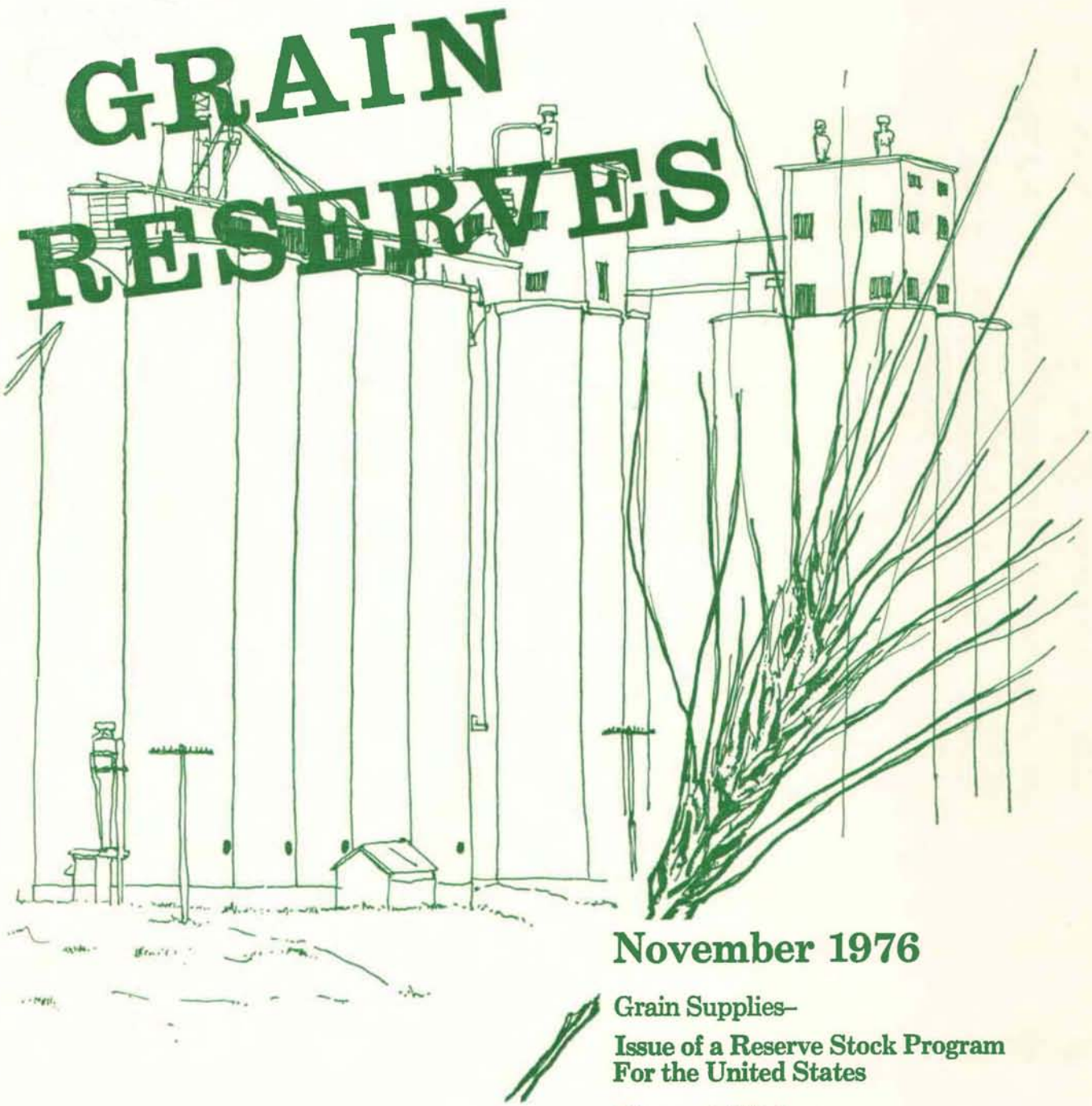
Federal Reserve Bank of Dallas

Business Review



November 1976

Grain Supplies–
Issue of a Reserve Stock Program For the United States

Discount Window–
Seasonal Borrowing Privilege Liberalized

Grain Supplies–

Issue of a Reserve Stock Program For the United States

In the short span between 1972 and 1974, the large surplus of grain in the United States vanished. The sudden disappearance of abundant grain stocks contributed to unprecedented increases in prices. As a result, this nation's people and their leaders sought ways to cope with unexpected shortfalls in grain production and associated declines in stocks.

With these shortages, attention shifted from farm problems and public programs relating to surplus commodities. For many years, taxpayers had voiced much dissatisfaction with subsidizing farmers for producing crops and paying the bills for storing surpluses. But as dwindling supplies drove grain prices higher, many people became anxious about the availability of grain and food supplies. The establishment of a national grain storage program to offset large fluctuations in production and help stabilize prices has become a major issue in the formulation of a new farm program next year.

However, proper evaluation of a public grain storage program must recognize that grain stocks held by producers and private traders are an important substitute for a public stock program. In fact, grain stocks held by the private sector are currently rebounding to levels that previous studies indicate are sufficient for stabilizing prices, to a moderate degree at least. Moreover, the upsurge in grain prices in 1973 and 1974 was caused by several unique worldwide events occurring within a short time. This experience is not likely to be repeated anytime soon. So, private stocks should be more adequate to the task in the foreseeable future.

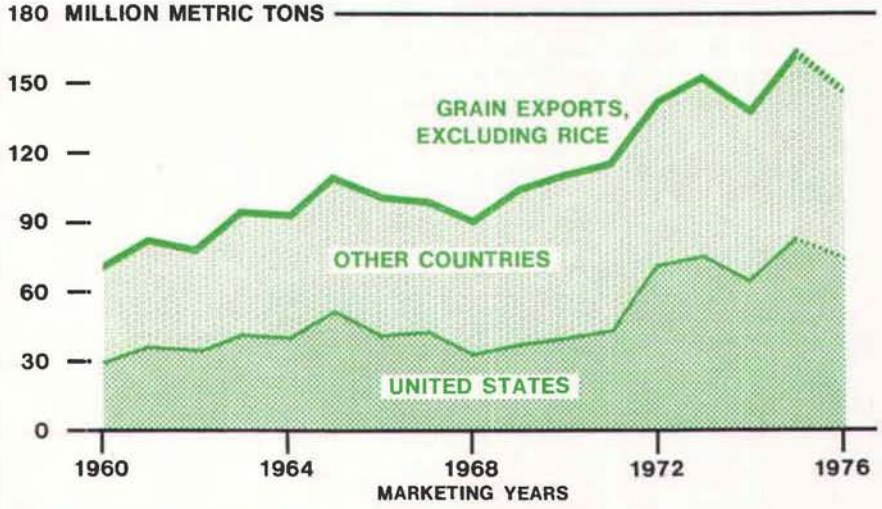
A major concern is whether a Government program that reduces wide fluctuations in prices will, at the same time, be operated flexibly enough to cause production to adjust to demand over the long run.

While a public storage program, if efficiently managed, could undoubtedly stabilize the grain market to a greater degree than would private traders acting by themselves, it is not at all clear that the benefits would be worth the costs. Furthermore, the history of Government involvement in agriculture does not encourage optimism about the chances for a grain storage program to be managed so that excessive surpluses could be avoided.

Widespread interest in issue

National leaders and grain producers and users are debating whether Government-held or controlled grain reserves would function better than stocks held by private trade in response to profit incentives. A major concern is whether a Government program that reduces wide fluctuations in prices will, at the same time, be operated flexibly enough to cause production to adjust to demand over the long run. Some analysts question whether the benefits of

World grain exports dominated by the United States



1975 preliminary; 1976 estimated
NOTE: World total also includes millet and mixed grains.
SOURCE: U.S. Department of Agriculture

a Government stock program will exceed the cost, and they also express fears that efficient management of a public storage program will fall victim to political pressures.

L. C. Carpenter, of the Midcontinent Farmers Association, has recently put forth the case for a national grain reserve program:

> With the expanding world demand for food and with the need to stabilize the dollar by offsetting nonfarm imports with farm exports, it is essential reserves be established to permit the United States to meet export demands on a consistent and continuing basis. . . .
>
> Secondly, it is essential to establish a national grain reserve in order to prevent wild fluctuating prices such as those experienced the past two years. . . .
>
> It is also essential to establish a national grain reserve in order to meet the emergency needs of this country such as drought, blizzards and flood.[1]

The Committee for Economic Development also favors a public storage program and has stated:

> A carefully conceived stocks policy is needed to enable the nation to cope more effectively with the short-term consequences of adverse harvests in the United States or elsewhere. . . .
>
> We recommend that the federal government assume the principal responsibility for establishing stockpiles of key foodstuffs in the United States large enough to ensure an appropriate degree of stability of food prices, to encourage and take advantage of commercial trade opportunities when they arise, and to assume a fair share of the responsibility for meeting the emergency food needs of poor nations. . . .
>
> Every reasonable incentive should be provided to encourage private stock building and to utilize the market system as an integral part of a stocks policy. The government should use incentives to encourage storage on farms, thereby keeping the national reserve in an optimum location for any eventual market.[2]

On the other hand, Earl Butz, former Secretary of Agriculture, opposes such a program and has stated:

> Government-managed food reserves are far from an unmixed blessing. First, they require public financing in a period of rapidly rising Government expenditures. They compete for tax funds with other Government services which cannot so adequately be met by private action as can the food reserve function.
>
> From the standpoint of the farmer, food reserves held by Government can never be perfectly insulated from the market.
>
> Buyers know they are there, and it is grossly unfair to expect farmers to produce in excess of projected annual requirements and then be penalized by the depressed prices which Government-held stocks produce.[3]

And William J. Kuhfuss, past president of the American Farm Bureau Federation, agrees, stating:

> The best food reserve for America and for the people of the world is the productive capacity of our land and the ability of the American farmer. We are safeguarding the interests of consumers through the tremendous productive capacity of American agriculture, the stocks carried by farmers and by the trade in the absence of a Government reserve program, the fact that major crops are produced over wide geographic areas, and the flexibility that goes with a livestock economy.
>
> We oppose Government-owned or controlled reserves of farm products. We vigorously oppose U.S. participation in any internationally controlled food reserves. Past experiences in international relations indicate that U.S. taxpayers would carry much of the financial burden of a system of Government controlled international reserves.[4]

The current farm program continues through the 1977 crop year. Congress will consider next year whether to extend the present policies beyond 1977 or to modify them. With views so diverse, there will inevitably be much further discussion as to whether a public grain reserve program should be established as part of a new national farm policy.

The case for grain reserves

The intent of a grain reserve program would be to offset, to some degree, the effects on prices that flow from big changes in production and demand and contribute to lesser swings in grain prices. Retail food prices, in turn, would be more stable. However, since processing and marketing costs make up 60 percent of total food costs, there would be less of a reduction in the variability of retail food prices.

Proponents argue that consumers would gain from transferring consumption of grain from periods of glut and low market prices to periods of scarcity when prices would otherwise be higher. The market price is a measure of the value consumers place on an extra unit of consumption at any point in time. Therefore, consumers would gain by an amount equal to the quantity stored times the difference in price over time.

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1. Statement of L. C. Carpenter, Vice President, Midcontinent Farmers Association, Columbia, Missouri, before the Subcommittee on Agricultural Production, Marketing, and Stabilization of Prices of the Committee on Agriculture and Forestry, U.S. Senate, March 21, 1974, p. 111
2. *A New U.S. Farm Policy for Changing World Food Needs* (New York, October 1974), pp. 50, 53, 54
3. Statement of Hon. Earl L. Butz, Secretary of Agriculture, U.S. Department of Agriculture, before the Subcommittee on Agricultural Production, Marketing, and Stabilization of Prices of the Committee on Agriculture and Forestry, U.S. Senate, March 21, 1974, pp. 54-55
4. Statement of William J. Kuhfuss, President, American Farm Bureau Federation, Park Ridge, Illinois, before the Subcommittee on Agricultural Production, Marketing, and Stabilization of Prices of the Committee on Agriculture and Forestry, U.S. Senate, March 22, 1974, p. 146

A greater degree of price stability would be in the interest of producers as well. Because production and marketing plans could be made with more certainty, producers would also gain from less variation in grain prices. And steadier income would provide a better basis for making long-run investment and operational management decisions as to expected returns on the land, labor, and capital resources devoted to various crop and livestock enterprises.

The more efficient utilization of resources could contribute to increased efficiency in food production and provide quality food at lower costs to the consumer. Long-run investments in food production directed toward the best economic uses of land, labor, and capital would help assure consumers stable food supplies and prices. And with less variation in food production, consumption of food products would also fluctuate less.

A reserve could encourage exports by providing more dependable supplies to foreign buyers. The United States currently exports about a third of its grain crop, which accounts for almost half the world's grain trade. And with a large amount of high-priced petroleum imports, the United States needs large farm exports to help offset nonagricultural imports and improve its trade balance.

Furthermore, a reserve could also help avert domestic pressure for export controls when U.S. supplies are tight. Export controls–used by most governments–often prevent potential purchasers from having ready access to grain supplies in another country. Thus, an important obstacle to further trade liberalization would be removed.

Management of a reserve program

Proponents of a reserve suggest that the present Government farm program could provide the basic mechanism for implementing a public grain reserve program. Target prices and loan support rates could be adjusted in an attempt to regulate production and stock levels.[5] Target prices could also be used to provide income protection to producers by covering operating costs of production.

Proponents of a reserve suggest that the present Government farm program could provide the basic mechanism for implementing a public grain reserve program. Target prices and loan support rates could be adjusted in an attempt to regulate production and stock levels.

The acquisition, maintenance, and release of reserve stocks might be regulated by the adjustment of Government loan support rates and of storage payments to producers for holding the grain. When reserve stocks are low, sufficiently high loan rates would encourage stock accumulation, and rates below market prices would discourage Government purchases.

Although the grain in the reserve program would be under Government control, stocks could be held by farmers at a lower cost. Economic incentives could be in the form of payments compensating grain producers, totally or partially, for costs of storing grain put under loan. For instance, the storage payment to farmers might be around 27 cents a bushel per year, or 2.25 cents a bushel per month–a common storage rate currently charged by commercial elevators in the Grain Belt.

To ensure the grain would be released so as to contribute to stabilizing prices, farmers would be required to follow stipulated release guidelines in order to receive full payment benefits for storing the grain. Researchers advocating a reserve program usually suggest that when market prices reach a range from 10 to 50 percent above target prices, stocks could be released from storage. The exact level would depend on the degree of price stabilization intended and the amount of grain in reserve stocks. Any action not conforming with the release schedule would result in a penalty requiring return of part or all of the storage payments.

A public grain reserve program would need to hold prices within a range so that producers would respond to supply and demand developments by increasing or decreasing output. Hence, an effective grain reserve program would not be a device to stabilize prices completely but to limit price extremes.

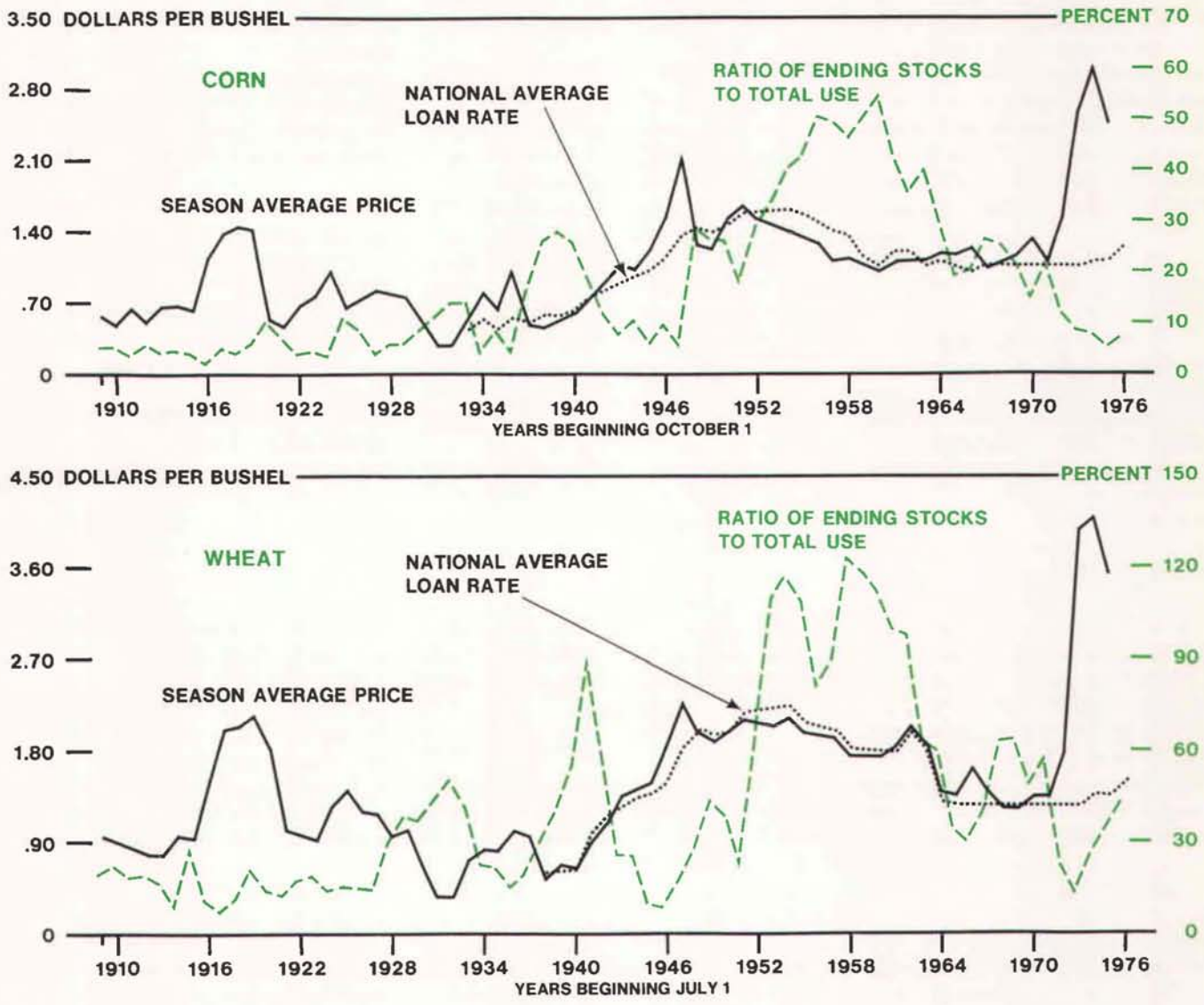
Lessons from history

Policymakers have been concerned with formulating Government programs oriented toward influencing

5. A target price is a minimum unit market value that is guaranteed to producers for their products. Deficiency payments–equal to estimated production times the difference between the target price and market price received by farmers in the first five months of the marketing year (calendar year for cotton)–are made to producers when average U.S. prices fall short of the target level. Production estimates are based on allotted acreage and projected normal yields.

The loan support rate is the unit value of a commodity for which farmers can acquire a nonrecourse farm loan through the Commodity Credit Corporation. While the crop is pledged as collateral, the amount loaned is the support rate times the quantity placed under loan. The loan allows the farmer to store his crop so that he continues to own it and can profit from any subsequent price advances. If the market price fails to rise, however, the farmer has the alternative of forfeiting the commodity collateral to the CCC.

Government programs initiated in 1930's built up large U.S. grain stocks



1975 preliminary; 1976 estimated
SOURCE: U.S. Department of Agriculture

agricultural production and farm prices and incomes since 1929. The Agricultural Marketing Act that year established the Federal Farm Board in the belief that, aided by the Government, cooperative marketing organizations could solve the problem of low farm prices. The idea behind the act was to make loans so that surplus farm commodities could be held off the market.

However, by mid-1932, it was recognized the effort had failed to prevent a disastrous decline in farm prices. With net farm income in 1932 less than a third the level in 1929, farm foreclosures were common. The board, in a special report to Congress in late 1932, recommended legislation that would provide a system of controlling agricultural production.

The result was passage of the Agricultural Adjustment Act of 1933, which was to support farm income and encourage farmers to adjust production to demand. But production controls generally did not strike a supply-demand bal-

ance that held market prices above support levels set by the Government. Yield-increasing technology was encouraged by price-support incentives and exacerbated the problem of surpluses–namely, production that could not be sold at the established prices.

Beginning in the midfifties, farm policies were aimed primarily at alleviating surpluses. The Public Law 480 program was set up in 1954 to dispose of farm products abroad through disaster relief and concessional sales. Then, the soil bank program was established in 1956 to retire land from crop production in an effort to help balance supply and demand. But increasing yields–spurred mainly by increased application of fertilizers, herbicides, and insecticides, more intensive irrigation, and use of improved seed varieties–more than compensated for the decrease in production due to cropland retirement.

In general, Government price supports still failed to allow market prices to fluctuate in line with supply and demand forces. Therefore, during the 1960's and early 1970's, commodity-support policies were changed to include direct income payments. Support levels were held at lower levels relative to production costs, and direct payments were used to help reinforce farm incomes. Farmers were also compensated for diverting land from production. But Government-held stocks continued large and burdensome. Taxpayers vigorously opposed the cost of storage and the payment of Government moneys to farmers to induce them to reduce production.

The broad objective of the Government programs from 1933 to 1973 was to support farm prices and incomes and, at the same time, control production. However, political pressures to support farm incomes caused Government loan rates to be manipulated to levels above market prices. The result was surplus stocks that were not the deliberate purpose of the program.

By 1973, however, the market situation had changed. Export demand for U.S. agricultural products jumped sharply, leading to a depletion of grain stocks. In response, the Agriculture and Consumer Protection Act of 1973 focused on maintaining or increasing crop production so as to meet the growing demand for U.S. farm products. Also, a new concept–target prices–was introduced to support farm income, replacing the previous policy of direct payments.

The current policy is basically a market-oriented approach, with less Government influence on market prices. Target prices have been generally set at a level below market prices and have provided little impetus to production. Loan support rates have been set even lower to minimize the accumulation of stocks by the Government. The cost to taxpayers of Government payments to farmers has been drastically reduced. Mandatory retirement of land has been eliminated, and producers are allowed to make their own decisions–based on market information and prices–as to which crops and how much acreage to plant.

With a return to abundance and low farm prices, the cost of this program could rise, especially if political pressures cause target prices and loan support rates to be raised to or above market prices. The present program would not necessarily lead to surplus Government stocks, provided loan support rates were not set too high. However, a new policy specifically designed to establish reserves through manipulation of loan rates would more likely lead to excess accumulation of Government stocks. Mounting political pressures can cause additional stocks to be accumulated, particularly if supporting farm incomes and prices is included as an objective of a stock program.

The size of reserves

Even if a reserve program were efficiently managed, the size of the Government-held grain reserve needed to offset variations in prices would depend on the degree of stabilization desired. Suggested levels of grain reserves in excess of working stocks range from about 10 million to over 60 million metric tons.

Researchers at the Economic Research Service of the U.S. Department of Agriculture have analyzed past ratios of wheat and corn stocks to total use to determine the linkage between stock levels and price variations.[6] In the periods they analyzed, market prices were generally above loan support rates, allowing prices to respond to market developments. And stocks were released according to guidelines based on the difference between market prices and the loan rate.

Price fluctuations vary inversely with the ratio of stocks to total domestic and export use. If the ratio is high, plentiful supplies are available to compensate for differences between current production and demand. When the ratio is small, supplies are not as plentiful and such differences must be reconciled more by changes in price.

The analysts concluded that the market prices of both wheat and corn are relatively stable when

6. U.S. Department of Agriculture, *Grain Stocks Issues and Alternatives–A Progress Report,* Agricultural Economic Research Report prepared for the Economic Research Service by W. R. Bailey, F. A. Kutish, and A. S. Rojko (Washington, D.C., February 1974). The precise periods analyzed were 1964-72 for wheat and 1959-72 for corn.

ratios of stocks to total use are above 40 percent but ratios below 20 percent lead to marked price variations. Ratios between 25 and 35 percent for wheat and 20 to 40 percent for corn are associated with moderate fluctuations in market prices. However, this study did not attempt to compare the benefits from stabilization to the costs of storing required levels of stocks.

Price fluctuations vary inversely with the ratio of stocks to total domestic and export use. If the ratio is high, plentiful supplies are available to compensate for differences between current production and demand.

Luther Tweeten, of Oklahoma State University, has suggested that 600 million bushels of wheat and 45 million metric tons of feed grains–equivalent to nearly 1.8 billion bushels of corn–are reasonable targets for reserve stocks.[7] Currently, 600 million bushels of wheat equal about 30 percent of usage, and 45 million tons of feed grains approximately 25 percent.

Tweeten based his recommendation on an analysis that indicated fluctuations in grain prices increase when wheat stocks fall below approximately 600 million bushels and feed grain stocks decline below about 45 million metric tons. These levels are similar to those given in the study by the USDA economists. Only about 400 million bushels of wheat and 35 million tons of feed grains would have to be stored in the emergency reserve stockpile, however, because the rest would be needed for working stocks.

Benefits versus costs

An emergency reserve of this recommended magnitude would be very costly to store. Annual carrying charges are estimated at $850 million. And initial investment in the grain purchased could approach $4.9 billion, assuming season average 1975-76 U.S. prices for wheat and corn. Estimated costs of facilities–excluding machinery–to store the nonpipeline grain would be about $1.25 billion.

D. Gale Johnson and associates at the University of Chicago have attempted to compare the costs of a world grain reserve to the benefits.[8] The criterion used to determine the optimal grain reserve was that the expected increase in market price per unit would equal the marginal cost of storage. Thus, the benefit to consumers as measured by the difference in the price would cover the cost, and a reasonable return could be realized on the storage facilities.

Their analysis was based on variations in world production from 1948 to 1973. They assumed free trade in grains and a constant demand adjusted by a trend coefficient. Given the probability distribution of world grain production, the results indicated that in only one year out of five would it pay to store nonpipeline stocks. And in only one year out of 20 would these stocks be more than 10 million metric tons–considering a level of world grain production of approximately 1.2 billion tons.

Johnson points out that since the analysis did not allow for demand variability, it may be profitable to hold larger reserves because of governmental policies that prevent ready access to available world supplies of grain. Governmental policies that strive for a high degree of price stability within individual countries or groups of countries cause considerable year-to-year variability in demand. These policies could make it economical to store more substantial reserves.

A stockpile of 10 million metric tons would be much less costly to maintain than the larger quantity that would stabilize prices more completely. Annual carrying charges would be about $186 million. The value of the grain, using season average 1975-76 prices, would be slightly over $1 billion, and facilities to store the 10 million tons would cost about $275 million to build.

Adaptability of private trade

Grain stocks held by the private sector–grain producers, traders, processors, and exporters and livestock and poultry producers–are an important substitute for a public stock program. The private sector tends to withhold grain from the market at times of low prices and relatively less need and make it available when prices are higher and the need greater.

In this regard, a feature unique to the grain market is the cushioning effect of adjustments in livestock production on the amount of grain available for consumption. High prices discourage indirect and future consumption of grain in livestock and poultry products, while low prices have the opposite effect.

With a season average price of $1.57 per bushel, corn use for feed totaled 4.3 billion bushels in

7. "Formulating a National Food Policy for the Next Decade," Oklahoma State University, Department of Agricultural Economics, Oklahoma Agricultural Experiment Station Professional Paper no. P-248 (Paper presented to the Technology Assessment Board of the U.S. Congress, December 10, 1975)
8. "World Agriculture, Commodity Policy, and Price Variability," *American Journal of Agricultural Economics* 57, no. 5 (December 1975): 823-28

the 1972 season. But in 1974, with prices averaging $3.03 per bushel, use dropped to 3.2 billion bushels. A near doubling of price caused a 26-percent decrease in feed use, which allowed over a billion bushels of corn to be used for export and other purposes.

Therefore, through the process of expansion and contraction in the number of livestock, the livestock industry acts as a grain reserve. When prices and consumption are smoothed out in this fashion, the improvement in the allocation of resources over time is similar to that of a public grain reserve program.

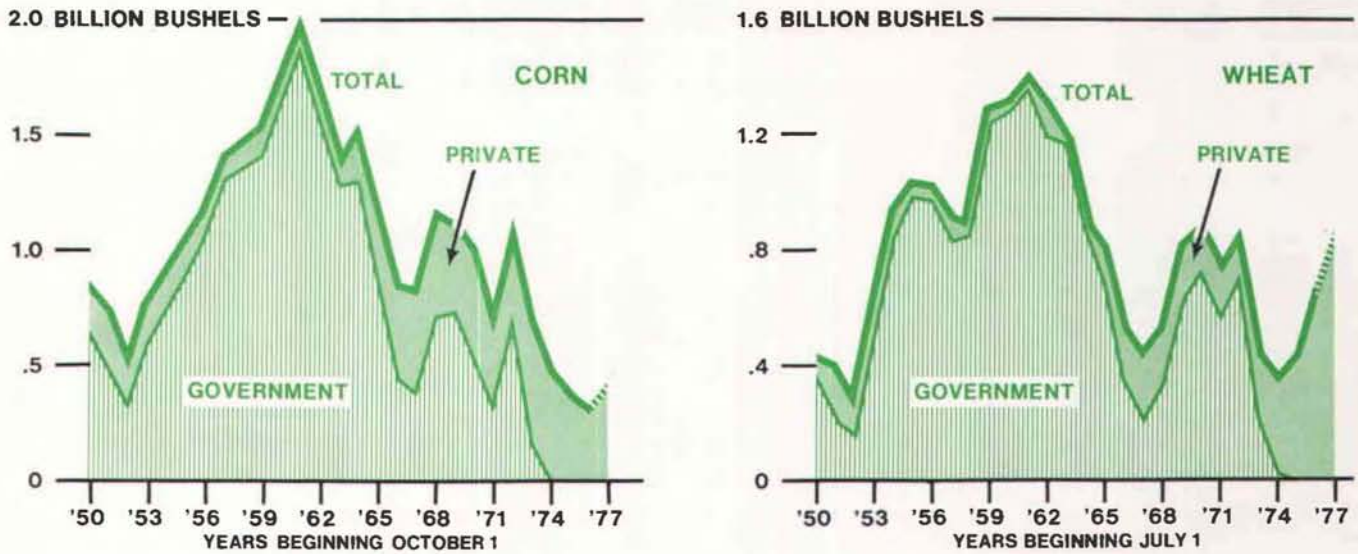
Grain stocks held by the private sector are currently rising markedly. By the end of the 1976 marketing year, wheat and feed grain stocks in the United States are expected to total around 40 million metric tons. That would be almost a fifth more than a year before and nearly a half larger than the low level two years earlier. Total stocks of wheat and feed grains have ranged from a high of more than 100 million metric tons in 1960, with more than 90 percent in Government storage, to a low of about 25 million in 1974–essentially all in private hands.

The private sector tends to withhold grain from the market at times of low prices and relatively less need and make it available when prices are higher and the need greater. It is now holding a relatively large inventory of grain, certainly more than it would hold if a Government storage program were in place.

Higher prices and profits and the withdrawal of Government restrictions have provided producers an incentive to increase output. And the private sector is now holding a relatively large inventory of grain, certainly more than it would hold if a Government storage program were in place. Wheat stocks, for example, totaled 665 million bushels at the beginning of the 1976 marketing year–a level that exceeds Tweeten's suggested reserve level of 600 million bushels. And there is a very real possibility that stocks at the start of the 1977 marketing year could be around 900 million bushels.

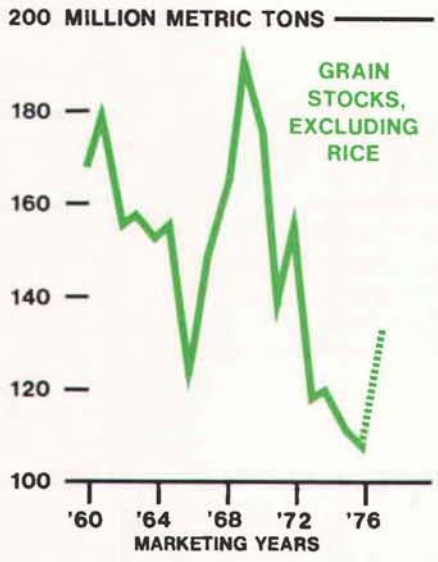
Moreover, a combination of events similar to those that led to the recent unprecedented surge in grain prices is not likely to be repeated anytime soon. Adverse weather decreased grain production over large areas of the world, but other developments also contributed to the drawdown in U.S. grain stocks. A sharp drop in production of fish meal for livestock feed and large purchases of grain by the Soviet Union helped deplete grain stocks. And grain

U.S. Government grain stocks replaced by private stocks



1976 preliminary; 1977 estimated
SOURCE: U.S. Department of Agriculture

World grain stocks rebound from recent lows



1976 preliminary; 1977 estimated
SOURCE: U.S. Department of Agriculture

stocks also disappeared quickly because nearly all foreign countries were relying on abundant grain supplies in the United States and Canada for emergency needs. Furthermore, two devaluations of the U.S. dollar had stimulated commercial export demand.

Conclusion

Grain production is subject to uncontrollable factors that include weather conditions, disease, and the biological nature of growing crops. Therefore, it has been proposed that publicly held grain stocks be maintained in the United States to offset variations in grain production and, thus, reduce price variations.

But mounting wheat supplies indicate private trade has the capability of providing needed grain without a formal reserve policy. Most stocks are in the hands of private trade now–especially wheat and feed grains. And with privately owned stocks, there are no public costs for administering, storing, and maintaining grain reserves. Furthermore, storage costs are shared by producers and users of grain according to anticipated changes in market prices.

But with Government interference in grain markets, such as price supports and trade restrictions, the incentive for private trade to hold stocks from one year to the next is generally curtailed. And in the past, Government support levels were, on average, set above the market-equilibrium price, causing production to continue high and large carryover stocks to accumulate. With little variation in market prices, supply and demand changed little from year to year. The result was a surplus of stocks that was a burden instead of a boon.

With the large supply of privately owned wheat that is on hand, evidence suggests that the price system can direct increases and decreases in grain stocks reasonably well to meet changes in world production and demand. Guided by market forces, private trade is an effective mechanism for achieving ample grain supplies, providing the opportunity for adequate farm earnings, and contributing to a higher balance of foreign trade.

–Carl G. Anderson, Jr.
Alan M. Young

Discount Window–

Seasonal Borrowing Privilege Liberalized

New and more liberal rules were recently established under which certain member banks may obtain seasonal credit from their Federal Reserve banks. In the Eleventh Federal Reserve District, nearly two-thirds of the 673 member banks qualify for seasonal credit under the new rules, compared with about half under the old guidelines.

The Federal Reserve's seasonal loan program has been developed primarily to support small banks serving credit needs in specialized areas. In the Eleventh District, most of the banks that qualify are heavily involved in financing farming, ranching, and related businesses. However, some banks located in small college towns or resort areas also qualify, as do some that experience significant seasonal flows of public moneys.

The benefits of the seasonal loan program accrue ultimately, of course, to the communities served by the member banks that have strong seasonal flows of deposits, loans, or both. Bankers having available a dependable source of seasonal funds can plan with confidence to serve the seasonal credit needs of their customers.

The new program

The seasonal loan program is now significantly expanded over the earlier one adopted in 1973. For a member bank to qualify for seasonal borrowing, there must be recurring fluctuations in loans, deposits, or both. These seasonal patterns are determined by analyzing the experience in the previous four to seven years. The data must show a significant seasonal need for four consecutive weeks or longer. Further, the member bank is expected to provide for some of the seasonal fluctuations from its own resources–specifically, that part of its seasonal need that equals 4 percent of the first $100 million of deposits, 7 percent of the second $100 million of deposits, and 10 percent of any deposits over $200 million.

Under the old program, the seasonal need had to extend eight weeks or more, and banks had to provide from their own resources an amount equal to 5 percent of the previous year's average deposits. The seasonal credit program is now available to banks with deposits up to $500 million; this upper limit previously was $250 million. Larger banks are assumed to have ready access, on favorable terms, to national money markets to serve their seasonal needs.

In the Eleventh Federal Reserve District, nearly two-thirds of the 673 member banks qualify for seasonal credit under the new rules, compared with about half under the old guidelines.

Another important change in the program concerns sales of Federal funds. Formerly, it was deemed inappropriate for a member bank to have net sales of Federal funds while borrowing from its Reserve bank under the seasonal loan program. But now, a member bank can have net sales of Federal funds while using seasonal credit as long as the transactions represent normal operating patterns of the bank. A member bank is precluded from borrowing under the seasonal privilege for the purpose of *increasing* sales of Federal funds, however.

This change recognizes that more and more small banks are providing a portion of their liquidity in the form of Federal funds sold rather than in the more traditional form of holdings of short-term U.S. Government securities or purchased loans.

Using the seasonal loan program

For member banks in the Eleventh District, the Federal Reserve Bank of Dallas analyzes movements in monthly deposits and loans (net of Federal funds purchased) for several prior years. Using a standard statistical procedure, if there is significant seasonality in the difference between a bank's deposits and loans, a projection of this difference is made for the forthcoming year. Banks that appear to qualify for seasonal credit are then notified early in each calendar year.

The accompanying chart shows movements in loans and deposits of a typical bank qualifying for seasonal credit. The initial computations at this Reserve bank represent no more than a preliminary screening, however. Additional factors, such as loans purchased and sold, are taken into consideration also. Any member bank that believes it qualifies for the seasonal loan program should review its situation with this Reserve bank.

Further, it is desirable, although not required, that this review take place before the seasonal borrowings are actually needed. This is a matter of convenience for both the member bank and the Federal Reserve bank and assures the availability of funds under the seasonal loan program.

An important advantage of borrowing under the seasonal loan program, in fact, is the ability to make arrangements in advance and to draw the funds as needed without detailed review by the

Reserve bank officials at the time of each drawing, as is customary with the conventional adjustment credit. The seasonal borrowing program provides qualified banks an assured source of funds for longer periods and for larger amounts than would be considered appropriate under adjustment credit guidelines.

Collateral requirements and interest rates are the same on seasonal loan borrowing as on the more traditional adjustment credit borrowing from the Reserve bank. Also, borrowing under the seasonal loan program does not preclude concurrent conventional borrowing from the Reserve bank for appropriate purposes.

Role of the discount window

The seasonal borrowing privilege is a relatively new concept, but the discount window has always been an important feature of the Federal Reserve System. In fact, the preamble of the Federal Reserve Act states that the act was, among other things, intended "to afford means of rediscounting commercial paper." The Federal Reserve banks rarely rediscount commercial paper now but make loans to member banks, collateralized by "acceptable assets" and with interest collected at maturity.

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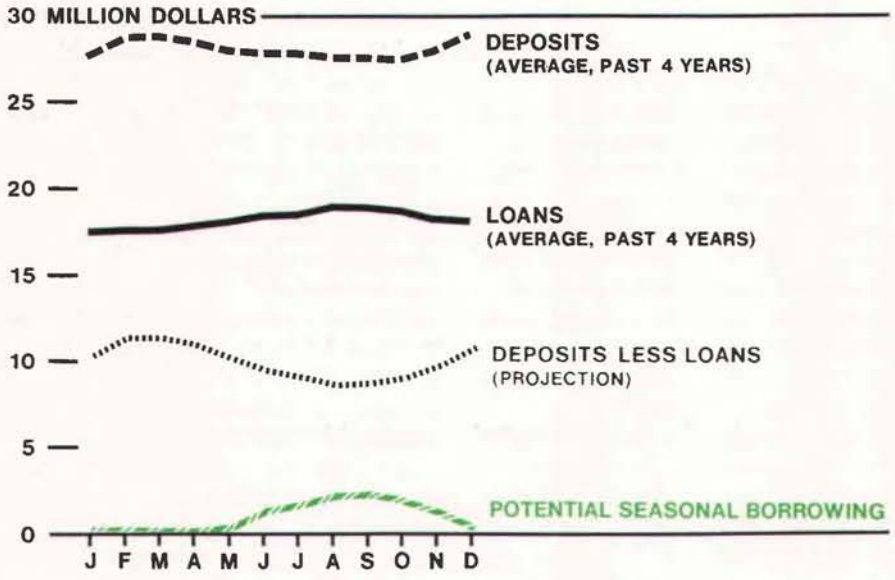
The Federal Reserve Act, as originally drafted, contemplated use of the discount window as the principal tool of central bank policy. During the 1920's, reserves supplied through discounting never fell below 37 percent of total reserves of all member banks, and a peak use of more than 80 percent was reached in 1921. But from 1934 until the end of World War II, banks were extremely liquid and made little use of the discount window. Moreover, in the postwar period, open market operations have become the primary means of providing whatever reserves are needed.

When Regulation A, which covers extensions of credit by Federal Reserve banks, was extensively revised in 1955, emphasis was placed on making only short-term credit available to member banks. Subsequent revisions of the regulation have tended to be more liberal, but neither adjustment credit nor seasonal credit is intended to be a substitute for needed realignment of a bank's asset-liability mix or the injection of new capital funds. Thus, the current version of Regulation A states that short-term adjustment credit is available to assist a member bank "in meeting temporary requirements for funds or to cushion more persistent outflows of funds pending an orderly adjustment of the bank's assets and liabilities."

Generally, when a member bank borrows under adjustment credit guidelines, the bank is not expected to be indebted for more than six to eight continuous reserve periods or eight to ten of the previous 13 reserve periods, except under unusual circumstances. Additionally, banks with deposits of $400 million or less are scrutinized more carefully than usual if their borrowing needs are in excess of 100 percent of their required reserves. Larger banks are usually expected to meet short-term adjustment problems with borrowings of two-thirds or less of reserve requirements for the entire reserve period. It should

Deposits, Loans, and Potential Seasonal Borrowing
Of Typical Bank Qualifying for Seasonal Credit
In Eleventh Federal Reserve District



be emphasized, however, that these are merely guidelines of this Reserve bank, and considerable flexibility is permitted.

Experience under the program

While there are exceptions, member banks in this District that have used the seasonal borrowing privilege have many common characteristics. Typically, the seasonal borrowers are located in cities with 6,000 to 15,000 in population, have deposits ranging from $10 million to $30 million, and have borrowed for durations of four to six months. Borrowings mostly range from 80 to 150 percent of required reserves but frequently reach 2½ to 3 times required reserves on a daily average basis. Most of the banks borrowing seasonally have 30 to 60 percent of their loan portfolios committed to agricultural activities of various types.

Especially for banks with these characteristics, the seasonal privilege offers much greater latitude as to the duration and amount of credit available than do the short-term adjustment credit guidelines.

While there are exceptions, member banks in this District that have used the seasonal borrowing privilege have many common characteristics.

Some banks may qualify for only moderate amounts of credit and for the minimum time span under the seasonal program. But for most banks, the recent changes in the seasonal borrowing privilege represent a substantial liberalization and will provide greater flexibility for senior management of member banks in planning the best way to take care of community credit needs.

Additional information on the policies and practices in administering the discount window is available from the Loan Department at the Federal Reserve Bank of Dallas and at each of its branches at El Paso, Houston, and San Antonio.

–Leon W. Cowan*

*Vice President, Loan Department

New member bank

First Bank of Snook, Snook, Texas, located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, became a member of the Federal Reserve System on October 13, 1976. The new member bank has a capital structure of $500,000, consisting of capital stock of $200,000, surplus of $200,000, and undivided profits and reserves of $100,000. The officers are: Rayfield O. Slovacek, Chairman of the Board; C. C. Chamberland, President; Earl Sebesta, Vice President; and Bonnie J. Hejl, Cashier.

New par banks

First Texas Bank, Vidor, Texas, a newly organized insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business October 6, 1976, remitting at par. The officers are: Dr. G. M. Brassard, Chairman of the Board; Don Aycock, President; and Rogers Smith, Vice President and Cashier.

Bank of Logansport, Logansport, Louisiana, an insured nonmember bank located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, began remitting at par October 18, 1976. The officers are: L. H. Vidler, President and Chairman of the Board; Ernest L. Beauvais, Executive Vice President; R. I. Muse, Vice President and Cashier; Vernon H. Spears, Assistant Cashier; and Fred Ellis, Assistant Cashier.

Bank of Montgomery, Montgomery, Louisiana, an insured nonmember bank located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, began remitting at par October 18, 1976. The officers are: Kent Wardlow, President; James H. Snyder, Vice President and Cashier; and Irene Procell, Assistant Cashier.

Federal Reserve Bank of Dallas
November 1976

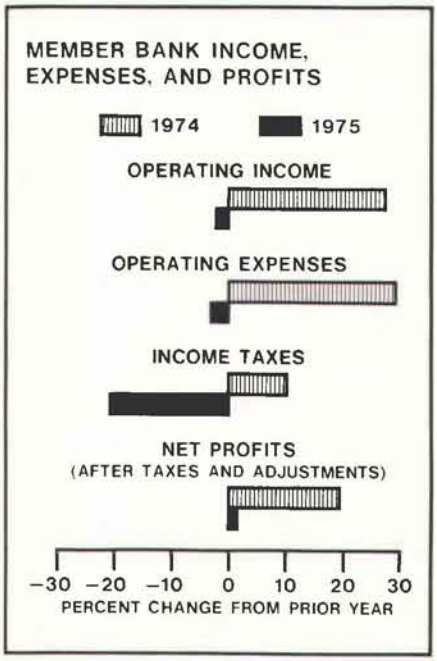
Eleventh District Business Highlights

MEMBER BANK INCOME

Net income of member banks in the Eleventh District in 1975 was 1.6 percent greater than in the preceding year. This small increase followed two years of rapid increase in profits and reflected primarily the effect of the recession on banking.

Total operating income declined 2.1 percent last year, following two years of sharp increases. The decrease in total revenue reflected a sharp decline in interest rates and a considerably slower growth in loans and Federal funds sales. Income from investments, however, was up slightly more than in 1974 as banks increased sharply their holdings of securities, largely of local, state and federal governments.

Interest and fees from loans and Federal funds sold historically account for nearly three-fourths of total operating income at District member banks. In 1975, income from this source declined 5.2 percent.



Much of the decline can be attributed to a fall in interest rates. The prime rate, for example, fell 294 basis points between 1974 and 1975. The Federal funds rate dropped 469 basis points, to 8.6 percent last year, down from 10.1 percent in 1974.

Slower growth in the volume of loans and Federal funds sold also contributed to the reduction in interest income and fees in 1975. The volume rose only 5.6 percent in 1975—considerably less than increases of 10.6 percent in 1974 and 18.6 percent in 1973. A slower rate of increase in loans outstanding was evident in all loan categories.

Interest and dividend income from securities rose almost a fifth in 1975. The sharp increase reflected the slowdown in loan demand, which led banks to place more of their funds in securities.

District banks found U.S. Treasury securities somewhat more attractive than tax-exempt municipals. As a result of this shift to higher-yielding U.S. Treasury obligations, member banks in the District increased slightly their before-tax rate of return on investments in 1975.

Total operating expenses of member banks in the District declined 2.7 percent last year, following an increase of 29 percent in 1974. Reduced interest expense on deposits and other borrowed money was the major cause of the decline.

Although average time and savings deposits rose substantially in 1975, interest paid on these funds rose 0.1 percent as a result of the decline in interest rates. Moreover, interest paid on Federal funds purchased and other borrowed money declined sharply, reflecting both lower volume and reduced interest rates. In 1975, interest expenses accounted for 56 percent of total operating expenses, down from 62 percent in 1974.

All other major categories of operating expenditures rose in 1975. Although the largest rate of increase was recorded in the provision for loan losses, these expenses represented only 5 percent of total operating costs. Salaries, wages, and employee benefits—the second largest expenditure category—continued to rise in 1975. But the increase in payroll costs was substantially less than in 1974 because additions to staffs were smaller.

Net operating earnings at District member banks declined 4.2 percent in 1975 since the reduction in operating expenses was not enough to offset the decrease in operating revenue. Applicable income taxes declined sharply, however, and banks realized modest gains from securities adjustments and extraordinary credits. Consequently, net income for the year rose slightly.

OTHER HIGHLIGHTS:

• Home building has continued to strengthen in the five southwestern states, with the value of residential contracts in September rising to a seasonally adjusted $446 million. Although the value of residential contracts has not been steady this year, it is currently running ahead of the level in each of the past two years.

In Texas, the total number of housing starts surged to 11.2 million units, seasonally adjusted, in September. That is the highest level of starts since January 1973. Most

(Continued on back page)

INDUSTRIAL PRODUCTION

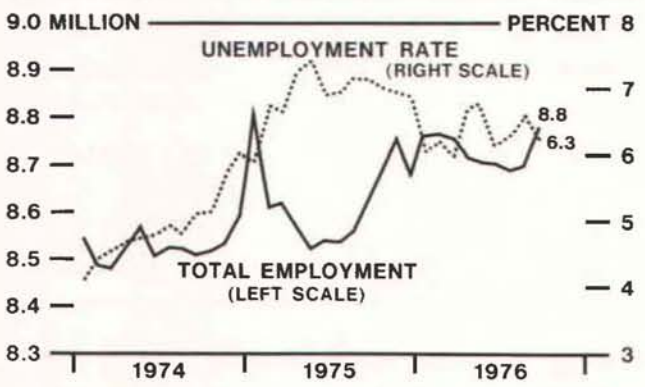
(SEASONALLY ADJUSTED)

SOURCES: Board of Governors, Federal Reserve System
Federal Reserve Bank of Dallas

°Comparable back data from the 1976 revision are not yet available.

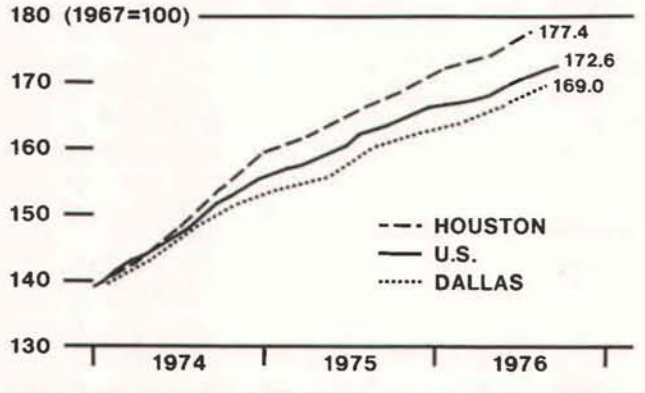
EMPLOYMENT AND UNEMPLOYMENT

FIVE SOUTHWESTERN STATES[1]
(SEASONALLY ADJUSTED, BY FRB)



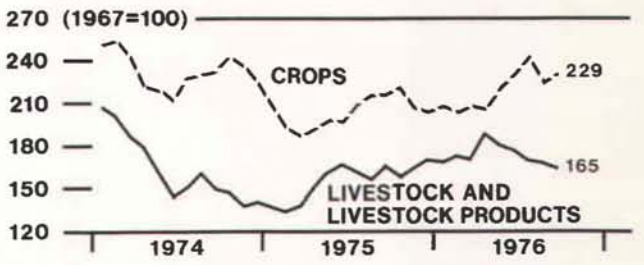
1. Arizona, Louisiana, New Mexico, Oklahoma, and Texas
SOURCE: State employment agencies

CONSUMER PRICES



SOURCE: U.S. Bureau of Labor Statistics

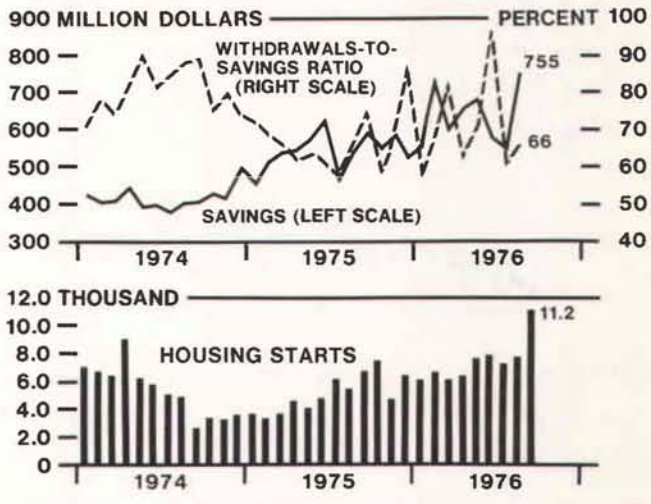
PRICES RECEIVED BY TEXAS FARMERS



SOURCE: U.S. Department of Agriculture

SAVINGS AND LOAN ASSOCIATION ACTIVITY AND HOME BUILDING IN TEXAS

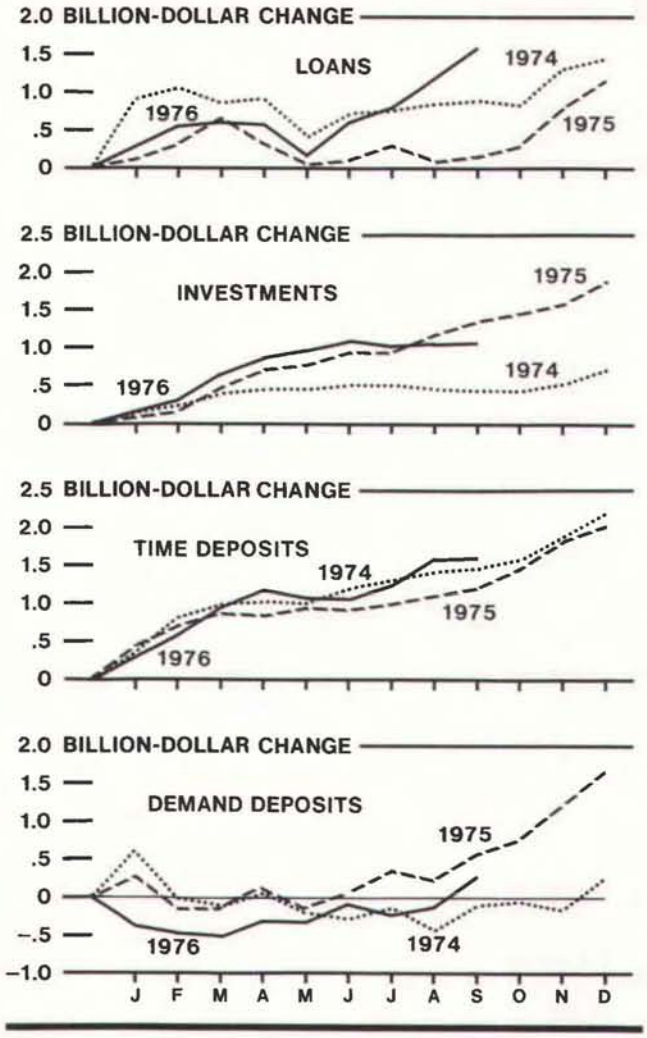
(SEASONALLY ADJUSTED, BY FRB)



SOURCES: Bureau of Business Research, University of Texas
Federal Home Loan Bank of Little Rock

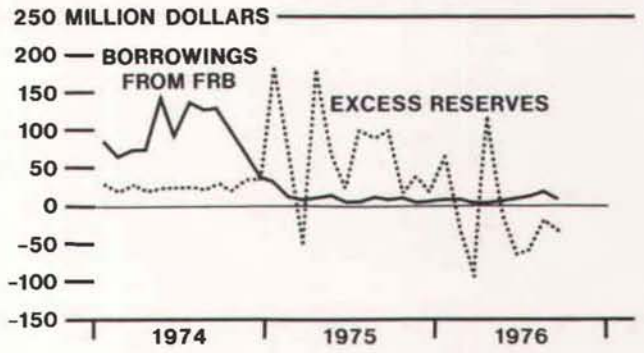
CONDITION STATISTICS OF ALL MEMBER BANKS

ELEVENTH FEDERAL RESERVE DISTRICT
(CUMULATIVE CHANGES)



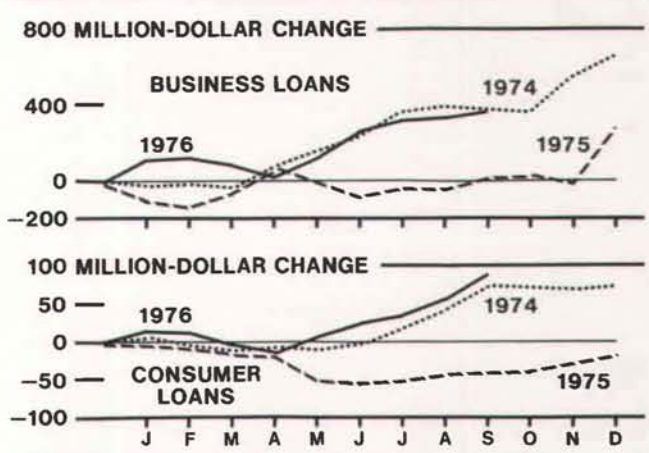
RESERVE POSITION OF MEMBER BANKS

ELEVENTH FEDERAL RESERVE DISTRICT
(MONTHLY AVERAGES OF WEEKLY DATA)



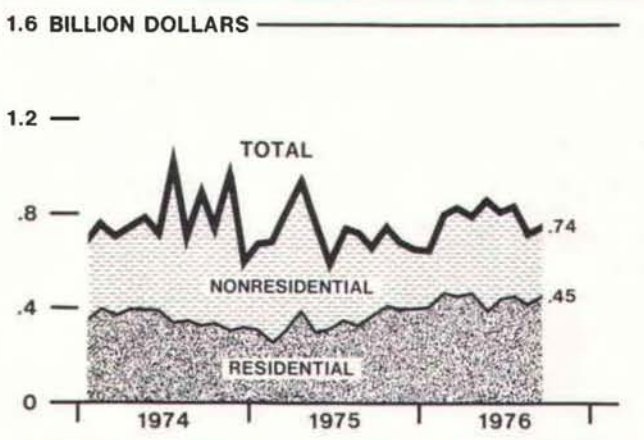
LOANS AT WEEKLY REPORTING BANKS

ELEVENTH FEDERAL RESERVE DISTRICT
(CUMULATIVE CHANGES)



BUILDING CONTRACTS

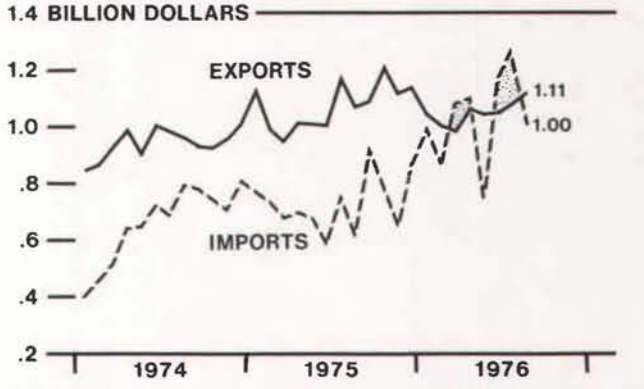
FIVE SOUTHWESTERN STATES
(SEASONALLY ADJUSTED, BY FRB)



1. Arizona, Louisiana, New Mexico, Oklahoma, and Texas
SOURCE: F. W. Dodge, McGraw-Hill, Inc.

FOREIGN TRADE

HOUSTON CUSTOMS REGION
(SEASONALLY ADJUSTED, BY FRB)



SOURCE: U.S. Department of Commerce

of the improvement has been in single-family units, especially in the large urban areas. Multifamily housing has shown only slow improvement even though apartment occupancy rates in major Texas cities are high, ranging up to 96 percent.

The increased demand for new homes has tended to push up mortgage rates. In early September, according to the Federal Home Loan Bank of Little Rock, the average effective rate on conventional loans on new houses was 9.26 percent in the Dallas-Fort Worth SMSA and 9.25 percent in the Houston SMSA, or about 10 basis points higher in each area than a month earlier. These rates were also higher than the average of 9.09 percent for the 18 SMSA's making up the national sample.

The price patterns for new homes have been mixed. In the Dallas-Fort Worth area, the average price rose sharply to $58,200 in September from $55,000 a month earlier. That was significantly higher than the national average of $50,600.

In Houston, the average price of new homes fell to $53,700 from $56,000 in the same period. The price decline suggests that the inventory of completed but unsold homes in that area may be increasing since sales have begun to lag new housing starts. The prices do not take account of any changes in average size or quality of houses.

The strength of the recovery in residential construction in Texas has increased the demand for building tradesmen. The number of construction workers in the state rose 7,600 in September to a level that was 19,000 higher than a year earlier. Residential builders in Dallas and Houston are reported to be actively recruiting workers from out of state.

- Preliminary data show the Texas industrial production index, seasonally adjusted, rose at a 5.7-percent annual rate in September. The rise reflected a significant increase in total manufacturing that more than offset a sharp decline in mining output.

Total output in manufacturing has climbed steadily since June and increased at a 13.3-percent annual rate in September. Most of the strength has been in nondurable goods production.

The September rise in nondurable goods production centered in the chemical and refining industries, but increased output was also evident in paper and textiles. However, in industries employing a large number of workers—such as food processing, apparel, and printing and publishing—output was down.

In durable goods manufacturing, production increased in all major industries except lumber and wood products. Output of nonelectrical machinery, the largest durable goods industry in terms of employment, rose for the third month in a row.

The decline in mining output was due entirely to reduced crude oil production. But drilling activity continued to expand, rising for the fourth consecutive month.

- Total bank credit at member banks in the Eleventh District rose substantially in September as both loans and investments increased. The increase in loans was the largest since June and reflected greater use of bank credit by a wide range of borrowers.

Sharp gains in business loans were evident in loans to the food, textile, chemical and rubber, retail trade, and construction industries. Public utilities also stepped up their borrowing.

Loans to consumers also surged, with these borrowers increasing their bank debt at the fastest pace in two years. Although the rise in real estate loans trailed that in the previous month, the level of loans represented the largest ever recorded for September.

Member banks in the District also continued making substantial additions to their investment portfolios in September, as the growth in deposit inflows exceeded the expansion in loans. Most of the investment activity remained centered in U.S. Government securities, with holdings of municipal issues declining for the second consecutive month.

- The unemployment rate for the five southwestern states fell to 6.3 percent of the total civilian labor force in September from 6.6 percent a month earlier. The decrease was the first since June as total unemployment declined sharply and total employment advanced for the second consecutive month.

Total nonagricultural employment climbed for the third month in a row. The strongest advances were in contract construction, services, mining, nondurable goods manufacturing, and finance, insurance, and real estate. Government employment was the only nonagricultural category experiencing a decline.

- Average prices received by Texas farmers and ranchers for farm products changed little in the month ended in September 15. A slight increase in crop prices offset a small decline in overall livestock prices.

The crop index increased 2 percent on the strength of somewhat higher cotton and grain sorghum prices. However, pressured by large supplies and the slowdown in cattle feeding, wheat and corn prices decreased moderately.

Lower prices for cattle, calves, and hogs reflected increased marketings and pushed the index of livestock prices down. However, these declines were partially offset by gains in lamb, milk, and wool prices. The August 15-September 15 period marked the sixth consecutive month that the index of livestock prices declined.