

# Economic Review



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# The Agricultural Outlook: Stable Farm Income in 1979?

*By C. Edward Harshbarger and  
Marvin R. Duncan*

The strength in farm prices during 1978 pleasantly surprised U.S. farmers. This strength resulted largely from circumstances that could not have been accurately predicted in the fall of 1977, when farmers and agricultural economists were looking ahead with apparently justified pessimism. There were three basic reasons why farm prices were stronger than expected. First, free market supplies of grain were markedly reduced by large-scale impoundments of 1976 and 1977 crops under Commodity Credit Corporation (CCC) loans and the three-year farmer-owned reserve program. Second, the export market for U.S. farm products was much stronger than expected, due in part to crop production problems in some parts of the world. Finally, strong consumer demand for meat, along with modest reductions in red meat production, pushed meat animal prices up to levels quite profitable to farmers.

All this meant surprisingly good farm income for 1978. Realized net farm income in 1978 will likely rise about \$6 billion above 1977 levels, with higher Government payments accounting for over \$1 billion of the increase. Furthermore, the increase in farm income is expected to be broadly spread among different agricultural products.

The events of 1978 provide a basis for the farm outlook for 1979. In the coming year, grain crop supplies are likely to continue to be abundant,

while total meat supplies may be little changed from 1978. Strong domestic and export demand for U.S. agricultural products may result in price increases for farm products equal to, or perhaps a little greater than, the increased cost of production. Therefore, **realized** net farm income in 1979 may be about the same as in 1978.

## **1978 HIGHLIGHTS PRICES AND INCOMES**

Farm prices improved substantially during 1978 from the generally depressed levels of late 1977. In November 1978, the Index of Prices Received by Farmers was 20 per cent above year-earlier levels. During the same period, the Index of Prices Paid by Farmers for commodities and services, interest, taxes, and farm wage rates increased 11 per cent. Thus, although farm input costs which include feeder livestock purchased from other farmers rose at a rapid rate during the year, prices received by farmers rose even more rapidly.

Prices were higher for a broad range of agricultural products in the fall of 1978, compared with year-earlier levels. Cash corn and most other feed grain prices were moderately above year-earlier levels, while wheat, soybean, and cotton prices were all up sharply. Cattle, hog, and broiler prices all improved

substantially. In addition to higher cash receipts from farm marketings, Government transfer payments to agriculture in 1978 are expected to be close to \$3 billion, compared with \$1.8 billion in 1977.

The amount of wheat and feed grains removed from the market by CCC loans and by the farmer-owned reserve program had a strengthening effect on prices. About 404 million bushels of wheat and 432 million bushels of corn were in the farmer-owned reserve program and an additional 47 million bushels of wheat and 365 million bushels of corn were under CCC loans at the end of October. Additional impoundings under CCC loans can be expected in late 1978 and early 1979. Thus, a substantial part of the carryover stocks of these grains has been removed from the market, at least temporarily.

Gross farm income in current dollars is expected to top \$120 billion for 1978—a new record. Fueled by sharply higher livestock prices, cash receipts from livestock sales are expected to increase about 20 per cent. Once again, livestock receipts will exceed crop receipts, as has been the case since 1920—except for the years 1973 through 1977. Cattle and calves are once again the top 1978 income producers for farmers, with dairy products recapturing second place from grains and soybeans. Among crops, soybeans will likely be the top-dollar earner for the first time this year, continuing the tendency for the proportion of farm receipts derived from various crops to change over time.

Realized net farm income rebounded sharply in 1978 from the \$20.1 billion level of 1977 to about \$26 billion. However, when corrected for inflation, real net farm income in 1978 was about \$13.1 billion in 1967 dollars—near the level that existed before the 1972-73 **runup** in farm income, and about \$2.1 billion above 1977 (Chart 1).

## SUPPLIES

Two characteristics dominated the supply considerations for agricultural products in 1978:

abundant supplies of crops and adequate, but not excessive, supplies of livestock.

### Crops

Because 1978 began with large stocks of food and feed grains, Government efforts were aimed at reducing production as well as maintaining income. Although acreage set-asides and smaller plantings were successful in reducing wheat production in 1978, total supplies available for marketing were only about 6 per cent below 1977. This was due to available carryover stocks of almost 1.2 billion bushels.

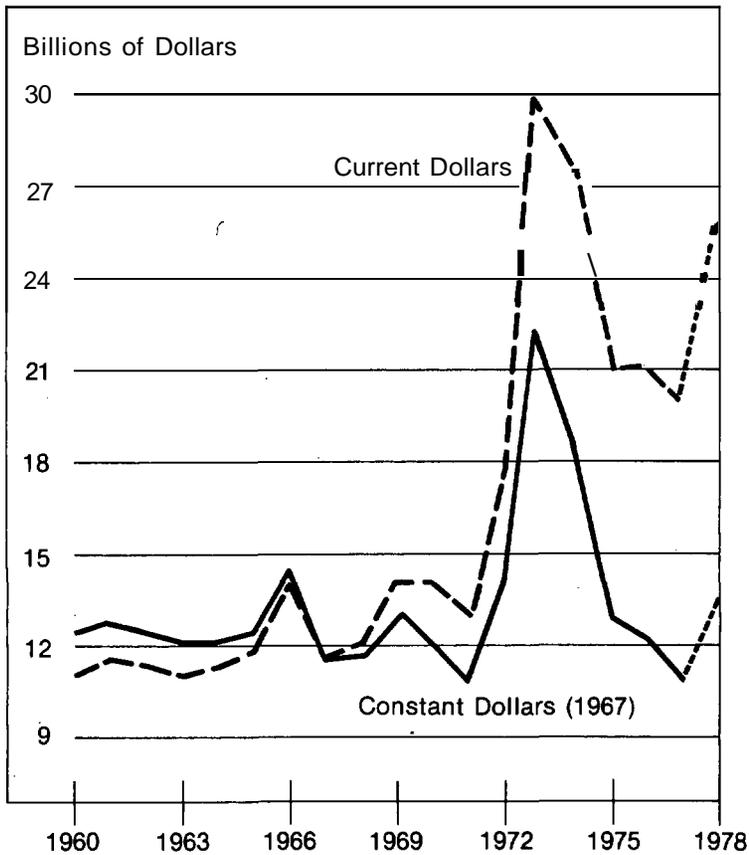
Limited participation by farmers in feed grain acreage set-asides and near-perfect growing weather resulted in record corn production in **1978—estimated** at 6.9 billion bushels. When added to carryover stocks, corn supplies for the 1978-79 marketing year will be about 7.9 billion bushels. Furthermore, total feed grain supplies for the 1978-79 marketing year are expected to be the largest ever, up about 8 per cent from 1977-78.

In the **oilseed** sector, increased plantings and excellent weather boosted 1978 soybean output to a record level, with total available supplies likely to exceed 1.9 billion bushels. Increased production of sugar beets, rice, and tobacco also occurred in 1978. Cotton production may be off by as much as one-fourth in 1978, compared with 1977—due primarily to unfavorable weather.

### Livestock

Despite record large placements of cattle in feedlots during much of 1978, reductions in nonfed cattle slaughter held beef and veal production about 5 per cent below the 1977 level. Lamb and mutton production was off substantially—down about 14 per cent. However, increased pork production took up much of the slack and total red meat supplies for 1978 were down about 3 per cent from

**Chart 1**  
**REALIZED NET FARM INCOME IMPROVES**



Preliminary.

SOURCE: U.S. Department of Agriculture.

**1977.** Broiler production increased about 6 per cent over year-earlier levels for the first eight months of **1978**. Egg production in **1978** totaled about  $5\frac{1}{2}$  billion dozens—up about 2 per cent over **1977**. Milk output—at 122 billion pounds—was off 1 per cent from the **1977** volume.

### DEMAND

The agricultural product market was characterized by strong demand in both domestic and foreign markets. During fiscal **1978**, the

volume of U.S. agricultural exports increased about 17 per cent over **1977** to a record value of \$27.3 billion. U.S. exports of soybeans and feed grains benefited from crop shortfalls in Brazil and the USSR. The relative weakness of the U.S. dollar against certain foreign currencies may also have increased demand for some commodities such as soybeans or cotton. Despite somewhat lower exports to European Common Market countries, sales to Japan—the largest single U.S. agricultural export market—continued to increase. More importantly, export sales to the

centrally planned countries and to the developing countries continued to show substantial growth.

Continued growth in U.S. employment levels and in per capita disposable personal income supported an increasing domestic demand for meat products during 1978. Although part of the strength in livestock prices resulted from reduced supplies, most of it was apparently due to strong consumer demand—a pleasant surprise for livestock producers.

### 1978 FARM LEGISLATION

During 1978, Congress enacted several laws affecting agriculture. The Emergency Agricultural Act of 1978 increased CCC borrowing authority from \$14.5 billion to \$25 billion and gave the Secretary of Agriculture discretionary authority to increase target prices for wheat, feed grains, and upland cotton whenever a set-aside is in effect for one or more of these crops. Under provisions of this Act, the Secretary raised wheat target prices to \$3.40 per bushel and cotton support prices to 48 cents per pound.

The Agricultural Credit Act of 1978 provides for additional credit to farmers through direct and guaranteed Farmers Home Administration' (**FmHA**) loans. The Emergency Livestock Credit Act of 1974 was extended to September 30, 1979, and can now provide credit to farmers and ranchers who own livestock being custom fed. The FmHA lending limits for individual operators have been raised as well, with new economic emergency loans of up to \$400,000 and a combined debt limit of \$650,000 per borrower now available.

The Agricultural Trade Act of 1978 provides for new intermediate-term (3 to 10 years) credit to exporters who must provide such credit to develop, maintain, or expand long-term export markets for agricultural products. Provision is also made for the use of CCC credit to finance deferred payment sales (not to exceed three years) to the People's Republic of China and to other countries eligible for financing of sales

under CCC's short-term export credit program. Finally, U.S. Department of Agriculture (USDA) reorganization will upgrade export sales development efforts by placing agricultural counselors in a number of U.S. embassies and by establishing up to 25 U.S. agricultural trade offices in other nations.

### THE OUTLOOK FOR 1979 DEMAND AND SUPPLY OF FARM PRODUCTS

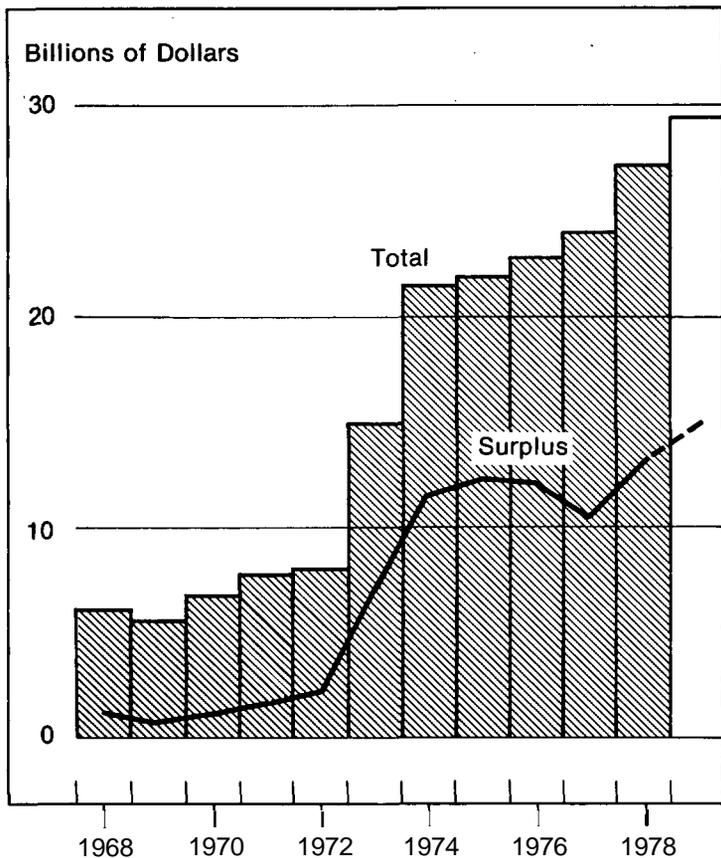
The demand prospects for agricultural output appear favorable in both the domestic and foreign sectors. Although slower real growth in the U.S. economy is anticipated, a larger population and a moderate rise in disposable income should boost the demand for agricultural commodities in 1979. The outlook for agricultural exports remains bright. Foreign sales are expected to hold up well, despite growing food reserves throughout the world and the **possibility** of a stronger dollar.<sup>1</sup> Chart 2 shows that agricultural exports have run above \$20 billion in each of the last five fiscal years, culminating in shipments of \$27.3 billion in fiscal 1978. These lofty export figures have made a significant contribution to the economic welfare of American farmers. Export markets now absorb the production from about one of every three harvested acres.

The record level of sales achieved in the last fiscal period may not stand very long, however. With somewhat higher prices and continued strong foreign demand, the value of shipments abroad could increase to about \$29.5 billion in fiscal 1979. But even if total sales fall below this

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<sup>1</sup>As the U.S. dollar increases in value—against the currencies of trading partners—agricultural imports from the United States become relatively more expensive to these trading partners.

**Chart 2**  
**U.S. AGRICULTURAL EXPORTS AND THE**  
**SURPLUS FROM AGRICULTURAL TRADE**



**SOURCE:** U.S. Department of Agriculture.

objective, the surplus from agricultural trade is expected to continue large. This surplus, ranging from \$10 to almost \$14 billion annually in recent years, has helped alleviate a serious international balance of payments problem for the United States. Although the special programs recently adopted by the U.S. Government to strengthen the dollar could have a diminishing impact on agricultural exports, the surplus from agricultural trade is still expected to reach a new record of close to \$15 billion in fiscal 1979.

The supply picture for 1979 is marked by

several imponderables including Government farm programs, the weather, livestock profit margins, and the impact of voluntary wage and price guidelines. Generally, total meat supplies in 1979 are expected to be approximately equal to 1978 levels, with increases in poultry and pork production offsetting a decline in beef output. Milk production will probably hold fairly steady in the year ahead. In the crop sector, production levels will depend largely on weather conditions and the acreage adjustments made by farmers in response to new price developments and to

changes in the Government farm programs. Given the continuation of set-aside requirements for wheat and feed grain producers, total crop acreage in 1979 will probably change very little from 1978 levels. However, shifts in acreage for individual commodities can be expected as relative prices change in the coming months. Current relationships suggest that soybean and cotton acreage will expand in 1979, while corn acreage may drop somewhat. Wheat acreage probably will remain about the same in the coming year, since the profit picture appears to be improving. Therefore, with favorable weather, output from the crop sector should hold up quite well in the year ahead.

### THE OUTLOOK FOR CROPS

A key factor in the outlook for 1979 crop prices and output will be the new farm program and the extent to which farmers participate in it. The Administration will likely strive to keep crop prices competitive in world markets while attempting to hold feed costs in check so that domestic livestock producers will be encouraged to expand their breeding herds. The Administration also recognizes that farmers will participate in the farm programs only if it is financially advantageous. Thus, some changes have been made to promote a greater degree of participation by farmers in 1979.

On balance, though, the basic features of the 1979 wheat and feed grain programs are very similar to the 1978 programs. To participate, producers must set aside a specified proportion of their planted acreage (20 per cent for wheat and barley, and 10 per cent for corn and grain sorghum) to be eligible for target price protection and Government crop loans. The support prices for wheat were left unchanged—the target price is \$3.40 per bushel and the loan level is \$2.35. However, some adjustments have been made in the feed grain program. The target price for corn was raised to \$2.20 per bushel—10 cents above

the 1978 level. Moreover, target prices for grain sorghum and barley were increased to \$2.30 and **\$2.40** per bushel, respectively. Loan rates on feed grains will remain the same as in 1978.

Although the special payments made to farmers in 1978 for grazing out their wheat have been discontinued, feed grain producers will still receive diversion payments for idling extra land, but at a reduced rate. The payment for corn will be 10 cents a bushel in **1979—one-half** the rate paid in 1978. Grain sorghum producers will also receive diversion payments of 10 cents a **bushel—down** 2 cents from the 1978 rate. However, an important feature of the farm program is that the Secretary of Agriculture has the authority to amend the benefits that have been introduced for 1979 production if future market conditions warrant it.

Crop supplies for the 1978-79 marketing year are expected to be plentiful due to relatively large harvests in 1978 and, in some cases, bulging carryover stocks (Table 1). In the last marketing year, farmers received prices for wheat, corn, and soybeans which averaged about \$2.30, \$2.05, and \$5.80 per bushel, respectively. For the most part, these prices were significantly below the averages realized in the 1976-77 marketing period, reflecting a burdensome supply situation. Yet the 1977-78 season ended with wheat prices averaging 75 cents to \$1 a bushel higher than at the start, even though ending carryover stocks were higher for the fourth consecutive year. Heavy use of the loan and extended reserve programs, coupled with exceptionally strong export demand during the last half of the season, provided strong support to the wheat market. A continuation of these features in the wheat market could push wheat prices higher in the coming months, since the "free" carryover (total reserves less quantities under Government loans) promises to be relatively small by the end of this marketing year. On balance, an estimate of **\$2.80-\$3** per bushel appears reasonable as an average price for the

**Table 1**  
**BALANCE SHEET FOR MAJOR CROPS**  
**(Millions of Bushels or Tons)**

	Corn (bu) Marketing Year Oct. 1—Sept. 30		All Feed Grains (tons) Marketing Year*		Soybeans (bu) Marketing Year Sept. 1—Aug. 31		Wheat (bu) Marketing Year June 1—May 31	
	1977-78	1978-79t	1977-78	1978-79t	1977-78	1978-79t	1977-78	1978-79t
<b>Supply</b>								
Beginning Carryover	884	1,064	29.9	40.0	103	159	1,112	1,176
Production and Imports	6,374	6,891	201.8	211.1	1,762	1,810	2,028	1,780
Total	7,258	7,955	232.0	251.4	1,865	1,969	3,140	2,956
<b>Demand</b>								
Domestic	4,246	4,520	135.7	144.0	1,006	1,064	840	770
Exports	1,948	1,900	56.3	54.9	700	740	1,124	1,150
Total	6,194	6,420	192.0	198.9	1,706	1,804	1,964	1,920
Ending Carryover	1,064	1,535	40.0	52.5	159	165	1,176	1,036

\*Marketing year begins October 1 for corn and grain sorghum, July 1 for barley and oats.

†Preliminary USDA estimates as of November 1978.

SOURCE: U.S. Department of Agriculture.

1978-79 year, which means that deficiency payments—based on the \$3.40 target price—will once again be an important income factor to wheat growers.

Feed grain supplies for the coming period are large enough to meet anticipated demands while still permitting an increase in carryover stocks. Normally this would presage a drop in price, but larger movements of grain into Government loans should permit corn prices to average in the \$2-\$2.15 range, a little above the support level of \$2 a bushel. Moreover, deficiency payments, based on a target price of \$2.10 per bushel, will be made to those producers who participated in the 1978 program. Although soybean production was up in 1978, total use is expected to rise moderately, thus stemming a big buildup in reserves. If demand holds up, prices could soar to rather lofty levels early in 1979, particularly if crop prospects in the Southern Hemisphere are poor. Therefore, soybean prices—while varying widely—should average significantly above

year-earlier levels in 1978-79, in the \$6 - \$7 per bushel range.

The sharp reduction in 1978 cotton output, coupled with continued strong demand, should buoy cotton prices in the period ahead. However, if U.S. acreage expands sharply next year, or if world stocks continue to increase, cotton prices could slip during the second half of 1979. The outlook for fruits, vegetables, tobacco, and sugar is mixed. Generally, 1978 production levels were somewhat below year-earlier figures, although there were some exceptions. For the most part, prices have averaged higher in 1978. Looking ahead, demand is expected to remain in reasonably good balance with supplies, so market returns for these crops promise to hold fairly steady in 1979.

### THE OUTLOOK FOR LIVESTOCK

The demand for livestock products in 1979 is expected to remain very strong, although some of

the bloom in the domestic market could fade if economic expansion and consumer buying power perform poorly. On the supply side, meat supplies promise to remain relatively large in 1979. Cyclical patterns in the livestock industry now point to more growth in **pork and** poultry output, and a moderate reduction in beef supplies. If demand holds, prices will probably remain strong through most of 1979, providing additional incentives to producers to expand their breeding stock.

Recent reports on livestock inventories suggest that pork output in 1979 is going to be lower than previously anticipated. Although hog prices have been relatively favorable in 1978, producers appear to be very cautious about expanding production. As of September 1, 1978, the number of hogs and pigs on farms was down 1 per cent from the year-earlier figure, and plans for future farrowings showed only modest increases—averaging 3 per cent for the September 1978-February 1979 period. If producers actually follow through with these intentions, output in 1979 is not likely to be more than 4 to 6 per cent above this year's levels. However, some analysts believe that farrowings will expand at a faster pace next year, and if average litter sizes should also increase because of lower death losses, pork output may increase rather significantly. In any event, prices on barrows and gilts should remain very profitable during the first half of 1979—probably averaging \$50 per hundredweight or more. Although some weakness can be expected during the second half, the average price for 1979 should be near the \$48 per hundredweight now estimated for 1978.

Continuing a trend that began in 1975, cattle producers are still liquidating their inventories, which should bolster cattle prices in the future. However, larger feedlot placements—reflecting low feed costs—are expected to support fed-beef supplies at a high level in the coming months, effectively tempering any upward price movements. As of October 1, 1978, the number

of cattle on feed was 16 per cent above year-earlier levels owing to a big increase in new placements during the third quarter. Thus, the slaughter of grain-finished cattle is likely to exceed year-earlier levels by a substantial margin during the first three quarters of 1979. However, a sharp reduction in the slaughter of grass-fed animals will more than offset the larger supplies of fed beef. For the year, total beef supplies will probably decline 4 to 6 per cent from 1978 levels, which suggests that higher prices will result. Though some price strength may occur during the winter and spring, most of the rise will probably occur in the second half of the year when beef supplies begin to shrink more rapidly. The average price for choice steers in 1979 may approach \$60 per hundredweight, as compared with the \$52 estimated for 1978.

Feeder cattle prices are now well above year-ago figures, and further strength is likely. In 1979, choice yearling feeder steers will probably average in the mid- to upper-\$60 per hundredweight range. The cattle inventory on January 1, 1979, is expected to be about 111 million head—down from 116 million head a year ago and 132 million head at the beginning of 1975. However, many analysts feel that the liquidation phase of the cattle cycle has nearly run its course, and that numbers will soon start growing. But the buildup in numbers will likely be slow, particularly in view of the many uncertainties that cattle producers presently face. Although the supply of feeder cattle will be smaller in 1979, the reduction may not be as large as anticipated if calving rates improve, death losses decline, and imports of live animals rise in the period ahead. Thus, feeder cattle prices in the second half of 1979 may not average much above fall 1978 prices.

The outlook for the dairy industry is dominated by low commercial stocks, falling production, and brisk demand. As a result, prices—which are supported at 80 per cent of parity—will likely average about 6 to 10 per cent

above **1978** levels, with the largest gains during the first half of **1979**. With a better profit picture in store, producers can be expected to expand output enough to perhaps eliminate the year-to-year gap in production that has characterized most of **1978**. But prices will probably remain firm, bolstering dairy incomes in the year ahead. The outlook is also favorable for the poultry industry. Reduced beef supplies and relatively high red meat prices will likely provide strong support for poultry and egg prices in **1979**. Broiler prices should nearly match the high levels of **1978** even if output rises **8 to 10** per cent. Turkey prices, which are sharply above year-earlier levels, may turn down a little next spring if output expands as expected. However, egg prices will probably hold fairly steady, since output is not expected to increase very much in the coming year.

### **WILL DOMESTIC FOOD PRICE INCREASES MODERATE?**

Rapidly rising food prices contributed to the reacceleration of inflation in the economy during the first half of **1978**. A combination of poor weather, lower-than-expected meat supplies, and strong demand caused retail food prices to rise at an annual rate of nearly **20** per cent during that period. Although the head of steam in food prices has eased since midyear, the annual gain in retail food prices is still expected to be at least **10** per cent in **1978**.

An analysis of the gains in food prices during **1978** indicates about one-half of the rise was due to higher farm prices, which were up about **15** per cent from **1977**. The remainder was explained by the higher charges for processing and marketing, as well as the increased costs for fish and imported food items.

In **1979**, per capita total food supplies are expected to remain ample, thus helping to

dampen upward price pressures. However, shoppers can look for food prices to average higher in **1979**, both because of the inexorable increase in marketing charges and because of a likely gain in some farm prices, particularly in the meat sector. The USDA anticipates that **1979** food prices will probably rise at least 6 per cent on a year-over-year basis, and might push into the double-digit range if poor weather should reduce agricultural output. But, the most likely occurrence is thought to be an increase of **7.5** per cent.

A key factor in the outlook for food prices is the general rate of inflation. Inflation impacts the costs of labor, processing, packaging, and other merchandising activities that are involved with moving food from the farmer to the consumer. Therefore, food prices can be expected to rise as these various costs increase.

What will be the effect of the newly announced wage-price guidelines on the rate of increase in food prices next year? The answer depends on how well both wages and prices adhere to the specified guidelines. Since marketing costs represent about **57** per cent of retail food costs, strict adherence to the program will greatly increase the chances of restraining the rate of increase in food prices next year. But if wages should exceed the **7** per cent limit, or if farm prices—which are not subject to the controls—should show unexpected strength, the increase in **1979** food prices will probably approach, if not exceed, the **10** per cent gain posted in **1978**.

### **CONCLUSION**

The agricultural outlook for **1979** is favorable, since farm prices will be buoyed by relatively strong demand from both the domestic and foreign sectors. However, recent **U.S.** Government actions to slow the economy do mean there is now an increased probability that domestic consumer demand could slacken

somewhat before the end of **1979**. The financial picture for livestock producers is especially bright, given the prospects for low feed costs and rising market prices. In the crop sector, prices are not likely to exhibit significant weakness in the year ahead due to heavy exports and the cushioning effects of the Government crop loan program. Also, deficiency payments will help bolster crop receipts in **1979**.

Total cash receipts from farm marketings

should rise moderately in **1979**, with most of the gains coming from the livestock sector. Government payments may decline somewhat next year, but they will still lend support to gross farm income. However, production costs are expected to rise again in the coming year, and these gains may offset most, if not all, of the increase in gross income. Thus, net farm income probably will remain about the same as the \$26 billion realized in **1978**.

# Business and Financial Outlook for 1979

*By Dan M. Bechter and Carl M. Gambs*

The U.S. economy in 1978 was characterized by moderate growth in total real output, an acceleration in the rate of inflation, and a worsening international situation dramatized by a sharp decline in the value of the U.S. dollar. At the same time, the domestic economy apparently was not subject to the excesses in particular sectors that typically accompany peak levels of production. For 1979, it is still an open question as to whether the economy will proceed on a moderate to slow growth path, thereby avoiding a recession, and whether meaningful progress will be made toward slowing the rate of inflation. This article summarizes business and financial developments during 1978, and suggests a guardedly optimistic outlook for the economy in 1979.

## BUSINESS DEVELOPMENTS

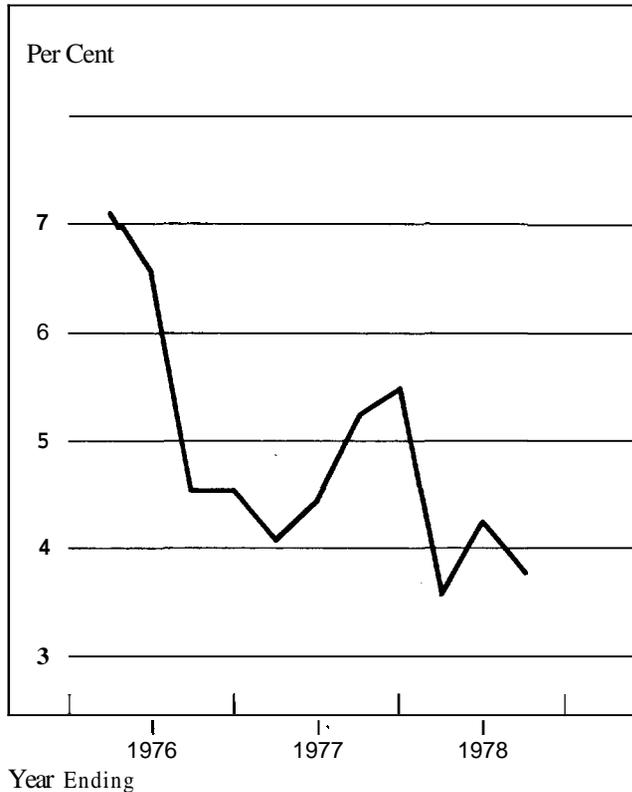
The economic recovery from the recession trough of March 1975 has been one of quarterly spurts and pauses. During the economy's first year of expansion, total real output grew rapidly. Since that typical initial burst, the rate of economic growth has been moderate, with a discernible but not pronounced downward trend (Chart 1).

As the expansion has matured, some changes in the nature of economic growth have occurred. Spending by households on consumer

goods and new homes has played a lead role through most of the recovery. But growth in real consumer expenditures has been waning, and residential construction virtually stopped growing in the latest four-quarter period (Chart 2). The slower growth in consumer spending and homebuilding was not a surprise in 1978. Less stimulus had been expected from consumer expenditures because the recession's backlog of postponed purchases of household durables typically is eliminated as an expansion ages. In the year ending with the third quarter of 1978, real consumer spending on new durable goods rose 5.6 per cent, in contrast to 9.3 per cent over the corresponding period a year earlier and 17.3 per cent during the first year of the current expansion. In the case of homebuilding, too, slower growth in 1978 had been expected as the deficiencies in the nation's stock of housing were made up and as residential construction reached a level consistent with the country's longer term rates of growth of income and population.

The gradual decline in the growth of real personal consumption expenditures cannot be attributed to a decline in the growth of real personal income. Real personal income grew 4.5 per cent in the year ending with the third quarter of 1978, virtually the same growth it averaged over the previous 2½ years of the expansion. But, because of the tax-increasing effect of inflation, real **disposable** personal income has not grown as

Chart 1  
GROWTH IN REAL GNP:  
1976:1 TO 1978:3



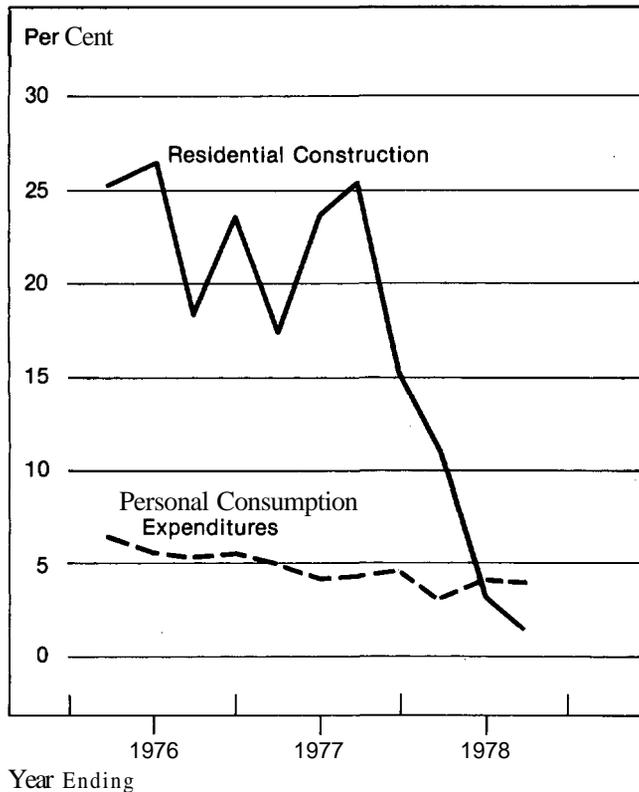
fast as real personal income.<sup>1</sup> More importantly, in each of the last three years, real disposable personal income has grown less than real personal consumption expenditures. As a consequence, the rate of personal saving out of disposable income has been pushed down to a

<sup>1</sup>Real disposable personal income is real personal income less real **personal** tax and nontax **payments**. The increases in wages and salaries that accompany inflation increase the effective tax rate on personal income by putting people into higher income tax brackets. In the third quarter of 1978, personal tax and nontax payments took 15.2 per cent of personal income, the **highest** since 1969, and up from 13.6 per cent in the third **quarter** of 1975.

very low level—5.1 per cent **in the** third quarter of '1978. In recent years, another increasing drain on disposable income has been the rapid rise in payments of interest to business by consumers. In the four quarters ending with the third quarter of 1978, these interest payments rose almost 18 per cent as compared with a 12 per cent increase in **personal** income over the same **period**.

Business investment in plant and equipment has supported the expansion since late 1975, in **that real business fixed investment has grown faster than real gross national product in each** of the last three years. Although business

**Chart 2**  
**GROWTH IN REAL PERSONAL CONSUMPTION**  
**EXPENDITURES AND IN RESIDENTIAL CONSTRUCTION**  
**1976:1 TO 1978:3**



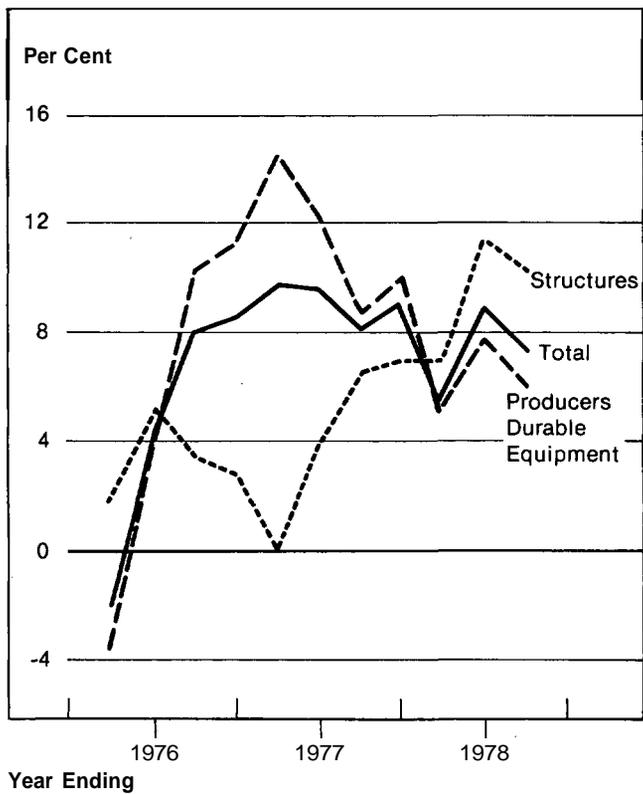
spending on plant and equipment has not increased sharply during any one-year period as in previous expansions, its average yearly rise of 7.8 per cent during the three years ending in the third quarter of 1978 compares very favorably with the three-year experiences of other recoveries.

It had been widely anticipated that some acceleration in the rate of business investment would accompany the economy's approach to full capacity in 1978. Although rates of capacity utilization have risen, the rate of growth of real business fixed investment

dropped to 7.3 per cent in the four quarters ending with the third quarter of 1978, compared with about 8 per cent annually over the two previous years.

The rate of growth of business fixed investment has been fairly steady over the course of the current expansion, but the composition of this growth has changed. Growth in real business expenditures on new structures has accelerated, and growth in expenditures on equipment has slowed (Chart 3). Also, the rate of growth of business expenditures during the year ending with the

**Chart 3**  
**GROWTH IN REAL BUSINESS INVESTMENT**  
**IN PLANT AND EQUIPMENT: 1976:1 TO 1978:3**



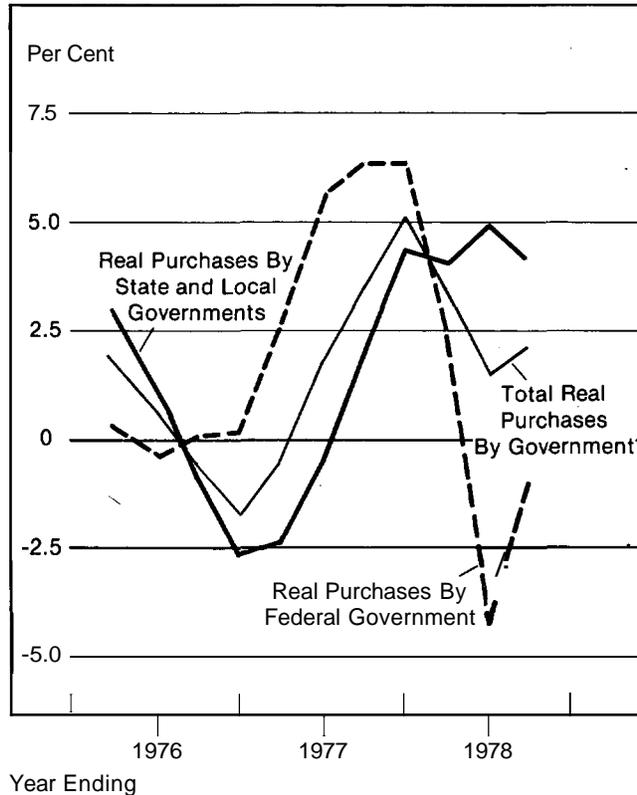
third quarter of 1978 shows a greater decline in manufacturing than in nonmanufacturing. These developments may decrease the chances for improving productivity gains, since gains in productivity are typically greater in the manufacturing sector than in the **nonmanufacturing** sector.<sup>1</sup>

<sup>2</sup>**Productivity** gains in manufacturing have been more than twice those in the rest of the private nonfarm economy since the recession trough early in 1975. In the decade from the third quarter of 1968 through the third quarter of 1978, productivity in manufacturing has increased at an average annual rate of 2.4 per cent as compared with a 1.4 per cent average annual increase in the private nonfarm economy as a whole.

Government purchases have grown unevenly since the recession's trough in early 1975. As Chart 4 shows, growth in real purchases by Federal and state and local governments actually declined in 1976 and then grew moderately in 1977. During the first half of 1978, these purchases fell again but then bounced back in the third quarter. As purchasers of goods and services, state and local governments have recently provided more support to the expansion than has the Federal Government, whose stimulus has decreased markedly from 1977 (Chart 4).

The Federal Government deficit for calendar

**Chart 4**  
**GROWTH IN FEDERAL AND STATE-LOCAL**  
**GOVERNMENT EXPENDITURES: 1976:1 TO 1978:3**



year **1978** is projected to be about \$34 billion, down from \$71 billion in **1975**, \$54 billion in **1976**, and \$48 billion in **1977**. State and local governments, as a group, will run a projected \$27 billion surplus in calendar year **1978**. The fiscal impact of all levels of government, therefore, is currently approaching a combined government balanced budget. As a result, the budgetary effect of all governments combined has been toward less stimulus as the recovery has matured.

The general level of prices in **1977**, as measured by 'the implicit GNP price' deflator, increased **5.9** per cent over **1976**. During the

first three quarters of **1978**, the deflator rose at an annual rate of **8.4** per cent, and is projected to average about **7.5** per cent above the level in **1977**.

Several factors contributed to accelerating inflation in **1978**. In the private business sector, unit labor costs rose **8.8** per cent from the third quarter of **1977** to the third quarter **1978**. This increase compares with **6.5** per cent over the comparable period a year earlier. Some of the acceleration in unit labor costs, which make up about seven-tenths of unit costs, can be attributed to a more rapid rate of increase in compensation per hour, from **8.4** per cent to

9.2 per cent in the periods defined. But most of the acceleration in unit labor costs resulted from a decline in productivity gains, from 1.8 per cent to 0.3 per cent. Finally, unit nonlabor payments (profits, rents, and interest) also accelerated to 5.6 per cent from 4.9 per cent in the same periods.

The increase in compensation per hour for the year ending with the third quarter of 1978 was greater than the rate of inflation over that period. Consequently, real compensation per hour rose 2 per cent. But compensation per hour includes Social Security contributions and the cost of employee benefits, and is calculated before income tax deductions. Once allowance is made for these nonspendable parts of compensation, the purchasing power of take-home pay for the average worker fell over 3 per cent from September 1977 to September 1978.

## BUSINESS OUTLOOK

Prospects for continued economic growth in 1979 were good as of October 1978. Late that month, the U.S. Department of Commerce reported that economic growth had been moderate in the third quarter of 1978, inflation had slowed, and productivity had registered a sizable gain. Even later in October, the Department of Commerce reported that the index of leading economic indicators had risen sharply in September after a previous increase in August. The decline in the rate of inflation in the third quarter of 1978 was encouraging, but developments in prices at the producer level threatened an acceleration in prices at the retail level. Specifically, prices of finished goods at wholesale rose at a 10.9 per cent annual rate in September and October. Even more disturbing, prices of goods at intermediate stages of production rose at an annual rate of 12.2 per cent in those two months, and prices of crude

materials increased at an annual rate of 31.1 per cent.

Against this background, the Administration announced a domestic anti-inflation program in late October and a program in support of the dollar internationally on November 1. The anti-inflation program includes elements of fiscal restraint, regulatory reform, and voluntary wage-price restraint in the private sector. As such, it is intended to influence the forces of both cost-push and demand-pull inflation. The dollar defense program, which is discussed later, will also have an impact on domestic growth and inflation. Taken together with recent evidence on the performance of the economy, these policy programs contribute to an outlook for slower total real output growth, but promise little, if any, reduction in the rate of inflation in 1979.

In assessing the business outlook for 1979, sources of potential weakness may be found in both the household and business sectors of the economy. In the household sector, moderate income growth and large numbers of families in the prime buying age groups should support continued modest growth in real personal consumption expenditures. But growth in personal income and in retail sales have slowed recently, while price rises are again accelerating. These factors, along with the weight of consumer debt, a net increase in tax burden, and the likelihood of a rising personal saving rate, will act to restrain the growth of consumer spending in the period ahead.

Business spending for inventories has not been excessive in this expansion, and is not likely to be a problem unless sales decline sharply. Inventory-to-sales ratios are still in relatively good balance, but the output of consumer goods has risen slightly faster than real retail sales in recent months. A continuation of growth in real business fixed investment is expected, but early surveys of spending intentions for 1979 project only a small real

increase over 1978. Other leading indicators of capital spending tend to support the implication of the surveys that the contribution of business fixed investment to total output growth will be modest.

Real residential **construction** spending was virtually flat over the first three quarters of 1978, and there is little reason to believe that housing will make a positive contribution to growth in 1979. While financing for housing has been maintained well, given the high level of market interest rates, such a situation is not likely to continue indefinitely. Housing starts remain at a high level, but they have been edging downward since the end of 1977—as have building permits. Furthermore, recent economic policy moves have led both industry and government forecasters to revise downward their estimates of 1979 housing starts.

Such performance by these major spending sectors—which account for more than three-fourths of total real purchases—suggests output growth below the 3.9 per cent averaged over the first three quarters of 1978. This expected performance presumes both continued relatively low rates of increase in real government purchases and the possibility of a significant increase in net exports. One consequence of total real output growth below the economy's long-run potential—a not unlikely outcome in 1979—will be a rising overall unemployment rate.

The problem of inflation is likely to remain serious in 1979. If the rate of increase in the Consumer Price Index in the fourth quarter of 1978 is the same as in the third quarter, the Bureau of Labor Statistics estimates that the full-year rise for 1978 will be about 9 per cent. Increases in the underlying rate of inflation, as indicated by changes in unit labor costs, show a similar picture. In the private business sector during the first three quarters of 1978, compensation rose about 10 per cent, productivity grew about 0.5 per cent, and unit

labor costs increased about 9.5 per cent (all SAAR). The rate of unit labor cost increase declined somewhat following the first quarter, however, and the full-year increase may be around 9 per cent or slightly below. Labor cost increase, and hence the basic inflation rate, probably will not improve much in 1979 unless the Administration's incomes policy is very effective. The program's importance is underlined by the significant number of pattern-setting contract negotiations upcoming in 1979, against a background of large CPI increases and with the desire of union bargainers to catch up with past inflation and to keep up with anticipated inflation. At the same time, slower growth in total output should lessen the upward pressure of demand on prices.

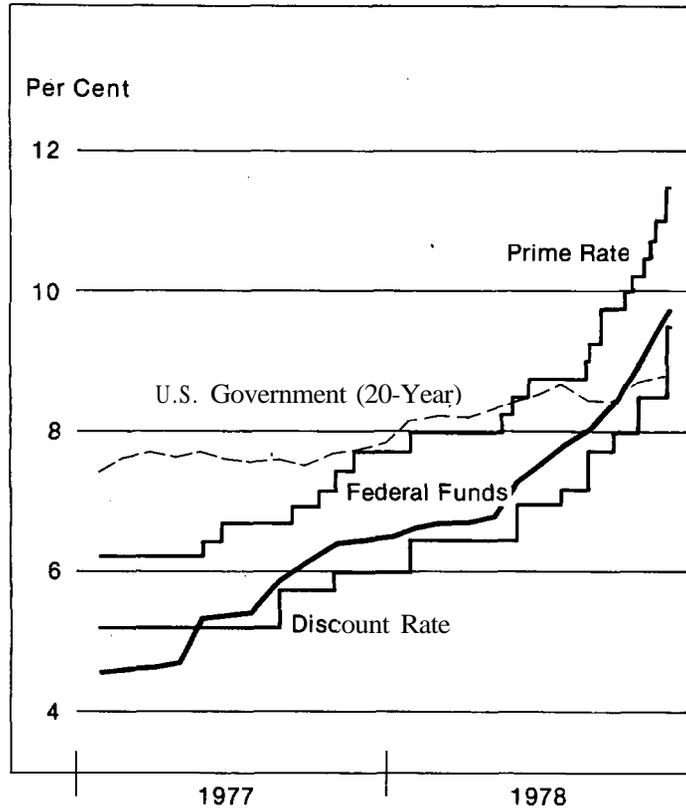
## FINANCIAL DEVELOPMENTS AND OUTLOOK

The financial sector of the nation's economy interacts closely with the real sector, as developments in the financial sector affect and are affected by movements in production, employment, and prices. This section analyzes developments in domestic and international financial markets in 1978 and discusses the outlook for these markets in 1979.

### Financial Developments in 1978

Interest rates trended upward during 1978, with short-term rates rising substantially more than long-term rates (Chart 5). Short-term interest rates rose in January, remained relatively stable from February through April, and rose from May through November with particularly strong increases in October and early November. Long-term interest rates increased **through** the first half of the year and reached a temporary peak in **mid-July**. Following this peak, long-term rates declined somewhat, but then rose above the level of **mid-July** late in the year. Interest rates, particularly short-term

**Chart 5  
SELECTED INTEREST RATES, 1977-78**



rates, increased sharply in early November in response to the actions taken by the Federal Reserve and the Administration to stabilize the international value of the dollar.

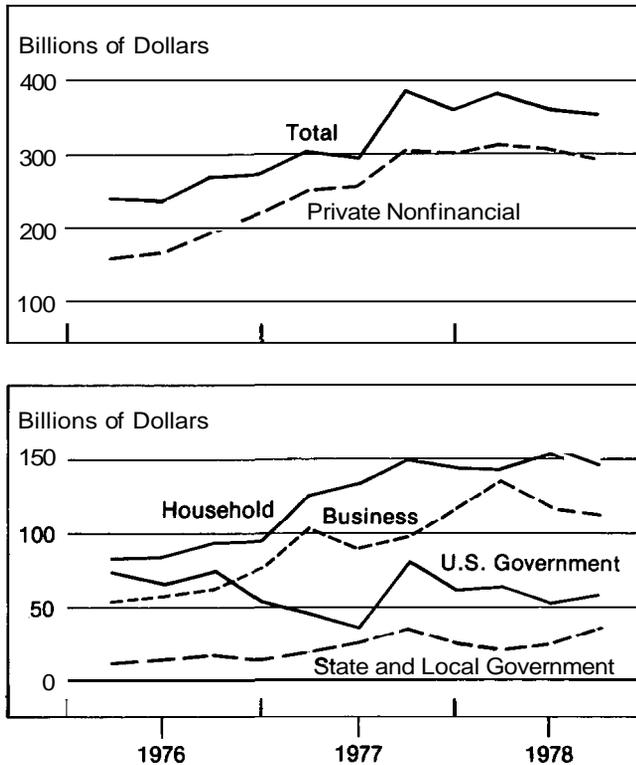
The increase in interest rates in 1978 may be attributed to several interrelated factors. One was continued strength in the demand for funds in credit markets. During the first three quarters of 1978, nonfinancial borrowers—households, nonfinancial businesses, Governments, and foreigners—raised funds at an annual rate of \$366 billion, compared with \$340 billion in 1977 (Chart 6). However, the rate of growth in borrowing by the nonfinancial sectors of the

economy slowed sharply during 1978, as is generally the case during periods of rising interest rates. Borrowing rose 8 per cent in 1978, compared with 29 per cent in the previous year and 32 per cent in 1976.

Federal, state, and local governments have used less credit in 1978 than in 1977 and the growth of business borrowing has diminished also. The major source of lower growth in borrowing, however, has been the household sector, especially for home mortgages.

After two years of very rapid growth, mortgage borrowing declined during the first three quarters of the year to an annual rate of

**Chart 6  
BORROWING IN CREDIT MARKETS**



\$91 billion, compared with \$93 billion in 1977. Home mortgage borrowing, however, did not decline as sharply in 1978 as in past periods of rising interest rates. Previous reductions in mortgage borrowing have been attributed to increases in the cost of home ownership from higher mortgage and construction interest rates, and from sharply reduced mortgage availability when ceiling rates on deposit liabilities have prevented thrift institutions from competing for funds. In 1978, however, high interest rates had a lesser impact on demand because the high rate of inflation of home prices encouraged borrowers to pay the high interest rates. Moreover, mortgage funds were more

available in 1978, in part because money market certificates of deposit allowed thrift institutions to compete more effectively for funds. These certificates carry a maximum interest rate equal to the new 6-month Treasury bill rate when offered by commercial banks and  $\frac{1}{4}$  per cent higher when offered by savings and loan associations (**S&L's**) and mutual savings banks. Money market CD's have been highly successful in maintaining the flow of funds to thrift institutions, particularly **S&L's**. A Federal Home Loan Bank Board survey showed that large **S&L's** were obtaining 7.3 per cent of their deposits from money market CD's at the end of October.

**Table 1**  
**MONETARY GROWTH RATES**  
**(Annual Rate in Per Cent)**

<u>Year</u>	<u>M1</u>	<u>M2</u>	<u>M3</u>
1975	4.6	8.4	11.1
1976	5.8	10.9	12.8
1977	7.9	9.8	11.7
1978*	8.0	8.2	9.3
1978:Q1	6.2	6.9	7.7
1978:Q2	9.9	7.9	7.8
1978:Q3	7.6	8.9	10.0

\*Growth rate for four quarters ending in third quarter of 1978.

Another factor leading to increased interest rates during 1978 was a tendency for the money supply to grow more rapidly than the long-run growth ranges established by the Federal Reserve. Through the first three quarters of 1978, the growth ranges adopted for the major monetary aggregates have been 4 to 6½ per cent for **M1**, 6% to 9 per cent for **M2**, and 7% to 10 per cent for **M3**.<sup>3</sup> As seen in Table 1, the growth rate for **M1** has exceeded its range in 1978 and growth rates for **M2** and **M3** have generally been within their ranges. To maintain the growth rates of the aggregates within their ranges the Federal Reserve held back on the flow of reserves to the banking system, which resulted in upward pressure on-market interest rates.

The divergent pattern of **M1** and the broader monetary aggregates over the last two years

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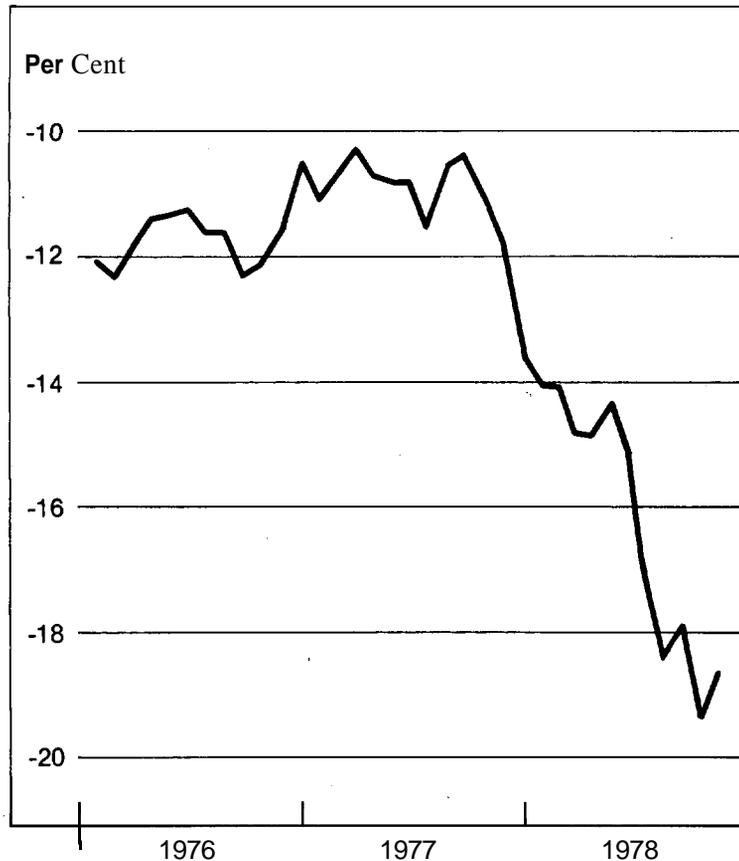
<sup>3</sup>**M1** is demand deposits of commercial banks other than domestic interbank and U.S. government deposits, less cash items in the process of collection, and Federal Reserve float; foreign demand balances at Federal Reserve Banks; and currency outside the Treasury, Federal Reserve Banks, and vaults of commercial banks. **M2** is **M1** plus time and savings deposits of commercial banks other than negotiable certificates of deposit of \$100,000 or more of large weekly reporting banks. **M3** is **M2** plus deposits of mutual savings banks and savings and loan associations plus credit union shares.

reflects the sensitivity of the growth of time and savings deposits—which are not included in **M1**—to the differential between deposit rate ceilings and money market interest rates. When market rates greatly exceed ceiling rates, as in 1978, the growth rate of time and savings accounts at commercial banks and nonbank thrift institutions declines. In the third quarter of 1978, however, the growth of **M2** and **M3** accelerated somewhat at the same time as the growth of **M1** was falling. This acceleration was due largely to the introduction of money market CD's. Without these **CD's** it seems unlikely that the growth rates for these broader aggregates would have increased.

International considerations also affected monetary policy and interest rates in 1978. For example, on August 21, and on November 1, the Federal Reserve increased its discount rate in response to declines of the dollar in foreign exchange markets. The dollar fell relative to other currencies throughout most of 1978, with the decline being particularly pronounced in the latter part of October (Chart 7). By October 31, the dollar had declined 9.3 per cent on a trade-weighted basis from its value at the beginning of the year. Over the same period the dollar had declined 16.4 per cent relative to the German mark, 25.2 per cent relative to the Japanese yen, 24.7 per cent relative to the Swiss franc, and 7.6 per cent relative to the U.K. pound. A 6.6 per cent increase in the value of the U.S. dollar relative to the Canadian dollar was the primary reason for the fact that the dollar declined less on a trade-weighted basis than relative to most other major currencies.

The decline of the dollar was due in large part to continuing international concern with **U.S.** inflation and the **U.S.** balance of trade deficit. During the first ten months of 1978, the deficit in the **U.S.** balance of trade totaled \$24.8 billion, up \$3.6 billion over the first ten months of 1977. However, the trade balance in the June to October period was slightly improved

**Chart 7**  
**EFFECTIVE DOLLAR DEVALUATION**  
**(From May 1970)**

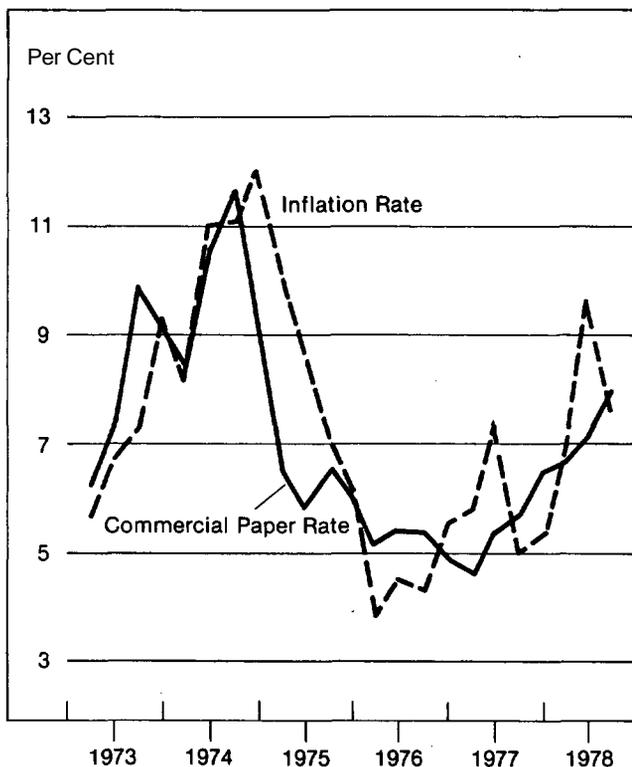


NOTE: The effective devaluation of the dollar measures the percentage depreciation of the dollar, since May of 1970, against a basket of 15 major currencies. This index is calculated using a geometric average, with weights based on each country's percentage share of U.S. exports and imports.

from 1977. The substantial declines in the dollar, the improvements in the balance of trade, and evidence that U.S. economic growth was moderating while foreign growth rates were accelerating led to a belief by some that the dollar was undervalued in international currency markets. Nevertheless, the dollar continued to decline through the end of October.

On November 1, the Federal Reserve and the U.S. Treasury announced a number of actions designed to strengthen the international value of the dollar. These included an increase in the Federal Reserve discount rate from 8½ to 9½ per cent, an increase of member bank reserve requirements equal to 2 per cent of time deposits in denominations of \$100,000 or more, increased sales of U.S. gold, and a variety of

**Chart 8**  
**INFLATION AND 3-MONTH COMMERCIAL PAPER RATES**



NOTE: The rate of inflation is the quarter to quarter rate of change in the GNP implicit price deflator expressed as an annual rate.

actions to increase the capacity for **U.S.** intervention in foreign exchange markets.

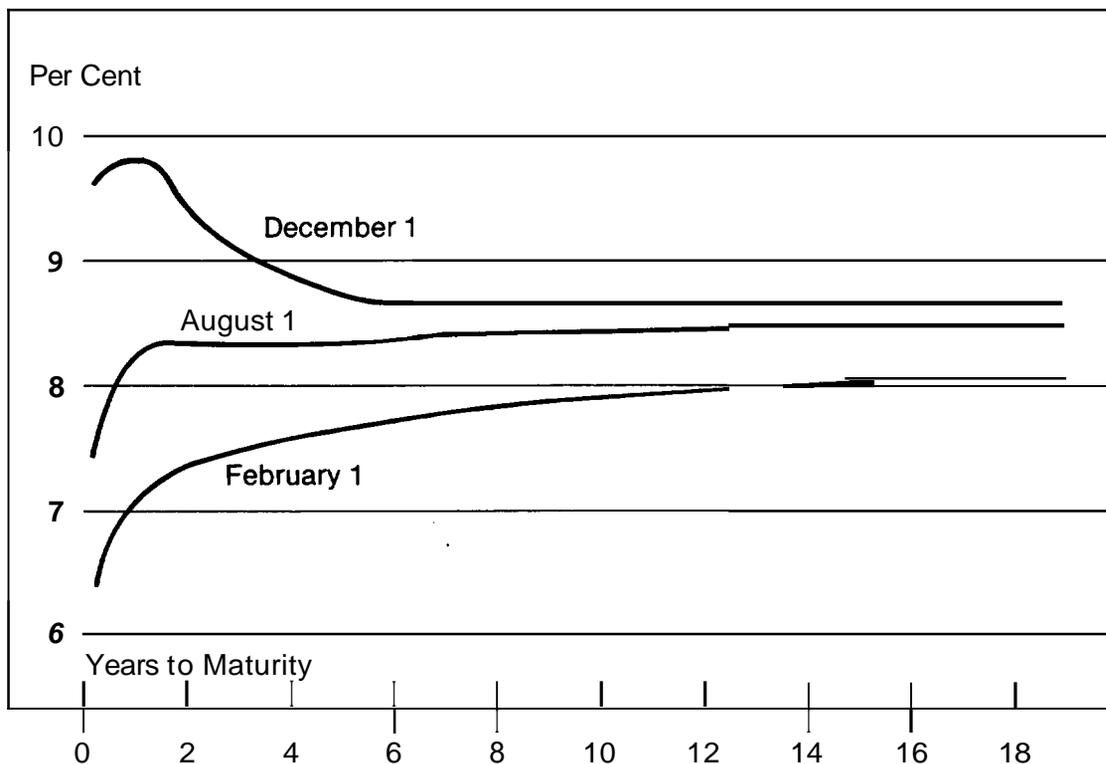
Another factor contributing to the rise in interest rates in **1978** was an increase in inflationary expectations. When inflationary expectations increase, lenders require higher interest rates to compensate for inflation. As may be seen by Chart 8—which shows the relationship between inflation and the interest rate on 3-month commercial paper—major movements in interest rates generally parallel the rate of inflation. Between the fourth quarter of **1977** and the third quarter of **1978**, the rate of

inflation increased from 5.4 per cent to **7.7** per cent, while the interest rate on 3-month commercial paper was increasing from 6.5 per cent to **8.0** per cent.

### Prospective Developments

The financial outlook for **1979** is particularly uncertain. Some factors, such as the maturity structure of interest rates, suggest that a peak in market interest rates may occur in the near future. Chart 9 shows that the yield-to-maturity curve for Government securities is downward

**Chart 9**  
**YIELDS ON U.S. GOVERNMENT SECURITIES, 1978**



sloping due to short-term rates being higher than long-term rates. A downward sloping yield curve implies that holders of Government securities expect prices of securities to be higher and interest rates on securities to be lower in the future than at present. These expectations of higher prices lead investors to bid for the longer term securities, which places upward pressure on their prices and downward pressure on their yields. Downward sloping yield curves typically exist when interest rates are at cyclical peaks. However, a downward sloping curve does not necessarily imply that a peak is imminent. In previous periods, downward sloping yield curves have sometimes

existed for a number of months before the peak in interest rates occurred.

The future course of interest rates depends importantly on the strength of the demand for credit, which depends in turn on the course of the economy. As mentioned earlier, the economy is expected to be growing in **1979** at a slower rate than in **1978**. Under these circumstances, the demand for credit may expand at a pace that will not place heavy pressures on financial markets.

As in **1978**, interest rates will also be affected by the behavior of the monetary aggregates and by the efforts of the Federal Reserve to maintain moderate growth in the aggregates.

The growth rates for the monetary aggregates in 1979 will be affected by a recent innovation—automatic transfer accounts (**AT's**). **AT's**, which banks began offering on November 1, 1978, allow funds to be shifted automatically from savings accounts to demand accounts when the balance in a checking account reaches zero or some other preauthorized level. These accounts are expected to lead to a reduction in the growth of **M1** during 1979, as some funds will be deposited in savings accounts rather than in demand accounts. For this reason, the Federal Reserve's growth range for **M1** for the period from the third quarter of 1978 to the third quarter of 1979 has been set at 2 to 6 per cent compared with the previous range of 4 to 6% per cent. Ranges for **M2** and **M3** were left unchanged at 6½ to 9 per cent for **M2** and 7% to 10 per cent for **M3**. If the growth rates of the monetary aggregates tend to exceed these ranges—as might occur if the economy's growth rate is strong—the Federal Reserve may respond by holding back on the supply of bank reserves, which would tend to place upward pressure on interest rates. If, on the other hand, the growth rates for the monetary aggregates are slower than the ranges, as would be likely to occur if the economy is weak, the Federal Reserve may respond by increasing the supply of bank reserves, placing downward pressure on interest rates.

The performance of the dollar on exchange markets is another factor that will affect monetary policy and interest rates in 1979. The decisive action taken by the Federal Reserve and the Treasury on November 1 has reversed the downward trend of the dollar in international markets. Whether the gains will be maintained will depend importantly on the rate of inflation in the United States in 1979. In addition, the rate of growth of the economies of our trading partners and the price of OPEC oil

will have a major impact on the dollar's future value.

Besides affecting the dollar's value, developments with regard to inflation will have a direct impact on interest rates in 1979. A reduction in the rate of inflation would, if maintained for an extended period, tend to reduce inflationary expectations and thus would tend to put downward pressure on interest rates. On the other hand, a stable financial environment will be extremely difficult to achieve if the rate of inflation continues to accelerate.

## CONCLUSIONS

The first three quarters of 1978 were characterized by moderate economic growth, by serious inflation, and by rising interest rates. The latter two elements in the economic picture have led some analysts to fear that a recession may occur in 1979. This article suggests, however, that the dynamics of the business cycle expansion itself, in conjunction with economic policy already in place, are more likely only to reduce the rate of real output growth further in 1979. The reduction in growth below the economy's long-run potential growth rate is likely to be associated with a rise in the unemployment rate and only slight reduction in the rate of inflation in 1979.

The prospective reduction in the economic growth rate in 1979 will tend to remove some of the pressures on interest rates and financial markets. Moreover, any reduction in the rate of inflation, even though slight, will work in the same direction. Thus, financial markets in the coming year may exhibit a degree of stability not shown over the past year. If so, the stability will contribute to the expected continued moderate growth in the overall economy.

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