227	+35	+96	+424	+55	+45	+27	+211
+) of	(²)	(²)	(²)	(²)	+49	+228	-60	+455	+634	-117	+196	-288	-1,265	-673	-454	+126	+648	+376	+311	+317	+1,259
move-	(²)	(²)	(²)	(²)	-33	+119	-106	+419	+585	-348	-4	-479	-637	-446	-419	+222	+1,072	+431	+356	+344	+1,470
	+164	+50	-686	-235	-295	-216	+102	-72	+154	+272	-120	-278	+176	-11	+173	-1,178	-1,720	-1,147	-1,271	-1,657	-3,018
	-1,278	-1,905	-316	+408	-175	-178	-135	-75	-423	-104	-384	+320	+92	+73	+61	+415	+368	+157	+425	+249	+789
	-1,114	-1,855	-1,002	+173	-503	-275	-139	+272	+316	-180	-508	-437	-369	-384	-185	-541	-280	-559	-490	-1,064	-759

ments arranged to show the total amount of dollars supplied to foreign countries through amount of dollars used by foreign countries for payments to the United States. are net; that is, they represent the excess of new investments over the liquidation of old a small net liquidation of United States direct investments abroad, the return flow has

been added to "Amortization payments to the United States" to avoid introduction of another item. The amounts so added, by years, are as follows: 1933, \$32,000,000; 1935, \$34,000,000; 1937, \$35,000,000; 1938, \$16,000,000; 1939, \$9,000,000.

² Not available.

