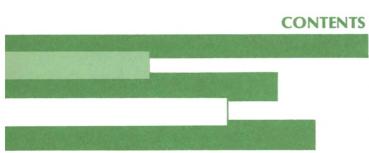
A BUSINESS AND FINANCIAL REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO

July/August 1977

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Banking insights
Bull market in homes
The prime rate revisited
Social security changes necessary





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Banking insights International banking in the Seventh Federal Reserve District

Bull market in homes

Both starts on new single-family homes and transactions in existing homes have been at a record pace in recent months, with prices increasing much faster than the general price level.

The prime rate revisited

The unusually wide spreads that have persisted over the last two years between the prime rate and moneymarket interest rates are now narrowing.

Social security changes necessary

The social security system will have progressively increasing deficits year after year unless changes are made in the method of financing, the system for determining methods, or both.

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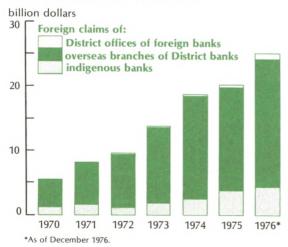
Banking insights

International banking in the Seventh Federal Reserve District

The postwar period has been one of unprecedented growth for the United States in international banking activites. U.S. banks expanded their loans and other claims on foreigners dramatically: the total reached \$80.7 billion at the end of 1976 from the U.S.-based offices. In addition, U.S. banks expanded overseas by establishing branches worldwide; at the close of 1976 U.S. banks operated 731 branches in 85 foreign countries with assets totaling \$220 billion.

The expansion of U.S. banks abroad has been accompanied by a rapid expansion of activities of foreign banks in the United States. By the end of 1976 there were 199 foreign financial institutions operating in the United States with total assets of \$76 billion.

Foreign claims of banks in the Seventh District 1970-1976*



International banking activities of indigenous banks

The rapid rate of growth of international banking activities in the United States as a whole was more than matched by the expan-

	No.
Bahamas	9
Barbados	1
Belgium	2
Cayman Islands	8
England	14
France	3
Germany	5
Greece	6
Ireland	1
Italy	3
Jamaica	1
Japan	4
Kenya	1
South Korea	1
Lebanon	1
Luxembourg	1
Mexico	1
Netherlands	2
Panama	2 2 2 1 1
Singapore	2
Switzerland	1
Taiwan	
United Arab Emirates	_1
TOTAL*	71

sion of such activities in the Seventh Federal Reserve District. In the early postwar years District banks showed only minimal interest in international banking, as reflected in their total claims on foreigners held in that period—only \$100 million at the beginning of 1960. In the early sixties, however, the situation changed dramatically. Banks began to expand their foreign loans and to establish banking facilities abroad. By the end of 1976

District banks' claims on foreigners amounted to \$5.3 billion, and there were 71 branches of District banks with assets totaling \$19.7 billion. The geographical distribution of assets at the close of 1976 (by residence of the branches' customers) showed claims on Europe of \$10.4 billion, Latin America and the Caribbean \$4.2 billion, Asia \$3.3 billion, the United States \$835 million, Africa \$471 million, and Canada \$321 million.

	As of the end of							
	1975	1976	1Q 1977					
BRANCHES		(thousand dollars)						
Algemene Bank Nederland N.V.	92,473	93,276	72,654					
Banca Commerciale Italiana	221,082	385,723	350,756					
Bank Leumi Le Israel	26,793	47,659	30,593					
Barclays Bank International LTD	13,121	11,555	16,018					
Banque Nationale de Paris	63,715	86,006	72,581					
Banque De L'Indochine et De Suez	923	24,050	27,397					
The Chartered Bank	2,894	9,100	14,897					
Commerzbank	52,952	116,476	111,406					
Credit Lyonnais Credit Lyonnais	122,042	333,036	404,904					
Dresdner Bank, AG	22,887	41,297	20,380					
European Banking Co., LTD	25,157	1,018	*					
Hong Kong & Shanghai Banking Co.	473	7,445	6,281					
The International Commercial Bank of China	3.803	6,340	5.283					
Korea Exchange Bank	15,017	12,725	17,582					
Lloyds Bank International LTD	49,614	30,176	32,708					
National Bank of Greece	29,201	40,376	38,638					
National Westminster Bank, LTD	63,616	103,742	143,419					
The Sanwa Bank, LTD	177,088	177,210	155,891					
State Bank of India	2,336	11,115	14,052					
The Sumitomo Bank Limited	152,565	198,815	204,212					
Swiss Bank Corporation	158,304	326,555	318,129					
Union Bank of Bavaria	23,256	67,220	63,962					
Union Bank of Switzerland	**	**	2,110					
Subtotal	1,319,312	2,130,915	2,123,853					
SUBSIDIARIES								
Banco Di Roma	133,006	170,913	160,063					
First Pacific Bank	102,751	157,295	145,388					
Subtotal	235,757	328,208	305,451					
GRAND TOTAL	1,555,069	2,459,123	2,429,304					

Economic Perspectives

	As of the end of				
	1975	1976	1Q 1977		
ASSETS		(million dollars	s)		
Cash, cash items in process of collection, balances with Federal Reserve, and due from directly related					
commercial banks	222.5	628.0	587.7		
Stocks, bonds, and other securities	30.7	71.2	86.7		
Loans to other than directly related institutions, gross	1,106.8	1,458.0	1,438.0		
Due from directly related institutions	135.9	197.6	233.2		
Other assets	59.1	104.3	83.1		
TOTAL ASSETS*	1,555.1	2,459.1	2,429.3		
LIABILITIES					
Demand deposits or credit balances due to other					
than directly related institutions Time and savings deposits due to other than	107.6	113.5	91.2		
directly related institutions	382.8	622.1	688.		
Borrowings from other than directly related institutions	295.6	702.1	702.0		
Due to directly related institutions	699.4	908.6	852.0		
Other liabilities, reserves, and capital accounts	69.6	112.8	96.0		
TOTAL HABILITIES DESERVES AND					
TOTAL LIABILITIES, RESERVES, AND CAPITAL ACCOUNTS*	1,555.1	2,459.1	2,429.		

Foreign banks in the Seventh District

For many years the presence of foreign banks in the Midwest was limited to representative offices that had no legal power to conduct any banking business directly. As the international activities in the region continued to expand, the interest of foreign banks in establishing full banking operations grew. However, until 1973, none of the five Midwest states comprising the Seventh Federal Reserve District had provisions in their banking laws for the licensing of foreign banking operations. Finally, in 1973, the Illinois State Legislature passed the Illinois Foreign Banking Office Act, which permitted foreign banks

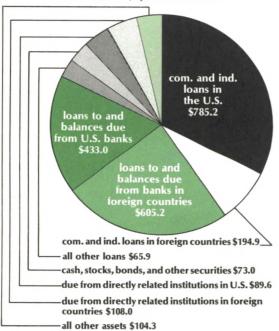
to establish branches in Chicago with a full spectrum of banking functions. Foreign banks responded aggressively to the opportunity: in the three years that the act has been in effect, the number of foreign banks operating in Chicago has reached 26. Their activities expanded rapidly, and by the end of 1976 their assets totaled \$2.4 billion.

One notable feature about foreign banks' activities in Chicago has been the extent of their involvement in "domestic" banking. A comparison between the aggregate assets of the foreign banking institutions in the Chicago District and those for the United States as a whole shows commercial and in-

Federal Reserve Bank of St. Louis

Assets of branches and subsidiaries of foreign banks in Chicago

total assets \$2,459.1 million



*As of December 1976.

dustrial loans to parties in the United States amounted to 32 percent of their total assets, as compared to 20 percent for all foreign financial institutions in the country. This suggests a higher level of participation in the domestic market by foreign banks in Chicago.

Conclusion

Historically, the Midwest has been an important center of the nation's international activities, where a large share of the country's international trade and investment has originated. Many years passed before the District banks responded to the challenges and opportunities presented by this situation. But once the response was initiated, progress was rapid. Today, District banks literally span the globe, providing international banking services to their U.S. and foreign customers on a scale commensurate with their domestic importance. And the expansion of the operation of foreign banks has added another dimension to the internationalization of banking in the Seventh District.

Susan D. Sjö

Bull market in homes

Financial counselors have long advocated home ownership as a prime investment for the typical family. The wisdom of this advice has seldom been demonstrated so conclusively as in the past two years. Both starts on new single-family homes and transactions in existing homes have been at a record pace in recent months, and prices have increased sharply—much faster than the general price level.

Some real estate analysts have used the term "panic buying" to describe the 1977 home market. The home boom has been universal throughout the nation, but "panic" is too strong a term for conditions in most regions. In April the average price of existing homes was up 11 percent, nationally, according to the National Association of Realtors (NAR). Home prices in the Seventh Federal Reserve District average 10 to 11 percent higher than last year, both for new and existing homes. In the West, the NAR reports, prices are up 27 percent from a year ago! Press accounts have described speculative purchases of homes in California with builders holding lotteries to ration limited output. The surge in home purchases is least pronounced in the Northeast, among major regions, with prices up 5 percent from a year ago.

Speculation in any booming market carries a threat of an eventual backlash if units bought for quick profits rather than as long-term investments are thrown on the market. While speculative elements doubtless are present to some extent throughout the nation, these forces do not account for the great underlying strength in home buying and building. Solid reasons include: (1) improvement in the overall economy, accompanied by rising incomes and increased confidence; (2) rising household formation; (3) the low level of housing production in the 1974-75 recession; (4) ready availability of mortgage

funds; (5) downpayments provided by large equities in existing properties; (6) an erosion of the stock of suitable housing in central cities. As always, most people have a deep-felt desire for the privacy and other amenities of a house and yard, an attitude that no doubt has been reinforced by the burgeoning problems of central cities. About 65 percent of U.S. dwelling units are owner occupied, up from less than 45 percent prior to World War II. Home ownership is particularly prevalent in the Midwest.

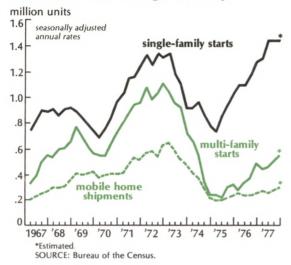
Apartment construction has also increased substantially from the low point of early 1975. However, the rate of multifamily starts so far in 1977 has been less than half of that reached in the peak year of 1972. Demand for existing apartments also has increased, as indicated by rapidly rising rents for desirable units and stronger prices for condominiums. However, potential investors have remained cautious in making new commitments. Many suffered losses when the apartment building surge of the early 1970s led to an overhang of unsold units and widespread financial distress.

Two million starts?

One of the most widely publicized monthly statistical reports is the Census Bureau's data on housing starts. About the middle of each month, initial estimates are released for starts in the previous month and revisions for earlier months. Data cited usually are "seasonally adjusted." A "start" occurs when ground is broken for a foundation. Single-family homes are usually completed three to six months after the start. Apartment projects may take a year or more.

Housing starts fluctuate substantially with the seasons, especially in the northern states. For the nation as a whole, starts in the spring and summer months average about 80 per-

Homes lead housing recovery



cent above the level of the winter months. Deep frost penetration during the recent severe winter caused more delays than usual. As a result, the underlying strength of the residential construction sector was not clearly evident until the spring was well advanced.

Most analysts expect housing starts to total 1.9 to 2.0 million in 1977, up from 1.5 million in 1976 and less than 1.2 million in 1975. The 1975 total was the smallest number since 1946 when the industry was reviving after World War II. The all-time peak of 2.4 million was reached in 1972.

An important supplement to conventionally constructed housing is provided by "mobile homes" or "manufactured houses" assembled in factories and transported to their sites fully equipped and furnished. Most of these units provide year-round living quarters. Mobile home shipments rose from a level of about 100,000 units per year in the early 1960s to almost 600,000 in both 1972 and 1973. Shipments then declined sharply, reaching a low of 210,000 in 1975. Last year saw a recovery to 250,000, and a further gain is expected this year.

The slight improvement in mobile home shipments has been disappointing to analysts who view these units as a lower cost alternative to conventional home ownership. In 1973 mobile homes were almost 22 percent of

the combined total of housing starts and mobile home shipments. In recent months this proportion has been only about 12 percent. The quality of mobile homes has improved in recent years, partly because weaker producers have dropped out of the market and partly because of federally imposed standards. However, some lenders, particularly commercial banks, suffered losses on repossessions of mobile homes following the 1972-73 boom and have reduced their activities in this sector. Also, existing mobile homes have not appreciated in value in recent years in the manner of conventional homes.

Apartments vs. homes

In the late 1960s and early 1970s, apartment building soared in virtually all large metropolitan areas. Favorable tax rules on depreciation attracted investors, and plentiful funds were available to finance these projects. Loans from insurance companies, pension funds, and other institutions were augmented by those provided by Real Estate Investment Trusts (REITs), which were authorized by federal legislation in 1960 to pass through earnings to shareholders without taxation. Mutual funds, which invest in stocks and bonds, were allowed to pass through earnings untaxed by legislation enacted in 1940. Another factor encouraging apartment construction was the growth of the condominium device under which individuals purchase their apartments and obtain individual mortgages.

Apartments accounted for 19 percent of all housing starts in 1959. Comparable data are not available for earlier years, but various evidence indicates that the proportion of multifamily starts had been in the 15 to 20 percent range throughout the 1950s. The proportion of apartments to total starts jumped to 35 percent in the mid-1960s, to 40 percent in 1968, and finally to 45 percent in the years 1969 through 1973.

Single-family and multifamily starts both declined 13 percent in 1973. The following year singles declined 22 percent and multis 51

percent. In 1975 home starts were as large as in 1974, but multis dropped another 40 percent and their proportion of total starts declined to 23 percent, the lowest since 1960. Bell Savings and Loan Association data for the Chicago area show this phenomenon to a striking degree. Apartments dropped from almost 60 percent of all permits for new housing in the Chicago area in 1971 and 1972 to 36 percent in 1975.

The early 1970s saw substantial overbuilding of apartments in many areas and the development of a large overhang of unrented or unsold units. In the meantime building costs had increased sharply and interest charges were heavy. Construction loans commonly carried rates of 15 percent or more at the peak. Many construction loans and mortgages were defaulted, and the resulting financial morass is still being worked out. Month-by-month, however, the picture has substantially improved.

As the number of vacant apartments has been reduced, continued increases in real estate values and rising rents have restored many projects to financial health, thereby encouraging promotions of new projects.

From a low point of 270,000 in 1975, multifamily starts rose to 375,000 last year and have approached a 500,000 rate in recent months. This is still only half the 1972 level, however, while single-family starts are running 12 percent higher than in 1972. As a result, the proportion of apartment starts to the total is unlikely to much exceed 25 percent this year.

The failure of apartment construction to recover more rapidly is a counter productive factor in the nation's drive to conserve energy. Apartment buildings are much more efficient in using energy either to heat or cool a given area of living space. Moreover, apartments are more likely to be located near shops and public transportation than are detached houses.

Households and housing units

Two factors largely determine the nation's need for new housing units: (1) the

rate of increase in the number of households, and (2) the rate at which existing units are demolished or abandoned. Complicating factors include net conversions of existing units and acquisitions of second homes for recreation or other reasons. To a degree, cause and effect runs both ways: a growing surplus of new housing units may encourage both household formation and also abandonment of substandard structures.

Official estimates place the number of households in March 1976 at 73 million households; the current number probably approaches 75 million. "Household," a broader concept than "family," includes single persons or groups of persons, unrelated by blood or marriage, who occupy housekeeping units (as opposed to transient or institutional quarters). Nonfamily households have been growing as a proportion of the total in recent years as young unmarried people have more commonly established separate living quarters. The number of households has doubled since World War II, while the population has increased by less than 60 percent. In the past decade households have increased 25 percent, while the population has risen 10 percent.

Net household formations surged in the years following World War II to 1.5 million per year, as marriages delayed by the war took place, and many families living with relatives "undoubled" as the increasing supply of housing permitted. From 1950 through 1965 household formation averaged less than 1 million annually. The rate increased in the late 1960s and since 1970 has averaged 1.6 million annually. The Census Bureau's median projection suggests that household formation will continue near this rate for the next decade.

The sharp rise in households relative to population partly reflects an increasingly affluent and more independent-minded society. But, more importantly, it reflects relative growth in the number of young adults. Since 1968 the 25-34 age group has increased twice as fast as the population; in the past five years—four times as fast.

Federal Reserve Bank of St. Louis

The number of housing units demolished or abandoned as unlivable is not known, but may exceed a half million per year. Many demolitions occur as land is cleared for expressways or urban renewal projects. Abandonments have occurred steadily in areas where farms have been consolidated, mineral or forest resources have been exhausted, or an exodus of industry has occurred for other reasons. Increasingly, abandonment of dilapidated or burned-out structures in depressed areas of inner cities has led to evacuation and eventual demolition of whole blocks. In New York, Chicago, Detroit, and other large cities, tens of thousands of housing units have been abandoned or demolished in the past 15 years and the pace has accelerated sharply in the 1970s.

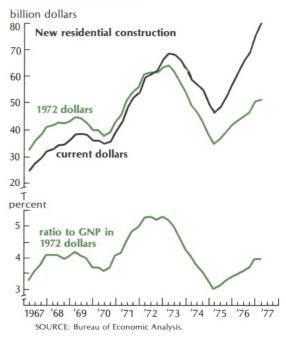
Housing and the cycle

Since World War II residential construction activity usually has moved "counter cyclically," leading general business both in declines and recoveries. Moreover, housing has traced fluctuations that had no counterpart in total output, e.g., peaks and subsequent declines occurred in 1955 and in 1965 when total activity measured by the gross national product (GNP) continued its upward course. The highly cyclical nature of this sector is further exemplified by the fact that increases and declines have shown far greater amplitude than general business.

Peaks in residential construction, adjusted for price changes, have usually been reached several quarters before peaks in real GNP. Leads in recoveries typically have not been nearly so long, but uptrends in housing usually have been rapid and a greater source of strength in the early stages of an expansion than have business capital expenditures, which usually gather steam only after margins of unused capacity have narrowed significantly.

The cyclical nature of residential construction to a large extent reflects changes in the availability of mortgage credit. Interest as a portion of total costs is very important to housing activity both during construction and

Residential construction —a volatile sector



in the monthly payments that amortize loans. When business needs for funds are moderate, market interest rate patterns encourage inflows of funds to the savings and loans and mutual savings banks, which specialize in mortgage lending. In such periods, moreover, commercial banks and insurance companies are more likely to be attracted to mortgage investments.

As general business expands and interest rates rise, the forces that provided ample funds for housing are reversed. Inflows of savings to thrift institutions slow down and may give way to net outflows—as in 1969 and 1973-74. Mortgage commitments become less available. The problem is compounded by ceilings on the rates that can be paid on savings and time accounts, and by state usury laws applicable to home mortgages. (Usury ceilings in many states, for example, Illinois, have been made more flexible by recent legislation.)

Another factor that may increase the volatility of housing is the tendency for government to establish new or expanded

programs when activity is depressed. Such programs may not become fully effective until a new expansion in building is well under way.

Although of great importance, a large and steady flow of mortgage funds at moderate rates probably would not guarantee long-term stability in residential construction. The need for new units rises fairly steadily year after year, while new units are provided in waves as new projects are developed. Partly because of the length of time required to bring new housing to the market, especially apartments, there is a strong tendency to overbuild. After one or more boom years a backlog of unsold houses and vacant apartments must be absorbed before a new expansion can be supported.

The residential construction cycle was vividly illustrated in the recent recession. Residential construction, in real terms, peaked in the first quarter of 1973—three quarters earlier than the peak in real GNP which coincided with the oil embargo. Residential construction bottomed out in the first quarter of 1975 after a two-year decline and a drop of 45 percent. Real GNP also hit its low in the first quarter of 1975, after a decline of 8 percent. Since the recession low, both residential construction and real GNP have increased in each successive quarter.

As a proportion of GNP, residential construction reached a high of 5.3 percent in 1972. In the first quarter of 1975, this ratio had declined to only 3 percent. In the comeback the ratio reached 4 percent in the first quarter of 1977. It probably increased further in the second quarter, but remained well below the 1972 level. If apartment construction had advanced at the same pace as single-family homes, the 1972 ratio probably would have been regained by mid-1977.

Mortgage funds ample

Residential mortgage debt totaled over \$660 billion at the end of 1976, up 12 percent during the year, with most of the gain in the second half. Mortgage debt doubtless will rise more than 10 percent this year as more new

homes and apartments are completed and the number of transactions in existing properties continues at a record pace and at ever-rising prices.

Total credit market debt owed by all non-financial sectors, public and private, now exceeds \$2.6 trillion, having doubled since 1968. During this period residential mortgages have increased from less than 24 percent of total debt to over 25 percent. Despite heavy borrowings by government and business, the residential mortgage sector has been able to increase its share of total funds raised.

Home mortgages on properties with one to four units (including condominiums) totaled \$559 billion at the start of the year, compared to \$102 billion outstanding on multifamily properties. Home mortgages and multifamily mortgages have both more than doubled since 1968. In 1975 and 1976 when home mortgages increased by over \$100 billion or 23 percent, multifamily mortgages rose by only \$2 billion or 2 percent. This reflected the sharply lower level of multifamily construction, paydowns, or write-offs of existing loans on apartments, and conversions of some apartments to individually owned condominiums. Growth in condominium ownership continues despite some widely publicized problems associated with communal operation and maintenance.

The relative shares of home mortgages and multifamily mortgages that are held by various groups of lenders vary substantially, as shown in the accompanying tables. Savings and loan associations (S&Ls) now hold 47 percent of all home mortgages, up from 42 percent in 1970 and far more than any other group. Last year S&Ls accounted for 55 percent of the rise. Commercial banks are the second largest holders of home mortgages with 16 percent, a somewhat larger share than a decade ago. Mutual savings banks (MSBs) have 10 percent, down from 15 percent a decade ago. Slower growth of MSB mortgage holdings partly reflects the slower growth of the northeastern region where they are concentrated. The share of life insurance companies, once major lenders on home mortgages, declined from 13 percent in 1966

TABLE 1 Holders of home mortgages, one to four units

	1966		1968		1970 (billion dollar		1972 ars, year-end)		1974		1976	
Total	232.9	100.0%	264.6	100.0%	297.7	100.0%	372.8	100.0%	449.9	100.0%	559.3	100.0%
Savings and loans	97.4	41.8	110.1	41.6	124.5	41.8	167.0	44.8	201.6	44.8	261.7	46.8
Mutual savings banks	35.6	15.3	39.5	14.9	42.1	14.1	46.2	12.4	49.2	10.9	53.2	9.5
Commercial banks	32.8	14.1	38.8	14.7	42.3	14.2	57.0	15.3	74.8	16.6	87.9	15.7
Life insurance companies	30.2	13.0	29.0	11.0	26.8	9.0	22.3	6.0	19.0	4.2	16.1	2.9
Government and related agencies ¹	10.7	4.6	15.1	5.7	23.7	8.0	26.5	7.1	36.8	8.2	40.4	7.2
Mortgage pools ²	.5	0.2	1.4	0.5	3.0	1.0	10.7	2.9	18.6	4.1	42.0	7.5
Individuals and others ³	25.7	11.0	30.8	11.6	35.2	11.8	42.9	11.5	49.9	11.1	57.8	10.3

Includes federal, state, and local government agencies, Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC).

SOURCE: Federal Reserve Board.

TABLE 2 Holders of multi-family mortgages, five or more units

		966	1968		1970 1972 (billion dollars, year-end)			1974		1976		
Total	41.3	100.0%	48.3	100.0%	60.1	100.0%	82.6	100.0%	99.9	100.0%	102.0	100.0%
Savings and loans	8.6	20.8	10.5	21.7	13.8	23.0	20.8	25.2	23.7	23.7	28.1	27.5
Mutual savings banks	6.6	16.0	7.3	15.1	7.8	13.0	10.9	13.2	12.9	12.9	14.2	13.9
Life insurance companies	10.3	24.9	12.8	26.5	16.0	26.6	17.3	20.9	19.6	19.6	19.2	18.8
Commercial banks	2.1	5.1	2.7	5.6	3.3	5.5	5.8	7.0	7.6	7.6	6.3	6.2
Government and related agencies ¹	2.3	5.6	3.1	6.4	5.6	9.3	9.8	11.9	17.1	17.1	19.4	19.0
Individuals and others ²	11.4	27.6	11.9	24.6	13.6	22.6	18.0	21.8	19.0	19.0	14.8	14.5

¹See Table 1.

SOURCE: Federal Reserve Board.

 $^{^2}$ Outstanding principal balances of mortgages backing securities guaranteed by Government National Mortgage Corporation (GNMA), FHLMC, Farmers Home Administration (FmHA).

 $^{^3}$ Includes mortgage companies, noninsured pension funds, state and local retirement funds, real estate investment trusts, credit unions.

²Includes mortgage companies, noninsured pension funds, state and local retirement funds, real estate investment trusts, mortgage pools.

to 3 percent currently. The most rapidly growing suppliers of home mortgage funds are "mortgage pools," which issue securities backed by mortgages. This group, which includes securities guaranteed by the Government National Mortgage Association (GNMA), now holds 7.5 percent of all home mortgages, compared to almost none 10 years ago.

Savings and loans are also the largest holders of multifamily mortgages with 28 percent of the total. Government and related agencies, including the Federal National Mortgage Association (FNMA), hold 19 percent, having increased their share sharply in recent years. Life insurance companies hold 19 percent, and mutual savings banks 14 percent.

Savings and loans, MSBs, and commercial banks reported sharp increases in savings and time deposits in 1976 and early 1977. Mortgages closed and new loan commitments reached record highs. In April, for example, deposits of insured S&Ls totaled \$346 billion, up 16 percent from a year ago. Mortgage loans outstanding were up 17 percent; loans closed and loan commitments outstanding were both up 37 percent. New

savings inflows at S&Ls and MSBs slowed in the spring, but remained at a fairly high level. Also, a large volume of funds is available from loan repayments, including advance repayments as properties changed hands. If savings inflows do shrink, S&Ls can expand their borrowings from Federal Home Loan Banks and other lenders.

Interest rates and home prices

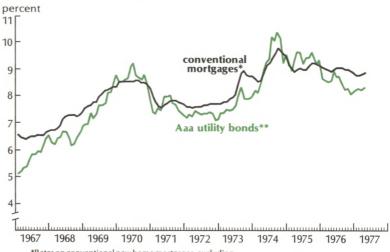
In the early 1960s the typical new home carrying a conventional mortgage, according to

Federal Home Loan Bank Board (FHLBB) data, cost \$23,000 and carried a 75 percent 25-year, 6 percent loan. All of these measures increased in the 1960s. In the tight credit period of 1969-70, mortgage interest rates rose sharply, moving to 8.5 percent or more for a limited period. Such rates were unprecedented and exceeded usury ceilings in many states. The median purchase price of new homes exceeded \$35,000 in 1970, partly because of inflation, but also because the average new home was larger and more fully equipped.

Home mortgage contract rates dropped in 1971-72 to about 7.5 percent. In the second half of 1974, rates rebounded to a new high of over 9 percent, then receded to 8.75 percent—a level about maintained through the present. Fees raise effective rates to about 9 percent. Rates increased moderately in most areas this spring.

The median price of new homes has increased very sharply since 1973, about 10 percent per year, despite some trend toward smaller-sized houses. In addition to rising costs of material and labor, tighter building codes have added further to costs of construction. Impediments to the development of new sites reflecting environmental restric-

Rates on home mortgages have held near 9 percent for two years



^{*}Rates on conventional new home mortgages, excluding fees and charges, based on HUD field office surveys.

^{**}Newly issued Aaa utility bonds.

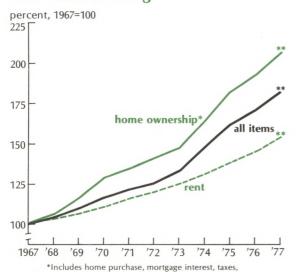
tions and limited access to natural gas, water, and sewerage facilities have sharply limited the supply of buildable lots in many areas, especially in California, thus causing lot prices to soar.

In May 1977 the average new home price was \$52,000. The average loan was \$39,400, the average downpayment 23 percent, and the average maturity 28 years.

Longer maturities reduce average monthly amortization payments, but this tendency has been more than offset by higher interest rates. In 1965 a typical \$18,000, 25-year, 5.75 percent loan carried monthly amortization payments (principal and interest) of \$113. Currently, the monthly payment of a typical \$39,000, 30-year, 9 percent loan is \$314. In addition, payments for taxes, fuel, maintenance, insurance, and utilities have increased at least as fast as home prices.

As home prices have risen in recent years, there have been widespread complaints that the typical family, especially a young couple, "cannot afford" a single-family home—new or used. However, families are buying homes at an amazing pace.

Costs of home ownership have risen faster than either rents or the total "cost of living"



insurance, home maintenance and repairs.
**Estimated
SOURCES: Bureau of Labor Statistics; Consumer Price Index.

Median annual family income currently exceeds \$15,000, 50 percent higher than in 1970. FHLBB data show new home prices up somewhat *less* than 50 percent in this period. Since 1965 medium income has increased 120 percent, while new home prices are up about 110 percent.

More family incomes have been augmented by a second wage earner in the past 10 or 15 years, and fewer couples have the expense of rearing children. Downpayments on new or more expensive homes are often available from increased equities in homes previously purchased as a result of paydowns on mortgages and inflation.

Federal aids to housing

Until the early 1960s federal activities in the housing field were largely limited to providing Federal Housing Administration (FHA) insurance on unsubsidized mortgages, Veterans Administration (VA) guarantees, and financing of public housing, usually administered by local authorities. In the past 15 years a variety of programs have provided subsidies to aid home ownership or reduce the burden of rental payments.

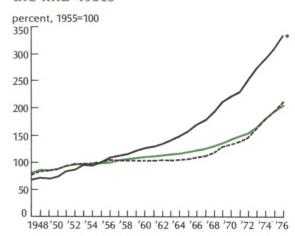
FHA insurance played an important role in reviving the housing industry in the late 1930s after the Depression. VA guarantees were provided after World War II and aided many veterans in acquiring homes on favorable terms. In recent years the part played by these unsubsidized governmentbacked mortgage insurance programs has been relatively small. At the end of 1975 they accounted for only 11 percent of all mortgages held by S&Ls. Ceiling rates on FHA-VA loans, regulations governing the characteristics of properties financed, and administrative delays have discouraged many lenders from participating actively in these programs. Increasingly, private mortgage insurance has been substituted for government insurance on low downpayment loans.

Public housing has never been a large factor in the total housing picture in the United States. Only about 1.5 percent of all units now occupied, including special hous-

Price increases for new housing have about matched income gains in recent years. . .



....but income has far outpaced house prices since the mid-1950s



NOTE: This pair of charts illustrates the importance of the selection of a base year, 1972=100 in the first and 1955=100 in the second, in comparing trends in home prices with other prices and with income. SOURCES: Bureau of the Census; Bureau of Economic Analysis.

ing for the elderly, are under public ownership. Only 10,000 public units were started last year, down from 35,000 in 1970. While experience with public housing has varied by project, "high-rise" units erected in inner cities have generally proved unsatisfactory. Some high-rises of relatively recent construction deteriorated to the point that demolition was necessary.

A variety of federal rental supplements have been available since the mid-1960s, especially under Section 236 of the Federal Housing Act. In addition, under Section 235, the FHA has encouraged home ownership with subsidized insured loans on new homes. Little or no downpayment is required, and subsidies reduce monthly payments. Experience with many "235" loans made in the late 1960s and early 1970s has been unsatisfactory. The FHA has been forced to foreclose loans on thousands of abandoned properties. Mismanagement, fraudulent appraisals, and shoddy construction, on the one hand, together with poorly prepared home owners with no equity to protect, on the other, have cast a shadow over prospects for subsidized home ownership programs. The revised 235 program attempted to deal with these

problems, for example, by requiring higher downpayments.

Currently, two federal programs may provide extensive subsidies for multifamily renters in the near future. Under Section 8, enacted in 1974, the Department of Housing and Urban Development (HUD) hopes to provide assistance to 80,000 rental unit housing starts in the current fiscal year. Section 8 provides federal subsidies to keep rental payments below 25 percent of adjusted income for families whose income is less than 80 percent of the median for designated areas. (This implies that 40 percent of all families might qualify for subsidies.) Another active program is GNMA's "tandem plan" under which the agency raises funds at market rates and buys multifamily mortgages at below market rates-the difference measuring the amount of the subsidy.

The full dimension of federal subsidies to either home owners or renters cannot be evaluated merely by analyzing programs that provide aid specifically for housing. Any income from welfare or other benefit programs can be used for house-related payments, and this need is often specifically taken into account in providing such payments.

Federal Reserve Bank of St. Louis

To sustainable levels

In the late spring there were reports that the explosive bull market in family houses was tapering off, even in California. For several months many lenders have been screening mortgage loan applications more closely to exclude borrowers who do not intend to occupy the houses they contract to purchase. Any slowing in the rate of price rise of homes would tend to discourage speculators who desire a quick profit. Mortgage funds continue to be readily available, meanwhile, with rates and fees only moderately higher than at the start of the year.

Most observers of housing market trends expect that new home construction will remain strong in 1978, although single-family starts may be somewhat fewer than in 1977. A further expansion in multifamily construction is widely expected. Vacancy rates have declined to the lowest level in several years, and rising rents will justify additional projects. HUD is reported to be pushing hard for additional subsidized housing.

Recent higher levels of residential construction have been accompanied by scattered reports of spot shortages of brick, cement, insulation, and other building materials, but nothing critical. Most areas, according to *Engineering News Record*, have adequate numbers of skilled construction workers.

Availability of suitable sites for new residential buildings with access to water, sewerage, and utility services apparently is the major factor limiting developments in the vicinity of metropolitan areas. To a considerable degree the "lot shortage" reflects stiff new environmental standards and a reaction to the haphazard, poorly planned expansion of some suburban areas in the past 10 to 15 years. For many years to come, public policy will be challenged by the need to balance desires to protect and improve the setting of urban life with requirements for new living space.

George W. Cloos William R. Sayre

The prime rate revisited*

The unusually wide spreads that have persisted over the last two years between the prime rate—the interest rate that banks charge on loans to their most creditworthy business customers—and money-market interest rates are now narrowing. Bankers themselves were the first to focus attention on the relationship between the prime and openmarket rates. In October 1971 a few moneycenter banks decided to link their prime rates directly to the cost of open-market funds. They adopted "formula prime rates" based on fixed relationships to the interest rate on commercial paper—specifically, the average of quoted dealer rates on paper maturing in three to four months. Commercial paper is unsecured promissory notes issued by large corporations and sold to large-volume investors. To borrowers the commercial paper market represents an alternative to bank loans.

Ever since the advent of the formula prime, the nexus between the prime rate and the short-term commercial paper rate has been the major focal point of prime rate analysis, even though prime formulas have never been used at most commercial banks and have not been applied rigidly and consistently at any bank. Citibank, N.A. (formerly First National City Bank) in New York, the originator and major proponent of the formula prime, has stated repeatedly that the formula is only a guide and that other factors must also be considered in setting the best lending rate.

One objective of devising the formula prime was to deflect attention from the prime rate as a rate subject to some degree of dis-

*Methods used by banks both historically and in recent years to set the prime rate were surveyed by the author in "The Prime Rate," Business Conditions, Federal Reserve Bank of Chicago (April 1975), pp. 3-12. The present discussion highlights prime rate developments occuring since that article appeared.

cretionary control by the banks. The Committee on Interest and Dividends (CID), a part of the Wage-Price Stabilization Program, began scrutinizing bank lending rates in 1971. Some banks felt that changes in their prime quotations would be easier to justify to all concerned parties (the CID, Congress, bank borrowers, and even other banks) if the relationship between interest charges on the best credit-rated bank loans and on an openmarket source of funds for business borrowers was spotlighted.

By publicizing the linkage between prime and the commercial paper rate, however, formula-prime banks implicitly deemphasized other factors which are important in setting the prime rate. These factors include interest costs on banks' lendable funds, interest returns on nonloan assets held by banks, and expected future growth in bank loans and deposits.

Formulas and rate spreads

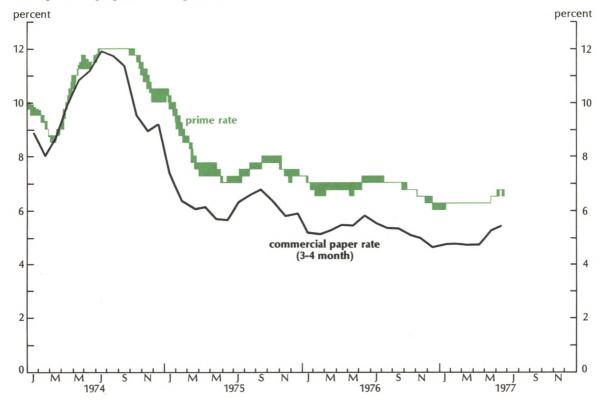
Citibank's first formula called for setting its prime rate approximately ½ percentage point above the rate on three- to four-month commercial paper subject to weekly review. Since then, Citibank has exercised considerable latitude in tempering the formula prime concept to the financial and political environment-rounding up or down from the formula, temporarily discontinuing the formula in 1973, intermittantly ignoring weekly rate changes implied by the formula, and revising the formula itself. The current Citibank formula, and the only one now publicized nationally, calls for a prime rate that is 11/4 percentage points above the threeprevious-week average of the 90-119 day, dealer-placed commercial paper rate. The present Citibank prime-setting method is the culmination of four changes in the differential between the formula prime and the commercial paper rate since the CID ended. The formula spread was increased from 34 to 1 percentage point in October 1974, from 1 to 11/4 percentage point in April 1975, and from 11/4 to 11/2 percentage points in January 1976, and then was lowered to 11/4 percentage points in June 1977.

Although other large commercial banks do not presently issue formula-prime quotations, some acknowledge that they use the commercial paper rate as an informal indicator for prime rate revisions. Some banks also admit to using Citibank's prime as a benchmark for their own prime rate revisions, although clearly they do not have a simple follow-the-leader allegiance to Citibank's prime. Industry-wide prime quotations have tended to stay within ¼, or at most ½, percentage point of Citibank's rate.

Even though prime bank loans and commercial paper are both tailored to borrowers' needs and are close substitutes for short-term business financing, a historical spread exists between the respective rates. The basic spread depends on differences in administrative costs and nonprice lending terms involved in issuing and servicing each type of debt contract. Differences in interest cost calculations—discount method for commercial paper and typically bond-yield method for prime loans—also contribute to the spread.

Money-market rates, influencing the level at which banks set the prime rate, were relatively stable in 1976 and 1977. As a result, prime rate revisions in 1976 were less frequent than in any other year since the introduction of the formula prime in 1971. During 1976 the prime rate fluctuated within a narrow band of 1¼ percentage points, starting the year at or near 7¼ percent and ending 1976 at 6 percent. In the first five months of 1977, the prime rate was revised only three times, and between late-January and mid-May of this year, the

The prime-paper rate spread



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prime stood at 6¼ percent—the longest uninterrupted duration for an industry-wide prime rate since 1969.

Why the wide spread?

The most noteworthy development in 1976 and 1977, however, has been the widened margin of the prime rate above the commercial paper rate. Prime rate adjustments typically lag behind changes in the commercial paper rate, widening the differential between the rates when the commercial paper rate falls and narrowing the spread when the paper rate rises. Such lagged response was not an important factor in explaining the wider prime-paper rate differentials in 1976 and 1977. For example, the weekly average paper rate remained at or very near 4¾ percent from mid-January through April 1977 while the prime remained at 61/4 percent industry-wide—a persistent prime-paperrate spread of 1½ percent.

Several partial explanations for the wider prime-paper rate differential, offered by bankers and financial observers, have focused on institutional features of banking.

- The wider spread indicates a return to the historically higher prime rate margin over the commercial paper rate.
- Banks have granted some loans at belowprime or "super-prime" rates in order to maintain higher advertised prime quotations while attracting some additional loans to "best" customers.
- Non-rate terms of lending have been relaxed in lieu of lowering the prime rate, particularly by allowing business borrowers to "double count" compensating balances—i.e., use the same non-interest deposit balances to compensate a bank for a credit extension and to reimburse the bank for nonloan services provided to the business customer.
- The cost of lending in 1976 and 1977 has remained relatively high, compared to open-market rates during this period, because of higher average costs for loanable funds attributable to the larger proportions of their deposits in the form of time certificates of deposit.

These reasons may have contributed to the wider prime-paper rate spread for particular banks at certain times during 1976 and 1977. Singly or collectively, however, these reasons do not account for the large industrywide differential. The argument concerning historical spreads has some validity, in the sense that banks felt somewhat more latitude to increase margins between the prime rate and money market rates in the post-CID period. In earlier periods before the formulaprime era, for example, the prime-to-paperrate spread did exceed 1 percentage point on occasion. However, there were no counterparts to the sustained 1½ percent spread that appeared in the first half of 1977.

But the major reason cited by the banking community itself for the high prime-paper rate spread in 1976 and 1977 has been slack loan demand and unresponsiveness on the part of business borrowers to declining bank loan rates. In economics parlance, banks perceived that the demand for business loans in the existing circumstances was highly inelastic with respect to the loan rate. Inelastic demand for loans implies that a bank's total loan revenue (and, consequently, profits) would decline if it lowered the prime rate, since increased revenue resulting from a greater dollar volume of loans at the lower rate would be more than offset by the loss of revenue from a lower per-dollar return (interest rate) on all loans extended.

The effects on loan revenue resulting from lowering the prime rate are reinforced by the multiple functions served by the prime rate. Revisions in the prime influence a bank's loan revenue from both prime and nonprime loans because nonprime loan charges typically are determined by tying them directly and formally, or indirectly and informally, to the prime.

Prime rate changes also influence revenue from loans contracted by a bank in earlier time periods, as well as loans made after a prime change, since both long- and short-term bank loan rates often are indexed to the prime. That is, interest charges on these loans vary up and down with the prime rate over the duration of the credit contract.

"Floating" loan rates of this type have become increasingly important in recent years with a greater share of some banks' loan contracts including this feature and with many banks increasing the proportion of their loan portfolios in term loans—longer-term contracts with rates often linked to prime. Floating-rate contracts on term and other loans were probably a major contributing factor in the recent episode of downward inflexibility of the prime rate.

Linkage to the prime rate of nonprimerated and prior-period lending provides commercial banks with an incentive to offer below-prime-rate loans to some customers in order to make more new business loans without lowering returns on other loans that are linked to officially publicized prime quotations. This has been a major explanation accompanying claims that banks have given below-prime rate concessions.

Banks, however, adamantly deny the granting of "super-prime" loans in 1976 and 1977, and for good reason. While a bank might be tempted to experiment with loans at below-prime rates in order to boost shortterm revenue, a strong disincentive toward such lending arises from the "customer relationship"—arrangements built around bank-customer loyalty whereby a bank provides a variety of services to its longestablished clientele. If prime-rate loan customers discovered that some bank borrowers were receiving even better loan rates, a bank's customer relationships would be placed in extreme jeopardy. Loss of bank revenue from the exodus of longstanding customers could far overshadow short-term gains from below-prime lending.

What about next time?

The spread between the prime rate and commercial paper rate is narrowing as the demand for commercial and industrial loans has started to recover during the past year. But it is too early to predict the extent to which the gap between the two rates will shrink in the

months ahead.

Commercial banks may possibly adopt methods in the future that would permit more downward flexibility of the prime. For example, use of proviso clauses governing the extent of rate flotation in "floating-rate" loan contracts could increase. Such arrangements allow the interest rate to vary with the prime rate over the duration of the bank loan but set an absolute lower limit on the rate—a point at which the interest rate ceases to follow the prime downward.

As an alternative approach commercial banks could adopt two prime rates—the regular prime rate on new loan contracts and a special prime for calculations in floating-rate contracts from earlier time periods—with the two rates being allowed to deviate from each other by a specified fraction of a percentage point, or more. Banks would be able to thereby lower the prime rate on new loans, while maintaining the rate used for indexing in earlier loan contracts.

Commercial banks may simply widen the spread between the prime rate and commercial paper rate in future periods when economic circumstances warrant such action, while at the same time engaging in some public reeducation on the prime rate concept. The irony of the formula prime experiment is that private and public financial observers may have learned the formula too well. Another banking lesson in prime-setting that focuses on other factors besides the commercial paper rate may be necessary.

The formula prime experiment holds a different and somewhat more general lesson for commercial bankers. An innovation such as the formula prime can be a political asset partly because of its simplicity and direct link to the money market. But in certain economic situations the same innovation may become a political liability due to its over-simplification of complex banking decisions. In the last analysis, this message may prove to be the greatest legacy of the formula prime concept.

Randall C. Merris

Social security changes necessary

According to the most recent estimates of the trustees of the Social Security Trust Funds, expenditures for old age, survivors, and disability benefits will exceed income by about \$5.6 billion during 1977. This is substantially higher than the \$3.9 billion deficit that the trustees forecast one year ago. The trust fund for disability payments is expected to be exhausted in 1979, and the trust fund for old age and survivors benefits in 1983, unless something is done to increase the income of these funds in the near future. Furthermore, the problem is not simply short-ranged and caused by the recent high levels of unemployment and inflation. The social security system will have progressively increasing deficits year after year unless changes are made in the method of financing, the system for determining benefits, or both. The trustees estimate that over the next 75 years the average tax rate will have to be about 75 percent higher than the rate (including scheduled increases) provided for by current law to balance revenues and benefit payments.1

Automatic benefit increases

Before the 1972 overhaul of the social security system,² Congress had intermittently passed legislation altering the benefit and tax schedules. The increases in benefits generated by this earlier legislation were significantly larger than the inflation that oc-

¹This estimate is for old age, survivors, and disability programs only. Problems of a long range nature also exist for the Hospital Insurance Trust Fund if hospital costs continue to rise at the 15 to 16 percent annual rates experienced in recent years.

²While financing problems, over both the short and long term, beset all aspects of the social security system, this discussion is primarily centered on old age and survivors benefits, which account for about three-quarters of the total benefits operating with payroll-tax financed trust funds.

curred between changes. Nevertheless, the income to the trust funds had provided an ever-increasing balance in the trust fund. In 1972 legislation that provided for an automatic escalation of benefits determined by increases in the Consumer Price Index was passed. At the same time the level of wages subject to the payroll tax was tied to increases in the average wage.

Application of the new formula raised current benefit payments very sharply in the midst of the recession. At the same time, although the wage base was also increased, the rate at which tax receipts were rising dropped significantly because of the high levels of unemployment. This immediate impact was not foreseen at the time the legislation was passed, although some longer-run shortage of income was anticipated. The 1973 forecast of the trustees expected revenues to still be running ahead of benefit payments in 1977.

In addition to the short-term financing problem posed by the continuation of high unemployment and high inflation, a recent Supreme Court decision has increased the benefit payment more rapidly than could have been expected when the 1972 legislation was passed. The new ruling awards widowers the right to claim full dependency benefits without proof of dependency—a right previously available only to widows.

The long-term problem

A significant part of the long-term problem results from the 1972 changes incorporating automatic increases in both wage base and benefits and the way in which benefits are computed. The payments to each new retiree are based on an average of the wages on which taxes were paid. Each time the base for collecting taxes is raised, the level

of benefits for future retirees is also raised. But the levels of benefits for each average wage level are also raised because of the adjustment for the change in the Consumer Price Index. Thus, while current beneficiaries have their payments raised in step with inflation, the inflation correction for future retirees is made twice. This overcompensation, referred to as "coupling," accounts for about half of the long-term deficit predicted by the system trustees.

Another major cause of the projected deficit lies in the changing age distribution of the nation's population. Currently, there are over 100 million persons paying social security taxes, while 33 million are drawing benefits. If present trends continue, in 75 years two persons will be paying taxes for each individual drawing benefits. Although 75 years is a long time to project population trends, even in the somewhat shorter period to the year 2000, the demographics are unfavorable. Most persons who will have firm attachment to the labor market in the year 2000 have already been born, and the vast majority of the beneficiaries who will be receiving payments, financed by the taxes on the work force of that day, are also now alive. By that time the number of workers per beneficiary is going to drop from today's 3.1 level to about 2.6. Even if there were no change in benefits from today's levels, the tax rate needed to keep the system on a "pay as you go" basis will have to be about 20 percent higher than the present rate.

The President's program

President Carter has proposed a series of eight changes in the social security program aimed at solving both the short- and long-term financing problems. Two of these eight changes will act to decrease the rate at which benefit costs increase. The most important is "decoupling," or eliminating the double adjustment of future benefits for inflation, which would be accomplished by adjusting future benefits for wage increases only. The other change would be to narrow the eligibility for claiming benefits based on a

deceased spouse's earnings to the claimant who had the lower earnings of the two, rather than having eligibility independent of the claimant's earnings, as is now the case.

Another proposed change would transfer part of the currently scheduled increases in payroll taxes (1978 and 1981) from the Hospital Trust Fund, for which these increases are now earmarked, to the Old Age and Survivors and the Disability Trust Funds. This shift assumes that the rate of growth of costs for payroll-tax financed Medicare costs will be slowed significantly in future years.

Of the five remaining proposed changes, four are direct tax increases. The most significant of these changes would require the employer to pay taxes on the entire wage rather than on the same wage base paid by the employee. The increase would be introduced in steps, reaching the full payroll level in 1981, and providing about 60 percent of the \$50 billion of total funds which would be raised in the 1978-82 period if the President's proposals were adopted.

The other tax changes that are proposed include increases in the wage base by an average of \$300 per year from 1979 through 1985 in addition to the automatic increases that will result from operation of the 1972 act. This procedure will raise the wage base to about \$30,300 per year as compared to \$27,900 without the added increase.

Another proposal is to raise the tax paid by self-employed individuals from 7.0 to 7.5 percent. Prior to the 1972 act self-employed persons paid a 50 percent higher tax rate than did wage and salaried workers. This change would restore that ratio to the historic level.

The remaining tax increase is to advance the effective date of a tax rate increase of 1 percent (on both employer and employee) which is now scheduled for the year 2011. One-quarter of the increase would become effective in 1985, the balance in 1990.

Correcting for the recession

The remaining Presidential proposal to modify the funding of the social security system is to augment social security receipts with general revenue funds when the unemployment rate is about 6 percent. The trust funds would be credited with an amount equal to the difference between what was actually paid and the estimated payments if unemployment were actually at 6 percent. This new funding, called the "counter-cyclical financing method," would make transfers in 1978, 1979, and 1980 based on the unemployment rates for 1975 through 1978. The Administration is currently asking that this method be enacted temporarily, suggesting that it be made permanent if a review in 1978 proves the method sound.

Congressional reaction

Leading members of Congress have generally agreed on the need for a prompt program to insure financing of the social security system. Virtually all who have commented have recognized the necessity of "decoupling" wage- and price-related benefit adjustments. Reaction to the other proposals has been mixed, and while some changes in the social security financing structure seem certain within the next year, they could be in directions significantly different from the President's proposal. Most adverse Congressional reaction has centered on the counter-cyclical financing from general revenues. Significant opposition to any move away from a fully self-supporting social security system seems to exist. Several Senators and Representatives have indicated they would view such a move as a change from an insurance system toward a welfare system of benefit payments.

Morton B. Millenson