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Monthly Review

FEDERAL RESERVE BANK OF SAN FRANCISCO
TWELFTH FEDERAL RESERVE DISTRICT

May 1961

In This Issue

Review of Business Conditions page 78

The Search For Certainty In An Uncertain World

PART I:

The Rise of Gold as a Domestic Standard . page 84



ALASKA



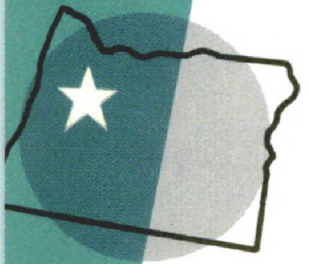
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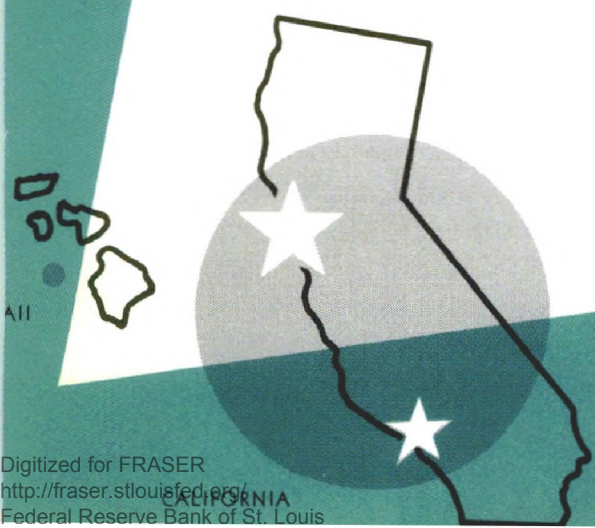
WASHINGTON



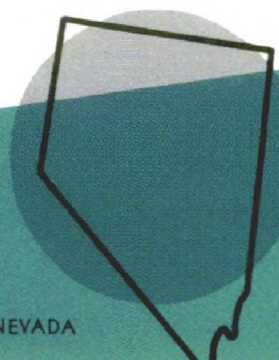
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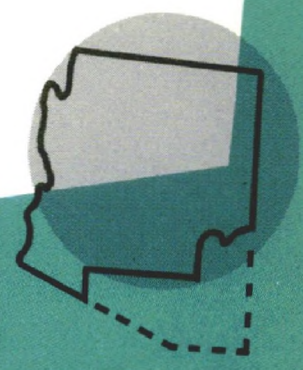
OREGON



CALIFORNIA



NEVADA



ARIZONA

Review of Business Conditions

IF ECONOMISTS were groundhogs, they would have emerged from their burrows on February 2, seen their own shadows and, as in the legend, returned underground convinced that winter would last six more weeks. The shadows, not of economists, but of declining business activity were still to be seen all about the economic landscape in February, but there was also widespread anticipation that business would turn up in the spring. National business activity did improve on many fronts in March, and further gains in April and early May revealed that the economy had swung into the recovery phase of the business cycle. Industrial production rose 2½ percent in April, following a very slight gain in March. The April index was 105 percent of the 1957 base, compared with the recession low of 102 percent in February. Output gains were widespread in April and included increased production in the auto and steel industries, where much of the recent decline was concentrated. New car sales rose about 19 percent from February to March, on a daily average basis, and this level was maintained in April, reducing new car stocks. As a result, auto makers stepped up production schedules and boosted their steel orders. Further gains in steel and auto production occurred in May. The value of new construction put in place rose both in March and April, with the larger gain occurring in April. New construction in that month was valued at \$55.8 billion, at a seasonally adjusted annual rate. Private residential construction, which had been one of the major weak spots during the recession, increased 4 percent in April, reflecting in part the 8 percent rise in private housing starts in March.

Employment in nonfarm establishments rose moderately both in March and April, aided by the expansion in construction activity. In the latter month, employment began to pick up in most manufacturing industries.

The average factory workweek continued to lengthen in April as it had throughout the first quarter. The April increase was of special significance because there is usually a seasonal decline in manufacturing hours in April. Average hourly and weekly earnings also increased somewhat and were 2 percent above a year ago.

Despite these gains, a high proportion of the work force remained jobless. The seasonally adjusted unemployment rate of 6.8 percent was the same in April as in December, when industrial production and construction activity were at lower levels. The capacity of the economy to provide employment for many of those now out of work and to expand employment as the labor force continues to grow will be a major test of the vigor of the present recovery.

In the Twelfth District, overall business activity did not pick up in March and scattered data for April and early May indicate a continued weakness in residential construction and retail trade; however, steel production did rise sharply in April. In the absence of a strong demand for business loans, District banks added substantially to investments in United States Government securities during March and April.

District nonfarm employment edged downward; unemployment rises

Employment developments in March in the District were mixed but continued to present a picture of weakness. Total civilian employment increased by 35,000 on the Pacific Coast, on a seasonally adjusted basis, but additions to the labor force raised the seasonally adjusted unemployment rate to 6.3 percent from 6.1 percent in February. Unemployment was widespread in the District, with 11 of the 15 major labor markets classified as areas of substantial labor surplus (6 percent or more unemployed). Among the small labor market areas, Centralia, Washington

and Klamath Falls, Oregon were classified in April as having a substantial labor surplus, raising the District total of small areas so classified to a record 14. Six of the 14 are also designated as "chronic" labor surplus areas.¹

Pacific Coast total nonagricultural employment declined in March by about 0.1 percent, making the District nonfarm employment level of 7.1 million workers a shade lower than in February when there was a decline of the same relative magnitude. The only sizable employment decline in March was in construction, which had a drop from February of 16,400 workers, or 3.6 percent, on a seasonally adjusted basis. Much of this decline was accounted for by California and was associated with the continued slump in residential building activity there, and some of it occurred in the Pacific Northwest, where bad weather seriously interfered with building activity. Transportation employment also declined slightly, and mining and trade were virtually unchanged. Gains were recorded in government, services, and finance.

District manufacturing employment in March, seasonally adjusted, showed a slight gain and returned to the January level. Pacific Coast manufacturing jobs increased by 2,600 to 1,669,000. Gains in nondurable goods were concentrated in food processing. Durable goods employment dropped slightly in March, but the decline was much smaller than in January and February. Most of the decline in March stemmed from a cutback in auto assembly and continued declines in lumber. Aircraft and metals employment were unchanged; electrical machinery showed a little gain but remained below the January level.

The recent abatement of heavy layoffs in aircraft may be temporary. The California State Department of Employment reports that nearly all of the major aircraft firms in

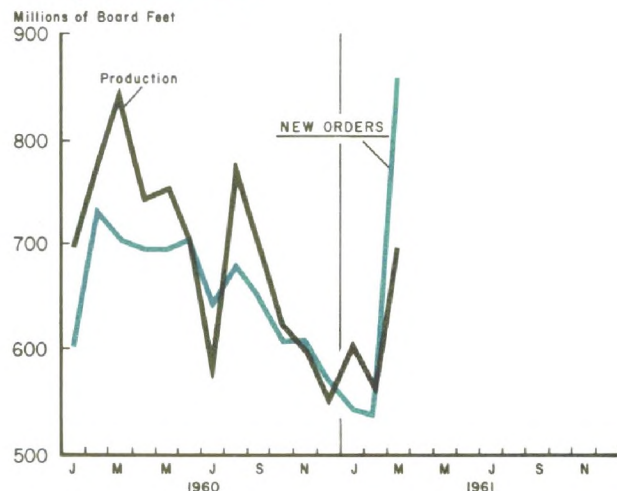
southern California forecast substantial layoffs for April through July. Pacific Coast plants did not participate in the recent \$1 billion Air Force contract awards for military jet cargo planes. It is reported to be uncertain whether the present B-70 bomber program will be continued. Aside from recent Boeing orders, there has been little strength in the market for commercial aircraft.

Lumber prices rise but plywood prices reduced

Fir and pine lumber prices continued to rise during April, both absolutely and relative to a year ago. Much of the increase was concentrated in green fir items. By mid-April, the average price for fir and pine items was only 6 percent below a year ago, according to *Crow's* industry average. Prices rose by over \$5 per thousand board feet from the beginning of March, when they averaged 13 percent below the year-ago average. Green fir prices alone increased \$8 per thousand board feet, to a level only 2 percent below 1960.

Preliminary data indicate that Douglas fir output and shipments are beginning to respond to the recent increases in prices and the

New orders for Douglas fir rose sharply in March



Source: West Coast Lumbermen's Association

¹ An area in which the unemployment rate has been 50 percent or more above the national average for a prolonged period.

March rise in new orders. The market impact of any substantial production boost will depend on how well demand holds up. New orders in April were 17 percent below the March level. The industry is focusing most of its attention on developments in the housing market.

Plywood producers had raised prices to \$72 per thousand square feet by mid-April, but consumer demand proved insufficient to maintain prices at this level. Demand did not appear to exceed normal inventory replacement buying, and early in May many producers cut prices back to \$68.

District construction declines slightly from last year

The value of District construction contracts in March dipped 1 percent below the same month last year because of a further decline in single family residential contracts and a drop in nonresidential contracts. Awards for other types of construction continued above 1960 levels. Total contract awards, however, did show a gain from February to March.

District contracts did not share in the national increase over last March largely because reduced single family unit construction led to an 11 percent decline in total residential awards, whereas residential construction rose nationally. Contracts for multiple family units continued to show signs of strength. The anomalous situation of increasing levels of rental unit construction in the face of rising rental vacancy rates changed in the first quarter. The United States Census Bureau indicates that first quarter rental housing vacancy rates levelled off in the West, with the rate being about 11 percent in both the fourth quarter of last year and the first quarter of 1961.

Nonresidential awards in the District followed the national pattern and fell 9 percent below last March; contracts for manufactur-

ing and education and science buildings declined. Heavy engineering construction contracts were 43 percent above a year ago, reflecting a continued rise in awards for street and highway construction and increased contracts for electric light and power systems. A recent survey by the Federal Housing Administration indicates that mortgage rates have been easing in the District. The FHA reported that average interest rates on conventional first mortgages on new-home loans in the West declined to 6.40 percent on April 1 from 6.55 percent on January 1 of this year. The average rate on existing-home loans was reported to have fallen from 6.65 percent to 6.45 percent over the same period. On April 1, the secondary market price of the typical FHA-insured 5½ percent mortgages averaged 97.6 per \$100 amount of the outstanding mortgage, almost equal to the 97.7 price that was reported for the 5¾ percent mortgages on February 1, 1961. The spread between these two was wider in other regions, suggesting that there have been heavier upward pressures on FHA-insured mortgage prices in the Twelfth District compared with other parts of the country.

The market has been reported to be at a standstill during the past several weeks. Conventional rates have apparently steadied and the secondary market prices of FHA and VA mortgages have remained approximately the same. The latter is attributed to the fact that the mortgage demands of Eastern savings banks have softened in recent weeks.

The net flow of savings into District savings and loan associations increased in March, and for the first three months of this year was 2 percent above the same period last year. The dollar rise in their loans outstanding during the first quarter was approximately equal to that for the comparable period of last year. Time deposits of District weekly reporting member banks rose \$568 million in the first 4 months of this year, with

**CHANGES IN SELECTED BALANCE SHEET ITEMS OF
WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES**

(dollar amounts in millions)

	Twelfth District				United States			
	From Mar. 15, 1961 to Apr. 26, 1961		From Apr. 27, 1960 to Apr. 26, 1961		From Mar. 15, 1961 to Apr. 26, 1961		From Apr. 27, 1960 to Apr. 26, 1961	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
ASSETS:								
Total loans and investments	+382	+ 1.64	+1,534	+ 6.93	— 471	— 0.42	+6,629	+ 6.33
Loans and investments adjusted ¹	+329	+ 1.43	+1,475	+ 6.75	— 483	— 0.44	+6,684	+ 6.49
Loans adjusted ¹	— 10	— 0.07	+ 158	+ 1.06	— 370	— 0.53	+1,468	+ 2.18
Commercial and industrial loans	+ 20	+ 0.38	+ 126	+ 2.42	— 506	— 1.58	+ 552	+ 1.78
Real estate loans	+ 8	+ 0.16	— 175	— 3.32	+ 40	+ 0.32	— 113	— 0.90
Agricultural loans	+ 18	+ 2.92	+ 70	+12.43	+ 40	+ 3.66	+ 231	+25.63
Loans for purchasing and carrying securities	+ 2	+ 0.99	+ 34	+20.00	+ 447	+13.56	+ 681	+22.23
Loans to nonbank financial institutions	— 54	— 7.17	— 81	—10.38	— 378	— 7.21	—1,010	—17.18
Loans to domestic commercial banks	+ 53	+19.49	+ 59	+22.18	+ 12	+ 0.78	— 55	— 3.41
Loans to foreign banks	+ 17	+ 9.24	— 31	—13.36	+ 18	+ 2.57	— 67	— 8.75
Other loans	— 19	— 0.60	+ 228	+ 7.88	— 26	— 0.16	+1,287	+ 8.69
U. S. Government securities	+374	+ 6.40	+1,167	+23.10	— 250	— 0.83	+3,995	+15.37
Other securities	— 35	— 1.66	+ 150	+ 7.78	+ 137	+ 1.29	+1,221	+12.76
LIABILITIES:								
Demand deposits adjusted	+101	+ 0.91	+ 127	+ 1.15	+ 604	+ 0.99	+ 710	+ 1.17
Time deposits	+307	+ 2.61	+1,429	+13.43	+1,017	+ 2.79	+5,736	+18.05
Savings accounts	+160	+ 1.68	+ 677	+ 7.50	n.a.	n.a.	n.a.	n.a.

n.a. Not available.

¹Exclusive of loans to domestic commercial banks and after deduction of valuation reserves; individual loan items are shown gross.

Source: Board of Governors of the Federal Reserve System and Federal Reserve Bank of San Francisco.

more than half of the gain occurring after mid-March. This is in sharp contrast to the loss of nearly \$400 million in the first third of last year when funds were withdrawn for investment in higher yielding Government securities and savings and loan shares.

Steel production revived quickly in April

Western steel production rose rapidly in April, following a small increase in March. The Western¹ steel production index rose to 124 (1957-59 = 100) in the first week of May from 108 at the beginning of April, closely paralleling the gain in production nationally. While the national increase was partly a reflection of new orders from the auto industry, District output is sold primarily for construction, canning, and shipbuilding.

¹Twelfth District states and Colorado.

Copper prices strengthened by developments in world market

Several copper producers raised their prices 1 cent to 30 cents a pound on May 1. Rising demand for copper in foreign markets during recent months lifted the London price about 2 cents above the United States domestic price, after allowing for United States import duty. In addition, heavy demand for domestic scrap, especially for export, pushed up scrap prices to a point where custom smelters' raw material prices exceeded the equivalent refined value. Domestic fabricators also reported a continuing increase in business. Stocks of copper remained large, however, and a general price increase may reflect unwillingness to permit substantial inventory reduction in the face of a possible domestic labor dispute this summer and further disruption of the Congo supply.

Retail trade sluggish

California new car registrations declined 4.6 percent from February to March, on a daily average basis. Department store sales failed to show signs of revival in March, after seasonal adjustment. The Twelfth District index declined 3 percent from February although the level was 1 percent above a year ago. Unadjusted figures that include the pre-Easter week for both years show sales down 3 percent from a year ago during the six weeks ended May 6. Cumulative department store sales for the year through May 6 were 1 percent below the corresponding period in 1960, for both the District and the nation.

Estimates of consumer instalment credit outstanding at major California consumer finance institutions continued to decline through March, bringing the volume outstanding closer to 1960 levels. Credit outstanding in March was 2.2 percent above a year ago, whereas it was 3.8 percent greater in February.

Farm income rises in early 1961

District farmers' cash receipts in January and February were about 3 percent above the same months in 1960 and continued above year-ago levels in March, according to preliminary estimates. The gain was relatively smaller than the 10 percent rise in farm receipts nationally in this period. Farm income in other areas was boosted by higher returns from soybeans and hogs, commodities which are not produced in large quantities in this District.

California's huge bond issue successful in a congested market

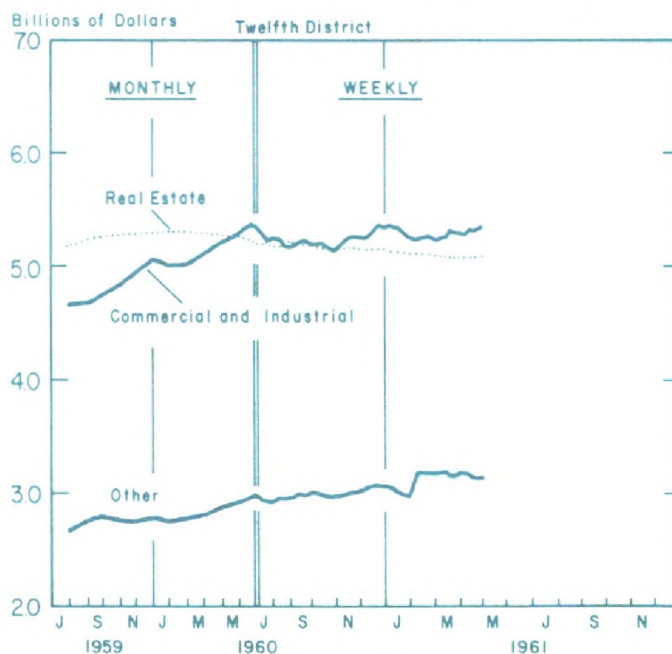
The most important development in District municipal bonds during April was the sale of a \$190 million California issue on April 5. It was the largest single issue ever sold by the State and was reported to have sold quickly to final investors. The success of

the sale was noteworthy because it occurred at a time when unsold inventories of municipal bonds were large, and institutional investors had not been very active in the market for some weeks. Reoffering prices were set to yield from 1.70 percent in 1962 to 4 percent for the longest maturities. Net interest cost to the state was 3.866 percent.

Bank investments rise; no expansion in business loans

Lending and investment behavior of District weekly reporting member banks has continued to reflect recession influences, and the sharp seasonal increase in loan demand that often occurs in the spring had not emerged by the end of April. From mid-March through April, total loans outstanding (excluding loans to domestic banks and valuation reserves) fluctuated because of tax borrowings and repayments. What small gain did occur in business loans was concentrated in one week and reflected mostly loans to public utility firms. Real estate and agricultural loans moved up slightly. Sales finance com-

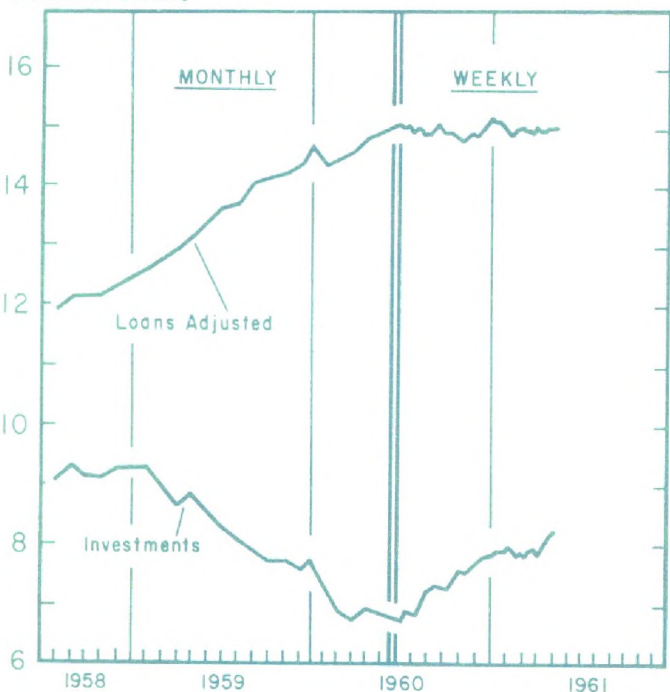
Major types of loans have shown little change at District banks in 1961



Note: Twelfth District weekly reporting member banks. The sharp rise in "Other" loans in late January 1961 reflects a large purchase of instalment paper from a national retailer.

Investments of District banks rise while loan volume remains stable

Billions of Dollars



Note: Data are for Twelfth District weekly reporting member banks.

panies made net repayments of debt in this period. Although District banks have ample funds with which to extend loans, the demand for loans has not been strong enough to result in a net expansion in their loan portfolios so far this year.

Consistent with the lack of pressure on reserves from loan demand, District weekly reporting member banks have turned to investments and added more than \$300 million to their holdings of United States Government securities during the first four months of 1961. They made a net reduction of \$600 million in the same period a year ago when loan demand was strong, and bank reserves were relatively tight. From mid-March through April, these banks added \$374 million to their holdings of Governments. A preference for liquidity was pronounced as two-thirds of the increase was in short-term holdings, mostly Treasury bills. Banks also added to their holdings of Government securities maturing in over 5 years, partly reflecting investment in the Treasury bonds offered in the March refunding.

Demand deposits followed a seasonal pattern during this reporting period; the increase of \$365 million from mid-March through the first three weeks of April was somewhat less than in the year-ago period. Demand deposits declined seasonally in the last week of April as funds were withdrawn for tax payments.

The Search For Certainty In An Uncertain World

PART I: THE RISE OF GOLD AS A DOMESTIC STANDARD

INCREASINGLY apparent in the thinking of the American public during the past decade and, to some extent, in economically advanced countries throughout the world, is a desire for stability of relationships, whether economic, political, or social. In part this may reflect a delayed reaction to the marked disruptions occasioned by World War II, by postwar inflation, the cold war, nationalist movements, and "popular" revolutions; and, in part, it represents a return to the search for stability of earlier generations but with some accentuation in recent years in the face of particularly rapid scientific and technological change. It is not surprising in such a world to find a similar search for a domestic and international standard of payments which promises stability.

Monetary stability not only provides a firm basis for trade but also promotes the saving and investment processes so necessary for economic growth and, perhaps equally important, contributes to the preservation of the middle classes of western societies and, thus, is conducive to political stability. It is also of some moment that a stable medium of exchange fulfills a moral commitment to pay back debts in the coin in which they were contracted and prevents well-earned retirements from becoming not so genteel poverty. If wishing could make it so, such a system would have long been established. At present the desires for such a system are manifest in two generally opposing programs. One represents an attempt to return to the golden

days of youth and takes the form of fuller reliance upon gold production and movements to induce stability in our economy. A contrasting approach presumes the extension to the international sphere of a system of credit similar to that developed domestically in many countries which relies upon the ingenuity of man to substitute properly the ease of writing numbers in ledgers for the difficulty of scraping gold out of the ground. As between these two views there are a myriad of compromises both possible and proposed. The recent threat posed to confidence in the dollar, which may now have shifted to other currencies, the mounting liabilities to foreigners by the United States, the low level of reserves in underdeveloped countries, and a continued flow of reserves into western Europe generally have caused the problem of an international payments mechanism to assume the status of one of the major economic problems of our time.

In the interest of public information, a series of articles on this subject have been prepared and will be published in this *Review* over the coming months. The first article here presented traces the rise of money and of gold as a medium of exchange. Articles will follow on the rise of other payments mechanisms, a survey of the production and movement of gold around the world, and a concluding piece on the problems before us.

Money and gold

Man is acquisitive—for himself, his family, his tribe, his town and country. He displays



amazing ingenuity in devising means by which he can more easily possess those goods and services that he wants. When barter proved unsatisfactory and cumbersome, various means of exchange were developed and refined, gradually evolving into the monetary mechanisms that exist in modern market economies. Sometimes man attempted to gain unfair advantage in effecting an exchange by giving in trade an old cow or a lazy slave, by chipping off a small amount from a coin before passing it along, or by handing over worthless currency or a check written on a nonexistent bank account. But more commonly he tried to obtain through fair exchange those goods and services which he desired. As a result, during all periods of history, men and governments have continuously sought a monetary standard not subject to wide fluctuations in value, either domestically or in relation to monetary units of other countries, and a medium of exchange which would contribute most to the effective functioning of the market. The fact that all mechanisms of exchange are man-made has led man both to irresponsible manipulation on occasion and to the establishment of monetary mechanisms to protect the exchange medium from such manipulation.

Archeologists have discovered that some primitive societies had fairly complex systems of exchange which involved elements of modern money economies, and recent history reveals that some highly industrialized countries under certain circumstances, such as severe financial crises or war, have reverted temporarily to direct barter arrangements. In general, however, with increasing industrialization and specialization, economic activity has become more complex and interrelated, with trade more essential and restricted less and less within narrow geographic or national boundaries. The development, therefore, of a means of exchanging the products of one area or country for those of another and of

measuring their relative values is of paramount importance. It is obvious that modern economies would grind to a halt if they had to return to direct barter or even to the use of certain types of commodity money, such as wives, cattle, slaves, salt, wampum, or cowry shells. Although the functions performed by money today are basically much the same as in early civilized societies, a brief historical review of the development of monetary standards and exchange media may help us to understand some of the forces underlying the establishment and abandonment of the domestic gold standard, the rise of currency standards, the growth of international financial agencies, and the significance of, and problems posed by, the recent gold losses of the United States.

The attributes of money

Money is anything, regardless of physical or legal characteristics, which serves as a means of payment for goods and services in the market place and for the discharge of debt. Its most essential property is that it be generally acceptable. Early moneys were often commodities, such as cattle, grain, salt, or tobacco, which were useful and widely desired in the community, although some societies adopted commodity moneys of solely ornamental value. The monetary standard or measure of value, however, does not always serve as the actual medium of exchange. In Borneo, for example, human skulls were the unit of account or standard of value, with pigs and palm huts "circulating" as the medium of exchange, each having a prescribed value in terms of human skulls. Similarly, in the United States gold is the standard of value, with silver, nickel, and copper coins and paper money circulating as the medium of exchange.

Many of the early forms of money were unwieldy because they were not divisible into smaller units of value and could not be easily carried around. Many of them were not of

consistent quality—one ox was not as young or as strong as another. Consequently, it was not long before a number of countries began to use precious metals, particularly gold and silver, as money.¹ Gold and silver best combined those characteristics desired in a medium of exchange and standard of value. They were relatively scarce and their value remained relatively high, assuring that small amounts could command relatively large quantities of goods and services in exchange. They could be divided into homogeneous units that were identical in value. Their small size and durability made them easy to use in everyday transactions, and they could not be readily imitated. In addition, the supply of the two precious metals remained comparatively stable, at least over historically short periods of time.



Gold coins appear on the scene

Throughout history, gold appears to have been particularly favored as an international currency. Perhaps its luster enhanced its acceptability, but more practical reasons, such as its occurrence in the natural state without the necessity of refining and other desirable metallurgical properties, were more important. It was first used as money in the form of rings or bars of fixed weight. In exchange transactions it was customary to weigh the gold offered in payment as well as the goods being bought. Its fineness was also checked

when possible, if only by biting. The difficulties in trading caused by wide variations in the weight and fineness of the gold rings and bars were partly responsible for the development of coinage—the placing of a seal or stamp upon a piece of metal attesting that the metal was of stated quality and weight. Coinage not only expanded the use of metallic substances as money but led eventually to the differentiation of money from its component material. When coins constituted the principal means of payment and were limited in relation to the volume of transactions, the value of the coins as money rose above the market value of its metallic content and commanded more goods in trade. When coins were issued in large quantity, on the other hand, their metallic value was greater than their face value and they tended to be melted down.

The shift in gold coinage from the East to the West

Some of the earliest known coins of the western world were those of the famous king and merchant of Lydia, Croesus, who issued both gold and silver coins bearing his seal. Gold coins were also widely used by the Greeks and the Romans. Throughout the Middle Ages, however, Byzantine and Arab gold coins were more important for international trade and for hoarding purposes. This was in large part due to the fact that the Byzantine Empire was the leading trading country of that period. Its principal coin, the solidus (called bezant by westerners and nomisma by the Greeks), retained its weight and fineness from the late 6th century until the early 13th century. The progressive decline in economic activity in western Europe in the Middle Ages following the decay of the Roman Empire reduced trade, specialization, and exchange to such an extent that for part of the period western Europe's economy closely resembled a barter economy and the

¹ Gold was used by the Egyptians as money as early as 3400 B.C.

need for money was accordingly reduced. At the same time, the lack of sizable gold-bearing deposits and the greater prevalence of silver in northern and western Europe, the dominance of the Byzantine and Moslem empires which attracted most of the gold, and the movement of the remaining gold into hoards and church decorations—all militated against the maintenance of gold coinage in western Europe. Consequently, Charlemagne sanctioned the abandonment of gold coinage in the latter part of the 8th century, and silver became the standard coin. Foreign gold coins, however, continued to circulate.

The recovery of trade in Mediterranean Europe by the 13th century led to a resumption of gold coinage, with the first gold coins issued by the Holy Roman Emperor Frederick II in 1231. This was followed by the revival of gold coinage in Italy (the fiorino of Florence and the ducato of Venice), which gradually displaced the Byzantine solidus and the Moslem dinar. The emergence of the economically powerful Italian city-states was instrumental in the decline in prestige of the Byzantine and Arab coins although debasement of these coins also played a part. The return to gold coinage in the West led to the establishment of a bimetallic standard by the end of the 13th century.

Monetary problems of the Middle Ages

The Middle Ages was a period of economic stagnation and monetary instability, accompanied by a chaotic coinage system. Problems were posed by the excessive number of entities with the right of coinage, such as the Italian cities and, at one time, more than 600 coiners of money in Germany, and by numerous changes in the metal content of coins. The French king, John the Good (1350-1364), reduced the amount of metal in his coins 18 times in one year to finance his costs in the Hundred Years' War. The existence of bimetallicism and the absence of a generally

accepted ratio of gold to silver further complicated the monetary situation as the undervalued metal tended to move out of the country. Coins were also easy to counterfeit or alter; penalties such as the loss of a hand or boiling in oil did not prove to be effective deterrents.

Because of the bewildering number of coins of varying issues, weight, and quality in circulation, merchants came to rely more and more upon the services of money changers, who were skilled in determining the true value of circulating coins and were, in general, trustworthy. Because of this and because of the dangers of traveling with large sums of money, merchants developed the practice of depositing coin with a money changer in one town and arranging through a written order to receive the equivalent sum from a money changer in another town where business was to be transacted. These pieces of paper constituted bills of exchange and greatly facilitated trade between distant locations.¹ Later, formalized merchant banks—municipal banks of deposit—were established which issued receipts (“bank money”) to the merchant as evidence of deposits of coin.² These receipts were in turn used by the merchant to carry on business transactions. Accounts were also settled during this period at international fairs, with bills sometimes drawn and payable at a subsequent fair, but no deposits of funds were involved.

Greater discipline in coinage and the emergence of modern deposit banking

When economic activity revived after the end of the Middle Ages, the currency situation improved and banking institutions developed further. The large inflow of precious metal from the New World facilitated this process, the increased money supply feeding

¹Bills of exchange were in use in Italy as early as 1200 A.D. Bills of exchange among merchants themselves had been used even earlier, dating back at least to Greece and possibly to the time of Hammurabi in Babylon.

²One of the first banks of this type was established in Barcelona in 1401 A.D. Two centuries later famous banks of the same kind were established in Venice, Milan, and Hamburg.

the increase in activity. One of the most important events occurred in 1561 when Queen Elizabeth I of England, in a carefully planned surprise move, recalled immediately from circulation all debased coins issued by her predecessors. In their place were issued coins of uniform quality and weight. From that point on, there was virtually no tampering with the English silver coins, and the only changes in the value of the coins were due to variations in the relative market prices of gold and silver. By 1650 the coinage had improved markedly, and, in the latter half of the 17th century, England (in 1666) and France (in 1679) abolished the seigniorage charge for minting, thus establishing the principle of free minting that became a feature of the gold standard. England, however, tended to undervalue silver in relation to gold throughout this period, causing silver to drop out of circulation and leaving what amounted to a gold coin standard.¹

After the Middle Ages, a variety of standards existed. Some countries, such as Belgium, Holland, Switzerland, and Italy, remained on a silver standard, while England was essentially on a gold standard from 1821 onwards. A number of other countries, such as France, adopted a bimetallic standard. Under bimetallism, all types of money are defined in terms of both gold and silver. One advantage of this standard was that it provided full-bodied coins for both large and small transactions and thus satisfied the strong preference for coins which stemmed from the questionable value of some of the paper money of this period. Another presumed advantage was that if the value of the monetary unit was determined by demand and supply conditions for two metals instead of one, the standard would be stronger and fluctuations in one metal might offset the other. Actually, the constantly changing market values of the

two metals caused by variations in supply and/or demand made maintenance of a bimetallic standard difficult, if not impossible.

Supplementing coins at this time were commercial paper, which was more easily negotiable and discountable than its medieval counterpart, and various banking facilities. By 1500 there were public and private banks in southern Europe, but the private banks were prone to invest their funds unwisely, and the public banks were permitted to lend only to public authorities and not to the general public. In view of the ambiguous position of the Church on the propriety of money lending and interest, the extent to which banking did develop testifies to the urgency of the needs served. In England, there were no municipal banks because merchants had permission to deposit their gold in the Tower of London for safekeeping. This was eminently satisfactory until 1640 when Charles I seized the merchants' gold for his own use. The merchants thereafter turned to the goldsmiths as more trustworthy custodians for their gold. With these additional resources, the goldsmiths expanded their functions. They lent the money left on deposit with them both to individuals and to the Crown,¹ issued written promises to pay (which were the forerunner of bank notes), and issued orders at the request of depositors to deliver money to third persons, foreshadowing the bank check of today. The goldsmiths' written promises to pay were accepted as money and became part of the medium of exchange, marking the beginning of debt money—promises to pay or redeem in standard money upon demand. The goldsmiths thus became the first to embody all the functions of a private bank—deposit, transfer, note issue, and loans.

¹ There had been money lenders since early periods of history, but money lent in most instances was that of the lender, not money held on deposit belonging to others. There were exceptions, such as the Babylonian Igibi bank, a private firm founded in 575 B.C. which made loans and received deposits, and public bodies, private firms and temples in Greece which tested and changed coins, accepted deposits, made loans, and arranged credit transactions between cities in the 4th century, B.C.

¹ Under a gold coin (or specie) standard, the monetary unit is defined in terms of gold, and full-bodied coins are issued, that is, coins whose value in gold when melted down is as great as its value as money.

The role of the goldsmiths was shortly eclipsed by the establishment of the Bank of England in 1694 in order to finance the war with France. The Bank of England became the principal lender to the Government. It also gradually became a bankers' bank as most banks in England opened drawing accounts with it and stopped issuing their own notes, using those of the Bank of England instead which enjoyed an excellent reputation. In times of crisis when banks needed gold, they drew upon their accounts with the Bank of England. To meet these obligations, the Bank accumulated large gold reserves, and most of the gold in the country not in actual circulation as coin found its way into its vaults.

Banking spread rapidly throughout western Europe in the 17th and 18th centuries, but bank notes were often issued so irresponsibly that exchange transactions, both domestic and international, were as difficult as in earlier periods when much of the circulating medium was of doubtful value.¹ Governments gradually intervened to control and regulate banks, particularly the issuance of bank notes. Governments also issued paper currency² and other forms of credit instruments—written promises to pay which were redeemable in gold or silver or whatever the legal monetary standard was—to finance their debts, especially in times of war. Thus, the monetary importance of gold gradually shifted from that of being the actual medium of exchange to serving as the legal backing for currency, both government issue and bank notes. As more and more paper currency, bank notes, and checks written on bank deposit accounts made their appearance, money no longer consisted mainly of metallic coin or occasional

bills of exchange. Except to the extent that governments imposed legal restrictions on the amount of bank notes which could be issued against gold or silver held by banks, the circulating medium of exchange was no longer limited to the available supply of gold or silver. By the end of the 19th century, central banks—government-owned or controlled in varying degrees—had been established by most industrialized nations, and many were given exclusive rights of note issue. The internal circulation of foreign coins and bank notes was prohibited. It was the first time that most countries had purely national currencies, giving them greater control over their own money supply.

The development of the United States monetary system

It was in the late 18th century that the United States became an independent nation and added even more colorful and turbulent chapters to the history of money and banking. The legal provisions in our Constitution pertaining to a monetary standard reflect the reaction against the chaotic situation that existed under the Articles of Confederation when each state issued its own coin and currency, augmenting the already wide range of bank notes, foreign coin, and paper currency in circulation. The Constitution reserved to Congress the "power to coin money, regulate the value thereof, and of foreign coin . . ." and specified that "No State shall . . . coin money, emit bills of credit, make anything but gold and silver coin a tender in payment of debt . . ." The Coinage Act of 1792 provided for the establishment of a mint and a bimetallic standard with the mint ratio of 15 fine grains of silver to 1 of gold. The United States monetary unit became the dollar because the Spanish milled dollar (the fabled "pieces of eight") was the coin most widely used and most uniform in value in comparison with the great variety of shillings which had been issued by the individual

¹In France, the bank note issue collapse resulting from John Law's land speculation in Louisiana had such disastrous financial and economic effects that note issuing in France was discredited for years.

²In China, rulers had issued paper currency many centuries earlier; by 800 A.D. they had already gone through two paper money inflations. Paper currency issue ceased in China about 1400 A.D. and was not resumed until after western countries had turned to its use.

states. All coins were full-bodied because of continued distrust of credit money, but foreign coins remained in circulation and as legal tender until 1856 because of the scarcity of domestic coins.

Although the United States was officially on a bimetallic standard, its operation was not entirely successful. Until 1834 gold tended to leave the country, partly because gold was valued at a 15.5 to 1 ratio in France and partly because England was on a gold standard after 1821. In an attempt to arrest the outflow of gold, the mint ratio was changed in 1834 to 16 to 1, which overvalued gold and caused a return flow to the United States. Silver in turn tended to drop out of circulation. During periods of crisis, moreover, bank notes were often not kept redeemable in specie. The disappearance of silver coins, especially the fractional coins, also handicapped business, and "shinplasters" (fractional paper issued by banks) and other private token money were poor substitutes. Finally, in 1853, Congress converted fractional silver into token coins (coins with metal content less than the face value of the coin), but the reduction in metal content was not large enough so that these coins also disappeared from circulation during the Civil War inflation. As a result, bank notes eventually

formed the major part of the circulating medium of the period.

During the Civil War, the United States was on an inconvertible paper standard because of the heavy requirements of war financing. State and national bank notes, Treasury greenbacks, and bank-created checking deposits in favor of the Treasury constituted the principal circulating media in place of gold, silver, and fractional coins, the value of which as metal rose above their mint prices. For fourteen years after the end of the Civil War, the United States remained on an inconvertible paper standard, primarily because of inability to agree on the metallic content of the dollar since United States prices had doubled over prewar levels. Finally, in 1878, Congress restored the prewar gold content of the dollar, necessitating a sharp deflation which adversely affected the economy and severely penalized debtors. The return to the prewar standard was accomplished in a series of steps taken over a number of years. In 1873, free and unlimited coinage of silver was discontinued—the so-called "Crime of '73." In 1875, the Gold Resumption Act provided for the return to a gold-based dollar. In 1879, the dollar was actually made convertible into gold, and greenbacks became redeemable in gold. Thereafter, the role of silver in the United States monetary system deteriorated rapidly. Under legislation passed in 1878 and 1890 the Treasury was authorized to purchase silver for monetary use but not for use as standard money. There is clearly apparent in the history of the United States a division between the creditor and the debtor. As long as they remained readily identifiable groups—such as the Eastern seaboard and the frontier, the city dweller and the farmer—the "money issue" was in the forefront of American politics, with one group or area favoring "sound money" while the other opposed limitations on the money supply which were attributed to Wall Street con-



trol. The defeat of William Jennings Bryan in 1896 effectively ended the agitation in favor of silver although it certainly did not settle the more basic issue involved. The Act of March 14, 1900 officially placed the United States on a single gold standard.

The rise of the United States banking system

Paralleling the development of the United States monetary system was the rise of the banking system. The first modern bank—Bank of North America—was incorporated in Philadelphia in 1782 to aid in financing the Revolutionary War. Similar institutions were founded in Massachusetts and New York. The only other banks were unincorporated private banks. In 1791 the first federally chartered bank—The First Bank of the United States—was set up. Its conservative policies, especially in regard to redemption of state bank notes, were attacked as hindering the development of the nation, and questions about the constitutionality of Congress action in awarding federal bank charters led to its demise in 1811. The ensuing five years were characterized by rapid proliferation of state bank notes, many of which soon became worthless. Consequently, The Second Bank of the United States was chartered by Congress in 1816 to counteract the abuses of state banking, but it encountered many of the same problems faced by its predecessor. In addition, its central banking functions—such as control of currency issues—did not accord with its private ownership and commercial banking business. Frontier philosophy contributed to the refusal by Congress to extend the charter of the bank in 1836.

Incorporated and unincorporated state banks then took over most of the banking business; their record was checkered—some were good but many were bad. By 1863, it became evident that a national banking system was necessary to replace the unsound and unsafe state system and to help finance



the Civil War. The National Banking Act required national banks to maintain reserves against their outstanding notes (until 1874) and against their deposits. Noteholders were further protected by various provisions regulating note issues. Additional legislation in 1865 placed a 10 percent tax on the circulating notes of state banks as a means of encouraging them to apply for federal charters. In the first few years after the tax was put into effect, the number of state banks dropped sharply. State banking revived thereafter as notes became a relatively unimportant part of a bank's business, and also because state banking regulations were generally less restrictive than those of the Federal government.

The national banking system, however, had its share of shortcomings. The supply of national bank notes tended to be inflexible and unresponsive to seasonal needs and emergencies since their volume depended primarily on the supply of Government bonds which constituted the collateral behind the notes. The pyramiding of reserves through concentration of interbank balances in the leading cities and the rigidity of the reserve requirements were other sources of weakness. The defects of the system were mirrored in the frequency



of banking panics—in 1873, 1884, 1893, and 1907—and more numerous periods of serious credit stringencies. In 1907, the National Monetary Commission was created to study the United States banking system, and its recommendations served as the basis for the legislation setting up the Federal Reserve System.

The Federal Reserve Act was designed to correct the deficiencies of the national banking system and the monetary structure. It provided for a more flexible supply of credit and for greater control by the monetary authorities. A gold requirement of 40 percent against notes and 35 percent against deposits of the Federal Reserve Banks was set up primarily to ensure the convertibility of notes and deposits. Eligible paper and later Government securities constituted the remainder of the collateral behind Federal Reserve notes. The gold requirement, which has taken the form of gold certificates since 1934, was unchanged until 1945 when it was reduced by Congress to its present level of 25 percent against both Federal Reserve note and deposit liabilities. A bill has recently been introduced into Congress which would abolish the present 25 percent gold requirement.

Widespread adoption of the gold standard

In adopting a *de facto* gold standard in 1879, the United States was in step with the major countries of western Europe, almost all of which had adopted gold as their monetary standard of value by the second half of the 19th century. There were a number of factors which were responsible for this gen-

eral return to gold. The disastrous inflationary effects of overissue of bank notes led an increasing number of countries to restrict by law the issuance of currency to the amount of gold coin or bullion held by the bank. In England, the Peel Act of 1844 drastically limited the note issue of the Bank of England to a fiduciary issue of £14 million, backed by government securities, with any amount in excess to be fully backed by gold. In Germany, the Reichsbank was also required to keep a gold cover for its notes. Thus gold assumed increased importance as a backing or cover for the issuance of paper currency since the gold requirements tended to limit the money supply.

One of the principal reasons inducing countries to join England on the gold standard bandwagon was their equating of England's prosperity and economic strength with the gold standard system. It was not realized that the successful operation of the gold standard in England rested on England's resources and not the other way around. The extensive use of sterling drafts in international trade and the indebtedness of many countries to England also encouraged expansion of the list of gold standard countries. A further push toward gold occurred in 1871 when the German Empire switched from a silver to a gold standard. Prior to this time, countries on a bimetallic standard were able to maintain bimetallism and stable exchange rates with



sterling because of large, new supplies of gold from California and Australia in the 1840's, which replenished gold drains to England. After 1870, however, the flood of silver from Germany, from Asia (especially India), and from new deposits in Nevada led to a concerted shift towards the gold standard. Table 1 gives the dates on which the major nations went on the gold standard during the latter part of the 19th century and the first few years of the 20th century. In the United States, silver producers, debtors, and those who feared the gold standard would limit the supply of credit needed for economic expansion continued to protest the abandonment of silver as a monetary standard.

The gold standard in the 20th century

From 1870 to World War I almost all major countries of the world were on a gold specie (or coin) standard. Their currencies were convertible into gold, in either large or small amounts, at the initiative of any holder, and exports and imports of gold were unrestricted. This was the period known as the "golden age of the gold standard" and is discussed in more detail in connection with the functioning of the international gold standard in the next article in this series. In the United States, the complaints of the silver advocates were lost in the general prosperity which prevailed. In addition, the money supply tripled as the supply of gold was increased by use of the newly developed cyanide process and by new gold discoveries in the Yukon region of Alaska and in the Rand district of the Transvaal in South Africa, and as the rapid growth of banks expanded demand deposits.

The outbreak of World War I resulted in the suspension of the gold standard by most western nations, and gold coin and bullion were further concentrated in the hands of governments and central banks as these countries refused to redeem their money in gold or permit gold exports. At the conclusion of the war in 1919, the United States terminated

TABLE 1
DATES OF ADOPTING GOLD STANDARDS

Great Britain	1816	Holland	1875
Germany	1871	Uruguay	1876
Sweden	1873	United States	1879
Norway		Austria	1892
Denmark		Chile	1895
France	1874	Japan	1897
Belgium		Russia	1898
Switzerland		Dominican Republic	1901
Italy		Panama	1904
Greece		Mexico	1905

Source: Chandler, Lester V., *The Economics of Money and Banking* (1953, rev. ed.), p. 122.

restrictions on gold exports and on convertibility of currency into gold, thereby fully restoring the gold coin standard without altering the dollar's prewar gold content. Other countries recovered more slowly from the inflationary effects of war financing and did not return to a gold standard until later—Britain in 1925 and France in 1928. Most western European countries which did reestablish a gold standard adopted a gold bullion standard, under which coinage of gold was discontinued and other types of money were not necessarily convertible into gold. Under a bullion standard, gold is bought and sold by the government or central bank at a fixed price and in unlimited quantities and serves as a monetary reserve and medium for foreign payments. A number of countries at this time went on a gold exchange standard, under which the monetary unit is defined not in gold but in the currency of some country which is on the gold standard. Both the gold bullion and gold exchange standards economized the use of gold. Since most countries were no longer on a gold coin standard, gold lost its former importance as a domestic medium of exchange; its monetary significance was as a reserve backing the money supply in the form of currency and demand deposits and as a means of settling international payments balances. This concentration of gold in the hands of governments and central banks gave them increased discretionary

powers in monetary management, both domestically and internationally.

The international gold standard that was restored after World War I differed in important respects from the prewar model. The environment in which it operated and its institutions had changed significantly. The prewar exchange relationships and the highly efficient and centralized international banking system had been disturbed, and international capital and gold flows were often disruptive. The collapse of the stock market in the United States in 1929, coupled with bank failures there and elsewhere in the world, was enough to upset the highly precarious international monetary balance that had been achieved. As the depression spread, various countries abandoned gold as a monetary standard in an effort to insulate themselves from external deflationary pressures. The next article in this series will explore in greater detail the developments of this period and their significance to the international monetary system.

The United States legally abandoned the gold coin standard in March 1933 and in January 1934 established a gold bullion standard and reduced the gold value of the dollar. Gold coinage was ended and existing coins were melted down into bars, and gold bullion was held domestically only under license for industry or the arts and sold for export only under Treasury regulations. The gold clauses existing in debt contracts were abrogated, and all coins and currencies of the United States were declared to be legal tender for payment of debt. At the outbreak of World War II, only the United States and a few other countries were on a limited form of gold standard. Most nations were on inconvertible paper standards under which the various types of money within a country were kept at a parity with each other but not at a constant value in terms of any metal. During the war, practically the whole world went off the gold standard, including the United States

in the sense that it placed restrictions on the use of gold in international payments. Since World War II, only the United States and a few other countries have adhered to a monetary standard based on gold.

Gold, nevertheless, is still of significance on both the domestic and international scene. Under the rules of the International Monetary Fund, which will be examined more closely in a subsequent article, the par value of member country currencies must be expressed in terms of gold or United States dollars of the weight and fineness in effect in 1944. Relatively few countries today, on the other hand, have in effect legal requirements for the holding of gold against notes or other sight liabilities issued by their central banks. In western Europe, for instance, only five countries have gold cover requirements against notes and/or certain other liabilities, four others permit gold *or* foreign exchange to be held as cover, while nine countries have no prescribed minimum legal requirements or the requirements have been suspended. The trend in the past several years has been towards the liberalization of required minimum holdings. This does not mean, of course, that central banks do not continue to hold gold and/or foreign exchange, either against their note and deposit liabilities or as international reserves. A great deal of variation also exists in the degree to which individuals may hold, transfer, and buy and sell gold. Major areas today where private gold ownership is prohibited are the United States, the United Kingdom and certain sterling area countries, and Scandinavia. There are many countries, including Belgium, Canada, Germany, and Switzerland, which allow their nationals to hold, transfer, buy and sell gold domestically and generally export or import gold freely. Another group of countries permits their citizens to carry on the same types of gold transactions except for export and import; the outstanding example in this category is



France. In the overall total of gold transactions, private transactions are generally not very substantial although at times their influence on gold prices is discernible. The primary function of gold at the present time is in the settlement of international payments. The domestic importance of gold has declined, and managed paper currencies are more the rule than the exception.

The domestic virtues of gold

What were the reasons for the popularity of gold as a domestic monetary standard? In the first place, it was felt that under a gold specie standard the money supply would be relatively stable since the monetary authorities could not increase the money supply unless gold supplies increased. This restraint was also viewed as a direct check upon the ability of central governments to engage in excessive expenditure. Under a system of fractional gold reserve requirements, these constraints were weakened somewhat but would still tend to operate along similar lines.

Another advantage claimed for the domestic gold standard was that gold production tended to increase when the general price level was low and to decrease when prices rose, providing a more or less automatic response to economic conditions. When the economy needed an injection of money, gold output expanded; when prices rose unduly, output fell. Thus the gold standard was viewed as serving as an automatic check on the ex-

pansion of money and as a protection against inflation. The necessity of relying on changes in the gold stock for changes in the money supply, however, often resulted in a shortage of money during seasonal peaks of activity or for longer run economic development. Further, the deflationary impact of limited gold supplies was liable to occur at inopportune moments of history. Finally, gold discoveries and improvement in mining techniques or changes in the industrial demand for gold bear no clear relation to the need for funds.

Summary

The basic function of money as a medium of exchange and measure of value for the purchase of goods and services and payment of debt has remained constant over history. The forms of money, however, have changed radically over time and will undoubtedly continue to evolve. The direction of monetary development will vary from country to country and will be dependent upon the preferences of individuals and governments, the state of economic and financial advancement, the type of government, and the degree of national and international control over money and economic activity. As exchange of goods and services contributed to specialization and thereby to more efficient production and higher living standards, the means of exchange also became more specialized as efforts were directed towards increasing the efficiency of the exchange mechanism. This evolution has been expressed in the movement from commodity money to representative coinage, from coins to paper currency, and from paper currency to deposits.

The preceding brief historical survey of gold in the monetary system has stressed several points. One is that gold shared the domestic stage with silver through much of history and only emerged supreme in the relatively recent past although it always was preferred as an international means of payment. Second, it was not until the second half

of the 19th century that most countries attained monetary sovereignty with national currencies of their own. Prior to that time, domestic monetary conditions were often influenced by the internal circulation of foreign coins. The experience of individual nations with their own national monetary systems therefore covers a relatively short span of time. Similarly, the use of gold as a currency standard has been a comparatively recent development. Third, the gold standard has been associated throughout history with economically strong countries with large stakes in international trade, for example, the Byzantine and Moslem empires, the Italian cities, and England. As a consequence, there developed a strong tendency to attribute economic strength to the existence of the gold standard.

Last, although the gold standard was lauded for its contributions to stability and economic growth, it generally was abandoned in favor of an inconvertible paper standard whenever a crisis—such as war or financial panics—occurred because the governments or monetary authorities wanted greater flexibility in monetary management at such times.

Gold thus has lost its former importance as a domestic medium of exchange, and managed currencies represent the prevailing monetary system. Gold, however, remains as a part of the monetary reserves of governments and central banks. As a standard of value for international payments, gold has lost little of its luster. Its significance in the international monetary area will be discussed in the succeeding article.