



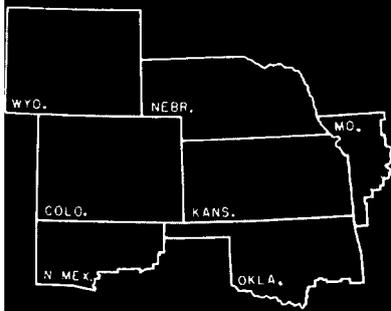
# *monthly review*

SEPTEMBER-OCTOBER 1977

A Primer on  
Agricultural Policy ..... page 3

The Secondary Market for  
Home Mortgages ..... page 11

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# A PRIMER ON AGRICULTURAL POLICY

By Marvin Duncan and  
C. Edward Harshbarger

**A**gricultural policy is attracting a growing body of followers. As Senator Herman E. Talmadge, Chairman of the Senate Agricultural Committee, puts it, "Times have changed in the development of agricultural policy. It used to be that only farmers and the government were concerned over farm programs and little national attention was paid when we passed a farm bill. Today, agriculture touches everyone in America, and its importance is widely recognized. Our people have been reminded that milk does not come from plastic containers and that bread does not originate at the bakery."

However, the rationale for an agricultural policy is confusing to many people. Further, the expressed goals for policy are unclear and frequently conflicting and the terminology is often unfamiliar. Thus, to promote greater understanding of agricultural policy and its various goals, this article examines agriculture's role in the general economy and the unique characteristics of agricultural production. Moreover, because common understanding of policy issues and terminology is helpful, a glossary of frequently used terms is included to assist interested persons in discussing the issues. A future article will examine the evolution of U.S. farm policy and discuss policy goals.

## THE ROLE OF AGRICULTURE IN AN INDUSTRIAL SOCIETY

Over the years, agriculture has become increasingly integrated into many different

facets of the U.S. economy as both a supplier and user of goods and services. When those industries that supply inputs to farmers as well as those that process and market farm products are included in the picture, agriculture and its backward and forward linkages account for about one-sixth of GNP, about one-fifth of total employment, and about one-fourth of export earnings.<sup>2</sup> Because of this interdependence, agricultural policy must now be viewed in terms of this nation's goals for economic growth, employment, and price stability, and not necessarily in terms of what is beneficial solely to farmers.

## What Does Agriculture Produce?

In 1976, the U.S. Department of Agriculture (USDA) estimated that total output from the agricultural complex amounted to \$300 billion. Of this amount, cash receipts from farm marketings totaled about \$100 billion, while the remainder represented the cost of marketing: the added costs of processing, packaging, transporting, and merchandising the products between the farmer and the consumer. Clearly, a **\$300-billion** industry is capable of providing a large number of jobs and generating a substantial amount of income within the general economy. Furthermore, any new developments in an industry of this size are bound to have a significant rippling effect on other economic sectors.

During the past few years, rapidly rising food prices have caused great concern among

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<sup>2</sup>A New U.S. Farm Policy for Changing World Food Needs, Committee for Economic Development, New York, N.Y., October 1974, p. 29.

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<sup>1</sup> *Farmland News*, June 30, 1977, p. 5.

## A Primer on Agricultural Policy

policymakers and consumers alike. As a result, the public has learned more about food production and the costs of marketing. In **1975**, consumers spent about **\$185 billion** for food, and the figure for **1976** was probably around **\$200 billion**.<sup>3</sup> Since the farm value of these outlays was about **\$55 billion**, the bulk of consumer expenditures for food went toward defraying the costs of marketing—at least **\$100 billion** on the food items produced domestically. Labor costs are the largest component of the marketing bill, accounting for about one-half of the total. Thus, in **1975** and again in **1976**, approximately **\$50 billion** was paid to an estimated 6 million workers in the food processing and distribution system.

The sharp rise in agricultural exports has also added stimulus to the economy. A study by USDA indicated that the **\$22 billion** in foreign sales in fiscal **1975** probably generated an additional **\$21 billion** in business activity in transportation, manufacturing, food processing, and construction.<sup>4</sup> Thus, the multiplier effect was almost **2**. These shipments and the attendant increase in business activity were responsible for about **1.2 million** jobs. From this evidence, it should be clear that agricultural producers make many valuable contributions to the economy providing food and opportunities for additional employment as well.

### **What Does Agriculture Consume?**

Agriculture has undergone dramatic change during the past **40** years as farms have become fewer but larger. **One** manifestation of the technological revolution has been the substitution of capital items for labor, with the result that the ratio of purchased inputs to total inputs has risen sharply. Thus, modern farmers now depend heavily on other businesses to

supply them with the goods and services needed to produce food efficiently. Because of this increased dependence on outside suppliers, coupled with sharply higher prices since **1970**, production costs in agriculture have skyrocketed. In **1976**, these costs were about **\$81 billion** as compared with **\$44 billion** in **1970**. While this sharp expansion in production costs has impaired the net cash flow position of many **farm** operations in recent years, a considerable amount of additional business activity has been generated in the economy by these expenditures.

According to USDA, farmers spent **\$7 billion** for capital items in **1971**.<sup>5</sup> More recently, however, capital expenditures in agriculture have been exceeding **\$12 billion** annually. It was estimated that the **\$7 billion** spent for new capital items in **1971** produced an additional **\$8 billion** worth of business activity—the multiplier effect was more than **2**. To maintain this level of economic activity, nearly **650,000** workers were needed to produce and deliver farm capital items in **1971**.

Capital spending in farming is only the beginning. Farmers also spend substantial sums for fertilizer, feed, seed, fuel, labor, and interest. All of these outlays also have a multiplier effect in the economy. In **1976**, about **72 per cent**—or **\$58.7 billion**—of the production costs in agriculture were of nonfarm origin. Assuming a multiplier effect of **2.0**, these outlays produced perhaps an additional **\$60 billion** in business activity in the economy. Obviously, many jobs were associated with this additional business. Hence, in our modern economy, agriculture is no longer a self-sufficient industry offering a unique way of life to farm people. Rather, agriculture is an integral part of the economic system that accounts for a significant amount of economic activity in the United States.

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<sup>3</sup> *Agricultural Outlook*, U.S. Department of Agriculture, Economic Research Service, AO-19, March 1977, p. 9.

<sup>4</sup> *Agricultural Outlook*, U.S. Department of Agriculture, Economic Research Service, AO-4, September 1975, pp. 15-17.

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<sup>5</sup> *Agricultural Outlook*, U.S. Department of Agriculture, Economic Research Service, AO-7, January-February 1976, pp. 17-19.

## WHAT IS DIFFERENT ABOUT AGRICULTURE?

A special agricultural policy in this country is—in large part—premised on the assumption that agricultural producers face business management problems that are unique to their industry. Common wisdom among members of Congress and agricultural producers has generally supported this view. The result has been the enactment of a series of farm bills by congress over the past few decades.

Increasingly, however, questions are being asked and judgments—both private and public—rendered as to the uniqueness of agriculture and, hence, the need for a special agriculture policy apart from a national policy on food. Increasingly, questions are raised about who the recipients of agricultural policy benefits are, about the implications of such policy on the structure of agriculture, and about how well past and present agricultural policy has served producers and consumers. Although answers to these questions lie outside the scope of this article, it is helpful to have some understanding of the characteristics of agricultural production that tend to make it unique.

### Many Producers

The agricultural industry in the United States has historically been characterized as having many small producers—none of whom supply enough of the market to affect the price of the product. The wide dispersion of production decisionmaking has made it very difficult for farmers and ranchers to make group decisions on production or marketing. While this has generally been conceded by policymakers in the past, is it still true?

The U.S. farm population has been declining both absolutely and as a proportion of the total population, to 8.86 million persons and 4.2 per cent of the U.S. population in 1976. Nonetheless, there are still 2.8 million farms in the United States and most of them are

operated by full or part owners (87 per cent). Despite the fact that 36 per cent of all farms in 1975 had annual sales of more than \$20,000, and despite the growing importance of these commercial farms, U.S. farmers have not been very successful in **coordinating** planting and marketing decisions for their own benefit. For example, wheat acreage in the United States was reduced by only 7 per cent for the 1977-78 crop year and production hardly at all, although there was widespread agreement among wheat farmers last summer that another 2-billion-bushel wheat crop would add to the surplus and severely depress wheat prices. Thus, although the productive capacity of U.S. agriculture is being concentrated in progressively fewer hands, there are still too many producer decisionmakers to permit successful organization and control of production.

### Inelastic Demand

Food products generally face an inelastic demand by consumers, as is fairly typical for a basic commodity with few good substitutes. That is, for a given percentage change in the price of a farm product offered for sale, the quantity demanded changes by a smaller percentage in the opposite direction. A small shortfall in production below an equilibrium level tends to cause agricultural product prices to soar—an event welcomed by farmers and ranchers but dreaded by consumers. Conversely, a relatively small increase in output tends to cause agricultural product prices to plummet.

Total demand for agricultural products tends to grow about as fast as the population in a prosperous and adequately fed country such as the United States. Thus, during recent years, there has been an increased dependence on export markets to dispose of the abundant U.S. agricultural production. While this development has produced valuable foreign exchange earnings and has firmed domestic product prices, it has also added to the instability in the agricultural picture because

the long-term prospects for exports depend in large part on worldwide weather conditions and the policies of foreign governments.

Since farmers and ranchers have typically made next year's production plans based on this year's prices, there is a tendency for farm prices to fluctuate widely. High prices one production period will likely result in higher production and sharply lower prices the following period—followed by tendencies toward reduced production and higher prices in a future period. The generally inelastic demand for agricultural products has magnified the price instability resulting from this type of production planning. Thus, one of the goals of farm policy is to lend greater price stability to farm product markets.

### **Resources Fixed in Use**

Resources devoted to agricultural production are quite specialized and frequently are substantially less valuable in other productive uses. For example, rangeland used in the production of beef may have no other equally valuable use. Similarly, very expensive and highly specialized farm equipment—such as that used in producing sugar beets—may have relatively little use or value in the production of most other crops.

Thus, resources devoted to a type of agricultural production tend to be locked into that use in the short run, even though such a use may be unprofitable. In the short run, the losses resulting from shifts to other types of production may exceed the losses from continuation of previous production patterns.

### **Biological Production Processes**

Biological production processes are not amenable to quick and substantial shifts. It is typically not possible to stop a biological production process once it has started (a cow bred or a crop planted), without losing a substantial part of the variable costs of production. Consequently, production decisions and actions tend to be relatively irreversible.

The time required to produce a crop is determined by the maturity date of the crop and the time required to produce cattle of slaughter weight will depend on growth rates and feeding practices. In the case of cattle, for example, about 38 months (over 3 years) are required to increase beef production—that is from the time a heifer calf is born until that animal's first offspring can be sold as a **1,000-**pound slaughter animal.

Once a biological production process has been started, variability in final production levels is determined by factors over which the producer has limited control. Animal and plant diseases can sharply reduce output. Weather conditions also have marked effects on production levels. For example, harsh weather during the winter and spring of 1976-77 limited the U.S. December-May pig crop to a 2 per cent increase, despite a 5 per cent increase in the number of sows farrowing (female pigs giving birth). Lack of adequate moisture and excessive heat during the growing season can sharply reduce production levels from crops.

Farmers are right when they contend that certain aspects of agricultural production are unique. Despite the fact that farmers and farm businesses are becoming more like their city counterparts over time, **some** significant differences remain. The differences discussed here will continue to make it hard for farmers to adjust to rapidly changing market conditions.

### **A GLOSSARY OF TERMS**

The casual observer is frequently confused and frustrated by the use of specialized terms to describe various aspects of agricultural policy and programs. Further, the terms are often used incorrectly. A few of the more commonly used terms are described here to serve as a basis for better understanding of policy discussions.<sup>6</sup>

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<sup>6</sup> Definitions are based on current farm legislation. Legislation presently under consideration in Congress may change the more technical aspects of the definitions—not only for future years but in some instances for 1977 as well.

## Parity Price

The parity price for an agricultural commodity is that price (in current dollars) that will give the commodity the same purchasing power—in terms of goods and services bought by farmers and certain production costs—as the commodity had during the 1910-14 base period.<sup>7</sup> Although the actual calculations required to derive parity prices are rather complicated, the basic concept of parity is fairly straightforward. To use a simple example, if—in the base period—50 bushels of wheat could have been sold and the proceeds used to purchase a ton of fertilizer, then the parity price of wheat at any given moment in time is that price which would enable a farmer to purchase a ton of fertilizer with the proceeds from 50 bushels of wheat. As a practical matter, however, parity prices are predicated on the average change in prices of all goods and services rather than on individual items.

In the past, parity prices have been considered by many to represent "fair" product prices and have been used as a factor in determining Government price support levels and marketing order prices. However, when parity price standards are used as a measure to assure a specified net farm income, 100 per cent of parity prices may yield a farmer a higher real net income now than would have been true in 1910. This is true because the parity formula does not take into account increases in farm efficiency as measured by an average index of productivity. Thus, as

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<sup>7</sup> Actually, the parity price for a commodity is calculated using an "adjusted base price," which is derived by dividing the average price received by farmers for the commodity in the previous 10 calendar years by the average Index of Prices Received by Farmers (1910 - 14 = 100) for the same 10-year period. (Both the numerator and denominator are adjusted to allow for unredeemed government loans and other supplemental payments from price support operations). This "adjusted base price" is then multiplied by the most recent Index of Prices Paid by Farmers including Interest, Taxes, and Wage Rates (1910 - 14 = 100) to yield the current parity price for the commodity.

productivity increases, returns to resources used in production equivalent to 1910-14 can be obtained with lower parity levels.

## Acreage Allotments

During the 1920's, the U.S. Government—at the urging of **farmers—developed** programs for farmers that included reducing the acreage of certain major crops in order to limit production, and thus to raise farm prices. For example, a plan was proposed under which individual acreage allotments would be assigned to individual farmers based on their previous acreage, production, and sales records. Such a proposal, with some modifications, was first enacted into law with the Agricultural Adjustment Act of 1933. Acreage allotments in some form have been around ever since.

The chief objective of acreage allotments was to establish and maintain levels of production of certain agricultural commodities that the market could absorb at prices considered fair to producers. The Secretary of **Agriculture—**after determining the acreage necessary to supply domestic requirements, projected export sales, and normal carryover of a **crop—**announced a national acreage allotment for each crop covered by such legislation. Crops covered in 1977 are corn, grain sorghum, barley, wheat, cotton, peanuts, rice, and some kinds of tobacco. If the national allotment for a crop was changed, that change was allocated among states and ultimately among farms on a proportional basis. In recent years, producers of most crops with allotments have been able to grow more than their allotted acreage without incurring any penalty. Farm legislation currently being considered by Congress would do away with historic allotments for growers of wheat, feed grains, rice, and cotton, but not for growers of tobacco and peanuts. Future benefits of farm programs would be distributed on the basis of what a farmer had planted, not on the basis of allotments that currently reflect production patterns of the 1950's.

**Commodity Credit Corporation**

The Commodity Credit Corporation (CCC) is a U.S. agency under a permanent Federal charter, having been formed in 1933 under Delaware law as a corporation wholly owned by the Government. Its board of directors is composed of seven top USDA officials. The CCC has an authorized capital stock of \$100 million and authority to borrow up to \$14.5 billion.

A major function of the CCC is to support prices of agricultural commodities through loans, purchases, payments, and other operations. The CCC assumes ownership of defaulted nonrecourse commodity loans, and thus acquires ownership of commodities used for domestic and international food aid programs. It also purchases some commodities for use in these programs, and provides nonsubsidized intermediate-term (up to 3 years) credit to foreign buyers of U.S. agricultural products. CCC operating losses are borne by the U.S. taxpayers.

**Loan Rate**

The loan rate is the level at which the Government will support a commodity's price. The terms "support price," "price support," and "loan rate" are used interchangeably. Loans to farmers are granted by the CCC using the commodity as collateral. For example, wheat produced during 1977 is valued at \$2.25 per bushel at the farm for CCC loan purposes (Table 1).

If the price of the commodity rises above the loan rate during the term of the CCC loan, the farmer may sell the commodity, repay the CCC loan with interest, and capture the price advantage of timely marketing. If the price of the commodity does not rise above the loan rate, the farmer can default on the nonrecourse loan and turn the commodity over to the CCC

<sup>8</sup> In nonrecourse loans, the property used as collateral for the loan may be turned over to the lender as full settlement of the loan.

**Table 1  
LOAN RATES AND TARGET PRICES  
FOR 1977**

	Loan Rate	Target Price
	In Dollars	Per Bushel
Wheat	2.25	2.90†
Corn	2.00†	2.00†
Sorghum ‡	1.70	1.62
Barley ‡	1.50	1.39*
Oats ‡	1.00	*
Rye	1.50	*
Soybeans	3.50	
	In Cents	Per Pound
Upland cotton	42.58	47.80

\*These crops are not covered by present target price legislation.

†As proposed in the Agricultural Act of 1977.

+Loan rates and target prices (where applicable) for these crops may also be increased for 1977 since they are typically set by the secretary of agriculture at a level that is fair and reasonable in relation to corn loan and target price levels.

SOURCE: U.S. Department of Agriculture.

as full settlement of the loan. Thus, despite market price fluctuations, the loan rate becomes the floor or lowest price for the commodity that the farmer needs to accept.

**Target Prices**

Target prices are "fair" price levels set by Congressional action for wheat, feed grains, cotton, and rice. Provision is made for escalation in target price levels in future years based on increases in certain production costs. If the average price for one of these commodities during the first 5 months of the market year falls below the target price level, cooperating farmers receive a "deficiency payment" from the Government, providing the target price is above the CCC loan rate. Deficiency payments are transfer payments to cooperating farmers.

This payment is calculated as the difference between the target price and the higher of the average market price or the loan rate. If the 1977 market price for wheat were \$2.24 per bushel, the loan rate \$2.25, and the target price \$2.90, a farmer would receive a deficiency payment of 65 cents per bushel of wheat (**\$2.90 - \$2.25 = 65¢**). The quantity of wheat on which this deficiency payment could be collected would be calculated by multiplying the smaller of the farm's allotment acres or planted acres times its normal yield per **acre**.<sup>9</sup> Under current farm legislation no **farmer** can collect more than **\$20,000** per year in payments under the deficiency payment and disaster payment programs, except in the case of rice farmers where the limitation is \$55,000. However, legislation presently under consideration in Congress will likely raise the **payment** limitation levels—perhaps retroactively to cover the 1977 crop year.

### Marketing Orders

Authorized by the Agricultural Marketing Agreement Act of 1937, marketing orders are agreements between producers and Federal or state governments that either fix the wholesale price of farm products or support prices indirectly by controlling the supply of commodities reaching the consumer. Orders are now in effect for milk and for a **variety** of fruits and vegetables.

Marketing orders are established through a process including producer petitions, public hearings, and a referendum vote by producers. They are frequently used to bring stability to markets that are inherently chaotic because of the weak bargaining position of producers and the special characteristics of the commodities. Products that are very perishable, require a lot

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<sup>9</sup>This method of calculation is provided for 1977 in legislation currently being considered by Congress. Previously the farm's allotment acres were used in the calculation of the deficiency payment. In future years only planted acres will be used in the calculation.

of processing, and vary widely in quality and yield are potential candidates for marketing orders. Thus, marketing orders are designed to establish and maintain orderly market conditions and to assure reasonable profits to producers while providing adequate supplies at more stable prices to consumers. With milk, the orders establish minimum wholesale prices within a geographic market area called a **milkshed**; while for fruit and vegetables, the prices are influenced indirectly by the establishment of grade, size, and quality standards which effectively limit the quantities reaching the consumer. Once an order is established, all producers are bound by the regulations and all sales in the specified market must adhere to the pricing policy of the order. Marketing orders also have the practical effect of limiting competition in a market and excluding foreign products from a domestic market.

### Federal Crop Insurance Corporation

This organization provides all-risk insurance to farmers eligible for coverage. Approximately 25 different crops are insured in different parts of the country, primarily in the commercial producing areas. In 1975, the program was available in about one-half of the **3,000** or so counties in the continental United States.

By law, the crops cannot be insured for more than production costs. However, farmers may designate the extent to which they want protection, and the premiums are set accordingly. The program is designed so that indemnity payments amount to 90 per cent of the premiums (the remainder is held in reserve for unexpected costs), so farmers are essentially paying the full cost of the benefits. Congressional appropriations cover the administrative costs of the program. Since the insurance can be cancelled or denied to various areas or individual producers with a high loss history, many farmers must either rely on private insurance firms for protection or bear the risks themselves.

## Disaster Payments

Disaster payments represent a form of free **insurance—provided** by the Agricultural Act of 1973 and the 1975 Rice Act—to eligible wheat, feed grain, cotton, and rice producers. A continuation of these benefits is expected under farm legislation currently being considered by Congress. Basically, payments are made if farmers are prevented from planting their crops or if yields fall below specified levels because of natural hazards. Thus far, expenditures under these provisions have been running between \$280 million and \$550 million a year.

The disaster payments mechanism has several weaknesses, although the new legislation may correct most of them, at least for wheat and feed grains. For example, under the old program, if farmers exceeded their acreage allotments, it was possible to sustain a severe loss and not be eligible for disaster payments because total output still exceeded the trigger point which was tied directly to production from allotted acreage only. Obviously, those producers without allotments received no benefit at all. In addition, payments to eligible producers were not prorated in any way to reflect the timing of the loss, the productivity of the farm, and the costs of production. Hence, the key to benefitting from this program was to establish eligibility.

The new legislation being considered would provide for two kinds of disaster benefit calculations for wheat and feed grain producers. If a disaster **prevented planting** of the usual crop or any other nonconserving crop, a farmer could receive a payment equal to one-third of the target price on the smaller of 75 per cent of the projected (normal) production from the intended planting or 75 per cent of the production from last year's

planted acreage of the crop. On the other hand, if production of a **planted crop** were reduced below 60 per cent of its projected (normal) yield by disaster, a farmer could receive a payment equal to half the target price on the difference between actual production and 60 per cent of the projected production on the acreage planted for harvest.

## CONCLUSION

Agricultural policy formulation has long been hampered by the assumption that the problems affecting agricultural producers were transitory. This has led to a policymaking environment in which programs of short duration were developed to meet the needs at hand. Further, there have been sharp and frequent shifts in policy directions as policymakers responded to what they perceived to be basic changes in the policy environment. Nonetheless, it should be clear after more than 45 years of public debate and legislation that agriculture is faced with fundamental and continuing adjustment problems of a long-term nature.

Because of the growing complexities of agricultural production and its interrelatedness with the general well-being of Americans, a compelling case can be made for taking the long view in policy formulation. Producers and consumers both need to know the "rules of the game" well into the future, as do foreign customers. It is demonstrably true that producers and consumers will not be satisfied with a public policy of no government intervention in agriculture. Consequently, formulating a policy that addresses the sometimes conflicting goals of all interested parties in a balanced and objective manner is an important, but unfinished, public policy task.

# The Secondary Market for Home Mortgages

By Peggy Brockschmidt\*

The secondary market for home mortgages has been an important part of the nation's financial markets for many years. By providing a mechanism for mortgage originators to sell their mortgages, the secondary market has facilitated the flow of mortgage funds from investors to home buyers. Moreover, by serving as a means by which long-term mortgage holders can adjust their mortgage portfolios, the secondary market has enhanced the liquidity and increased the attractiveness of home mortgages as investments. Through the provision of these adjustment and transfer mechanisms, the secondary market facilitates the flow of funds between ultimate mortgage lenders and home buyers and thereby contributes to the efficient allocation of credit in the housing market and in the economy.

In recent years, the secondary market has undergone a number of changes. One of the more important changes has been the development and growth of mortgage pools as a device for secondary trading. Another development has been the growth and increased importance of nonfederally insured mortgages in the secondary market.

This article discusses these and other important developments that have taken place

in the past few years in the secondary market for home mortgages. The first section provides an overview of the market by describing the purposes, transactions, and participants of the market, and by presenting information on the market's size and growth. The second section provides a more detailed discussion of the activities of the various participants in the market.

## THE SECONDARY MARKET: AN OVERVIEW

The secondary mortgage market is one in which previously originated mortgages are bought and sold. Originations of mortgages, which take place in the primary market, involve the creation of mortgage instruments and the provision of funds to mortgage borrowers for use in financing home purchases.

### Originators and Holders

The great majority of home mortgages, *i.e.*, mortgages on housing structures designed for four or fewer families, are originated by financial institutions in the private sector. Federal credit agencies—such as the Farmers Home Administration—account for a small volume of originations. (See Table 1.) Savings and loan associations are by far the most important of the private originating institutions. Commercial banks and mortgage companies are also important originators, while

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\*J. A. Cacy, vice president and senior economist, advised in the preparation of this article.

**Table 1**  
**ORIGINATIONS AND HOLDINGS**  
**1-4 FAMILY RESIDENTIAL MORTGAGES**  
**1970-76**

LENDER GROUP	Originations Yearly Average: 1970-76		Holdings Dec. 31, 1976	
	Billions of Dollars	Per Cent	Billions of Dollars	Per Cent
Federal Credit Agencies	2.2	3.1	36.6	7.5
Federally Sponsored Pools	0.0	0.0	41.9	8.6
Private Sector:	69.8	96.9	411.4	84.0
Commercial Banks	15.6	21.7	77.5	15.8
Mutual Savings Banks	4.5	6.2	52.4	10.7
Savings and Loan Associations	35.8	49.7	253.5	51.7
Life Insurance Companies	0.4	0.5	15.5	3.2
Mortgage Companies	12.8	17.8	4.2	0.9
Others*	0.7	1.0	8.4	1.7
<b>Total</b>	<b>72.0</b>	<b>100.0</b>	<b>489.9</b>	<b>100.0</b>

**SOURCE:** Department of Housing and Urban Development.  
 \*Private Pension Funds, Mortgage Investment Trusts, State and Local Retirement Funds, State and Local Credit Agencies. Other groups not included here due to lack of data also make or hold small amounts of mortgage loans.

mutual savings banks and other groups originate smaller amounts.

Commercial banks and mortgage companies sell many of their originations in the secondary market. Mortgage companies in particular specialize in originating and servicing **mortgages, but** do not hold them for extended periods. Thus, while these companies accounted for 18 per cent of all originations in the 1970-76 period, they held only 1 per cent of total home mortgages outstanding at the end of 1976. (See Table 1.) Other institutions, because they are net buyers as well as originators of mortgages, are more important as holders than as originators. Savings and loan associations, for example, held 52 per cent of outstandings at the end of 1976, but accounted for a smaller 50 per cent of total originations in the 1970-76 period.

### Purposes of Secondary Market

The secondary market for home mortgages serves several purposes. One is to provide a mechanism for transferring mortgages from firms—such as mortgage companies—that specialize in originating mortgages to other groups that hold mortgages for extended periods—such as savings and loan associations, mutual savings banks, and Federal credit agencies. Another purpose of the secondary market is to provide a way for long-term mortgage holders to adjust their holdings so as to accommodate their liquidity and earnings preferences.

### Secondary Market Transactions

Two types of transactions take place in the secondary mortgage market. One involves the buying and selling of individual mortgage

loans; the second involves mortgage pools. The mortgages involved in both types of transactions may be either federally insured or conventional. Federally insured mortgages are insured by the Federal Housing Administration (FHA) or Veterans Administration (VA). Conventional mortgages are not insured by FHA or VA, but may be insured by a private firm.<sup>1</sup>

Mortgage pools are created when mortgage originators or holders set aside mortgages in pools and sell securities that represent shares in the pooled mortgages. The pooled mortgages are removed from the balance sheets of the creators of the pools and the buyers of the securities become the joint owners of the pooled mortgages. Regular mortgage payments and any prepayments on mortgages held in pools are distributed to the holders of the securities. Typically, the creators of the pools assume responsibility for servicing the mortgages, that is, collecting payments from mortgagees and distributing them. In this article, the pools are treated as the purchasers of the mortgages, even though the owners of the mortgage-backed securities are technically the purchasers.

### Secondary Market Participants

The participants in the secondary market, i.e., the buyers and sellers, may be divided into three groups. The first group consists of the Federal agencies involved in mortgage credit, such as the Federal National Mortgage Association (FNMA), the Government National Mortgage Association (GNMA), and the Federal Home Loan Mortgage Corporation (FHLMC). A second group is the federally sponsored pools. Federal sponsorship involves the guarantee by an agency—usually GNMA—of the payment of the principal and

interest on the securities representing shares in the pools. Most of the securities and therefore most of the mortgages in the pools are owned by private participants in the market.

A third group consists of private financial institutions who participate in the buying and selling of individual mortgages—that is, nonpooled mortgages. (The participation of the private sector in mortgage pools is included under the category of federally sponsored pools.) Private participants in secondary market transactions that involve individual mortgages are essentially the participants in the primary mortgage market. They include savings and loan associations, mutual savings banks, commercial banks, and mortgage companies. Other participants—such as life insurance companies, private pension funds, state and local retirement funds, state and local credit agencies, and mortgage investment trusts—are active in a small way in the secondary home mortgage market.

Viewing the three groups in the aggregate, Federal credit agencies and pools tend to be net buyers in the secondary market, while the nonpool private sector tends to be a net seller. Within each of the groups except the pools, though, some individual institutions are mainly buyers in the secondary market, while others are primarily sellers.

The nonpool private sector is typically the most important participant group on both sides of the market. On the purchase side, the private sector accounted for 44 per cent of purchases in the 1970-76 period, while Federal credit agencies accounted for 29 per cent and pools accounted for 27 per cent. On the selling side, the private sector accounted for 80 per cent of total sales, Federal agencies accounted for 18 per cent, and pools accounted for 2 per cent.

### Growth of Secondary Market

Activity in the secondary home mortgage market has increased considerably in recent

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<sup>1</sup> The Farmers Home Administration, a part of the Department of Agriculture, also insures home mortgages under several programs. These mortgages are classified as conventional mortgages.

Table 2  
**SECONDARY MARKET PURCHASES**  
**1-4 FAMILY RESIDENTIAL MORTGAGES**  
**1970-76**

YEAR	Total Purchases	Federal Credit Agencies		Federally Sponsored Pools		Private Sector	
	Billions of Dollars	Billions of Dollars	Per Cent	Billions of Dollars	Per Cent	Billions of Dollars	Per Cent
1970	13.4	5.4	40.1	1.8	13.7	6.2	46.2
1971	18.3	3.7	20.4	3.9	21.6	10.6	58.0
1972	25.1	5.0	19.9	4.8	19.0	15.3	61.1
1973	22.6	7.4	32.8	4.2	18.5	11.0	48.7
1974	23.0	8.8	38.2	6.3	27.4	7.9	34.5
1975	31.9	10.7	33.6	11.2	34.9	10.0	31.4
1976	42.8	9.6	22.3	16.4	38.4	16.8	39.3
<b>Yearly Average</b>	25.3	7.2	28.6	6.9	27.5	11.1	44.0

SOURCE: Department of Housing and Urban Development.

years. Total purchases by all participants rose from **\$13.4 billion in 1970** to **\$42.8 billion in 1976**. (See Table 2.) Much of the gain has been due to growth of the primary market, as originations rose considerably in the **1970-76** period. The secondary market, however, has grown more rapidly than the primary market. Purchases rose **220 per cent** from **1970** through **1976**, compared to a **209 per cent** rise for originations. The greater growth in the secondary market is especially evident in the past **4 years**. From **1973** to **1976**, secondary market purchases rose **90 per cent**, compared to **39 per cent** for originations.

An important factor in the recent growth in the secondary home mortgage market has been the development and growth of the federally sponsored mortgage pools. Purchases by pools rose from **\$1.8 billion in 1970** to **\$16.4 billion in 1976**. This growth has pushed the pools' share of total purchases to **38 per cent** in **1976** from **14 per cent** in **1970**.

Another factor in the recent growth of secondary market activity has been the rapid growth of transactions involving conventional mortgages. Purchases of conventional home mortgages increased from **\$2.8 billion**, or **21 per cent** of total purchases in **1970**, to **\$20.1 billion**, or **47 per cent** of the total in **1976**. This important secondary market role of conventional mortgages contrasts with historical practices. In the past, transactions in federally insured mortgages dominated the secondary market. These mortgages were considered more suitable for secondary trading because insurance reduces the risk of loss and the need for buyers to assess the quality of individual mortgages. Also, Federal mortgage insurance programs facilitated secondary market trading by encouraging the use of standardized documents, mortgage terms, and origination practices.

The growth and increased importance of secondary market trading in conventional

**Table 3**  
**FEDERAL AGENCY PARTICIPATION**  
**1-4 FAMILY SECONDARY MORTGAGE MARKET**  
**1970-76**

AGENCY	Yearly Average: 1970-76					Dec. 31, 1976 Holdings
	Purchases		Sales		Net Purchases (Sales)	
	Billions of Dollars	Per Cent of Market	Billions of Dollars	Per Cent of Market	Billions of Dollars	Billions of Dollars
FNMA	3.7	14.7	0.0	0.2	3.7	26.9
GNMA	1.9	7.7	1.9	7.8	0.0	2.0
FHLMC	1.1	4.4	0.4	1.8	0.7	3.9
FmHA	0.4	1.5	1.8	7.4	(1.5)	0.5
Total*	7.2	28.6	4.5	18.3	2.7	36.6

SOURCE: Purchases, Sales, and Total Outstandings; Department of Housing and Urban Development.

Other outstandings, Federal Reserve Bulletin.

\*Some agencies not shown separately.

mortgages is due in part to the growth of private mortgage insurance. In 1976, about 14 per cent of conventional home mortgages were covered by private insurance, compared with 4 per cent in 1970. Another factor in the greater importance of conventional mortgages is the growth in the volume of these mortgages purchased by Federal agencies. Agencies bought \$7.0 billion of conventional mortgages in 1976, compared with only \$0.1 billion in 1970.

### PARTICIPANTS IN THE SECONDARY MARKET

This section of the article examines in greater detail the activities of the three major groups of participants in the secondary home mortgage market—the Federal credit agencies, the federally sponsored pools, and the private sector.

#### Federal Credit Agencies

A number of Federal agencies have been established to strengthen and help stabilize various sectors of the housing and mortgage

markets. Agencies include the Federal National Mortgage Association (FNMA), Government National Mortgage Association (GNMA), the Federal Home Loan Mortgage Corporation (FHLMC), and various farm credit agencies. Federal agencies, as mentioned above, are more active as buyers than as sellers, and they have ongoing programs for buying mortgages in the secondary market. Agencies place varying restrictions on the types of mortgages they buy, requiring that loan to value ratios, size, term, and age of the mortgages be within certain limits. Agencies also require that uniform mortgage documents be used.

During the 1970-76 period, Federal agencies purchased a yearly average of \$7.2 billion of 1-4 family mortgages and sold \$4.5 billion. (See Table 3.) In 1976, for the only time in the 7-year period, Federal agencies were net sellers. This is in line with cyclical patterns in that net mortgage purchases by Federal agencies typically decrease in periods when credit becomes more available from private sources, such as 1976, and increase when credit availability tightens.

## The Secondary Market for

### **Federal National Mortgage Association.**

FNMA, or Fannie Mae, was chartered by the Federal Government in 1938. In 1968, the agency was reorganized and became a privately owned, federally sponsored institution with public responsibilities. At present, five of FNMA's 15 directors are appointed by the President of the United States, and the Secretary of Housing and Urban Development has certain regulatory powers over the agency.

In the 1970-76 period, FNMA's purchases of home mortgages averaged \$3.7 billion per year, considerably more than any other agency and **15 per** cent of total purchases in the secondary home mortgage market. (See Table 3.) Although FNMA has authority to sell mortgages, it has done so infrequently, as sales were negligible in the 1970-76 period.

FNMA may become more active on the selling side of the market in the future. The agency plans new programs that will call for buying and then selling participations in packages of mortgages. The programs will involve conventional mortgages and will further increase FNMA's participation in the conventional sector. The agency's purchases of conventional mortgages have been growing in recent years and exceeded FHA and VA mortgage purchases in 1976. Even so, at the end of 1976, 85 per cent of the agency's holdings were federally insured mortgages.

### **Government National Mortgage Association.**

GNMA, or Ginnie Mae, a part of the Department of Housing and Urban Development, was established in 1968 to take over certain functions formerly performed by FNMA, particularly the Special Assistance **Function.**<sup>2</sup> Under this function, GNMA buys

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<sup>2</sup> Under another function—Management and Liquidation Function—GNMA manages and liquidates a portfolio composed of mortgages formerly held by FNMA, and of new mortgages acquired in connection with special FHA programs. GNMA also has fiduciary responsibility for administration of participations of its own mortgages and mortgages of other Federal agencies.

home mortgages, partly to support the housing market during periods of credit stringency, but mainly to help finance housing for low-income families. GNMA may buy mortgages from originators at above-market prices and then sell the mortgages to FNMA or other investors at market prices, absorbing the difference as a housing subsidy. Alternatively, GNMA may transfer the mortgages back to the originator, who then issues securities backed by these mortgages with the proceeds of the securities going to GNMA. Thus, GNMA sells most of the mortgages it buys. In the 1970-76 period, the agency purchased a yearly average of \$1.9 billion of mortgages, or 8 per cent of total market purchases, and sold essentially the same amount.

In addition to buying and selling mortgages, GNMA has been authorized since 1970 to guarantee the payment of principal and interest on mortgage-backed bonds issued by FNMA and FHLMC. Besides being guaranteed by GNMA, these bonds are collateralized by FNMA- and FHLMC-held FHA and VA mortgages equal to the face amount of the bond issue. Also, the bonds bear the full faith and credit of the U.S. Government. These bonds, while not a part of the secondary home mortgage market, can provide FNMA and FHLMC with funds to acquire mortgages in the secondary market, although they are not an important source of funds.

GNMA also guarantees the payment of principal and interest on securities representing shares in mortgage pools. This aspect of **GNMA's** operations, i.e., the GNMA pass-through program, is discussed later in more detail.

### **Federal Home Loan Mortgage Corporation.**

FHLMC, or Freddie Mac, was established in 1970 as an agency of the Federal Government to provide support for the conventional portion of the secondary mortgage market. FHLMC buys conventional mortgages, mainly from savings and loan associations; the agency then

sells some of the mortgages by creating pools and selling shares or participations in the pools. During the 1970-76 period, FHLMC secondary market purchases averaged \$1.1 billion per year, while sales averaged \$0.4 billion. Sales exceeded purchases for the first time in 1976. Most of these transactions were in conventional mortgages, although FHLMC has bought small amounts of FHA and VA loans. For example, the FHA and VA mortgages that FHLMC uses as collateral for its **mortgage-backed bonds**, discussed earlier, were bought in the secondary market.

**Farm Credit Agencies.** Two Federal farm credit agencies—the Farmers Home Administration (**FmHA**) and the Federal Land Bank System—are involved in 1-4 family housing and mortgage markets in rural areas. At one time, FmHA insured and sold packages of mortgages that it had originated. Now, however, the agency uses the pool method to sell mortgages, that is, it issues shares—called certificates of beneficial ownership—in pools of mortgages it originates. Since 1975, these certificates have been sold exclusively to the Federal Financing Bank.

### Federally Sponsored Pools

Mortgage pools are created by setting aside a package of mortgages and issuing securities that represent shares in the pooled mortgages. Federally sponsored pools are pools for which a Government agency guarantees payment of the principal and interest on the securities of the pool.

There are a number of Federal programs to sponsor pools. The most important one is the GNMA pass-through program, which began in 1970. Under this program, pools are formed and securities issued by GNMA-approved private originators. GNMA requires that the pools contain a minimum of \$1 million of FHA and/or VA mortgages with an age of less than 1 year. Upon formation of the pools, GNMA guarantees the payment of interest and

principal on the securities of the pool. The private creators assume responsibility for servicing the mortgages, but the holders of the securities are the owners of the mortgages. All payments on the mortgages, including prepayments, are passed through monthly (less servicing and guarantee fees) from the mortgages to the holders of the **securities**—hence, the term "pass-through securities."

GNMA pass-throughs are typically marketed through a securities dealer, although sometimes the originator of the mortgages in the pool—a mortgage bank, savings and loan, commercial bank, or mutual savings bank—will sell the securities directly. The minimum denomination available is \$25,000, but the normal denomination is much larger. While GNMA pass-throughs have a stated maturity equal to the life of the underlying mortgages (generally 30 years), actual maturities are shorter because of prepayments. For this reason, yields are usually quoted on the basis of an estimated life of 12 years. **GNMA's** are considered a qualifying asset for tax and regulatory requirements for savings and loan associations—that is, they are considered a mortgage investment rather than a debt security. Security dealers maintain a secondary market for GNMA pass-throughs. Thus far, margin requirements have not been applied to pass-through purchases in this secondary market. Trading in GNMA pass-through securities futures contracts began in October 1975. Savings and loan associations, mortgage companies, and other mortgage originators can use the futures market to hedge future mortgage loan transactions.

On December 31, 1976, there was \$29.6 billion of outstanding GNMA pass-throughs backed by 1-4 family federally insured mortgages. Pension funds held at least 10 per cent of all pass-throughs at yearend 1976 (an additional, unknown proportion was held through nominees). Savings and loans held 20 per cent, commercial banks 5 per cent, mutual

## The Secondary Market for

savings banks 13 per cent, and mortgage and investment banks held an additional 20 per cent. The remaining 32 per cent was held by individuals, credit unions, and all other groups including nominees.

The FHLMC also sponsors mortgage pools through two programs. One program, introduced in 1971, involves Mortgage Participation Certificates (PC's). PC's represent shares in pools formed by FHLMC with conventional mortgages originally purchased by the agency in the secondary market. When initially formed, the pools have a principal value of at least \$100 million. FHLMC issues PC's and guarantees payment of principal and interest on them. As in the case of GNMA pass-throughs, PC holders receive all payments on mortgages in the pools. The mortgages are serviced by the private institution that sold them to FHLMC, with the servicer remitting payments to FHLMC, and the agency distributing the payments to holders of PC's.

The FHLMC has recently made arrangements with a group of security dealers to market PC's; previously, the agency had dealt directly with PC buyers. The dealers maintain a secondary market in the PC's, which have a minimum denomination of \$100,000. Most PC's are held by savings and loan associations, although amounts held by other groups have been rising. They are qualifying assets for tax and regulatory purposes for savings and loan associations.

The other FHLMC program for sponsoring pools involves Guaranteed Mortgage Certificates (GMC's). These certificates, issued by FHLMC since 1975, are similar to PC's in that they represent shares in pools of mortgages, and interest and mortgage prepayments are distributed to GMC holders. However, GMC's are similar to bonds in some ways. Holders of GMC's receive their interest payments semiannually rather than monthly and FHLMC guarantees that a minimum amount of principal will be repaid each year. Also,

FHLMC agrees to redeem GMC's at par on specific dates, 15 to 20 years after issue. As a result, they do not qualify as a mortgage investment for tax and regulatory purposes. Savings and loan associations hold over half the GMC's that have been issued, although they were originally designed to appeal to investors not traditionally attracted to mortgages. At yearend 1976, a total of \$2.3 billion in FHLMC-sponsored mortgage-backed securities were outstanding through both programs.

As indicated earlier, federally sponsored mortgage pools are commonly treated as a participant group in the secondary mortgage market. Thus, while the mortgages in pools are actually owned by a wide variety of participants, the pools are viewed as buying, selling, and owning mortgages.

In the 1970-76 period, federally sponsored pools bought an annual average of \$6.9 billion of mortgages in the secondary market, which amounts to 27 per cent of total market purchases. (See Table 4.) GNMA-sponsored pools purchased an average of \$4.7 billion during the period, while FHLMC pools purchased \$0.4 billion. The remaining \$1.8 billion was purchased by FmHA pools. Nearly all the \$10 billion outstanding in securities backed by FmHA mortgage pools is held by the Federal Financing Bank.

### **Private Sector**

Most of the nation's major private financial institutions participate to some extent in the secondary mortgage market. Savings and loan associations and mutual savings banks are especially important on the buying side, while mortgage companies dominate the selling side (Table 5). Mortgage company activity in the market is highly structured. Established relationships exist between these companies and their customers, and transactions between them are regular and standardized.

Activity outside the channels established by mortgage companies is less structured. Some

**Table 4**  
**FEDERALLY SPONSORED POOL PARTICIPATION**  
**1-4 FAMILY SECONDARY MORTGAGE MARKET**  
**Yearly Average: 1970-76**

POOL	Purchases		Sales		Net Purchases (Sales)
	Billions of Dollars	Per Cent of Market	Billions of Dollars	Per Cent of Market	Billions of Dollars
GNMA	4.7	18.6	0.0	0.0	4.7
FHLMC	0.4	1.6	0.0	0.0	0.4
FmHA	<u>1.8</u>	<u>7.2</u>	<u>0.4</u>	<u>1.5</u>	<u>1.5</u>
Total	6.9	27.5	0.4	1.5	6.6

SOURCE: Department of Housing and Urban Development.

**Table 5**  
**PRIVATE PARTICIPATION**  
**1-4 FAMILY SECONDARY MORTGAGE MARKET**  
**Yearly Average: 1970-76**

LENDER GROUP	Purchases		Sales		Net Purchases (Sales)
	Billions of Dollars	Per Cent of Market	Billions of Dollars	Per Cent of Market	Billions of Dollars
Commercial Banks	0.7	2.8	2.3	9.3	(1.6)
Mutual Savings Banks	1.7	6.9	0.2	1.0	1.5
Savings and Loans	6.9	27.4	3.4	13.6	3.6
Life Insurance Companies	0.2	0.7	0.0	0.0	0.2
Mortgage Companies	1.0	4.0	13.7	55.5	(12.7)
Others*	<u>0.5</u>	<u>2.1</u>	<u>0.2</u>	<u>0.7</u>	<u>0.4</u>
Total	11.1	44.0	19.8	80.2	(8.7)

SOURCE: Department of Housing and Urban Development.

\*Private Pension Funds, Mortgage Investment Trusts, State and Local Retirement Funds, State and Local Credit Agencies. Other groups not included here due to lack of data also buy or sell small amounts of mortgage loans.

generalizations, however, may be made about this activity. The minimum size of transactions is around \$500,000 but may be much larger. Generally, new loans will be sold, because marketability declines with age. Trades take

one of two forms: the sale of individual mortgages or the sale of a participation in a single mortgage or a group of mortgages. In the first case, the mortgage actually changes hands, although servicing may be retained by

## The Secondary Market for Home Mortgages

the loan seller. In the second case, the seller usually retains a portion of the participation and passes on to the other participants in the group their share of interest and principal payments.

To assist these transactions, private mortgage insurance companies' secondary market departments, mortgage brokers, or other agencies are used to match buyers and sellers. The Automated Mortgage Market Information Network (AMMINET)—a non-profit organization established in 1973 by FHLMC and several trade associations—offers a computerized information system to facilitate trades by listing offers to buy and sell loans.

The first public offering of private pass-through certificates was recently announced by Bank of America. The certificates are not obligations of the bank, but represent partial ownership of mortgages in a pool. The pool backing the \$150 million of certificates will be composed of conventional mortgages. Five per cent of the principal amount of the mortgages is to be privately insured, with losses above that amount to be absorbed by the security holders. All payments to holders of the securities are made out of mortgage payments from the underlying pool, just as are GNMA-guaranteed pass-throughs.

A related development is the nonfederally guaranteed mortgage-backed bond issued by a private lender. From May 1975, when it was first permitted by FHLBB, to June 1977, four California savings and loan associations have publicly offered mortgage-backed bonds with a total face value of \$650 million. The first bonds offered were collateralized by a pool of FHA and VA mortgages to ensure marketability of the bonds, but the later issues were able to be marketed when collateralized by conventional mortgages.

The bonds are a debt obligation of the savings and loan associations, but their marketability is greater than that of other thrift

institution debt. That is because the bonds are overcollateralized, *i.e.*, the market value of the mortgages in the pool is over 100 per cent of the face value of the outstanding securities. Thus, if interest rates rise and market values decline, the market value of the pool may still exceed the value of the outstanding bonds. Payments on the bonds are fixed and do not depend on mortgage payments made from the underlying pool. While these mortgage-backed bonds are not strictly a part of the secondary market, since ownership of the underlying mortgages does not change hands, they use existing mortgages as a means of raising funds in order to make available funds for new mortgages.

## SUMMARY

From 1970 through 1976, activity in the secondary market for home mortgages nearly tripled. Moreover, the growth of the secondary market since 1973 has been double that of the primary market. One reason for the growth in the secondary mortgage market in the 1970's has been the introduction of the GNMA pass-through security. By enabling mortgage investors to purchase shares in a pool of mortgages, and thereby to circumvent many of the administrative difficulties associated with mortgage transactions, these securities have opened up a new source of funds for FHA and VA mortgages. The FHLMC mortgage participation programs have done the same thing to a lesser extent for conventional mortgages. In addition, the success of these Government-sponsored programs has encouraged the development of private mortgage-backed securities programs. The purchase of conventional mortgages outside the pools has also increased, aided by a growing private mortgage insurance industry and new Federal programs. These innovative programs should further stimulate the secondary mortgage market in coming years.