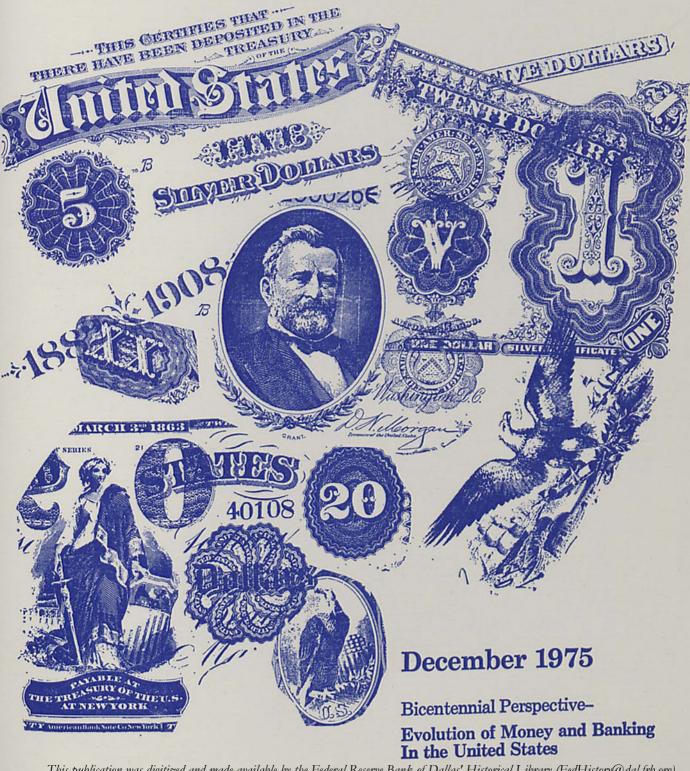
Business Review



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Evolution of Money and Banking In the United States

The development of monetary and banking institutions in the United States has followed neither a smooth nor a completely logical course. Most major changes in the nation's monetary structure were precipitated by either war or economic crisis. A few were the products of forward-looking financial leadership. Not all changes have been progressive, but advances have vastly outweighed reverses, creating a strong and viable monetary system for the country today.

Barter and country pay

In the colonial period, very little money circulated in the American colonies. Although settlers brought gold and silver coins from Europe, most of this *specie* flowed quickly back to England because the balance of trade weighed heavily in that direction. By the time of the American Revolution, there was less than \$12 million in coin in the colonies—less than \$5 each for the roughly 2.5 million settlers.

Colonists developed imaginative solutions to the problem of expanding trade and production despite the extremely limited circulation of money. Barter, or the direct exchange of goods, became so entrenched in early colonial days that it was still practiced in some heavily agricultural areas as late as 1800. In most areas, though, colonists found that certain commodities-so-called country payfacilitated trade. Tobacco and corn, in particular, were easily stored and relatively uniform commodities that were widely used as a medium of exchange.

Country pay was legally sanctioned in 1618, when the Governor of Virginia specified an official

value for tobacco as a means of payment. Soon after, Massachusetts set an official price for corn and made it legal payment, or *legal tender*, for discharging debts. But every farmer soon began growing his own "money" and, as more was grown, the value of country pay depreciated rapidly. Official prices could seldom be maintained for long.

The obvious disadvantages of the barter system and country pay led to widespread dissatisfaction with the shortage of money. Several attempts were made to establish mints in the colonies to alleviate the coin shortage, but most Empire. Other negotiable paper, such as bills of exchange and promissory notes, had circulated in the American colonies but had never gained wide acceptance as money. The Massachusetts bills were standardized in amount and had a specified legal value in payment of taxes—characteristics that made them a convenient medium of exchange and assured their use as money.

The use of bills of credit quickly spread to the other colonies. But because of the ease with which bills could be created, most colonies eventually overissued them. As more and more bills were issued

• There is a certain proportionate Quantity of Money requisite to carry on the Trade of a Country freely and currently; More than which would be of no Advantage in Trade, and Less, if much less, exceedingly detrimental to it.

-Benjamin Franklin April 1729

of these were unsuccessful. Mints that gave indication of being successful were quickly closed by the English government to protect the royal prerogative of coinage.

Experiments with paper money

Then, in 1690, Massachusetts printed bills of credit as a means of paying for King William's war against the French colonies. The inscription on the face of each bill declared it to be in value equal to money and acceptable in payments to the Treasurer. This simple innovation was a turning point in American monetary history.

Bills of credit represented the first paper money in the British

and as their redemption in coin became less and less likely, the value of paper money plummeted. In one extreme case, an issue of bills printed by Rhode Island depreciated within a few years to 4 percent of its original value.

Disputes in the colonies over the advantages and disadvantages of bills of credit gradually developed into large-scale political controversies. The British Parliament consistently sided with sound money, passing several acts designed to thwart the colonies' attempts to expand their money. But the various limitations imposed by Parliament and the Crown were matched by the inge-



Continental Currency, 1778

nuity of the colonists. By the time Parliament prohibited the colonies from issuing legal-tender bills of credit in 1763, groups of colonists had already formed land banks to issue paper money secured by land.

Colonial experiments with paper money established a precedent for the financing of the American Revolution in 1775. The Continental Congress at Philadelphia was not empowered to directly tax colonists, and it could not borrow enough money from Britain's traditional enemies to cover all the colonies' financial needs.

The most practical alternative for raising funds was, therefore, to issue paper money. Many congressmen recognized that the overissue of paper money was nothing but a form of disguised taxation, a procedure for transferring purchasing power to the government from the final holders of the depreciated currency. But it was the only "taxation" they had the power to levy. In June 1775, Congress authorized the issue of \$2 million in bills of credit, declaring that it would be the only such authorization.

By 1779, in spite of its resolution to limit issues of new bills, Congress had authorized \$200 million in paper money. And after attempts to have the colonies provide the funds to redeem these issues proved unsuccessful, depreciation, which had already started in 1776, accelerated. By 1780, \$1 in specie was worth \$80 in Continental currency.

Congress attempted to deal with depreciation by recalling much of the outstanding paper money in a complicated plan adopted in 1780. The overall failure of that plan spelled the end of Continentals. In time, they became worthless, giving rise to the expression "not worth a Continental."

The continuing need of Congress for assistance in financing the war eventually overcame resistance to the establishment of a commercial bank. In 1781, the Continental Congress granted a charter to the Bank of North America, which aided in financing the rest of the war–principally through a large loan from France.

The Bank of North America was successful as a commercial enterprise. It issued notes redeemable in specie, provided credit for trade and economic expansion, and gradually overcame the general suspicion and distrust the colonists had developed from past experience with paper currency and land

banks. Soon after, commercial banks patterned closely after the Bank of North America were established in New York and Boston. The successful operation of these three banks provided valuable banking experience and helped lay the groundwork for the Bank of the United States.

First Bank of the United States

Most of the important developments affecting the nation's financial structure have been in response to the demands of war or economic hardship. However, creation of the Bank of the United States-largely a personal achievement of Secretary of the Treasury Alexander Hamilton-was an important exception. Working during a period of peace and prosperity, Hamilton designed the bank as part of his overall plan for a sound financial system, not only to assist the Treasury with receipts and expenditures but also to enhance the economic environment with a source of credit and a convenient medium of exchange.

Before Hamilton's plan was adopted, it became the focal point of a constitutional controversy that lasted several years. The Constitution expressly forbade state governments to coin money, emit bills of credit, or make anything but gold and silver coin legal tender in payment of debts. With respect to banking, however, the Constitution did not specify the powers of the federal and state governments.

The Federalists, supporters of strong central government and broad interpretation of the Constitution, favored Hamilton's plan. Strict constructionists, such as James Madison, opposed the bank as an infringement on rights properly reserved to the states. Hamilton and the Federalists ultimately prevailed. President Washington rejected the opinions of his Attorney General and Secretary of State that the act was unconstitutional

and signed the bill incorporating the bank in 1791.

The bank soon became a major financial institution. Hamilton gradually transferred the Treasury deposits to the bank. And the bank began to issue notes that were receivable in payments to the federal government—a unique legal prerogative over notes of other banks.

Most of the bank's transactions, however, were commercial loans for financing domestic and foreign trade. Thus, although the bank had prominence and influence nationwide, it was not what later came to be called a central bank with authority over or responsibility for the country's monetary system.

State banking

Establishment of the Bank of the United States did not represent a legal obstruction to the growth of other banks. And though the Constitution prohibited state governments from participating in banking directly, it did not forbid their chartering private banks. By 1810, state governments had chartered nearly 90 banks.

The Bank of the United States exerted an important stabilizing influence on state banks. By favoring well-run, sound institutions in its dealings and by regularly presenting the notes of other banks for redemption, the bank restrained somewhat the tendencies toward speculative practices and overissue of notes by country banks. The importance of this restraint became more apparent when it ended.

A bill renewing the bank's 20year charter was defeated by a single vote, and the bank was forced to close. State governments continued granting charters to fill the void, and one of the most inflationary periods in the nation's history followed. Banking practices became more and more irresponsible—even fraudulent.



State Bank Note, 1837

The War of 1812 added to the severity of the developing financial crisis. Congress was reluctant to levy taxes to pay for the war. Instead, it borrowed mainly from the banks. With no central bank to control them, state banks accommodated congressional demand for funds by creating a volume of paper money that defied specie redemption.

Bank notes in circulation rose from \$28 million in 1811 to \$68 million in 1816 as the number of banks rose from 90 to 250. The value of the notes, which depended solely on the confidence of the noteholder in the issuing bank, began depreciating. Within three years of the closing of the Bank of the United States, confidence had deteriorated to such an extent that banks across most of the country stopped redeeming their notes.

Ironically, it had been hardmoney advocates that defeated the
bill to recharter the bank. Thus,
the inflationary situation that
developed left them in an unpleasant quandary. On the one hand,
they philosophically opposed a
central bank. On the other, they
abhorred the overissue of paper
money, excessive expansion in the
number of state banks, and rampant inflation. As the lesser of two
evils, they chose to support the

Second Bank of the United States, which Congress chartered in April 1816.

Second Bank of the United States

As fiscal agent for the U.S. Government and with a capital of \$35 million, the Second Bank of the United States was immensely powerful. In the course of business, the bank acquired a stream of state bank notes that it could redeem in specie at issuing banks. Thus, as creditor of state banks, the bank could, at its discretion, reduce the amount of money in circulation by increasing the redemption of state bank notes.

The bank facilitated repayment of the public debt and the regional transfer of Government deposits. Treasury receipts were heaviest in New York because customs receipts were by far the most important source of Treasury income. The bank, with branches in all principal cities, was in an excellent position to transfer portions of these funds to other parts of the country.

Notes of the bank provided a uniform currency throughout the country. Its loans were important for agriculture and commerce on the developing frontiers. And the large volume of acceptances issued by the bank spurred both national and international trade. The

bank also participated in foreign exchange markets to alleviate temporary shortages and keep flows of specie as small and as gradual as possible.

Nevertheless, the bank fell into disfavor. Its conservative behavior did not please the easy-money group, and the political faction that favored hard money continued to be opposed to all banks-even one with its stabilizing influence.

Although its charter did not expire until 1836, the bank's future was doomed in 1828 with the election of Andrew Jackson-a hardmoney agrarian who looked on banks as the cause of inflated currency, speculative booms, and disastrous depressions. Ironically, some supporters of the Jackson party opposed the bank for exactly the opposite reason. They believed that the bank kept money and credit in short supply and imposed a check on economic expansion.

Before the bank's charter ran out, a number of financial measures that were instituted virtually assured a financial crisis and led to the worst depression the country had experienced. First, the Treasurv stopped making deposits in the Bank of the United States and transferred funds to designated state depository banks. Without the financial leverage of Treasury deposits, the bank could exert little influence on the country's financial markets and could no longer effectively control note issues of state banks.

Growth of state banking

As a consequence, and quite contrary to the wishes of Jackson and the hard-money group, state banking burst into an era of unusual growth. By 1837, there were at least twice as many state banks as in 1830. The volume of state bank notes doubled, and loans and discounts increased 2½ times. This stimulus produced rapid inflation and an economic expansion that

could not have been sustained in any event.

The Treasury began running a large surplus that it redistributed among the states in direct proportion to the number of representatives in Congress. Had the bank still been fiscal agent for the Treasury, it could have drawn the payments from the branches that could most easily spare reserves. But the Treasury gave no considerand other sectors of the economy. In 1837, the economy suddenly plunged from a boom prosperity into a severe depression.

The depression was a direct consequence of the demise of the Bank of the United States and the resulting excessive issues of bank paper and disruptive financial measures of the Treasury. Unfortunately, this was not understood at the time, and the economic turmoil of

 The lessons taught by the Bank of the United States can not well be lost upon the American people. They will take care never again to place so tremendous a power in irresponsible hands.

-Andrew Jackson December 1836

ation to the ability of the state banks to meet its withdrawals. And in 1837, the demands of the Treasury helped put such pressure on the New York banks that they were forced to suspend specie payment entirely. Many banks in other parts of the country were then forced to suspend also.

Another cause of the banking panic of 1837 was the Treasury's new policy with respect to payments for public lands. In the interest of hard money and in an effort to stop the multiplication of state banks and to dampen speculation, the Administration had decreed in 1836 that only gold and silver would be accepted in payment for public lands. This "Specie Circular," as the Treasury called its directive, produced a flow of specie into the Treasury from banks in the West where land sales were taking place.

But the Treasury was limited by law in the amount it could redeposit in any bank and could only get specie back into circulation with payments to employees and suppliers. Since there were few of the latter in the West, the Specie Circular disrupted banking, land sales, the depression produced a political sentiment unfavorable to the formation of another Bank of the United States.

President Martin Van Buren rejected suggestions for a new bank, proposing instead the creation of a sub-Treasury system whereby the Treasury would require payment in gold and silver and collect its revenues directly, rather than through financial intermediaries. Van Buren hoped to advance the cause of hard money by completely separating the federal government from the banks.

The Independent Treasury Act of 1846 separated the Treasury from the banking system. The act instructed the Treasury Department "to keep safely, without loaning, using, depositing in banks" all the money it collected. All transactions with the Treasury were to be settled in either specie or Treasury notes.

While Congress was establishing the Independent Treasury, most of the states, in the wake of the depression of 1837, were making far-reaching changes in state banking. Some states moved to prohibit banks entirely, but most adopted

the other extreme of free banking, allowing anyone to form a bank without a special act of the state

legislature.

The experiments met with mixed results. In Michigan, which adopted the nation's first freebanking law in 1837, the system was a momentous failure. By contrast, the free-banking system in New York worked well enough to form the model on which the National Banking System was later based.

Because of experiences with excessive issues of paper money, most states during this time stressed the importance of hard money in their banking legislation. Even in free-banking states, banks usually were required to maintain a specie reserve equal to a specific percentage (usually 25 percent) of their notes.

Greenbacks

The Civil War had an immense influence on the subsequent history of banking and currency in the United States. The federal government again issued paper money and reentered banking.

In the early stages of the war, the Treasury enforced rigid conformity to the Independent Treasury System, accepting only specie in payment for Government bonds. But when expenditures began rapidly outpacing receipts of gold from bond sales, the Treasury issued demand notes to pay for its purchases. The notes, for all practical purposes, were paper money. Nevertheless, the Secretary of the Treasury considered the demand notes only a partial breach of the rules of the Independent Treasury System since the Treasury maintained a policy of exchanging the notes for gold on demand.

The demand notes-or, more precisely, the huge increase in Government expenditures financed through demand notes without an offsetting increase in taxes-gener-



National Bank Note, 1900

ated inflation that seriously aggravated the Treasury's already monumental problem. Inflation pushed the market price of gold above its official price. With that, gold was withdrawn from the nation's banks and hoarded in anticipation of further price increases. Just eight months after the war began, rapid gold outflows forced banks and the Treasury to stop redeeming notes in specie.

Treasury officials and congressmen responsible for raising money faced a dilemma. Almost everyone involved disliked paper money, but the need for funds was extreme. · Lacking an alternative, Congress began issuing United States notes. This paper currency, later called greenbacks, was the first legaltender money ever issued by the U.S. Government.

As opponents of the plan had expected, another promise of only one issue was promptly broken. By 1865, Congress had authorized \$450 million in greenbacks. Depreciation began, and the value of \$100 of greenbacks quickly sank to \$75 in gold and eventually to \$35. During this period, the term inflation was first used.

National Banking System

When greenbacks proved inadequate for the financing effort, Congress passed the National Banking Act of 1863, Although Congress approved the act primarily because it provided a means of raising enough money to pay for the war, other benefits proved far more important in the long run.

The act established provisions for chartering national banks, signaling the reemergence of dual banking after a lapse of almost 30 years. Under the provisions of the act, national banks became an important market for Treasury bonds. Each national bank was required to deposit, with the Treasury, Government bonds equal to at least a third of its capital.

To speed the conversion of state banks to national banks, Congress imposed a 10-percent tax on state bank notes. Many state banks, finding it unprofitable to issue notes and pay federal taxes on them, gave up their state charters and joined the national system.

A significant long-run contribution of the act was the provision for national banks to issue notes. These national bank notes, secured by Government bonds on deposit at the Treasury, were receivable by the Government for all taxes except customs. At the time the law was passed, the value of existing bank notes depended on the laws of 34 separate states and the independent operation of about 1,600 banks. The National Banking Act

established a framework for the first uniform paper currency and made possible the elimination of the confusing array of state bank paper that was distinctly inferior for the conduct of trade.

Another significant aspect of the act was its recognition that, as bank liabilities, deposits were at least as important as bank notes.

as credits with authorized banks in New York and other reserve cities.

In the summer and winter, when loan demand was slack, country banks deposited part of their reserves in New York City banks, receiving interest on the deposits. The New York banks counted specie deposited by country banks as part of their own reserves, which

depended on conditions in the Government bond market, since the notes had to be secured by a deposit of Government bonds equal to their face value. When bond yields fell relative to the return on other investments, banks were less willing to hold bonds as security and the amount of bank notes outstanding tended to decline.

• It is the misfortune of war that we are compelled to act upon measures of grave importance without that mature deliberation secured in peaceful times.... We are about to choose between a permanent system [the National Banking System], designed to establish a uniform national currency based upon the public credit, limited in amount, and guarded by all the restraints which the experience of men has proved necessary, and a system of paper money without limit as to amount, except for the growing necessities of war.

-Senator John Sherman February 1863

The act required banks to hold cash reserves of 15 to 25 percent against both deposits and notes, effecting a notable change in banking practice. Bank loans, particularly in cities, had come more and more to be made by crediting the demand deposit accounts of borrowers rather than by issuing notes or paying out coin. Thus, deposit creation was little different from bank note creation and involved the same risk of overissue by banks. Nevertheless, as late as 1879, only six states required banks under their charter to keep such reserves.

Along with its many improvements, the new National Banking System had some defects. For many years, the banking system under state regulation had suffered seasonal fluctuations as bank funds moved to New York to take advantage of Wall Street's call-money market. Instead of correcting such fluctuations, the National Banking Act encouraged them by permitting national banks to keep a considerable amount of these reserves

allowed the New York banks to expand security loans in the callmoney market. Then, when country banks needed funds for making agricultural loans in the spring and fall, they withdrew deposits from New York and put pressure on the money market.

In most years, the banks managed to survive the temporary credit stringency. But when the economy was expanding rapidly and the volume of security loans in New York City was large, the scramble for liquidity often created a money market panic and, in turn, an economic recession.

Another deficiency of the banking structure under the National Banking Act was the inelasticity of the currency supply. The act limited the volume of national bank notes to \$300 million, originally divided among the states in proportion to population. The supply of currency could not be increased in response to variations in demand.

Moreover, the actual amount of national bank notes in circulation

Silver versus gold

When Hugh McCulloch became Secretary of the Treasury in 1865, he proposed a return to the gold standard by using the Government's surplus to retire the greenbacks. In the Funding Act of 1866, the Secretary received authority to retire \$10 million of greenbacks within six months and \$4 million a month thereafter.

Secretary McCulloch wasted no time in putting this deflationary program into effect. The combined effect of the Treasury surplus and the decrease in money sent the economy into a recession and precipitated one of the most intense and dramatic struggles in the history of money. In the controversy, which continued intermittently for 30 years, advocates of easy money pressed various plans.

One of the first proposals called for the Government to refund all outstanding Government bonds with additional issues of greenbacks. The Greenback party formed to give the public the chance to vote for easy money and entered candidates in three presidential campaigns, but without success. On the contrary, national sentiment continued to favor a return to the gold standard.

In 1875, Congress passed the Resumption Act, directing the Treasury to redeem in coin any greenbacks presented for redemption after January 1, 1879. According to the act, the Treasury was to retire \$80 of greenbacks for every \$100 of national bank notes issued after 1875. The deflationary

effects of this were made more severe by the fact that greenbacks served not only as currency but also as bank reserves.

The Resumption Act helped convince the easy-money bloc that greenbacks did not offer a promising way of increasing money in circulation. The public distrusted paper currency. Experiences with Continental currency, state bank notes, and Confederate paper had left indelible impressions. So, easymoney advocates turned to silver coins as the means of increasing money in circulation.

Until 1873, the country's monetary system was legally bimetallicthat is, the U.S. mint was obligated to coin any gold or silver presented to it. But bimetallism did not exist in practice because the price of silver was much higher in the open market than at the mint. Mineowners, therefore, sold their output to bullion dealers rather than the mint. Realizing this, Congress discontinued minting of the standard silver dollar in 1873.

At about the same time, however, large new deposits of silver were discovered. As the supply of the metal rose, the price fell. And by 1874, the open market price was considerably lower than the

mint price. Silver miners and inflationists began talking about the "Crime of '73" and demanded an immediate restoration of bimetallism. Farmers and other debtors that would have benefited from an expanded money supply joined in the crusade for a return to the free coinage of silver.

Congress bowed to the pressure of silverites by adopting the Sherman Silver Purchase Act in 1890. The act required the Treasury to

The Treasury's gold holdings decreased rapidly, as people in increasing numbers presented paper notes for redemption and then hoarded the gold. The crisis culminated in the panic of 1893.

President Grover Cleveland believed in strict adherence to the gold standard. When the panic broke out, he immediately called Congress to a special session to repeal the Sherman Silver Purchase Act. With this step, the

 If they dare to come out in the open field and defend the gold standard as a good thing, we will fight them to the uttermost....We will answer their demand for a gold standard by saying to them: You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold.

-William Jennings Bryan July 1896

purchase 4.5 million ounces of silver each month and to make this purchase with a new type of money-a Treasury note that was legal tender and redeemable in gold or silver at the discretion of the Treasury. The public was skeptical of the new note because silver had been falling in price. Partly to counter this skepticism, the Treasury decided to redeem the new notes in gold.

panic gradually receded, but unrest and danger to the gold standard remained until the presidential election of 1896, when William McKinley defeated William Jennings Bryan. Bryan had won the presidential nomination with his famous "Cross of Gold" speech to the Democratic National Convention. His defeat in the 1896 election brought an end to the free silver movement.

Fulfilling his campaign promise of a return to the gold standard, McKinley signed the Gold Standard Act into law in 1900. Although the act ended bimetallism and established gold as the official legal standard, it did not prove to have a deflationary effect.

Easy-money blocs had advocated expansion of coin and currency as the primary means of increasing money in circulation. But by 1900, demand deposits had become the fastest growing component of the money supply. Furthermore, gold discoveries in Alaska, South Africa, and Colorado combined with the invention of new mining and refining meth-



Silver Certificate, 1891

ods to produce a rapid increase in monetary gold. With ample gold to serve as reserves, the quantity of money expanded at roughly 6 percent a year from 1900 to 1912, effectively quieting the clamor for easier money. Banking once again became the focus of the financial reform movement.

Federal Reserve Act

By 1900, the weaknesses of the national banking system were widely recognized, as was the primitive nature of American banking relative to the banking systems developing in Europe. But once again, only a dramatic crisis—the 1907 money market panic—could focus the attention of legislators on bank reform.

An economic boom had ended in early 1907 and was followed by a recession that remained relatively mild for about six months. Then, in late October, the failure of the Knickerbocker Trust Company triggered a concerted run on other trust companies and banks. Banks were forced to contract their loans, interest rates soared, and reserves began to run down. The pyramiding of reserves that was permitted under the National Banking Act seriously compounded the difficulty, as country banks withdrew deposits at the first sign of a crisis and impaired the liquidity of large city banks.

To alleviate the crisis, the Secretary of the Treasury deposited \$36 million in New York banks in a single two-week period. But before the panic eased at the end of the year, banks and savings institutions were forced to restrict deposit withdrawals. The panic brought into sharp relief the defects of the banking system.

In the wake of the crisis, Congress passed the Aldrich-Vreeland Act to provide emergency relief in the event of another panic. The act also created a National Monetary Commission to study banking and its problems and to help prepare a permanent banking act. Studies by that commission led eventually to a comprehensive bill introduced by Carter Glass, chairman of the House Banking and Currency Committee. This bill, signed shortly after Woodrow Wilson became president in 1913, was the Federal Reserve Act.

Under provisions of the act, the country was divided into 12 districts with a Federal Reserve bank in reserves, causing the total money supply to fall.

Inelasticity of the nation's currency was corrected by the act's provision for a rediscount mechanism and authorization for Federal Reserve banks to issue notes. Member banks in need of funds were permitted under the act to rediscount their commercial paper at Reserve banks, and Federal Reserve notes could be issued to meet their demands. The notes,

• The American banking system has had some very serious defects. The principal defect of our system has been that the country has had no adequate protection against panics, so that from time to time the country has been shaken to its foundations by the severest financial panics, throwing into chaos our commerce, our manufactures, and our industries, from which the recovery in some cases has taken as much as four or five years. This [Federal Reserve] bill is intended to correct the chief defects in our system.

-Senator Robert Owen December 1913

serving each one. All national banks were compelled to become members, and state banks were allowed to join. Member banks were required to maintain reserves against time and demand deposits in their own vaults and at Federal Reserve banks—not at other commercial banks. This feature was a response to the instability of the old system that permitted the pyramiding of reserves.

Maintenance of the gold standard was not questioned in the Federal Reserve Act. Gold served as a basis for the member bank reserves that were deposited at Federal Reserve banks and continued to be a backing for currency as well.

Past financial crises had frequently been aggravated by attempts on the part of the public to convert deposits into currency. Without an elastic currency, withdrawals forced banks to contract deposits by a multiple of the loss

like greenbacks, were made obligations of the Treasury. They were to be backed 100 percent by commercial paper and an additional 40 percent by gold.

Federal Reserve System

Details of organization and procedure occupied monetary authorities in the early years of the Federal Reserve System. But these issues were soon dwarfed by the problems caused by the entry of the United States into World War I.

Although the Independent Treasury System was not formally dissolved until May 1920, the Federal Reserve was made fiscal agent of the Treasury in 1915, and Reserve banks took on the job of handling certificates of indebtedness and bonds in the Treasury effort to finance the war. When gold production failed to provide adequate expansion of money and credit, Congress lowered reserve require-

ments by amending the Federal Reserve Act in June 1917.

The Board of Governors of the Federal Reserve System gave member banks the privilege of borrowing at Reserve banks, using Government securities as collateral. This assurance of liquidity for their bond purchases helped induce banks to invest in Government obligations as earning assets. By the end of the war, commercial banks held a fifth of the total Government debt.

The large volume of outstanding Treasury debt resulting from the war was an important prerequisite for the development of open market operations as a policy instrument. In the early years of the System, the discount mechanism was the major policy tool. Credit policy was expressed in terms of the level of the discount rate and the volume of discounted paper held by Federal Reserve banks. But following a recession in 1921, a rapid repayment of borrowings by member banks induced Reserve banks to purchase sizable amounts of Treasury securities, assuring themselves sufficient earnings to meet expenses.

Since the purchase of securities by the Reserve banks provided funds to the banking system, it soon became evident that open market purchases would have to be coordinated with discount policy. In 1923, the Board established a special committee to carry out open market policy and declared that purchases or sales of securities by Reserve banks would be made primarily with regard to their effects on credit conditions. This marked the beginning of what is now the Federal Reserve System's most powerful policy instrument.

The primary weakness of the Federal Reserve Act was that it lacked provisions for strengthening the state banking system. When demand deposits replaced



Federal Reserve Bank Note, 1914

notes as the major component of the money supply, the tax on state bank notes, imposed by Congress shortly after enactment of the National Banking Act, no longer deterred the formation of state banks. Eventually, a weak and poorly run system of state banks developed. Between 1921 and 1933, more than half of all banks in the United States failed. Most of these were state banks that were not members of the Federal Reserve System. And they were, in general, banks that were least regulated and had the smallest capital.

In February 1927, Congress passed the McFadden Banking Act, encouraging growth of the Federal Reserve System by giving national banks some of the advantages of state banks. The act allowed national banks to establish branches where permitted by state law. It also broadened the power of national banks to make real estate loans, increased the limit on the amount that could be loaned to one borrower, and allowed national banks to purchase corporate bonds and investment securities.

These features increased the attractiveness of national banks and stimulated membership in the System. However, they created a dichotomy that later proved troublesome. The McFadden Act

permitted banks to invest heavily in illiquid assets but did not liberalize the borrowing privilege, under which banks could obtain relief at the discount window only by pledging liquid obligations. In a time of heavy demand for money, this structure limited the degree of help available from the Federal Reserve System.

In the late 1920's, conflicting goals complicated the conduct of monetary policy. From early 1928 through most of 1929, the System attempted to curb a stock market boom by discouraging loans for security speculation. At the same time, it wanted to accommodate the economic expansion that had resumed after the 1927 recession. The Board attempted to achieve these goals by denying discount window facilities to banks borrowing for the purpose of making speculative loans and by moderating increases in the discount rate.

As a result, the discount rate rose more slowly than market rates, giving banks an incentive to borrow from the System. This combination of policies was too weak to break the speculative boom but too restrictive to permit continued economic expansion. As the economic outlook deteriorated, panic erupted in the stock market in October 1929, initiating a self-reinforcing downward spiral as

falling security prices forced brokers to sell customer collateral.

Depression and bank reforms

The stock market crash occurred without any major disruptions of banking. A year later, however, a growing number of bank failures—particularly in agricultural areas—led to a major banking crisis: 256 banks failed in November 1930, and 352 failed a month later. This first banking crisis lasted only three months.

But a second crisis followed in early 1931, partly as a result of attempts by banks to protect themselves. In their search for liquidity, banks sold bonds at lower and lower prices. And the liquidation of assets at distress prices rendered insolvent banks that otherwise might have survived. In the seven months from February to September 1931, commercial bank deposits contracted nearly 10 percent.

Britain's abandonment of the gold standard in 1931 compounded the difficulties of U.S. banks. When Britain suspended gold payments, foreign demands for gold shifted to the United States. Gold exports in a single two-month period offset all the net inflows of gold since 1929. In an attempt to protect the gold standard, most of the Reserve banks raised their discount rates, making credit more expensive and discouraging investment during the depths of the Depression.

Through two banking crises, Federal Reserve operations had been largely defensive, with no vigorous action to stimulate economic activity. And international developments had evoked a contractionary response. Political pressure began to build in Congress for stimulative measures.

In January 1932, Congress passed the Glass-Steagall Act, which permitted Reserve banks to count Government bonds as security against Federal Reserve notes. Under the Federal Reserve Act, notes required 100-percent backing in commercial paper or gold. But by early 1932, commercial paper backing had dropped to less than 40 percent of the volume of outstanding notes, and the availability of gold depended on foreign flows.

It is not certain to what extent the Glass-Steagall Act relieved the concern of monetary authorities over note collateral or, for that matter, whether a scarcity of colReserve Act gave the Government permanent title to all monetary gold. This put the United States on a limited gold standard, meaning redemption of dollars in gold was restricted to foreign central banks and licensed private users.

In 1933 and 1935, two of the most important banking acts in the financial history of the United States were enacted. These acts struck directly at the defects in the banking system that had contributed to speculative excesses

• After all, there is an element in the readjustment of our financial system more important than currency, more important than gold, and that is the confidence of the people.... We have provided the machinery to restore our financial system; it is up to you to support and make it work.

It is your problem no less than it is mine. Together we cannot fail.

-Franklin D. Roosevelt
First "Fireside Chat"
March 1933

lateral had really deterred largescale open market purchases of securities. Congressional concernrather than new collateral provisions—may have been the dominant force in prompting a policy change.

In any case, after passage of the Glass-Steagall Act, the Federal Reserve undertook large-scale open market purchases. Although the purchases produced an increase in excess reserves of banks and probably contributed to a decline in interest rates, they were largely offset by an outflow of gold and a reduction in discounts. With no immediate evidence of the effectiveness of the operations, open market purchases were prematurely discontinued.

A third banking panic gripped the country in 1933. The Roosevelt Administration declared a national banking holiday and, apparently as a temporary measure, prohibited the private holding of gold. Then, in 1934, the Gold in security markets and panicky runs on banks.

The Banking Act of 1933 widened the authority of the Federal Reserve Board so that credit could be refused to banks making too many speculative loans. It authorized the Board to limit the amount of loans secured by stock or bond collateral. And it prohibited payment of interest on demand deposits, which had attracted large seasonal flows of funds from country banks to New York for investment in broker loans. Because so many of the closed banks were small, the act raised the minimum capital of national banks and liberalized the law governing branch banking.

The most important accomplishment of the Banking Act of 1933–and, oddly enough, the most strongly opposed by banks—was establishment of the Federal Deposit Insurance Corporation.

The deposit insurance was funded

by assessments on insured banks and safeguarded by careful bank examination. Unfortunately, most of the weakest banks had already failed by the time FDIC was established, and their depositors did not share in the benefits of the plan. But in later recessions, deposit insurance stabilized financial markets by stemming runs on weak banks and preventing rumors of weakness at one bank from causing runs on other banks and, thus, a banking crisis.

The Banking Act of 1933 had just become law when Marriner Eccles, governor of the Federal Reserve Board, sponsored a bill that became the Banking Act of 1935. In this bill, Eccles—an early spokesman for compensatory fiscal policy and centralized credit and monetary control—proposed measures to strengthen monetary management and increase the power of

the Federal Reserve.

The act gave the Board new authority to regulate reserve requirements and authority to regulate the rate of interest paid by member banks on time deposits. The law also broadened the lending powers of Federal Reserve banks. In addition, it removed the Comptroller of the Currency and the Secretary of the Treasury from membership on the Federal Reserve Board. According to Eccles, this last provision was included at the insistence of Senator Glass, who had been Secretary of the Treasury and believed the influence of that office should be eliminated.

World War II and after

The nation's financial system met a major test when, without any major legislative changes, the Federal Reserve and the Treasury successfully financed World War II. Less than half the total war costs were covered by taxation. Treasury debt increased from \$50 billion to \$270 billion during the war, and it was marketed without any major changes in the monetary system. The Federal Reserve assured the success of the financing by fixing high and stable prices for Treasury securities.

In the postwar era, most of the important innovations in commercial banking have come from banks themselves, rather than from any major legislative or regulatory changes. Commercial banks have remained the leading financial intermediary, but they have faced increasing competition from a wide variety of other institutions. Savings and loan associations and life insurance companies have become more important intermediaries for savings. Mutual savings banks, credit unions, personal finance companies, investment bankers, and government lending institutions have also taken a greater share of the nation's borrowing and lending.

To attract funds and maintain their competitive position, banks have designed new money market instruments. For example, in the early 1960's, banks began issuing negotiable certificates of deposit to attract funds businesses and investors were unwilling to hold in demand deposit accounts that yielded no interest. Banks have also sought funds by borrowing Eurodollars (dollars on deposit abroad) and by issuing commercial paper and finance bills. Demand deposits have remained the most important bank liability, but all other liabilities combined now provide well over half of bank funds.

Two important changes in banking structure have taken place in the postwar era. One striking change is that the number of branch offices has increased from less than 4,000 in 1945 to almost 30,000 in 1975. This change reflects not only the growing acceptance and trust of banks by the public but also the dictates of a changing economic structure.

Even before the war, many small banks that had failed during the 1920's and 1930's were replaced by branch banks better able to meet needs of businesses for more extensive and diversified banking services. The movement was accelerated by postwar legislation liberalizing requirements regarding branching by national banks and other members of the Federal Reserve System, putting them on a more competitive basis with nonmember state banks.

The other structural change, still in progress, is the formation of bank holding companies. In 1965, there were only 53 bank holding companies in the United States. Now, there are over 1,700, controlling nearly 70 percent of the assets of all commercial banks. Most of these holding companies own only one bank. However, nearly 300 are multibank holding companies, controlling about a third of all commercial bank assets.

Many of the holding companies were formed to find new sources of funds during periods of high interest rates. Others were formed as a vehicle for geographic expansion, particularly in states that prohibited branch banking but did not prohibit the ownership of several banks by a single bank holding company. Still others were formed to acquire nonbank firms.

Recent economic history testifies to the successful evolution of the nation's financial structure. The yearly output of goods and services in the nation has more than doubled since 1950, and the expansion has been financed for the most part by its financial institutions.

Even more significant is the fact that although economic expansion has been interrupted by recessions five times since 1950, the recessions did not produce panics in the nation's financial markets. On the contrary, improvements in bank management, bank regula-

tion, and monetary policy have fostered a level of confidence in banks that has allowed them to become a stabilizing rather than destabilizing influence on the economy.

-Edward E. Veazey

New member bank

Commerce National Bank of Conroe, Conroe, Texas, a newly organized institution located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business November 3, 1975, as a member of the Federal Reserve System. The new member bank opened with capital of \$800,000, surplus of \$300,000, and undivided profits of \$200,000. The officers are: W. S. Pebworth, Jr., Chairman of the Board; Robert N. Jones, President; Barrett L. Willett, Vice President; and Lola M. Babin, Cashier.

New par bank

Commonwealth Bank of Houston, Houston, Texas, a newly organized insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business October 23, 1975, remitting at par. The officers are: David Tripplehorn, President; Gus Comiskey, Jr., Vice President; and James Treptow, Cashier.



Research Department Federal Reserve Bank of Dallas Station K, Dallas, Texas 75222



Federal Reserve Bank of Dallas December 1975

Statistical Supplement to the Business Review

Rising oil prices in recent years have triggered a massive search for more petroleum reserves. This quest, in turn, has led to a boom in the output of oil field equipment, including offshore drilling rigs.

A recent slump in offshore drilling worldwide, however, has decreased demand for rigs. New orders have slowed, and cancellations have pared the backlog of unfilled orders.

In November, world construction of offshore rigs was 25 percent below the January 1975 peak. Still, it was five times higher than the previous peak in 1965.

Of the 36 offshore drilling rigs being built in the United States, 33 were being assembled in Gulf Coast yards. These and other projects, which will keep manufacturers busy for the next 12 to 18 months, have special implications for industrial production in Texas.

Production of oil field equipment-which in addition to domestic rigs includes equipment that is installed on rigs built abroad comprises a large part of the nonelectrical machinery industry in Texas. And nonelectrical machinery, the state's largest durable goods industry, accounts for 6.5 percent of Texas' industrial output.

Despite fewer new orders, production of nonelectrical equipment should remain high, bolstering the recovery in industrial output in Texas. But once the rigs under contract are completed, the strength of this important industry will largely depend on whether manufacturers can find other work.

Large firms possibly can switch their output to other product lines, such as oil field production platforms that are used onshore or barges. Small, specialized firms, however, may have problems developing alternative product lines.

Growth in total business loans at weekly reporting banks in the Eleventh District has been sluggish in 1975. Analysis of the composition of total commercial and industrial loans indicates borrowings by most types of businesses have been weak, with the petroleum refining, mining, and transportation industries being the major exceptions.

The failure of business loans to expand in the first half of the year reflected the deepening recession. But even after economic activity picked up after midyear, business loans remained sluggish. That was largely because of a reluctance to rebuild inventories.

One reason that firms have kept their stocks low is that materials and unfinished goods have been readily available from suppliers. Thus, businesses have had less need for bank credit to carry inventories.

Many commercial and industrial borrowers have also repaid a large amount of their outstanding shortterm debt with proceeds from longer-term bond and equity offerings. Short-term borrowings had reached near-record levels in 1974.

Use of bank credit lines by the transportation industry this year has exceeded the 1974 rate and borrowings by petroleum refining and mining industries have lagged record rates of 1974 only slightly. Strength in borrowing by these industries-which account for nearly a third of the total volume of business loans-has largely offset weakness in loan demand from most other industries this year.

On the strength of increased crop production and livestock production, total farm and ranch output in Texas in 1975 is expected to be substantially higher than in 1974. Based on November 1 conditions, total agricultural output in the state was projected at more than a fifth higher than a year earlier.

Crop production this year could exceed output last year by a fourth, since problems with drouth did not recur in 1975. In addition to a record winter wheat crop this spring, most of the gain reflects higher output of corn and grain sorghum. And despite reduced acreage, the cotton crop should be slightly higher than a year before.

Livestock production, meanwhile, is likely to exceed 1974 levels nearly a fifth. Sharply higher rates of slaughter, including a 42-percent gain for cattle and calves, have pushed livestock production well above a year before. Through September, liveweight beef production was a substantial 30 percent ahead of the same period in 1974.

With fed cattle marketings through September having dropped 25 percent from a year before, the gain in beef production in 1975 has resulted from higher slaughter of grass-fed animals. And it has more than offset a significant drop in pork production and declines for all other livestock products except turkeys.

Other highlights:

• Labor markets in Eleventh District states were much improved in October. The seasonally adjusted unemployment rate fell to 6.9 percent, as the number of unemployed workers declined for the first time since June.

The fastest growth in employment was in the construction (Continued on back page)

CONDITION STATISTICS OF WEEKLY REPORTING COMMERCIAL BANKS

Eleventh Federal Reserve District

(Thousand dollars)

| ASSETS | Nov. 19, 1975 | Oct. 15, 1975 | Nov. 20, 1974 |
|---|--------------------|--------------------|------------------------|
| Federal funds sold and securities purchased | | | |
| under agreements to resell | 1,499,930 | 1,600,663 | 1,625,941 |
| Other loans and discounts, gross | 10,512,830 | 10,603,502 | 10,515,988 |
| Commercial and industrial loans | 5.051;000 | 5,122,340 | 4,969,419 |
| Agricultural loans, excluding CCC | | | |
| certificates of interest | 216,627 | 207,079 | 246,832 |
| Loans to brokers and dealers for | | | |
| purchasing or carrying: | | | |
| U.S. Government securities | | 200 | 1,233 |
| Other securities | 68,613 | 66,222 | 35,918 |
| Other loans for purchasing or carrying: | 1220 | | |
| U.S. Government securities | 681 | 869 | 4,902 |
| Other securities | 374,809 | 370,889 | 424,748 |
| Loans to nonbank financial institutions: | | | |
| Sales finance, personal finance, factors, | | | |
| and other business credit companies | 168,613 | 201,652 | 154,549 |
| Other | 556,403 | 595,344 | 584,425 |
| Real estate loans | 1,474,907 | 1,494,279 | 1,537,998 |
| Loans to domestic commercial banks | 64,936 | 53,595 | 42,278 |
| Loans to foreign banks | 74,511 | 87,883 | 72,633 |
| Consumer instalment loans | 1,134,859 | 1,122,261 | 1,122,052 |
| Loans to foreign governments, official institutions, central banks, and international | | | |
| | 0.040 | 0.050 | |
| Institutions Other loans | 2,849 1,323,822 | 2,053 1,278,836 | 1 210 000 |
| Total investments | 5.175,363 | 5,115,462 | 1,318,988 |
| otal investments | 5,175,363 | 5,115,462 | 4,260,600 |
| Total U.S. Government securities | 1,656,296 | 1,545,788 | 935.736 |
| Treasury bills | 323,461 | 273,779 | 90,876 |
| Treasury certificates of indebtedness | 0 | 0 | 0 |
| Treasury notes and U.S. Government | | | |
| bonds maturing: | 220000 | | |
| Within 1 year | 274,166 | 267,288 | 162,985 |
| 1 year to 5 years | 879,935 | 836,094 | 471,723 |
| After 5 years | 178,734 | 168,627 | 210,152 |
| Obligations of states and political subdivisions: | | | |
| Tax warrants and short-term notes and bills | 271,280 | 298,365 | 152,323 |
| All other | 2,925,370 | 2,964,604 | 2,847,716 |
| Other bonds, corporate stocks, and securities: | | | |
| Certificates representing participations in | 0.740 | 0.745 | 20.240 |
| federal agency loans | 9,710 | 9,745 | 20,342 |
| All other (including corporate stocks). | 312,707 | 296,960 | 304,483 |
| Reserves with Federal Reserve Bank | 1,619,272 | 2,191,031 | 1,541,116 1,176,656 |
| Currency and coin | 1,208,778 | 920,207 | 131.605 |
| Balances with banks in the United States | 492,666 | 130,787 584,958 | |
| Balances with banks in foreign countries | | | 411,899 28,461 |
| Other assets (including investments in subsidiaries | 136,947 | 106,564 | 20,401 |
| not consolidated) | 1,342,929 | 1.223,453 | 936,178 |
| | 1,042,028 | 1,220,400 | 550,176 |
| not consolidated) | - | - | - |

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(Million dollars)

| Item | Oct. 29, 1975 | Sept. 24, 1975 | Oct. 30, 1974 |
|---|------------------|-------------------|------------------|
| ASSETS | | | |
| Loans and discounts, gross | 21,851 | 21,775 | 21,337 |
| U.S. Government obligations | 3,173 | 3,054 | 2,057 |
| Other securities | 7,449 | 7,439 | 6,946 |
| Reserves with Federal Reserve Bank | 1,662 | 1,762 | 1,890 |
| Cash in vault | 417 | 400 | 374 |
| Balances with banks in the United States | 1,474 | 1,351 | 1,239 |
| Balances with banks in foreign countriese | 133 | 123 | 37 |
| Cash items in process of collection | 1,834 | 1,711 | 1,803 |
| Other assetse | 2,277 | 2,055 | 1,720 |
| TOTAL ASSETS® | 40,270 | 39,670 | 37,403 |
| LIABILITIES AND CAPITAL ACCOUNTS | | | |
| Demand deposits of banks | 1,865 | 1,702 | 1,642 |
| Other demand deposits | 12,845 | 12,569 | 11,926 |
| Time deposits | 17,954 | 17,671 | 16,009 |
| Total deposits | 32.664 | 31,942 | 29,577 |
| Borrowings | 3,144 | 3,194 | 3,514 |
| Other liabilitiese | 1,685 | 1,783 | 1,684 |
| Total capital accountse | 2,777 | 2,751 | 2,628 |
| TOTAL LIABILITIES AND CAPITAL | | - | |
| ACCOUNTS [®] | 40 270 | 39.670 | 37,403 |

| LIABILITIES | Nov. 19, 1975 | Oct. 15, 1975 | Nov. 20, 1974 |
|---|---------------------|------------------|----------------------|
| Total deposits | 16,722,016 | 16,941,598 | 15,229,26 |
| Total demand deposits | 7,744,117 | 8.188.941 | 7,153,74 |
| Individuals, partnerships, and corporations | 5,622,482 | 6,029,635 | 5,115,717 |
| States and political subdivisions | 453,393 | 389,485 | 565,32 |
| U.S. Government | 112,630 | 97.877 | 108,08 |
| Banks in the United States | 1,382,671 | 1,237,096 | 1,186,28 |
| Governments, official institutions, central | | | 0.50 |
| banks, and international institutions | 4,002 | 5,854 | 2,52 |
| Commercial banks | 66,344 | 324,203 | 63,56 |
| Certified and officers' checks etc. | 102,595 | 104,791 | 112,25 |
| Total time and savings deposits | 8,977,899 | 8,752,657 | 8,075,51 1,142,44 |
| Total savings deposits' | 1,388,805 | 1,362,045 | 6,933,07 |
| Total time deposits' | 7,589,094 | 7,390,612 | 4,675,63 |
| Individuals, partnerships, and corporations States and political subdivisions' | 5,007,369 | 4,898,946 | 2,086,97 |
| U.S. Government (including postal savings). | 2,109,075 27,395 | 2,094,893 28,047 | 10.71 |
| Banks in the United States | 419.710 | 347.842 | 126.09 |
| Foreign: | 419,710 | 347,042 | 120,00 |
| Governments, official institutions, central | | | 45.00 |
| banks, and international institutions | 14,202 | 18,260 | 15,36 |
| Commercial banks | 11,343 | 2,624 | 18,28 |
| Federal funds purchased and securities sold | | | 0.040.20 |
| under agreements to repurchase | 2,875,837 | 3,055,406 | 3,010,30 |
| Other liabilities for borrowed money | 18,865 | 19,641 | 637,52 |
| Other liabilities | 728,059 | 704,336 | 188,20 |
| Reserves on loans | 203,319 | 202,890 | 21,44 |
| Reserves on securities | 27,492 | 27,651 | 1,394,33 |
| Total capital accounts | 1,554,743 | 1,525,105 | 1,394,33 |
| TOTAL LIABILITIES, RESERVES, AND | | | |
| CAPITAL ACCOUNTS | 22,130,331 | 22,476,627 | 20,628,444 |

Week and year ago figures are not comparable since savings deposits of domestic governmental units were previously included in time deposits and are now included in savings deposits.

DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. Million dollars)

| | DE | EMAND DEPO | TIME DEPOSITS | | |
|---|--|--|---|--|--|
| Date | Total | Adjusted* | U.S. Government | Total | Savings |
| 1973: October | 13,289 | 9,461 | 239 | 13,795 | 2,863 |
| 1974: October November December | 13,687 13,843 14,351 | 9,976 10,148 10,355 | 149 138 208 | 15,714 16,016 16,177 | 2,977 3,009 3,049 |
| 1975: January February March April May June July August September October | 14,180 13,956 14,114 14,247 14,106 14,333 14,501 14,514 14,748 14,725 | 10,353 10,245 10,349 10,572 10,374 10,529 10,698 10,745 10,608 10,752 | 166 150 165 213 195 199 164 129 196 | 16,842 17,052 17,177 17,176 17,303 17,273 17,315 17,452 17,563 17,715 | 3,079 3,124 3,226 3,325 3,348 3,409 3,480 3,493 3,513 3,561 |

Other than those of U.S. Government and domestic commercial banks, less cash items in process of collection

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. Thousand dollars)

| Item | 5 weeks ended Nov. 5, 1975 | 4 weeks ended Oct. 1, 1975 | 5 weeks ende Nov. 6, 1974 |
|--|-------------------------------|-------------------------------|------------------------------|
| Total reserves held With Federal Reserve Bank | 2,225,903 1.876,200 | 2,044,653 1,683,597 | 1,976,880 1,644,676 |
| Currency and coin | 349,703 | 361,056 | 332,204 |
| Required reserves Excess reserves | 1,996,198 229,705 | 2,025,253 | 1,969,566 |
| Borrowings | 8,666 | 11,302 | 113,426 |
| Free reserves | 221,039 | 8.098 | -10 |

BANK DEBITS, END-OF-MONTH DEPOSITS, AND DEPOSIT TURNOVER

SMSA's in Eleventh Federal Reserve District

(Dollar amounts in thousands, seasonally adjusted)

| | DEBITS | DEBITS TO DEMAND DEPOSIT ACCOUNTS | | | _ | DEMAND DEPOSITS | | |
|---------------------------------|----------------------------------|-----------------------------------|--------------|-------------------|---|-------------------------|---------------|-------------|
| | | Percent change | | | _ | Annual rate of turnover | | |
| | Oct. | Oct. 197 | 75 from | - 10 months. | - | - | | 0-1 |
| Standard metropolitan | 1975 - (Annual-rate basis) | Sept. 1975 | Oct. 1974 | 1975 from 1974 | Oct. 31, 1975 | Oct. 1975 | Sept. 1975 | Oct 1974 |
| statistical area | | 100 | 68% | 32% | \$392,626 | 70.3 | 68.3 | 41.3 |
| | \$27,488,155 | 1% | | 8 | 131,571 | 47.6 | 46.4 | 47.7 |
| RIZONA: Tucson | | 2 | 6 | 18 | 375,067 | 64.3 | 64.3 | 59.3 |
| | | 1 | 10 | | | 28.7 | 26.1 | 23.6 |
| OUISIANA: Monroe Shreveport | 24,100,979 | 9 | 39 | 11 | 57,252 | | | 27.0 |
| Ollieveport | 1,687,884 | | 11 | 11 | 157,188 | 27.5 | 30.2 | 44.7 |
| EW MEXICO: Roswell ¹ | 4,364,560 | - 10 | | 3 | 263,215 | 44.4 | 43.0 | |
| | | 3 | 13 | 15 | 517,542 | 52.1 | 47.6 | 43.3 |
| | | 12 | 54 | 4 | 368,849 | 29.7 | 32.2 | 34.7 |
| | | -6 | | 5 | 128,560 | 32.4 | 29.8 | 28.7 |
| | | 11 | 24 | 12 | 68,872 | 29.7 | 29.8 | 28.6 |
| | | 1 | 22 | 6 | 326,002 | 36.9 | 38.0 | 37.9 |
| | | -4 | 8 | 7 | 42,921 | 17.3 | 18.0 | 19.0 |
| | | -5 | 6 | -2 | 3.266,128 | 76.9 | 80.3 | 89.7 |
| | | -5 | -11 | | 380,097 | 39.4 | 47.0 | 49.7 |
| | | -13 | -7 | 8 | 1,019,251 | 41.7 | 41.7 | 40.5 |
| | | 1 | 13 | 16 | 157,087 | 33.0 | 31.6 | 35.5 |
| | | 3 | 3 | 15 | 4.151,157 | 65.2 | 68.8 | 63.4 |
| | | -5 | 12 | 19 | 134,863 | 22.3 | 23.8 | 20.3 |
| | | -6 | 23 29 | 12 | 76.213 | 29.1 | 28.2 | 26.3 |
| Houston Killeen-Temple | 3,061,435 | 3 | 29 | 13 | | 43.2 | 40.5 | 38.8 |
| Laredo | 2,287,487 | 5 | 24 | 0 | 248,704 | 28.4 | 26.9 | 25.2 |
| | | 9 | 28 | 25 | 179,766 | 25.7 | 26.3 | 18.9 |
| Lubbock | 5,039,902 | 0 | 52 | 32 | 236,148 | 41.8 | 38.8 | 22.5 |
| | | 8 | 17 | 48 | 147,343 | | 33.4 | 31.1 |
| | | | 23 | 15 | 102,062 | 34.0 | 39.2 | 34.0 |
| | | 1 | 24 | 14 | 995,039 | 37.8 | | 21.1 |
| | | -3 | 8 | 5 | 89,068 | 21.5 | 20.6 | 21.9 |
| | | 3 | 21 | 14 | 102,024 | 24.8 | 25.6 | 25.4 |
| | | -2 -2 | 19 | 12 | 164,785 | 25.8 | 27.4 | |
| | | | | 19 | 181,231 | 36.6 | 38.1 | 33.2 |
| | | -1 | 27 - 11 | 5 | 189,028 | 27.6 | 29.3 | 33.9 |
| | | -5 | -11 | - 19 | 100000000000000000000000000000000000000 | | | 50.7 |
| Wichita Falls | | -3% | 7% | 9% | \$14,649,659 | 55.4 | 57.3 | 56.7 |
| otal-30 centers | ca15 345.993 | -370 | 100 | | | | | |

Deposits of individuals, partnerships, and corporations and of states and political subdivisions
 County basis

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(Thousand dollars)

| | Nov. 19, | Oct. 22, | Nov. 20, |
|---|-----------|-----------|-----------|
| | 1975 | 1975 | 1974 |
| Total gold certificate reserves Loans to member banks Other loans Federal agency obligations U.S. Government securities Total earning assets Member bank reserve denosits | 422,062 | 422,062 | 678,602 |
| | 1,876 | 17,596 | 57,711 |
| | 0 | 0 | 0 |
| | 310,420 | 295,934 | 193,603 |
| | 4,309,527 | 4,259,980 | 3,477,141 |
| | 4,621,823 | 4,573,510 | 3,728,455 |
| | 1,865,225 | 1,667,068 | 1,890,415 |
| Member bank reserve deposits Federal reserve notes in actual circulation | 2,890,651 | 2,863,435 | 2,609,971 |

VALUE OF CONSTRUCTION CONTRACTS

(Million dollars)

| | | | | January-October | | |
|---|--|--|---|---|--|--|
| Area and type | Oct. 1975 | Sept. 1975 | Aug. 1975 | 1975 | 1974 | |
| FIVE SOUTHWESTERN STATES! Residential building Nonresidential building Nonbuilding construction UNITED STATES Residential building Nonresidential building Nonresidential building Nonbuilding construction | 913 409 315 190 7,767 3,189 2,629 1,949 | 841 369 267 205 7,692 2,966 2,526 2,200 | 992 373 386 233 10,037 2,784 2,666 4,587 | 10,541 3,462 4,027 3,052 79,275 26,625 26,846 25,803 | 10,359r 3,783r 4,071r 2,505 80,645r 30,025r 28,359r 22,262r | |

Arizona, Louisiana, New Mexico, Oklahoma, and Texas r—Revised
 NOTE: Details may not add to totals because of rounding.
 SOURCE: F. W. Dodge, McGraw-Hill, Inc.

BUILDING PERMITS

| | | | VALU | JATION (Dol | lar amou | nts in tho | usands) | |
|---|--|--|---|--|--|--|---|--|
| | | | | | F | Percent c | hange | |
| | NUI | NUMBER | | | | 1975 om | | |
| Area | Oct. 1975 | 10 mos. 1975 | Oct. 1975 | 10 mos. 1975 | Sept. 1975 | Oct. 1974 | 10 months 1975 from 1974 | |
| ARIZONA Tucson | 351 | 4,770 | \$4,308 | \$73,811 | -8% | -17% | 4% | |
| LOUISIANA Monroe- West Monroe Shreveport | 88 644 | 738 7,295 | 2,615 5,141 | 14,159 58,022 | 44 32 | 188 - 46 | - 15 - 35 | |
| TEXAS Abilene Amarillo Austin Beaumont Brownsville Corpus Christi Dallas Denison El Paso Fort Worth Galveston Houston Laredo Lubbock Midland Odessa Port Arthur San Angelo San Antonio Sherman Texarkana Waco Wichita Falls | 432 78 2,310 87 190 113 142 88 69 991 22 | 1.099 2,785 4,637 2,184 1,170 2,420 15,718 3,739 556 19,119 11,148 | 1,884 5,842 8,992 3,726 1,653 1,911 22,918 459 7,791 9,933 1,027 762 13,190 3,213 3,691 7,467 169 332 1,351 7,467 169 3,159 1,698 | 24,511 66,688 130,844 36,134 15,788 45,960 222,358 95,696 156,419 7,733 504,250 12,224 103,292 24,133 27,670 4,090 18,148 123,702 3,847 5,069 17,152 13,974 | - 53 26 0 113 180 - 58 20 9 16 128 - 56 152 - 23 - 57 24 - 58 - 56 - 56 - 57 24 - 58 - 62 - 33 - 62 - 33 - 65 - 33 - 14 | 72 -16 -16 149 21 10 45 194 -17 -48 32 17 429 230 423 108 -75 110 -14 -88 -6 55 60 | 80 22 -40 1 -37 -10 -17 81 -35 -75 -9 -10 65 1 55 -21 -32 -27 -47 | |
| Total-26 cities | 9,556 | 96,187 | \$184,292 | \$1,808,547 | 11% | 11% | -14% | |

DAILY AVERAGE PRODUCTION OF CRUDE OIL

(Thousand barrels)

| | | | | Percent change fro | | |
|---------------------|--------------|---------------|---------------|--------------------|--------------|--|
| Area | Oct. 1975 | Sept. 1975 | Oct. 1974r | Sept. 1975 | Oct. 1974 | |
| FOUR SOUTHWESTERN | | | | | | |
| STATES | 5,783.7 | 5.763.0 | 6.054.9 | 0.4% | -4.5% | |
| Louisiana | 1,776.0 | 1,735.7 | 1,900.9 | 2.3 | -6.6 | |
| New Mexico | 255.0 | 255.0 | 269.6 | .0 | -5.4 | |
| Oklahoma | 449.3 | 447.7 | 470.2 | .4 | -4.4 | |
| Texas | 3.303.5 | 3.324.6 | 3.414.2 | 6 | -3.2 | |
| Gulf Coast | 636.7 | 641.8 | 667.8 | 8 | -4.7 | |
| West Texas | 1,784.8 | 1,786.8 | 1.823.3 | 1 | -2.1 | |
| East Texas (proper) | 211.5 | 215.6 | 194.2 | -1.9 | 8.9 | |
| Panhandle | 54.4 | 58.0 | 51.6 | -6.2 | 5.4 | |
| Rest of state | 616.1 | 622.4 | 677.3 | -1.0 | - 9.0 | |
| UNITED STATES | 8,326.3 | 8,284.2 | 8,567.7 | .5% | -2.8% | |

r-Revised SOURCES: American Petroleum Institute Federal Reserve Bank of Dallas

LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Five Southwestern States¹

(Seasonally adjusted)

| | Tho | usands of p | Percent change Oct. 1975 from | | |
|---|---|---|---|----------------------|-----------------------------------|
| Item | Oct. 1975p | Sept. 1975 | Oct. 1974r | Sept. 1975 | Oct. 1974 |
| Civilian labor force Total employment Total unemployment | 9,329.2 8,687.3 641.8 | 9,292.5 8,626.6 665.9 | 8,981.9 8,519.5 462.4 | 0.4% .7 -3.6 | 3.9% 2.0 38.8 |
| Unemployment rate | 6.9% | 7.2% | 5.2% | 23 | *1.7 |
| Total nonagricultural wage and salary employment Manufacturing Durable Nondurable | 7,662.8 1,268.9 706.1 562.9 | 7,618.2 1,263.1 703.7 559.4 | 7,592.2 1,312.2 743.7 568.5 | .6 .5 .3 | .9 -3.3 -5.1 -1.0 |
| Nonmanufacturing Mining Construction Transportation and | 6,393.9 270.8 487.7 | 6,355.2 270.4 480.3 | 6,280.0 264.1 502.5 | .6 .1 1.5 | 1.8 2.5 - 2.9 |
| public utilities Trade Finance Service Government | 502.5 1,836.3 423.6 1,314.0 1,558.9 | 498.6 1,829.9 421.9 1,307.0 1,547.0 | 513.9 1,810.9 413.8 1,286.5 1,488.3 | .8 .3 .4 .5 | -2.2 1.4 2.4 2.1 4.7% |

- Arizona, Louisiana, New Mexico, Oklahoma, and Texas
- Actual change
 Preliminary

p—Preliminary
r—Revised
NOTE: Details may not add to totals because of rounding.
SOURCES: State employment agencies
Federal Reserve Bank of Dallas (seasonal adjustment)

CROP PRODUCTION

(Thousand bushels)

| | | TEXAS | | FIVE SOUTHWESTERN STATES | | | |
|-----------------------------|------------------------------|---------|---------|------------------------------|---------|---------|--|
| Crop | 1975, estimated Nov. 1 | 1974 | 1973 | 1975, estimated Nov. 1 | 1974 | 1973 | |
| Cotton ² | 2,819 | 2,487 | 4,699 | 4,075 | 4,565 | 6,446 | |
| Corn | 115,500 | 73,600 | 60,800 | 131,046 | 88,315 | 73,398 | |
| Winter wheat | 131,100 | 52,800 | 98,600 | 326,484 | 206,145 | 280,442 | |
| Oats | 19,500 | 8,100 | 26,650 | 24,394 | 12,449 | 34,948 | |
| Barley | 2,380 | 1,350 | 3,510 | 15,825 | 12,750 | 21,825 | |
| Rye | 760 | 200 | 648 | 1,408 | 965 | 1,981 | |
| Rice ³ | 24,332 | 25,258 | 20,530 | 48,057 | 49.978 | 41.924 | |
| Sorghum grain | 387,600 | 312,000 | 417,000 | 439,198 | 356,707 | 478,164 | |
| Flaxseed | 480 | 374 | 80 | 480 | 374 | 80 | |
| Hay* | 4.860 | 5.106 | 5,808 | 11,453 | 11,371 | 12,964 | |
| Peanuts ⁵ | 474,300 | 413,280 | 471,225 | 735,735 | 644.054 | 743,867 | |
| rish potatoes3 | 2.433 | 3,206r | 3,778r | 5,388 | 6,534r | 6,880 | |
| Sweet potatoes ³ | 950 | 850 | 855 | 3,585 | 4.525 | 3.825 | |
| Pecans ⁶ | 55,000 | 38,000 | 20,000 | 122,000 | 56,700 | 96,500 | |
| Soybeans | 9,100 | 7.830 | 8,500 | 58.340 | 57,747 | 47,860 | |

r-Revised

Arizona, Louisiana, New Mexico, Oklahoma, and Texas

Thousand bales Thousand hundredweight

Thousand tons
 Thousand pounds
 Thousand pounds
 SOURCE: U.S. Department of Agriculture

INDUSTRIAL PRODUCTION AND TEXAS MANUFACTURING CAPACITY UTILIZATION

(Seasonally adjusted indexes, 1967 = 100 for production)

| Area and type of index | Oct. 1975p | Sept. 1975 | Aug. 1975r | Oct. 1974 |
|-------------------------------|---------------|---------------|---------------|--------------|
| TEXAS | | | | |
| Total industrial production | 125.1 | 125.3 | 125.2 | 127.3 |
| Manufacturing | 130.0 | 129.9 | 129.9 | 132.1 |
| Durable | 129.8 | 130.4 | 131.7 | 134.1 |
| Nondurable | 130.1 | 129.5 | 128.5 | 130.5 |
| Mining | 107.6 | 108.5 | 108.0 | 111.4 |
| Utilities | 171.8 | 171.8 | 171.8 | 162.8 |
| in manufacturing (1972 = 100) | 95.1 | 95.4 | 95.6 | 100.8 |
| UNITED STATES | | | | |
| Total industrial production | 116.5 | 116.0 | 114.0 | 124.8 |
| Manufacturing | 114.7 | 114.2 | 112.6 | 124.6 |
| Durable | 106.7 | 106.9 | 105.4 | 121.6 |
| Nondurable | 126.3 | 124.9 | 123.1 | 128.9 |
| Mining | 106.3 | 106.1 | 104.8 | 110.5 |
| Utilities | 156.6 | 156.0 | 154.5 | 151.2 |

p-Preliminary

r—Revised SOURCES: Board of Governors of the Federal Reserve System Federal Reserve Bank of Dalla

industry, where work has resumed after a series of strikes. But there were 15,000 fewer construction jobs than in October 1974. The rate of recovery in construction employment was shared about equally among the District states.

 Total credit at weekly reporting banks in the Eleventh District fell in the five weeks ended November 19, as total loans declined substantially. In line with the trend for most of the year, these banks increased their holdings of Government securities through sizable net acquisitions of Treasury bills and

intermediate-term notes. Holdings of municipal issues, however, declined considerably.

 The seasonally adjusted Texas industrial production index turned downward in October, after five consecutive months of increase. The decline primarily stemmed from a drop in crude petroleum mining. Manufacturing output showed little change, as a gain in nondurable goods production offset a decline in durable goods output.

The capacity utilization index for Texas manufacturers also reflected the slowdown in production. A

slight drop in October-the index fell to 95.1 percent of the 1972 base-represented the second consecutive month of decline.

· Cattle on feed in Texas and Arizona on November 1 numbered 2.2 million head, 19 percent more than a month earlier and 17 percent more than a year before. Placements during October were a substantial 71 percent higher than in October 1974, but marketings were 22 percent lower. The increase in placements resulted from lower feed costs and stronger prices for slaughter cattle.

