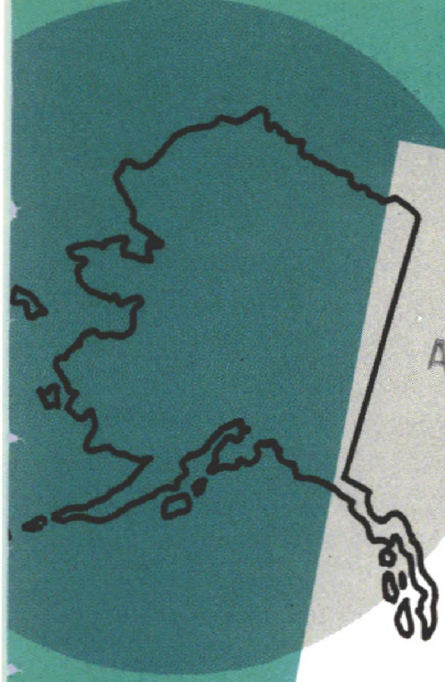
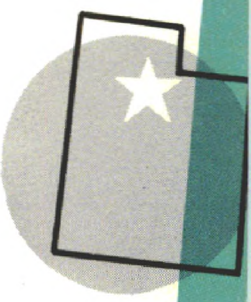
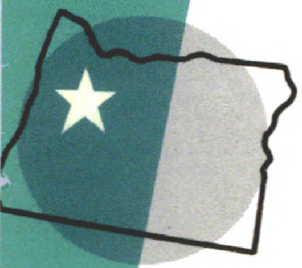
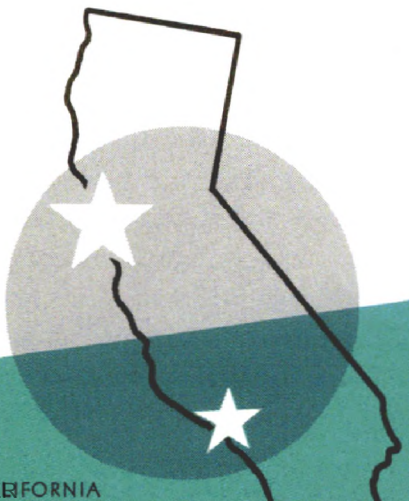
index

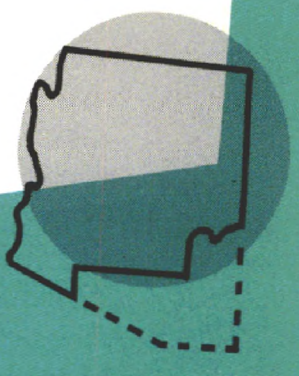
Monthly Review











FEDERAL RESERVE BANK OF SAN FRANCISCO
TWELFTH FEDERAL RESERVE DISTRICT

July 1961

In This Issue

Review of Business Conditions

THE recovery in the national economy was transformed in May and June into economic expansion. Gross national product, in real terms, is estimated to have increased above its prior peak. Industrial production in June made widespread gains which were well in excess of those seasonally expected, so that physical production is now approximately at the pre-recession peak level. Civilian employment and nonfarm employment rose to record levels in June, and the average pay rates and work week of factory workers also rose. Despite these widespread improvements, the ending of the school year resulted in an unusually large number of new entrants to the labor force so that the number of unemployed rose about seasonally to 5.6 million and the unemployment rate of 6.8 percent remained within the range established over the past six months. Although personal income has risen steadily to new highs, retail trade continues below the levels of the spring and fall of last year. The moderate behavior of consumers has been reflected in the continued sidewise movement of prices and in a more sober tone in the stock and commodity markets. The principal forces at work in the revival of business activity so far have been a cessation of inventory cutbacks and increases in consumer and Government spending, with support from stable levels of new construction and net exports.

The money markets have continued relatively easy, reflecting comfortable bank reserve positions and the absence of strong loan demand. At city banks, loans in June responded moderately to corporate tax and dividend needs, but holdings of United States Government securities expanded sharply. The June increase in bank credit brought loans at city banks to a level about $870 million below the first of the year and investments to $2.2 billion above the year-end level. The total credit expansion at city banks of $1.4 billion compares with declines at this time in most recent years. Despite the rise in bank credit, the seasonally adjusted money supply in June showed no change, and for the first six months of the year rose at an annual rate of only 2 percent. One explanation of the difference in behavior between bank credit and demand deposits is afforded by the behavior of time deposits which increased about $500 million in June, on a seasonally adjusted basis, to bring the rise since the end of 1960 to about $4.5 billion. This increase, at an annual rate of 12 percent, is much faster than in most other postwar years.

In contrast with the modest demand for bank loans in June, corporate security issues continued very large, and new bond offerings by state and local governments were at a record level. High-grade bond yields responded by increasing in June to the highest levels of the year, while short-term interest rates continued to fluctuate around the level established over the past six months. In June, and particularly in July, current and prospective Treasury needs for new funds and the scheduled maturities of outstanding issues also depressed the intermediate and longer term capital markets. Judging from the second quarter gold and dollar figures, the deficit in the United States balance of payments has risen slightly from the first quarter to an annual rate of about $1.5 billion.

Unemployment remains high

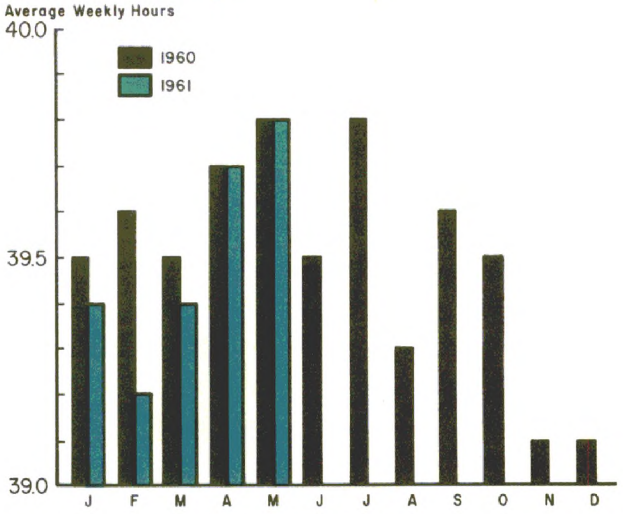
The level of unemployment in the District remained high in May, but the typically heavy increase in June was less than in most previous years. Continued signs of recovery in the District labor market occurred in May and also in June, according to preliminary data. In the Pacific Coast States, total civilian employment expanded slightly more than seasonally in May and June. The increase of 337,400 persons from April pushed total civilian employment in those states to a record

high of almost 8 million persons in June. Preliminary data indicate that Twelfth District nonfarm employment also expanded in June as well as in May.

The addition of 72,300 wage and salary workers swelled District nonfarm payrolls to 7.1 million in May. The rise was greater than seasonal and, as expected, more than compensated for the disappointingly small increase in April that was due to a labor dispute. Better than seasonal expansion occurred in all major industry categories except mining, construction, and transportation. Employment gains were sharpest in the manufacture of durables because of the termination of strikes in machinery and fabricated metals industries. Aircraft was the only hard goods industry that moved counter to the trend as increased hiring by Boeing in Seattle was outweighed by layoffs among Southern California firms. Although the size of layoffs during the past few months generally has been smaller than it was in the same period of 1960, the May employment decline in the Los Angeles-Long Beach area resulted in the displacement of aircraft by electrical machinery (which includes electronics) as the largest employer among manufacturing industries in that area. This reflects the fundamental change in military defense procurement during recent years. Seasonal declines dominated the employment picture in nondurables manufacturing, but continued gains in May occurred in printing and publishing and in miscellaneous nondurables (chemicals, petroleum, rubber, and leather products). Manufacturing industries showing higher employment than a year ago were electrical machinery, printing and publishing, and shipbuilding.

The average length of the factory workweek in the Twelfth District again rose by a little more than usual in May, moving from a seasonally adjusted 39.7 in April to 39.8 hours in May. This was the second consecutive month this year that average weekly hours equaled year-ago levels.

Average workweek in District manufacturing has risen steadily since February



Note: Data are adjusted for seasonal variation.
Source: State departments of employment.

Despite the lengthening of the workweek and a growing level of employment, total unemployment in the Pacific Coast States remained high in May, falling by 15,400 workers from April to 576,000—a little less than the expected seasonal decrease. On a seasonally adjusted basis, the unemployment rate went from 7.4 percent in April to 7.5 percent in May. The entrance of a somewhat larger number of new jobseekers into the labor force and a persistently high level of long-term unemployment accounted for the failure of the unemployment rate to decline. The slow response of unemployment to the improvement in economic activity reflects a characteristic tendency of employers at the end of recessions to increase hours and reduce layoffs before engaging in heavy rehiring.

A heavy influx of new jobseekers into the labor force in June increased unemployment in the Pacific Coast States by 30,500 to a total of 606,400 workers, the highest level for June in the postwar period. However, the increase was somewhat smaller than usual for June, and consequently the seasonally adjusted rate of unemployment as a percent of the labor force fell from 7.5 in May to 7.2 in

June. The number of major labor market areas in the District having substantial unemployment (6 percent or more), however, remained unchanged, although the national list of such areas declined by 8 in June. Ten of the 15 major industrial areas in the District continued in the labor surplus category, whereas nationally the proportion was 88 out of 150. Wenatchee, Washington and Oxnard, California were added to the list of smaller areas of substantial unemployment, bringing this total to 18. As in May, half of these 18 areas were also designated as areas of "persistent" labor surplus.

A greater than seasonal expansion in District employment through mid-July is suggested by employer hiring schedules. From mid-May to mid-July, according to reports of local state employment offices, these hiring schedules point to a seasonal expansion of employment in construction and food processing, with some additional nonseasonal gains in primary and fabricated metals, electrical machinery, ordnance, and shipbuilding, mostly concentrated in the Los Angeles-Long Beach, San Francisco-Oakland, and San Jose areas. Further sizable cutbacks are expected in the civilian and military aircraft industry of Los Angeles-Long Beach, but as in May these are not expected to be large enough to overshadow the anticipated nonseasonal gains in several other industries.

District construction up in May

Total construction in the District, as measured by the value of construction contracts, amounted to $658 million in May or 8 percent above the same month last year. District residential contracts were 13 percent above May 1960, reflecting increased contracts for both single and multi-family units. Awards for heavy engineering construction were also above last year (12 percent) because of increased contracts for both public works and utilities construction. The former was due to increased contracts for streets and highways, continuing the trend observed in recent reports. Nonresidential contracts, on the other hand, fell slightly below May 1960, reflecting declines in awards for manufacturing and educational and science buildings. The decline in the latter category may have been more in the nature of an erratic movement, however, since contracts for these buildings have been holding up so far this year and there is no reason to expect a decline. The same general pattern of change in construction awards is evident nationally.

District FHA applications for mortgage insurance on new housing failed to pick up in April, the most recent month available, although they did increase more than seasonally for the entire nation in May. District applications for FHA-mortgage insurance on existing homes continued to increase. For the first four months of this year, there have been over three-fourths again as many of these applications compared with the same period in 1960. District savings and loan associations have been increasing their mortgage investments more rapidly than in 1960, and this is likely to continue as their mortgage loan commitments in May were substantially above the same date last year. The flow of savings into these associations continues at a rate exceeding last year's pace.

Lumber and plywood markets steady in June

After easing in April and May following an early spring upsurge, new orders for Douglas fir leveled off in the first half of June according to preliminary reports and, in fact, rose slightly during the latter part of the month. Fir production in June was apparently kept in check, falling slightly below the level of new orders. However, this level of output was still above shipments, with the result that inventories increased slightly. Prices, which had declined slightly toward the end of May, were

steady during the first two weeks of June. Preliminary reports on western pine new orders in June suggest that they were approximately the same as in May. Western pine output was apparently also held below new orders and slightly below pine shipments, with the latter resulting in a further decline in pine inventories. Pine output through the end of June is estimated to be 15 percent below that of the corresponding period in 1960. Plywood prices on the one-quarter inch sanded paneling, which had been pushed up to $68 per 1,000 square feet at the end of May, remained at this $68 level throughout the month of June.

District lumber markets are beginning to feel the impact of certain international developments. One of these is the recent increase in Japan's purchases of timber from United States Government-owned land (Federal timber), a demand increase which is reported to have pushed up the price of this timber. This is having repercussions on domestic mills, since most of them depend on buying Federal timber or logs for at least a part of their raw materials. The decline in the value of the Canadian dollar vis-a-vis the United States dollar has also created some uncertainty in the District lumber market. Brtish Columbia mills turn out the same types of lumber as do District mills, and they both sell in the same market. The decline in the Canadian dollar gives Canadian mills a slightly wider profit margin from sales in the American market and therefore could encourage some price cutting by these Canadian mills and their more intensive cultivation of our markets.

Steel production enters seasonal slump

The District steel production index increased steadily from the low of 111 (1947-49 equals 100) in January of this year to 191 in May. The output in May was higher than any month since the first two months of last year. However, production during June, as indicated by weekly rates for the Western States,[1] retreated slightly from the high May rates. The weekly index (based on 1957-59), which ranged between 121 and 128 during May, varied between 119 and 124 during June. The average of June weekly rates for the Western States of 121 contrasts with an average of only 108 for national steel production and reflects the fact that recovery of steel production has been much more rapid in the West. For the first week of July, the District index was 110 and the national index was 95.5. Some official price cuts on several kinds and grades of steel products occurred during June following reports of price shading by smaller companies competing for larger market shares in order to operate at higher rates of capacity.

Currently, the earlier automobile model changeover this year and usual vacation shutdowns are affecting both steel and copper. In addition, the demand for copper was affected by a potential strike against a major mine producer which did not develop. May shipments of fabricated copper products in terms of copper content were the highest for any month in 16 years. However, when the strike did not materialize, demand for fabricated products —and in turn for refined—eased during June.

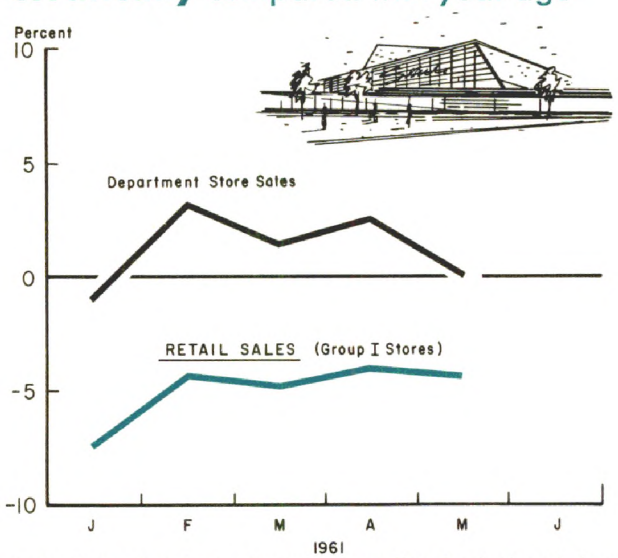
Retail sales erratic

Sales of Group I retail stores[1] in the District during May rose 6 percent from April and approached the dollar volume of sales a year earlier. On a trading day basis, however, sales by Group I stores eased from both the previous month and a year ago as did department store sales. But department store sales strengthened in June and were 6 percent above a year ago. New passenger car registrations in California in May increased by 9 percent over April and were only 2 percent under the number registered in May 1960. However, on a daily average basis (registration day basis), the decline from a year ago was 6 percent. For

[1] Twelfth District and Colorado.

[1] Stores of firms operating 1-10 stores at the time of the 1958 Census of Business. Prior to December 1960, stores in this category were classified on the basis of the 1954 Census.

District retail sales have behaved erratically compared with year ago



Note: Data plotted are adjusted to a trading day basis and show percentage changes from corresponding months of 1960.
Source: Bureau of the Census and Federal Reserve Bank of San Francisco.

the first five months of 1961, total registrations were 16 percent behind those during the comparable period of 1960.

Farm receipts slump in April

Returns to District farmers from marketings in April dropped 10 percent from April of 1960 as crop receipts declined sharply. A reduction was not unexpected because vegetable prices were unusually high last year. However, receipts in April were even below the dollar volume received in March. This is the first year since 1953 that a reduction in cash receipts has occurred from March to April. For the first four months of the year, receipts from marketings were slightly below those received during the comparable period of 1960. Nationally, receipts were up 7 percent for the same four-month period.

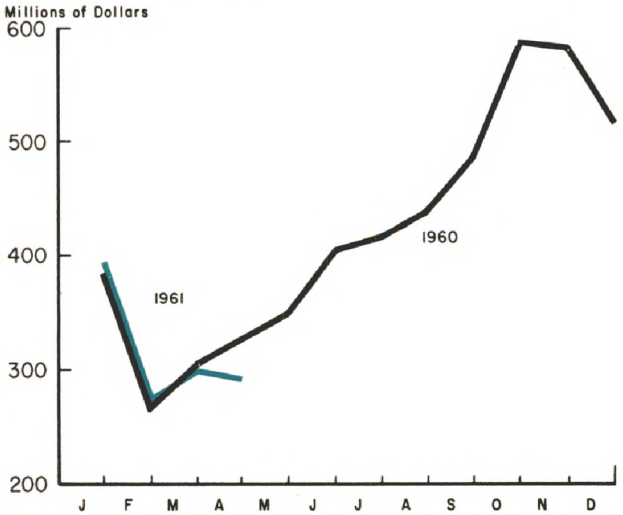
Some of the uncertainty concerning the farm labor situation in California has been removed as a major union's organizing efforts among California farm workers have been halted. However, other limited union activity in California agriculture continues.

Tax borrowing boosts loan volume in June

Total loans adjusted[1] and investments of District weekly reporting member banks increased over $300 million in the last three weeks of June. The loan increase of $100 million was largely due to tax borrowing at mid-month by business firms and increased use of bank credit by nonbank financial institutions that customarily resort to bank accommodations around tax payment dates as holders of their open market paper allow it to run off. Business firms borrowed only half as much as in the corresponding period last year, but borrowing by sales finance companies was heavier. The increase in investments during this period was reflected in larger holdings of both United States Government securities and other securities. Weekly reporting banks were allocated relatively small amounts of the new strip Treasury bills in mid-June but bought additional bills in the secondary markets. Net additions were also made to holdings of Treasury bonds of over 5-year maturity. The 2¼ percent bonds maturing in June 1962 and the 2½ percent bonds callable in June 1962

[1] Total loans less valuation reserves and loans to domestic commercial banks.

District farm cash receipts declined in April



Source: United States Department of Agriculture.

dropped into the within 1-year maturity range and accounted for a large part of the increase in holdings in this maturity category. Demand deposits adjusted declined in the last three weeks of June, but time deposits continued to rise as savings offset declines in deposit holdings of foreign banks and official institutions and of states and political subdivisions. In contrast to recent months, District banks were net purchasers of Federal funds in the period June 7-28 as temporary tightness developed in the reserve positions of some banks.

Second quarter shows gains in loans, investments, and deposits

A brief survey of the position of District weekly reporting member banks at the end of June discloses that loans adjusted and investments were almost $850 million above the end of the first quarter. This was $300 million more than the increase in the second quarter last year. However, only 10 percent of the gain in 1961 was accounted for by loans, while last year loans were responsible for 95 percent of the increase. This difference in performance is further brought out by the fact that the level of loans adjusted at the end of June 1961 was still below that at year-end, whereas there was over a $500 million increase in the first six months of 1960.

The accompanying table illustrates the diverse movements of loan categories in the second quarter of 1961 and of 1960. This year business loans showed only a nominal increase for the quarter as demand for bank credit by the metal products industry and other manufacturing and mining firms, by public utilities, and by trade firms failed to develop in the same magnitude as last year. The only category to show particular strength

CHANGES IN SELECTED BALANCE SHEET ITEMS OF TWELFTH DISTRICT WEEKLY REPORTING MEMBER BANKS

(millions of dollars)

	1961			1960		
	First Quarter	Second Quarter	First 6 Months	First Quarter	Second Quarter	First 6 Months
ASSETS:						
Loans adjusted[1] and investments	—339	+841	+502	—1,018	+551	—467
Loans adjusted[1]	—158	+ 84	— 74	— 19	+526	+507
Commercial and industrial	— 52	+ 2	— 50	+ 33	+279	+312
Real estate	— 52	+ 47	— 5	— 22	— 69	— 91
Nonbank financial institutions	— 90	+ 11	— 79	— 24	+ 96	+ 72
For purchasing and carrying securities	— 1	— 11	— 12	+ 19	— 6	+ 13
Other	+ 98	— 39	+ 59	+ 26	+188	+214
Total investments	—181	+757	+576	— 998	+ 24	—974
Total U. S. securities	—186	+660	+474	— 891	+ 61	—830
Treasury bills	—340	+288	— 52	— 160	+ 31	—129
Certificates	— 94	+259	+165	— 166	+ 34	—132
Notes and bonds						
Within 1 year	+321	+452	+773	— 202	— 93	—295
1 to 5 years	— 45	—512	—557	+ 208	+ 68	+276
After 5 years	— 28	+172	+144	— 571	+ 22	—549
Other securities	+ 5	+ 97	+102	— 107	— 38	—145
LIABILITIES:						
Demand deposits adjusted	—365	— 28	—393	— 728	—264	—992
Total time deposits	—144	+562	+418	— 451	+260	—191

[1] Exclusive of loans to domestic commercial banks and after deduction of valuation reserves; individual loan items are shown gross.
Source: Federal Reserve Bank of San Francisco.

during the quarter was real estate loans, a reversal of last year's trend. The volume of consumer borowing, as reflected in the "other loan category" in the table, is distorted due to the inclusion of loans of over $200 million made to a national retail firm in the first quarter and of repayments of about half that amount made in the second quarter. If adjustments are made to exclude these loans, consumer borrowing would show an increase of about $60 million in the second quarter this year instead of a decline.

The absence of loan pressure, the growth in total deposits, and the continued ease in bank reserve positions during the second quarter led District weekly reporting member banks to make a net increase of over $750 million in investments. As can be noted in the accompanying table, most of the gain was concentrated in short-term United States Government securities, although additions were also made to holdings in the over 5-year maturity range. The second quarter of 1961 contrasts sharply with that of last year when weekly reporting banks added only $24 million to their investment portfolios and decreased their holdings of Treasury notes and bonds of under one-year maturity. The increase in investments represents some rebuilding of the liquidity of District banks, although their loan to deposit ratios are still high relative to most of the postwar period. This factor, combined with expectations of a pickup in business and consequently in loan demand, has restrained banks from aggressively seeking to expand their loan portfolios by either lengthening loan maturities significantly or by lowering shorter term interest charges. In fact, as is noted below, interest rates on business loans have tended to rise.

Demand deposits showed a nominal increase in the second quarter while total time deposits increased over $550 million, more than twice the increase in the second quarter of last year. Computation of interest on savings accounts on a daily basis appears to be making such deposits increasingly attractive.

Higher rates on short-term business borrowing

Business firms that borrowed short-term funds from Twelfth District banks in June paid a slightly higher average rate of interest than in March, according to the latest quarterly interest rate survey conducted by the Federal Reserve Bank of San Francisco. While the increase was not large, it represented a reversal of the trend in the preceding three quarters toward lower borrowing costs. The average unweighted interest rate on short-term loans (those maturing in one year or less) made during the period June 1-15 was 5.36 percent, an increase of 8 basis points from the 5.28 percent rate prevailing in March and 4 basis points above the average rate in December 1960. The dollar volume of loans carrying the current prime rate of 4½ percent dropped from 33 percent in the March survey period to 28 percent in June. There was also an upward shift in the percentage of the dollar volume of loans made at rates over 5 percent and over 6 percent. The average rate on business loans of over one year was 5.51 percent in June, down from the average rate in March but still above the 5.28 percent rate prevailing in December 1960.

The Search for Certainty in An Uncertain World

Part II

THE INTERNATIONAL ADJUSTMENT PROCESS: THE GOLD STANDARD AND AFTER

ADJUSTMENT UNDER THE GOLD STANDARD

THE first article[1] in this series dealt with the function of gold as backing for the domestic monetary issue. The manner or metal in which each country defined its currency would be of little consequence if each country were a self-contained economic unit. But because the nations of the world exchange goods with each other and because trade between any two countries is rarely exactly in balance, it is imperative that there be some common basis for transacting business and making payments. Trade between New York and Montreal, for example, represents a more complex payments problem than trade between New York and San Francisco because different monetary units are employed. The exporter wishes to be paid in his own currency, and the importer wishes to pay in his, so that in international transactions a common denominator is useful. That common denominator has long been gold. The following discussion traces the role of gold in the international payments mechanism from the heyday of the "classical" gold standard through the rise of the key currencies—the pound sterling and the United States dollar.

Membership in the community of nations which were a party to the international gold standard was easily obtained. There were two principal requirements: First, that gold should serve as the standard of value for the particular nation, and, second, that the treasury or central bank should stand ready to buy and sell gold at a fixed price and permit the free import and export of gold. The first of these requirements is a purely internal matter for it merely specifies that all forms of domestic money, whether coins, currency, or demand deposits, shall be kept at par with gold and with one another.

The second requirement of the gold standard was what gave it its international character. Nations were tied together by virtue of the fact that they defined their currencies in terms of gold and were willing to buy or sell gold and permit the import or export of gold without restriction. The amount of gold in the various currencies determined the exchange ratios of those currencies as long as convertibility was permitted. Since the gold content of the currencies of the gold standard nations remained relatively constant, a system of fixed exchange rates together with the free movement of gold across national borders was the mechanism through which the adjustments to any imbalance in a country's payments were supposed to take place under the international gold standard.

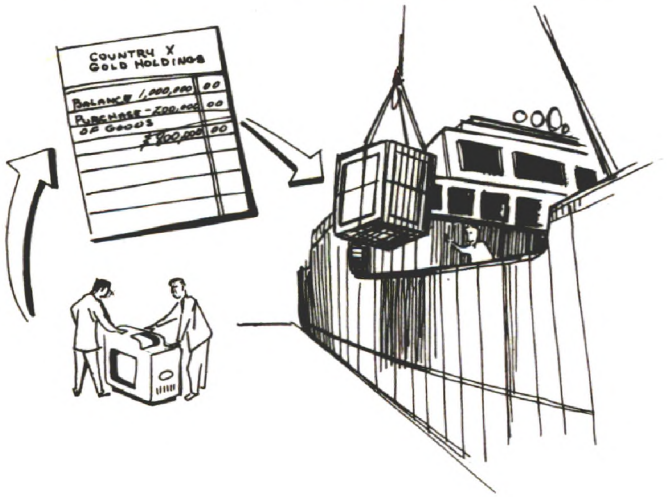
The operation of the adjustment mechanism might best be examined by looking at two countries, one of which has a deficit in its balance of payments with the other, and following the course of adjustment in the respective countries. It should be emphasized that the adjustment is necessitated by an imbalance in the external accounts rather than by gold flows, which serve merely as one means of restoring a balance.

[1] *Monthly Review*, Federal Reserve Bank of San Francisco, May 1961.

Adjustments to a payments deficit may operate through prices and interest rates

For purposes of exposition, assume that one of the countries on the gold standard experiences a temporary deficit in its international accounts. A familiar example is a crop failure and the need to import foodstuffs. Let us assume that this results in a net import balance. (This is more correctly a deficit in the balance of trade rather than in the balance of payments, but it serves to illustrate the process of adjustment.) The net import balance may be settled in several ways: By drawing upon existing short-term claims held abroad, through borrowing of the foreign currencies needed, or through the willingness of foreigners to accept payment in the form of bank balances in the debtor country. A further means of settling a deficit, and the most relevant to our subject, is the shipment of gold.

When the adjustment mechanism under the international gold standard was first studied, it was thought to operate primarily through changes in prices, interest rates, and the money supply in both the debtor and creditor countries. This explanation came to be associated with what is popularly called the "classical" gold standard. As gold is sent abroad, the domestic money supply shrinks since the buyer's deposits fall when checks are written to purchase gold. There is an equivalent reduction in bank reserves as commercial banks either reduce their own holdings of gold when this is permitted or reduce their claims upon the central bank (that is, their reserves) to pay for the gold. Under a fractional reserve system, the gold loss forces a reduction in overall deposits by a multiple of the gold lost if the banking system is operating without excess reserves. This is done through a reduction in outstanding bank loans and investments.



As the money supply in the deficit country is reduced, prices are supposed to fall since the same amount of business must be transacted with a smaller stock of money. A decline in the level of domestic prices relative to foreign prices tends to discourage buying abroad. On the other hand, the lower price level in the deficit country will make it a more attractive place for foreigners to buy goods. The cost structure of the country losing gold will also tend to fall since the deflation occasioned by the gold loss may also push down wage rates, further improving the competitive advantage of the deficit country in both its own and in foreign markets. As exports expand and imports decrease because of the changes in prices, the country's receipts and payments are brought into closer balance.

At the same time, the gold outflow is supposed to compel banks to liquidate their loans and investments because of the pressure placed on their reserves. Security prices will be depressed by sales from the banks' portfolios, and bank loans will be harder to obtain. Interest rates in general will tend to rise, discouraging new investment in plant and equipment. The reduced levels of production and employment which stem from the decreased availability of credit and from higher interest rates will help to push down the prices of finished goods and labor. The net

effect of the gold loss in the deficit country is thus deflationary, despite some offset arising from larger purchases in the deficit country by both nationals and foreigners as prices decline.

In the surplus country, on the other hand, changes in the opposite direction are supposed to occur. As gold flows into the country, the money supply increases and prices tend to rise. Higher domestic prices reduce the attractiveness of the goods of the surplus country to foreigners but make that country a better market; as a consequence, exports tend to fall and imports increase. Interest rates tend to decline, encouraging businessmen to lay in greater stocks of inventories, not only because interest rates are falling and it is easier to obtain bank accommodation but also because prices are rising and businessmen wish to build their inventories in advance of rising prices. Expansionary influences therefore emerge in the surplus country.

Central banks played a positive role under the international gold standard

Within the framework of the international gold standard, central banks were assigned a more positive role than simply the passive act of exchanging gold for currency. The central bank was supposed to act according to the "rules of the game," a series of measures intended to reinforce the basic adjustment forces. The principal action was either to raise or lower the central bank's discount rate depending upon whether the country was losing or gaining gold. An increase in the discount rate in the face of a gold outflow was designed to protect the central bank's gold reserve, the ultimate cover for the domestic currency and deposits. The increase in the rate would attract short-term funds from abroad and thereby gold, or slow the rate of gold loss. This measure would reinforce the restrictive effect on interest rates and price levels of commercial bank adjustments. The Bank of England discovered that quick action in raising the bank rate could stem the gold outflow quite rapidly, and there is even an instance recorded in which an outbound shipment of gold was taken off a ship in the harbor upon the news that the bank rate had been raised. A higher bank rate also encouraged commercial banks to reduce their indebtedness to the central bank.

The impact of changes in a country's gold stock could also be intensified by the use of open market operations. A sale of securities by the central bank in the open market in the case of a gold outflow would reduce further the reserves of the banking system, while the purchase of securities by the central bank when gold was flowing into the country would supply additional reserves. Other methods that were used by central banks to facilitate the adjustment process under the international gold standard included borrowing from the market and moral suasion. As a rule of thumb, the "rules of the game" dictated that the domestic assets of the central bank should move in the same direction as its holdings of international assets, chiefly gold.

Changes in income important in adjustment process

Under the international gold standard mechanism, as literally interpreted, a great deal of gold might have been expected to flow back and forth between countries in settlement of deficits. However, the physical movement of gold was surprisingly small. One reason was the influence of the differentials in interest rates upon short-term capital flows. Short-term balances are particularly sensitive to differences in return on alternative investments. For example, if gold threatens to or actually flows out of New York to London to cover a United States deficit, the resultant rise in interest rates in New York and their

decline in London will induce a prompt flow of short-term funds from London to New York as investors shift balances to take advantage of the higher returns in New York. These balances, of course, will flow where possible to that investment giving the most favorable yield only under conditions of complete confidence in maintenance of convertibility at stable exchange rates.

The more fundamental reason why gold movements were minimized, however, was the fact that the adjustment process did not operate exclusively through changes in prices and interest rates. The original explanation of the gold standard mechanism under stable exchange rates assumed conditions of full employment and price and wage flexibility, which necessarily placed much of the burden of adjustment on prices. Under conditions more closely approximating reality, where there may be less than full employment and price and wage inflexibilities, a fundamental source of adjustment arises from changes in income and employment resulting from a surplus or deficit in trade. In the case of an export surplus, the income of exporters will rise, and total domestic income eventually increases by some amount in excess of the export surplus.[1] Some portion of the increase in income, in addition, will tend to be spent on imports (depending on the proportion of the additional income that consumers are inclined to spend on such goods), helping to close the gap in the balance of payments. If wages are inflexible, part of the adjustment may take the form of a reduction in employment. Conversely, a deficit in the balance of payments will bring about a decline in the level of domestic income more than proportional to the amount of the deficit, imports will drop off, and the balance of payments will be brought into adjustment at some lower level of income.

[1] In addition to the initial rise in income generated by the export surplus, total domestic income in succeeding periods will be boosted by successive rounds of spending induced by the increase in income.

Although it is possible to visualize the adjustment process as taking place primarily through the income effects of a surplus or deficit in the balance of payments, income effects interact with price, wage, and interest rate effects. Income effects induce price and wage changes, while price and wage movements in turn induce changes in income. The following table summarizes the effects of a deficit or surplus in the balance of payments upon gold flows and other economic indicators.

	In deficit country	In surplus country
Gold Flow	Out	In
Money Supply	Down	Up
Bank Reserves	Down	Up
Interest Rates	Up	Down
Prices	Down	Up
Income	Down	Up
Employment	Down	Up
Wages	Down	Up

The actual workings of the gold standard did not always follow the theoretical explanation

In describing the operation of the gold standard mechanism as a means of settlement, the word "automatic" should be used advisedly. As we have indicated, the gold standard mechanism prior to World War I worked most satisfactorily when central banks generally observed the "rules of the game." The immediate goal of central bank policy, however, was the maintenance of convertibility rather than economic growth and stability of prices. A number of central banks also employed other methods to facilitate the necessary adjustments, such as small changes in the official selling price for gold to influence the movement of short-term funds or gold or as an alternative to discount rate changes, official operations in the foreign exchange markets, and borrowing from foreign commercial banks, foreign governments, or from their own governments to obtain foreign exchange. There was also some cooperative

action among central banks, such as direct borrowing from other central banks, discounting of foreign bills (for example, sterling bills), and, on occasion, shipment of gold to foreign markets. Cooperation between central banks, however, was not a common feature of the pre-1914 gold standard.

Several studies have suggested that the gold standard did not function in the manner neatly described by the theory. The majority of central banks did raise their discount rates when their gold stock or other external reserves declined but were less inclined to lower their rates when their international assets increased. Their domestic income-earning assets did not always move in the same direction as their international assets, although this lack of parallelism may be due partly to statistical weaknesses in the data, partly to some automatic offsets, and partly to cyclical influences.[1] Discount rates, moreover, were of varying effectiveness in affecting other money market rates—being more effective for Great Britain—or the international flow of short-term funds. Gold losses and higher discount rates, in addition, were a less depressing influence on income and employment than might have been expected from the theoretical description because of the long-run expansionary growth forces that prevailed during this period.

Since adjustments under the international gold standard did not always take place in the manner described by the theory, what was responsible for its relatively smooth operation? Short-term capital movements in response to interest rate differentials and fairly dependable longer term capital flows contributed to the maintenance of balance. But more important was the fact that the exchange rate structure reflected fairly accurately the existing price and cost relationships between the principal trading nations, that the United Kingdom and the pound sterling provided the economic and financial strength around which the system revolved, and that the rate of change in prices, income, and business activity in the various countries was quite closely synchronized.

[1] Arthur I. Bloomfield, *Monetary Policy Under the International Gold Standard: 1880-1914* (Federal Reserve Bank of New York).

THE FLIGHT FROM THE GOLD STANDARD

Although the gold standard was an excellent means of settling international transactions, it was not able to withstand the shocks of wide swings in prices and the level of economic activity or the political disruptions born of a general war. During World War I, the United States was the only major belligerent nation that remained on anything that resembled the classical gold standard. Great Britain left the gold standard for all practical purposes for almost a decade, returning to it in the mid-1920's. France also found itself unable to adhere to the requisites of the full gold standard and left it during the war, to return to it after Great Britain. As in the case of previous wars, nations found that if they were to continue to sell gold they would soon exhaust their monetary stock, so unrestricted transactions in gold were suspended. In times of war, imports generally run ahead of exports as nations divert their productive capacity toward producing war materials and away from the usual exports that provide foreign exchange. Between 1929 and 1936 nearly all of the major nations that had faithfully observed the two prerequisites of the gold standard—definition of the domestic currency in terms of gold and unlimited purchases and sales of gold at fixed prices—left the gold standard, some temporarily and others permanently.

Conditions had changed after World War I

The reasons for the final breakdown of the international gold standard during the world-

wide depression that started in 1929 were many and compelling. Some, but by no means all, of the factors involved might be laid at the door of the depression. One of the principal factors was the change in the patterns and practices of trade and finance from those that had prevailed before World War I. Where trade had been relatively free in the earlier period, it was now encumbered with high and rising tariff barriers. The Smoot-Hawley tariff enacted by the United States in 1931 is a case in point. Not only did this measure raise American duties to all-time highs, but it provoked similar responses from other nations. Tariffs played a part in the breakdown of the gold standard insofar as they acted to limit multilateral trade. The raising of barriers to trade through tariff restrictions narrowed the trading area and consequently reduced the ability of countries to balance out deficits against surpluses from other nations.

Another factor was the shrinkage in international lending toward the end of the decade, particularly by the United States, but also by Great Britain in some measure. The decline in international lending helped to hasten the downfall of the gold standard on an international basis because it limited the ability of some nations to close the gap in their balance of payments. The place of the United States as an international lender was quite different from that of Great Britain, which had held this position prior to the war. Where Britain was a net lender and a net importer, its financial and service transactions offsetting its imports of goods on balance, the United States was both a net lender and a net exporter. The fact that European countries were doubly debtors to the United States, both on capital account and to pay for the excess of their imports from the United States, made it increasingly difficult for them to meet their obligations to this country. Then there was the matter of the war debts and reparations payments. These demands for payment bore no relation to the existing patterns of trade and of payment for current commercial transactions.

The rules of the game were not always followed by central banks. The Federal Reserve System in the United States neutralized the effects of a heavy influx of gold from 1920 to 1924. It was thought that such funds were merely transient and that, if an expansion were to be encouraged on the basis of these funds, it must be followed by a deflation as the funds were withdrawn. Similarly, the Bank of England and, to some extent, the Bank of France followed a practice of offsetting gold flows after 1925. It was contended, moreover, that the pound was overvalued by Britain when it returned to the full gold standard at the pre-World War I parity, while France undervalued the franc after 1926. These actions had the effect of weakening the processes of adjustment to shifts in trade relations with other countries. These developments were further symptoms of a movement away from a world economy toward increasing concern with the domestic economy.

From 1929 to 1931, the adjustment to the depression took the form of deflation and, to a certain extent, exchange depreciation. The first phase of the international crisis was felt most keenly by countries which were primary producers of raw materials. The prices of raw materials typically fall further and faster in a depression than do the prices of finished goods, and such countries were particularly affected by the decline in world prices. Such countries as Australia, which was dependent upon wool as a source of foreign exchange, and the South American countries, such as Argentina, Brazil, or Bolivia, which depended upon wheat and beef, or coffee, or tin for their foreign exchange, found themselves at a severe disadvantage as the world prices of the goods in which they traded fell sharply in relation to the prices of the manufactured

goods which they wished to purchase. The decline in international lending and the heavy pressure upon the prices of the goods which they exported made it necessary for these primary producers to make some adjustment to the situation.

Countries which are principally producers of raw materials are usually heavily dependent upon their exports as a source of income. When world prices of these commodities fall relative to the prices of manufactured goods, these countries find themselves at a considerable disadvantage vis-a-vis countries which are exporters of finished goods. If the primary producing countries were to maintain the existing exchange rates in terms of the gold content of their currency, they would be bound to experience trouble. As their prices fall relative to prices in the countries from which they import finished goods, there will be a tendency for them to have a deficit on external account, except in the unlikely case where the fall in the prices of their exports is compensated by a rise in the physical volume of these exports. If countries exporting primary products depreciate their currencies (that is, reduce the gold content), they may reduce their imports and thus reduce the rate of their gold loss. In practice, these countries did depreciate their currencies as an alternative to drastic deflation. But, in spite of the depreciation in the currencies of these primary producers, there was no basic change in the gold standard until the spring of 1931. The break in the standard came from an entirely different quarter.

Capital flight contributed to financial crisis in 1931

The financial crisis of 1931 came, not from one of the major powers, but from Austria. The leading bank in Austria, the Credit Anstalt, had been in difficulty for some time, and the announcement that the government intended to reorganize it was the signal for a run on the bank. The loss of confidence in the largest bank in Austria led foreigners to question the safety of their funds in the country. A large scale withdrawal of foreign balances then ensued, both from Austria and other central European countries. The German banking system was not inherently strong since it was dependent to a very considerable extent upon short-term borrowing from abroad, and foreign deposits accounted for 45 percent of total deposits by 1928. Political and economic difficulties at home, compounded by the failure of a large German textile combine and the failure of the Darmstädter Bank, which was associated with it, led to a bank panic in Germany and a consequent loss of confidence and withdrawal of funds by foreigners.

The pressure then shifted to England, which had experienced no such difficulties with its banking system, but which had large balances which were now frozen in Austria and Germany. In spite of support by the Federal Reserve and the Bank of France, the British Government found it necessary on September 21, 1931 to suspend the responsibility of the Bank of England to sell gold. The decision of England to leave the gold standard was at least as much of a blow to the gold standard as it was to sterling: The prestige of sterling was only a little less than that of gold itself. At the time, a leading British economist quipped that sterling didn't "leave gold, but gold left sterling." The massive effort to offset the depression by international financial cooperation thus came to an end.

Domestic considerations forced the United States off gold

By way of contrast, although $338 million in gold flowed out of the United States in 1931-1933 as the gold exchange standard collapsed abroad, it was the domestic situation which took the United States off the full-bodied gold standard. The depression of 1929 touched all of the industrial countries of the world, but it visited the United States with

the greatest severity. Wholesale prices fell by almost a third between 1929 and 1932 while national income declined by half. Accompanying the business depression was a virtual collapse of the banking system. As values declined, the banks, which were heavily committed to real estate loans, were unable to realize upon these loans and became increasingly illiquid. Banks failed at a rapid rate between 1929 and 1933, and in the latter year the national government closed all banks for a brief period pending a determination of their solvency.

One of the aims of national policy in 1933 was to reflate the price level—and presumably thereby economic activity—to the level that had obtained prior to the depression. It was thought in some quarters that this could be accomplished by cutting the value of the dollar, that is, raising the price of gold in terms of dollars. The price of gold was cut free from its old price of $20.67 per ounce, and the price was determined on a daily basis for a number of months before it was finally fixed at $35 per ounce in 1934, a devaluation of 41 percent from the old price. At the same time, exports of gold were temporarily suspended, and individuals were forbidden to hold gold.

After the United States left the formal gold standard for a more modified form, the nations adhering to the gold standard dwindled to a group of six: France, the Netherlands, Italy, Belgium, Switzerland, and Poland, which under the leadership of France constituted the "gold bloc." The central banks of these gold bloc nations cooperated to check speculation in their currencies. Thus, after 1933 the world was divided into three principal currency groups: There was the sterling area which was cut free from gold, the dollar which was tied to gold, and the gold bloc whose constituent nations still retained the trappings of the old international gold standard. The gold bloc was a short-lived affair and dissolved in 1936 when France, Switzerland, and the Netherlands devalued their currencies.

When the gold bloc ceased to exist in September 1936, the Tripartite Agreement between the United States, Great Britain, and France was signed, pledging avoidance of exchange rate fluctuations and competitive exchange depreciation. The Agreement was strengthened in October by agreement of the members to sell each other gold at a fixed price guaranteed for at least 24 hours, which tended to give greater stability to the structure of exchange rates and permitted the various exchange stabilization funds[1] then in operation to be more effective.

By the fall of 1936, the principal world currencies had been brought into closer alignment. Sterling, which had been overvalued when brought back onto the gold standard in 1925, was being maintained at a somewhat lower level by the actions of the British ex-

[1] The purpose of an exchange stabilization fund invites explanation. When a country has left the international gold standard, there is no tie to the value of other currencies other than the demand for and the supply of the currency of the country in question in its international relations. In an effort to provide some degree of stability to the value of the currency in relation to that of other currencies, the stabilization fund will enter the foreign exchange market, making the specific currency available when it rises to a premium and buying it to provide strength when the demand for it is slack. In this manner the stabilization fund endeavors to maintain the international value of its currency at a given level. It might be noted that in this case the fund offsets rather than reinforces the domestic effects of foreign developments.

change stabilization fund; the dollar remained at the rate established by the 1934 devaluation; and the French franc had been devalued in 1936. A number of other countries came into the agreement: The Netherlands, Belgium, and Switzerland. This arrangement provided for a significant degree of cooperation between stabilization funds and succeeded in achieving relative stability of exchange rates. With the outbreak of World War II, the Tripartite Agreement ceased to be operative.

THE POUND STERLING STANDARD

The breakup of the international gold standard did not spell the end of international trade, but it did make it much more cumbersome. The old relationships between currencies and gold were gone. Obstacles were raised to the convertibility of currencies through the imposition of trade restrictions and of exchange controls in some countries. Exchange controls were imposed either to restrain the export of capital or to restrict merchandise imports. The immediate objective of such restrictions was to remedy an imbalance, generally a deficit, in the balance of payments. The varieties of controls were many and ingenious. A number of countries, chiefly in South America, had multiple exchange rates, granting the most favorable terms to exports which they wished to encourage or to imports which were deemed to have the highest priority. Arrangements were arrived at between countries wherein all payments for exports and imports would be conducted through some government agency, generally the central bank. But all such agreements had one thing in common; they treated the symptoms of the problem rather than the basic causes. Markets were limited, and the gains that might have been realized from a more efficient use of resources were lost.

After gold ceased to be the universal currency, attention was directed to the individual currencies. There came to be certain moneys that were considered to be "key" currencies. Chief among these were the pound sterling and the dollar. The pre-eminence of these currencies lay in the fact that London and New York were the principal money centers of the world. Subsequent to the breakup of the international gold standard, each of these currencies came to acquire some of the luster that had lately belonged to gold by serving as international means of payment and as international reserves.

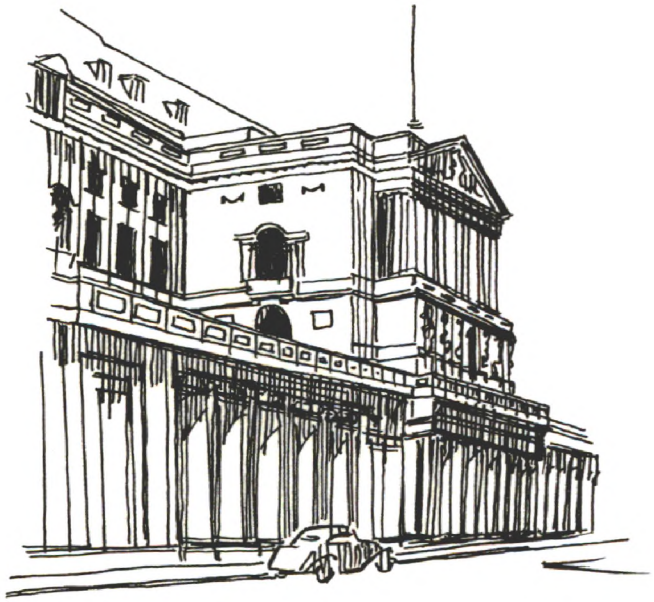
The gold standard was, in fact, the British (that is, pound sterling) standard from late in the seventeenth century until the outbreak of World War I. The pound sterling was in its greatest ascendancy during the period 1870 to 1914 when it was unrivaled as the most important currency in international finance. It was the London-centered system of international finance based upon British predominance in international trade which breathed life into the pre-World War I form of the gold standard.

Sterling reached a crisis in World War I

In World War I, the extraordinary war-induced changes in the flow of international trade and the reversal in the distribution of credit illuminated the dependence of the gold standard upon the uninterrupted performance of London as middleman in international finance and the unsuitability of gold as the balancing factor in international payments in a time of disorganized credit. Prior to the war, London had been able in time of crisis to contract her total foreign obligations and to realize some of her foreign assets. There were two sets of circumstances that enabled Britain to do this for they worked to offset one another in her balance of payments. Britain was a large net lender at long term, chiefly to non-European countries. In a time of crisis long-term lending would decline, and this

would work in the direction of a surplus. At the same time, Britain's exports would fall much more than her imports, which were chiefly foodstuffs, and this would act to push the balance of payments toward a deficit. Yet another characteristic of Britain's position was her facility to shift to short-term lending during a crisis, making up for the decline in her long-term lending abroad at these times. These countermeasures were carried out without creating a shock to the money and capital markets, without interfering with international trade and payments, and without lessening the availability of sterling as a medium of world payment.

The distinctive characteristic of the crisis of 1914 was that for the first time the flow of sterling credit was halted, and the City of London was forced to suspend its operation as middleman in international finance. In the normal course of affairs London served as a clearing center, and as sterling credits were received from investments abroad or sales of merchandise or services, such as insurance or shipping, banks and financial houses used these to offset sterling payments for imports, services, and interest and dividends on British securities owned by foreigners. The advent of war disrupted this complex but smoothly functioning system of clearing.



Although Britain remained on the gold standard in the strictest legal sense during World War I, for all practical purposes it left gold. There was no formal suspension of specie payments, but a number of legal measures, administrative procedures, and private practices accomplished the same end. In the domestic sphere, the Peel Act, which since 1844 required the Bank of England to secure increases in the currency above the fiduciary issue by an equal value of gold, was suspended. The Government did not refuse to redeem notes in gold upon presentation but effectively discouraged the demand for gold through a policy of inquiring quite closely into the purposes for which the gold was desired. In 1916 the major legal restriction placed upon gold was a prohibition against the melting down of gold coin. There were no restrictions against the importation of gold, but all gold produced in Empire countries and later all gold from other sources was purchased by the Bank of England. On the export side, the principal factor restraining the outflow of gold was the voluntary restraint upon transactions in the free market in gold.

With the great strain upon exchange rates created by war finance, it was significant of the contemporary position of the United States and of the role of Britain as peacetime and wartime financier that the sterling-dollar rate was the key rate to be maintained. If the sterling-dollar rate remained stable, this offered a broad base upon which to stabilize other exchange rates. The pound depreciated after the war started because of unprecedented import demands for war materials but was pegged at $\$4.76\frac{7}{16}$ from 1915 until the end of the war through large foreign credits obtained chiefly from the United States and through sales of American securities by the British Government. The security sales were incidentally a major element in transforming

the United States into a creditor nation. At the same time, Britain granted credits to France to support the franc.

Problems confronted sterling after World War I

The aftermath of a major war is typically characterized by two principal economic problems. The internal problem is inflation, and the external problem is that of finding, and adjusting to, an appropriate exchange rate. Despite strong wartime efforts to support the exchanges, there developed a fan-like dispersion of exchange rates around the sterling-dollar par, which did not reflect the movement of price levels in the various countries.

Britain's position was made more delicate by the fact that large balances had been built up in London during the war by the Dominions and by neutrals, who did not wish to repatriate these funds at the existing disadvantageous market rates of exchange, and by owners of flight capital. The existence of these large and potentially volatile balances placed obstacles to a return to the international gold standard at the conclusion of the war, but, even more important, significant changes had occurred in the institutional framework compared with that of the prewar gold standard.

Even before World War I, Britain's share in world trade had begun to diminish due to increased foreign competition in shipping and in the export of textiles and iron and steel goods; the war accelerated the decline in Britain's relative trading position. The demands of war finance had exacted a heavy toll from Britain's resources, and her creditor position was reduced by about one-quarter during the period 1914 to 1920. Britain's position in international finance also was significantly changed in other respects from prewar. The dominant role of the pound sterling bill of exchange (the "bill on London") before 1914 was permanently modified by two wartime developments: (a) the growth of new methods of finance, namely, the telegraphic transfer of funds and the use of bank advances and (b) the rise in importance of the dollar bill of exchange issued in New York.

The unquestioned position of London as the center of international finance was altered by the strong underlying force of the movement of wartime merchandise trade. The basic pull of London over the exchanges was weakened, and New York was raised to the position of a powerful competitor to London in international finance. As a consequence, Britain was forced to attract foreign balances through deposit advantages; she could no longer command them as the sole center of finance.

Despite the change in Britain's relative position in international trade and finance and despite the postwar difficulties facing all the former belligerents, there was widespread support in Britain and in other countries for a return to the prewar international gold standard as soon as feasible. The support for a return to the gold standard was based upon its long and relatively successful operation prior to World War I and upon an underestimation of the fundamental changes which had occurred in its institutional setting. Great Britain returned to the gold standard in May 1925, with the pound sterling at its prewar parity. The high level of unemployment which Britain suffered subsequently in the late 1920's—in order to maintain the exchange rate—led to the widely-held view that the pound had, in fact, been overvalued in its restoration to prewar parity.

By 1928 most of the nations of the world had returned to the gold standard. In many cases, the standard to which they returned was the gold exchange standard under which countries were permitted to count as their legal reserves funds held in other countries which were on the gold standard. Thus, while

economizing on gold, the gold exchange standard served to encourage the accumulation of short-term funds in the depositary countries. Since Britain maintained a relatively high Bank rate in defense of sterling, funds flowed into London, and Britain's short-term indebtedness to foreigners was much larger than its short-term credits abroad. The inherent volatility of these short-term funds, however, created a potential danger to the banking and monetary system of the depositary country since they could be easily withdrawn. The world-wide depression touched off by the American stock market crash in 1929 and the movement of short-term funds, occasioned by the international banking panic, succeeded in forcing Britain off the gold standard by September 1931.

The sterling area was organized in 1931

Great Britain was the first major nation to abandon the gold standard in the depression of the 1930's. In doing so, she chose to pursue a monetary and domestic policy geared more closely to internal developments, despite her stake in international trade. This move was followed by the organization of the sterling area in 1931 as a defensive mechanism in international trade and payments. Its principal characteristics were the link to sterling as an international currency and the coordinated exchange rate and import policy usually followed by all member countries. A number of countries chose to join the sterling area, which meant that they chose to link their currencies to the pound sterling rather than to gold, and most or all of these countries' monetary reserves were held in London in sterling balances or other liquid assets. However, unlike the gold standard, the parities of member currencies were not rigidly fixed with respect to sterling but were allowed to fluctuate somewhat in response to national interest.

The members of the 1931 sterling area included Great Britain, Eire, India, British colonies and mandated territories, Iraq, Iran, Egypt, Portugal, the Scandinavian countries, and the Dominions except Canada. Canada never became a member of the sterling area because of her close economic relations with the United States. Most, but not all, members of the sterling area were members of the British Empire. One of the major advantages afforded to members was the importance of the United Kingdom market for exports of foodstuffs and raw materials from member countries. If their currencies were tied to gold, the sterling price of their principal export commodities would have risen as sterling depreciated, and demand in their largest market would have been adversely affected. In addition, many countries in the sterling area owed large debts to Britain and to other members which could be settled most conveniently through the medium of sterling. Then, too, there was the prestige that sterling still commanded in the international financial world. Additional reasons encouraging the tie-in with sterling included the preference system, which was adopted for intra-Empire trade, and the negotiation of bilateral trade agreements with other countries and the fact that British industrial activity fell off much less than that of the United States during the period 1929-1932. American imports consisted mainly of industrial raw materials and hence were more subject to cyclical variation.

Because the British Empire constituted the largest single commercial and monetary system in the world and the sterling area included more than one-third of the world's population, the sterling area formed a very large multilateral trading system. The pound sterling was both a means of international settlement and a medium for reserves within the area; it served also as backing for domestic currency and for other central bank liabilities.

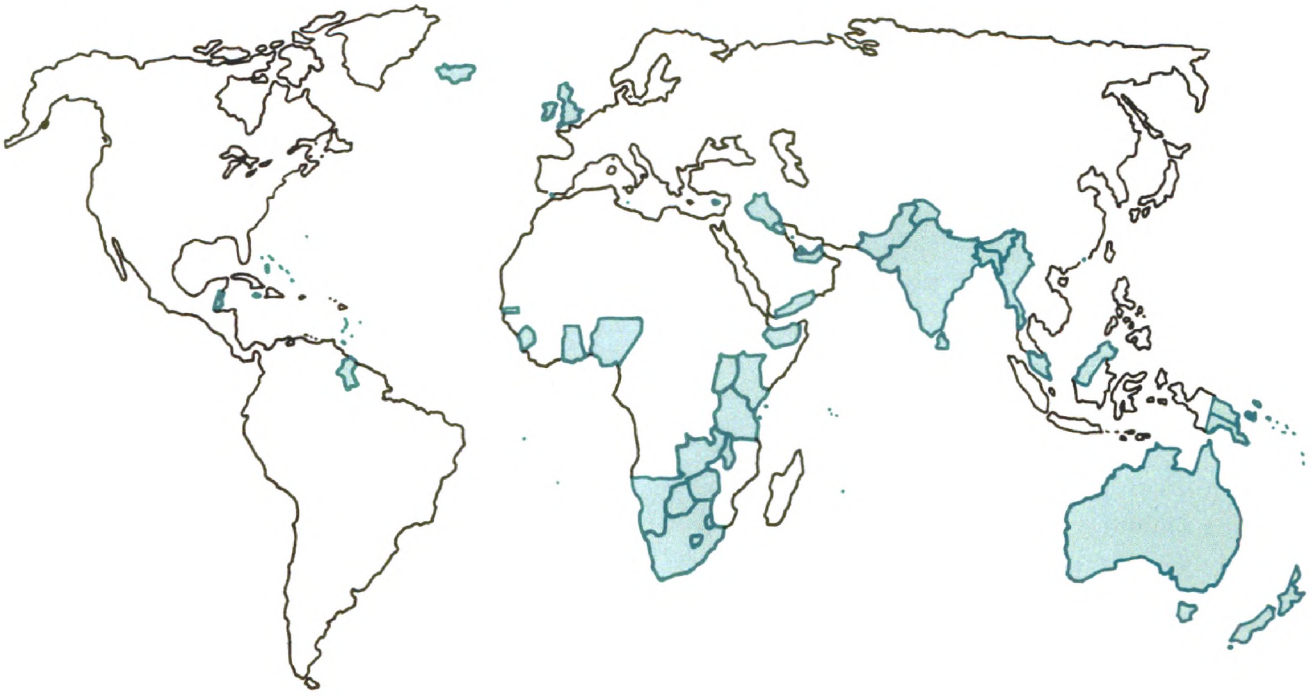
The sterling area changed in character after World War II

World War II marked a change in both the membership and character of the sterling area. The membership became more exclusively British and now includes the British Commonwealth (except Canada), the Irish Republic, British Trust Territories, British protectorates and protected states, Burma, Iceland, Jordan, Libya, South Africa, and South West Africa.

In character, the sterling area became more tightly knit, with closer monetary cooperation internally and a more formal coordinated policy toward the rest of the world. The basic elements of the prewar system, however, were retained. Member currencies continued to be maintained at a stable exchange rate with the pound sterling, and official monetary reserves continued to be held in London. In addition, the sterling area countries developed a system of exchange control beginning in 1939 generally patterned after and coordinated with that of Britain and agreed to pool their non-sterling exchange and gold in London, making it possible to centrally direct the use of these resources in the conduct of the war. This arrangement permitted exchange transactions within the sterling area to remain relatively free of control, while members could still buy dollars with sterling to make essential purchases.

British exchange control during the war developed gradually into a tight control. At the same time, Britain borrowed heavily overseas to finance the war and by 1946 had accumulated short-term sterling liabilities amounting to £3,500 million. After World War II, British exchange control continued under a classification of accounts based upon country of residence of the account-holder; each of the principal classifications of sterling accounts had its own convertibility characteristics, and approval for use of sterling holdings was based upon the residence of the payee as well as the residence of the account-

Members of the sterling area in the early postwar period



Source: *The Sterling Area: An American Analysis*, Special Mission to the United Kingdom, Economic Cooperation Administration (London 1951).

holder. Accounts held by residents of the sterling area were termed "resident sterling," and regulations permitted freedom of intra-resident account transfers, including capital transfers. Transfers to nonresident accounts, however, required approval by the government of the account-holder's country. Sterling accounts held by residents of certain European countries were termed "transferable sterling" and were freely transferable among countries in this group and *to* resident accounts, but capital transactions and transactions with the dollar area were excluded. Britain could not afford to provide exports for all existing external claims to sterling at once when she herself sorely needed imports, but the transferable sterling classification represented a limited effort to regain the former place of sterling as a medium of world payments.

Although Britain's dollar deficit before World War II was greater than after the war, the prewar system of free multilateral trade accommodated the dollar deficit, whereas the disorganized state of world trade and payments in the immediate postwar period could not. There was free multilateral trade within the postwar sterling area, but trade and payments with the outside world were restricted. Nevertheless, as Britain recovered from the effects of the war, she succeeded in gradually liberalizing the use of sterling. In December 1958 sterling became fully convertible for nonresidents for current trade and service transactions.

THE DOLLAR STANDARD

Because of its large area, diversity of natural resources, and developed economic activity, the United States of 1914 was the closest counterpart of the London-centered British complex of trade and payments. Long before World War I, New York had become the clearing center for transactions between different parts of the country. This was the center for arranging for the exchange of manufactured goods for agricultural products and the distribution of imported goods, as well as the entrepot center for exports. Loans, deposits, and financial transactions were concentrated in New York, and the correspondent banking system permitted settlement of interior transactions through the New York clearing house.

Before World War I, the facilities required of an international money market were not provided by New York alone, but in cooperation with London; for example, the credit facilities required by the cotton trade of the South utilized both the New York and London facilities. The New York-London connection was the channel through which long-term capital was attracted to the United States and through which American funds found profitable employment. The London market enjoyed the advantage of traditional usage and of an efficient complex of financial facilities. World War I provided the opportunity for New York to emerge as a powerful international money market. The war caused the United States to become a creditor in the long-term area and also contributed to the provision by New York of the short-term financing required by American trade and to the establishment of an American foreign banking system.

The New York acceptance market grew rapidly during the war, and by 1917 the volume of acceptances outstanding amounted to $1 billion, of which two-thirds was drawn to finance foreign trade. International bank balances in New York rose, influenced by the key role played by advances from the United States Treasury in financing the war after American entry and by capital flight from Europe. New sources of financing acceptance credit and a new distribution of international bank deposits had come into being. During the war, the New York Stock Exchange also

gained importance in the distribution of international securities.

The wartime transformation of New York into an international money market occurred because the United States was the only major country on the gold standard, had impressive credit reserves, and represented immense real wealth. However, New York yet lacked the international confidence which London had earned over its long period of operation, and New York lacked certain facilities related to commodities, shipping, and foreign exchange which were available in London.

Private capital exports from the United States became prominent in the 1920's; however, they had an unsatisfactory character because insufficient attention was given to the repayment prospects of the borrower (particularly in the case of bond flotations) and because they were irregular in volume, as shown in the table below, thus exerting an unstabilizing effect upon the world economy.

The 1930's proved a difficult period; following the collapse of the New York stock market in 1929, the United States experienced a severe depression and a banking panic. The depression became world-wide, and international trade greatly contracted. In April 1933, the American dollar was allowed to depreciate in terms of gold, and the United States has been on a limited gold bullion standard since passage of the Gold Reserve Act of 1934. Within the next several years there occurred a very large inflow of gold to the United States due to unsettled exchange conditions and political conditions abroad.

NET PRIVATE AMERICAN CAPITAL EXPORTS, LONG-TERM AND SHORT-TERM
(millions of dollars)

Year		Year	
1923	—33	1927	695
1924	517	1928	944
1925	621	1929	306
1926	181	1930	739

Source: Department of Commerce.

The dollar shortage after World War II

Throughout the postwar period and right up to the present time, attention has been focused on the dollar. There have been two distinct phases to this problem. In the early postwar period, nations which had been devastated by war wanted to purchase goods from the United States but did not have either the exports or accumulated gold and dollar holdings to cover the needed imports. More recently, the major trading nations have been building up their gold and dollar balances (especially gold), as shown by the large payments deficits recorded by the United States in 1958-60, in preference to spending them on United States goods and services.

The United States was a major supplier of finance and material for the conduct of World War II, and American productive capacity and the dollar emerged from the war in very strong positions. The United States was almost the only major industrial nation among the belligerents which did not suffer severe damage to its industrial plant. Consequently, the Western European countries, which had been ravaged by the war, turned to the United States for the goods and services necessary to rebuild their industrial plant. Table 1 illustrates the gap between United States exports of goods and services and imports in the years immediately following the war. United States imports from the rest of the world provided only part of the dollars to pay for exports from this country. As the European economies recovered and their currencies were brought into closer alignment with prevailing cost and price structures through the devaluations of September 1949 and as the Korean war stimulated United States imports, the surplus of United States exports over imports began to decline in 1950.

TABLE I

SELECTED ITEMS FROM THE UNITED STATES BALANCE OF PAYMENTS, 1946-1960

(billions of dollars)

	Exports of goods and services	Imports of goods and services	Surplus on goods and services	Net U. S. capital exports	U. S. gold sales or purchases (—)	Increase in foreign holdings of dollars
1946	14.7	7.0	7.7	6.7	—0.6	—0.6
1947	19.7	8.2	11.5	7.9	—2.9	—1.7
1948	16.8	10.3	6.4	6.6	—1.5	0.5
1949	15.9	9.7	6.1	6.7	—0.2	*
1950	13.9	12.1	1.8	5.4	1.7	1.9
1951	18.9	15.1	3.7	4.5	*	0.4
1952	18.1	15.8	2.3	3.9	—0.4	1.5
1953	17.1	16.6	0.4	2.8	1.2	0.9
1954	17.9	16.1	1.9	3.5	0.3	1.2
1955	20.0	17.9	2.1	3.7	*	1.1
1956	23.7	19.8	3.9	5.5	—0.3	1.3
1957	26.7	20.9	5.8	6.1	—0.8	0.3
1958	23.3	21.1	2.3	6.1	2.3	1.2
1959	23.7	23.5	0.2	4.3	0.7	2.9
1960	27.3	23.3	4.0	7.3	1.7	2.2

*Less than $100 million
Source: Department of Commerce.

The trade balance, however, was only part of the picture. In the early postwar period, the dollar deficit was met by grants or loans from the United States Government or by a decline in the international assets of other countries, primarily gold. From 1946 through 1949, $5.2 billion in gold flowed into the United States. But a substantial part of the deficit was met by the extension of economic aid and loans by the United States Government. In this way the United States provided the dollar exchange that was needed to finance its export balance. This means of settlement was not unique since Britain had followed a similar policy in earlier years of financing its exports by lending abroad to the importer nations. The only difference is that in the 1946-50 case grants were used to a greater extent than loans. The requirements of postwar reconstruction and the fact that the United States emerged intact and even stronger economically than before the war were thus instrumental in elevating the United States dollar to its position of prominence as a key currency.

The supply of dollars increases in 1958-60

After the critical phase of the dollar shortage had passed by 1950 or thereabouts, the dollar continued to be highly regarded as a means of payment and international reserve currency, as evidenced by the steady build-up in foreign dollar balances in the United States. From $6 billion in 1946 foreign short-term dollar holdings in the United States rose to $21 billion by the end of 1960. Beginning in 1958, however, the United States started to incur large deficits in its balance of payments, and foreigners took a large part of their dollar gains in the form of gold. Nevertheless, claims of foreigners against dollars increased by $6.4 billion during the three years 1958-60 (excluding the United States subscription to the International Monetary Fund). The experience of 1958-60 seemed

to indicate that not only had the dollar shortage ended but that there might be a surplus of dollars available for international payments and external reserves. Part of the lessening in the demand for dollars was due to the economic recovery of Western Europe and Japan and greater freedom in international payments consequent upon the introduction of nonresident convertibility at the end of 1958—goals which the United States supported.[1] Part of the enlarged deficits was due to special, nonrecurrent circumstances.

The sharp rise in the United States payments deficit and its maintenance at high levels, together with an accelerated rate of gold losses, led to speculation against the dollar in the latter part of 1960. It was rumored that the United States would be forced to devalue the dollar because of the pressures against it. The lower level of interest rates in the United States relative to other nations also encouraged the movement of funds abroad. Steps taken by the United States to bring its payments into closer balance and the cooperation of other countries helped to weather the crisis of confidence since the underlying position of the United States was still strong. The dollar thus continues to be widely accepted as the leading international currency.

International cooperation after World War II

After World War II, the dollar increased in importance relative to gold and sterling as an international currency. Since the end of the war, the functions performed by the dollar, the pound sterling, and gold have been supplemented by the creation of two international agencies which were conceived in the course of wartime discussions concerned with exchange stability and future balance of payments problems. These agencies—the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (often referred to as the World Bank)—were set up at the Bretton Woods Conference in 1944. These international agencies, mentioned briefly here, will be discussed in somewhat greater detail in a subsequent article in this series.

The International Monetary Fund was designed to promote and maintain a pattern of exchange rates sufficiently stable to encourage world trade and investment and at the same time sufficiently flexible to permit the orderly adjustment of exchange rates in order to deal with a fundamental balance of payments imbalance. To ensure stability of exchange rates, signatory nations are required to maintain their currencies within 1 percent of a given parity. To tide them over temporary payments difficulties, the IMF makes available to member nations short-term assistance from its pool of gold and currencies subscribed by members. On the other hand, the Fund Articles permit changes in exchange rate parities to correct a fundamental payments imbalance. This flexibility was built into the Agreement to avoid the competitive devaluations that had plagued world trade and payments in the 1930's. The Fund also provides a forum for international consultation on balance of payments problems.

The International Bank for Reconstruction and Development in turn was established to help meet the need for long-term investment capital in the war-devastated countries and in the less economically advanced areas of the world. The primary lending role of the Bank is supplementary to private international investment and to domestic investment, while its principal function is to increase the productive capacity of borrowing nations over the long haul and thus enable them to expand exports and earn foreign exchange. Two auxiliary agencies of the World Bank

[1] For a discussion of the United States balance of payments in recent years, see "Our Balance of Payments in Perspective," *Monthly Review*, Federal Reserve Bank of San Francisco, August 1960.

have been created recently: In 1956, the International Finance Corporation specializing in equity-type investments and in 1960 the International Development Association for long-term lending on easier terms. Both the Fund and the Bank carry out some of the functions borne primarily by the pound sterling and the dollar before World War II.

In addition to these world-wide international financial agencies, smaller regional arrangements appeared after the war. The European Payments Union (EPU), for example, was formed in September 1950 by the Marshall Plan countries and operated as a mechanism for the regional, multilateral settlement of current accounts among its members, with facilities for extending credit. The EPU was an essential element in the restoration of multilateral trade in Europe until nonresident currency convertibility was achieved in December 1958. The European Economic Community (the Common Market) and similar regional groupings have also set up, or plan to set up, institutions on a smaller scale to provide long-term financing and facilities for consultation among members.

SUMMARY

An examination of the functioning of the gold standard indicates that it served very well in the past as a means of effecting settlements in international trade when the basic conditions of international relations were stable, but it was much less satisfactory when conditions were undergoing severe change. Few countries left the gold standard in times of peace and prosperity, while many left it in times of war and economic turmoil. The principal advantage of the gold standard was that it provided a structure of stable (indeed, rigid) exchange rates. Such a system of relationships between the international values of currencies actively encouraged trade between nations because it eliminated much of the uncertainty that would have been present if the thread of gold did not run through the fabric of currencies of the principal trading nations. This very quality of certainty and changelessness was also the chief weakness of the international gold standard. All nations do not grow at the same rate or prosper at the same time. If, under the gold standard, one or a few countries were experiencing difficulties in their balance of payments, assistance in the form of loans might be obtained from other nations, while the underlying adjustments were carried through. But when within the space of three decades the world underwent two general wars and a depression of major proportions, the nations which were economically strong were affected as well.

The existence of a causal relationship between adherence to the international gold standard and general economic well-being among nations has never been proved. There is no assurance that general prosperity would prevail if the nations of the world were to return to the gold standard, although the gold standard flourished against a background of general prosperity in the 1870-1914 period. After World War I, there were drastic changes in the political and economic alignment of nations and in the economic structure of trade between nations that made the successful operation of the international gold standard as it was reconstituted impossible. Even if the conditions necessary to its successful operation had been restored, the acceptance of price stability and high levels of employment as goals of national policy presents a fundamental conflict with the requirements of the international gold standard.

The gold standard was a means for bringing about the adjustment necessary to meet a balance of payments disturbance. Although the "rules of the game" have a disarming simplicity about them, they implied much about the environment in which they were operative. They implied a high degree of re-

sponsiveness in the domestic economy to an imbalance in the foreign accounts and a willingness of the monetary authorities to reinforce the needed adjustments. Although it was seldom if ever stated in discussion of the operation of the international gold standard, a high degree of flexibility in the price and cost structure of the participant nations was quite necessary. In recent years prices have been highly resistant to downward adjustment, thus hindering the adjustment called for under the gold standard in a country having a deficit in its balance of payments. Following World War I, moreover, nations became increasingly reluctant to subordinate domestic economic policies to the requirements of the international gold standard. Seeming conflicts between international and domestic considerations were resolved in favor of the home economy. The problems of full employment and levels of prices and wages were divorced insofar as possible from the balance of payments and from developments in other countries. Thus, the adjustment mechanism of the gold standard was not permitted to function in its customary fashion.

In reviewing the process of international adjustment over the past three-quarters of a century, one is struck by the degree of management that was necessary even under the "automatic" gold standard. After the breakdown of the gold standard, management and international cooperation carried much of the burden of achieving the goals of balance of payments adjustment that were deemed desirable under the gold standard. The emphasis, however, shifted to the actions of governments and central banks to influence the flow of gold, rather than as a reflex to the gold flow.

The next article in this series will consider the current role of gold, the dollar, and international agencies in international payments and discuss the general problem of the adequacy of international liquidity and some of the proposals advanced to increase such liquidity. The final article in this series will examine the flow of gold about the world in recent years and its present ownership pattern.

BANKING AND CREDIT STATISTICS AND BUSINESS INDEXES—TWELFTH DISTRICT[1]

(Indexes: 1947-1949 = 100. Dollar amounts in millions of dollars)

Year and Month	Condition items of all member banks[2, 7]				Bank debits index 31 cities[4, 5]	Bank rates on short-term business loans[6, 7]	Total nonagricultural employment	Total mf'g employment	Carloadings (number)[5]	Dep't store sales (value)[5]	Retail food prices[7, 8]
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted[3]	Total time deposits							
1929	2,239	495	1,234	1,790	42	....	...	...	102	30	64
1933	1,486	720	951	1,609	18	....	...	...	52	18	42
1939	1,967	1,450	1,983	2,267	30	....	60	57	77	31	47
1951	7,866	6,463	9,937	6,777	132	3.66	112	121	101*r*	112	113
1952	8,839	6,619	10,520	7,502	140	3.95	118	130	100	120	115
1953	9,220	6,639	10,515	7,997	150	4.14	121	137	100	122	113
1954	9,418	7,942	11,196	8,699	153	4.09	120	134	96	122	113
1955	11,124	7,239	11,864	9,120	173	4.10	127	143	104	132	112
1956	12,613	6,452	12,169	9,424	190	4.50	134	154	104	141	114
1957	13,178	6,619	11,870	10,679	204	4.97	139	160	96	140	118
1958	13,812	8,003	12,729	12,077	209	4.88	138	155	89	143	123
1959	16,537	6,673	13,375	12,452	237	5.36	146	166	94*r*	157	123
1960	17,139	6,964	13,060	13,034	253	5.62	150*r*	166*r*	88*r*	156	125
1960											
June	17,131	5,738	12,298	12,277	255	5.73	150	166	85	153	125
July	16,895	5,967	12,608	12,253	260	....	150*r*	164*r*	86*r*	159	126
August	17,142	6,303	12,579	12,454	249	....	150*r*	164*r*	82*r*	155	125
September	16,923	6,339	12,575	12,547	253	5.53	150*r*	164*r*	86*r*	155	126
October	16,958	6,626	12,848	12,628	263	....	150*r*	164*r*	85*r*	160	126
November	16,898	6,697	12,907	12,616	248	....	150*r*	163*r*	85*r*	152	126
December	17,139	6,964	13,060	13,034	258	5.50	150*r*	163*r*	87*r*	159	127
1961											
January	16,751	6,984	13,010	13,121	255	....	151*r*	162*r*	84*r*	154	127
February	17,525	6,991	12,750	13,639	257	....	151*r*	162*r*	83*r*	164	127
March	17,517	6,916	12,860	13,754	274	5 48	151*r*	163*r*	83*r*	160	127
April	17,637	7,436	13,222	13,999	267	....	151*r*	162*r*	88*r*	164	127
May	17,632	7,393	12,865	14,289	265	....	151	163	81	153	127
June	17,578	7,571	12,935	14,371	269	5.50	152*p*	164*p*	85	162*p*	...

Year and month	Industrial production (physical volume)[5]							Waterborne Foreign Trade Index[7, 9, 10]					
		Petroleum[7]						Exports			Imports		
	Lumber	Crude	Refined	Cement	Steel[7]	Copper[7]	Electric power	Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanker
1929	95	87	78	55	...	103	29	190	150	247	124	128	7
1933	40	52	50	27	...	17	26	110	...	...	72	...	...
1939	71	67	63	56	24	80	40	163	107	243	95	97	57
1950	114	98	103	112	125	115	120	92	80	108	144	145	103
1951	113	106	112	128	146	116	136	186	194	175	162	140	733
1952	115	107	116	124	139	115	145	171	201	130	204	141	1,836
1953	116	109	122	131	158	113	162	141	138	145	314	163	4,239
1954	115	106	119	133	128	103	172	133	141	123	268	166	2,912
1955	122	106	124	145	154	120	192	166	178	149	314	187	3,614
1956	120	105	129	156	163	131	209	201	261	117	459	201	7,180
1957	106	101	132	149	172	130	224	231	308	123	582	216	10,109
1958	107	94	124	158	142	116	229	176	212	123	564	221	9,504
1959	116	92	130	174	138	99	252	188	223	138	686	263	11,699
1960	110	91	134	161	154	129	271	241*p*	305*p*	149*p*	808*p*	269*p*	14,209*p*
1960													
May	115	91	136	167	164	144	271	251	330	139	771	289	13,341
June	110	91	132	170	158	142	270	243	288	180	872	294	15,944
July	108	91	138	149	133*r*	123	270	193	257	102	681	263	11,565
August	109	90	138	164	125	121	275	227	280	153	1,025	261	20,948
September	106	90	136	143	131	141	279	250	347	113	885	284	16,550
October	103	91	131	159	127	144	275	244	347	97	779	238	9,240
November	100	91	135	155	129	141	276	220	306	97	826	254	15,744
December	99	91	137	151	133	137	274	271	338	175	1,046	245	21,919
1961													
January	101	91	134	159	111	139	277	235	318	118	779	218	15,394
February	101	91	134	176	152	134	276	...	...	...	...	...	...
March	103	92	131	178	162	137	...	...	...	...	...	...	...
April	112	92	135	168	172	137	...	...	...	...	...	...	...
May	110	92	143	169	191	...	...	...	...	...	...	...	...

[1] Adjusted for seasonal variation, except where indicated. Except for banking and credit and department store statistics, all indexes are based upon data from outside sources, as follows: lumber, National Lumber Manufacturers' Association, West Coast Lumberman's Association, and Western Pine Association; petroleum, cement, and copper, U.S. Bureau of Mines; steel, U.S. Department of Commerce and American Iron and Steel Institute; electric power, Federal Power Commission; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Department of Commerce. [2] Annual figures are as of end of year, monthly figures as of last Wednesday in month. [3] Demand deposits, excluding interbank and U.S. Government deposits, less cash items in process of collection. Monthly data partly estimated. [4] Debits to total deposits except interbank prior to 1942. Debits to demand deposits except U.S. Government and interbank deposits from 1942. [5] Daily average. [6] Average rates on loans made in five major cities, weighted by loan size category. [7] Not adjusted for seasonal variation. [8] Los Angeles, San Francisco, and Seattle indexes combined. [9] Commercial cargo only, in physical volume, for the Pacific Coast customs districts plus Alaska and Hawaii; starting with July 1950, "special category" exports are excluded because of security reasons. [10] Alaska and Hawaii are included in indexes beginning in 1950. *p*—Preliminary. *r*—Revised.