Better Times Ahead for Agriculture

By Marvin Duncan and Mark Drabenstott

The U.S. farm sector began its climb back to economic health in 1983. Improved farm prices and income signalled an end to three consecutive years of economic recession. While smaller output of major crops played a dominant role in brightening the farm outlook, historically large government subsidies also were a major factor.

Farm income will likely post further gains in 1984, largely as a result of large crop production. Prospects for improved livestock profitability add further to a brighter agricultural outlook. However, farm financial stress is expected to remain a very visible problem in 1984.

This article reviews events in the farm sector over the past year and outlines prospects for farm production and market demand in 1984. The discussion includes the outlook for farm prices, farm income, and farm financial conditions.

The year in review

Prospects for improved farm income were given a boost in January 1983 when the Payment-In-Kind (PIK) program was added to U.S. Department of Agriculture (USDA) efforts to reduce 1983 crop production and grain supplies overhanging the market. The program was intended to hold out of production a substantial proportion of acreage normally seeded to wheat, corn, grain sorghum, cotton, and rice. Already in place was the Acreage Reduction Program (ARP) under which producers could set aside part of their historical base acres of these crops. Such an acreage reduction earned farmers a diversion payment on part of the acreage reduction and eligibility to participate in the PIK program.

Under the PIK program, producers could set aside another 10 to 30 percent of their acreage. For idling these additional acres, farmers would receive in-kind commodities equal to 95 percent of their normal wheat production and 80 percent of their normal corn, grain sorghum, cotton, and rice production. Under a separate option, farmers also could bid to remove their entire base acreage of a crop from production for a PIK payment up to 95 percent of their normal wheat production or 80 percent of their normal production of the other crops.

Farmers recognized PIK as the most generous income transfer program they had been offered in the 50-year history of federal farm programs. They signed up in large numbers and, as a result, participation in acreage reduction programs increased substantially in 1983 (Table 1).

The PIK program, while popular with crop farmers, was an unpleasant surprise to livestock producers and agribusinessmen. Livestock pro-

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TABLE 1 Participation in acreage reduction programs

(percentage of base acres)

	1982	1983 (projected)				
Сгор	(actual)	<u>Totai*</u>	<u>PIK</u>			
Wheat	48	75	50			
Corn	29	65	60			
Sorghum	47	65	60			
Rice	78	98	85			
Cotton	78	95	75			
1						

*Producers removed about 75 million acres from production in 1983, compared with about 11 million in 1982. Source: World Agricultural Outlook Board, September 26, 1983.

ducers, who had been expanding production, found feed grain prices rising sharply and livestock profits disappearing. By the second half of the year, they were cutting their herds back to sizes that would be profitable with higher production costs.

The cutback in crop production created a particularly difficult situation for agribusinesses. Machinery manufacturers and dealers were already reeling from three years of farm recession. Fertilizer, chemical, and seed dealers had built inventories based on the plantings expected before PIK. Because of the large acreage reductions, suppliers of farm inputs found far weaker demand than expected. For example, Tenth District agricultural bankers responding to an agricultural credit survey at midyear reported farm equipment sales off nearly a third from a year earlier and demand for fertilizer and chemicals down more than a fifth. Processors and marketers also faced the prospect of substantial excess capacity as total crop production declined from the record-setting levels of 1982.

A severe drought across the nation's heartland that began in July and continued through the rest of the growing season contributed to the cutback in crop production. The Corn Belt, the Southeast, and parts of West Texas and eastern New Mexico were particularly hard hit (Chart 1). For some states, it was the worst drought since the 1930s. As a result, the fall harvest of most major crops was sharply cut. By contrast, range conditions in Rocky Mountain and western states were favorable throughout most of the grazing season and large hay crops were harvested.

Largely as a result of the production cutbacks, prospects for farm income are substantially better this year. Higher grain and cotton prices will combine with record large livestock output — though at disappointing prices — and lower production costs to boost farm income by about \$3 billion over the 1982 level. An important factor in raising farm income, however, is generous spending on farm programs — \$18.8 billion in fiscal 1983 in addition to about \$4 billion in PIK grain and cotton distributed to farmers in 1983. In fact, costs of government farm programs in 1983 probably reached an unsustainably high level.

With improved farm income and massive government income transfers to farmers, credit conditions are better this fall and winter than previously expected. Nevertheless, for the small proportion of farmers carrying more debt than they can service, credit problems are severe. Agricultural lenders are now finding they hold more problem loans than in many years.

Crops

The recent string of successive record harvests came to an abrupt end in 1983. Because of their participation in government acreage reduction programs, farmers harvested far fewer acres of major crops. An unusually high proportion of the base acreage for the crops included in the PIK program was in compliance with government farm programs, but the drought also reduced production for most crops. Expected average yields were off 30 percent for corn, 23 percent for soybeans, and 15 percent for cotton. Only in the case of wheat, where most of the crop was harvested ahead of the drought, was the expected average yield higher than in 1982.

CHART 1 Areas affected by drought in 1983*



*Based on the crop moisture index as of August 20, 1983

Wheat production, largely unaffected by drought, was off only 14 percent from the record crop last year. Total production was 2.4 billion bushels, and large wheat stocks held average farmlevel prices in the 1982-83 marketing year to \$3.53 a bushel (Table 2). Since most of the carryover wheat stocks brought into that marketing year were under Commodity Credit Corporation (CCC) loans — including the Farmer Owned Reserve (FOR) or in the CCC inventory, prices were higher than they would have been.

Sharply reduced by drought, feed grain production totaled only 135.4 million metric tons, 53 percent of the record output in 1982. Production of corn, the major U.S. feed grain, totaled only 4.1 billion bushels, which was down 51 percent from last year's record crop and the smallest corn crop since 1965. High feed use and large amounts of corn under CCC and FOR loan programs and in CCC inventory limited market supplies and supported corn prices, despite large total stocks. Average farm-level corn prices were \$2.70 a bushel in the 1982-83 marketing year, up somewhat from the previous year.

Soybean production, at 1.5 billion bushels, was off nearly a third from 1982. This was the smallest soybean crop since 1976. The farm-level soybean price averaged \$5.65 a bushel during the 1982-83 marketing year. That price was off substantially from the previous year due to soft world market demand, even though carryover stocks were not particularly burdensome. However, the 1982-83 marketing year had the largest total supply in recent years.

Cotton production totaled 7.5 million bales, only 63 percent of 1982's production. Total supplies were more than adequate, however. Carryover stocks at the end of the 1982-83 marketing year totaled 7.9 million bales, more than was produced in 1983. Farm-level cotton prices averaged 58 cents a pound for the marketing year, up somewhat from the previous year on the basis of world supply and

TABLE 2 U.S. farm product price projections

Crops (farm level)	1982-83	1983-84	Percent Change*	
Wheat	\$3.53/bu.	\$3.50-3.70/bu.	2	
Corn	\$2.65/bu.	\$3.40-3.80/bu.	. 33	
Soybeans	\$5.65/bu.	\$8.50-9.50/bu.	59	
Cotton	\$0.58/lb.	N/A	N/A	
Livestock	1983	1984		
Choice steers (Omaha)	\$61-63/cwt.	\$64-70/cwt.	8	
Barrows and gilts (7 major markets)	\$46-48/cwt.	\$46-52/cwt.	4	
Broilers (12 city average)	N/A	47-53 cents/lb.	N/A	
Turkeys (NY young hens)	58-60 cents/lb.	60-66 cents/lb.	7	
Milk	\$13.55-13.65/cwt.	\$13.60-14.30/cwt.	3	
*Calculated from the midpoint Source: USDA World Agricult USDA Agricultural Outlook, N	ural Supply and Demand Estim	nates, November 14, 1983.		

demand.

Between PIK and the drought, excess feed grain and soybean stocks have been reduced remarkably. While cotton stocks remain large, progress was made in reducing the large carryover supplies of recent years. Wheat stocks remain burdensome since wheat production was little affected by PIK or the drought.

Livestock

Livestock production is expected to reach an alltime high in 1983, up about 3.7 percent from 1982. The increase is related partly to a buildup in hog numbers and continued heavy feedlot placements and marketings of beef cattle. But the increase also reflects efforts in the second half of the year to market greater numbers of cattle and hogs because higher feed costs made production unprofitable.

Beef and veal production increased about 2.7 percent this year. Beef production exceeded year-

earlier levels almost all year. More of the cattle slaughtered in 1983 came out of feedlots and at heavier weights. Beef cattle numbers at the end of 1983 will probably be about the same or modestly lower than a year earlier. The stable to slightly lower numbers, which reflect unprofitable production at most levels of the industry, suggest that the current upswing in the cattle cycle may have ended much earlier than usual. If so, this may have been the shortest expansion phase in this century. Slaughter steer prices at Omaha are expected to average nearly \$62.50 per hundredweight in 1983 compared with \$64.30 in 1982, a decline of about 3 percent.

Pork production, up a substantial 6 percent from 1982, began rising early in the year. The increase reflected a buildup in inventories of both breeding and market hogs that began in late 1982 and continued throughout most of 1983. By September, the number of breeding hogs was up 5 percent from a year before and the number of market hogs was up 11 percent. As a result of the increase in production, market hog prices declined throughout much of the year. It appears that prices for barrows and gilts at seven regional markets will average \$47.53 per hundredweight in 1983, a decline of about 14 percent from 1982.

Production of lamb and mutton is expected to increase 2 percent in 1983. Sheep inventories will continue their decline, in part because drought conditions have triggered increased herd liquidation. Prices farmers receive, however, probably will average about \$56 per hundredweight, down slightly from 1982.

Poultry production has likely increased about 2.8 percent in 1983. Increased broiler output accounts for most of the gain, though turkey production also may be somewhat higher. Broiler prices are expected to average 49 cents a pound compared with 44 cents in 1982, an increase of 11 percent.

Dairy producers in 1983 continued to increase both the number of cows being milked and the production per cow. As a result, milk production is expected to increase close to 2 percent over the record 135.8 billion pounds produced in 1982. Increases in production may have slowed late in the year owing to government incentives to reduce output. To reduce milk output and the cost of supporting dairy prices, the USDA in April 1983 began to assess 50 cents per hundredweight on all milk sold commercially in the United States. Another 50 cents per hundredweight deduction became effective in October, with a provision that this second assessment would be refunded to producers that reduced sales by a specified proportion from their 1980-81 and 1981-82 average.

Prices and income

Sluggish demand for farm products and abundant commodity supplies held the prices farmers received in check throughout most of 1983. Prices received in September averaged less than 1 percent higher than a year earlier. By November, however, prices received were 5.5 percent higher than a year earlier. While crop prices averaged 16 percent higher in November than a year earlier, livestock prices averaged 2.9 percent less than a year before. With inflation slowing, the prices farmers paid also were held in check. In November, they were only 3.8 percent higher than a year earlier.

Cash receipts from farm marketings are expected to have declined about 1 percent in 1983 to about \$143 billion. Livestock receipts were probably about the same as last year, with lower crop receipts accounting for the reduction in total receipts. Direct government payments to farmers totaled about \$9 billion, up from only \$3.5 billion in 1982. Since crop inventories will be lower this year, inventory adjustment could reduce total farm income over \$7 billion. Thus, total gross income may be about \$161 billion, only slightly less than in 1982. Total farm expenses, however, declined approximately 3 percent to about \$136 billion, the first decline in farm expenses since 1953.

As a result, farm income improved somewhat. Net farm income may reach about \$25 billion, up about 13 percent from last year, though further inventory reductions could lower this forecast. Net cash income (cash income minus cash expenses) will total about \$43 billion, up 18 percent from 1982 (Chart 2). Despite these gains, farm income in constant dollar terms remains low by historical standards. Farm family welfare, however, is also determined partly by off-farm income. Farm families are expected to have earned about \$41 billion in offfarm income, with most of that being earned by small farmers.

Farmers have called the current farm recession the most severe since the 1930s. However, a recent revision of USDA farm income statistics suggests that the farm recession has not been as unremitting as previously thought. Net farm income estimates for 1980-82, for example, have been raised by \$1.4 billion, \$5 billion, and \$1.7 billion, respectively.

The farm balance sheet may show some improve-

CHART 2 Net farm income



ment at yearend (Table 3). After declines in real estate values and total assets during 1981 and 1982, both values are forecast to show an increase in 1983. Total asset values could be up 3 percent to \$1.08 trillion, while total liabilities could have declined slightly to about \$216 billion due to farmers paying down CCC loans. With these shifts, proprietors' equity could have increased to \$864 billion and the debt-asset ratio of the farm sector could have fallen to about 20 percent from its recent record high.

For the farm sector and most farmers, financial stress has probably eased some in 1983. Huge payments under government farm programs helped many farmers stabilize their financial situation. For some farmers, however, the situation has grown worse. In some cases, the drought brought credit problems to a head. In others, excessive leverage and poor farm income have eroded equity. Thus, despite overall improvement in farm income, agricultural lenders probably had a higher proportion of problem loans than at any time since the late 1960s.

In the short run, emergency FmHA loans will help many farmers with serious drought damage. Preferential interest rates on these loans will be especially helpful where farmers are not creditworthy with commercial lenders. The recent reopening of the FmHA Economic Emergency loan program with \$600 million in lending authority will also be welcomed by farmers hard pressed to meet production costs and service debts.

Unless prospects for farm income improve markedly, however, the relief these government loan programs provide will be short lived. Most prospective applicants for the loans already have more debt than their farms will support. Additional credit, regardless of the terms, will make the long-run prospects for these farmers even more doubtful. As

TABLE 3 Farm balance sheet on January 1* (billions of dollars)

	1980r	<u>1981r</u>	<u>1982</u> r	<u>1983p</u>	1984f
Assets					
Real estate	756	828	819	773	790-805
Nonreal estate	208	219	220	276	270-294
Total assets:	1,005	1,090	1,083	1,049	1,060-1,099
Liabilities					
Real estate debt	85	96	106	110	112-114
Nonreal estate debt:	80	86	96	106	
Total Liabilities:	166	182	202	216	211-220
Proprietors' equity	40	908	882	833	840-888
Debt-to-asset ratio	16.5%	16.7%	18.6%	20.6%	19.2-20.8%
f = forecast, r = revised, p	= preliminary.				
*Including farm households.	- •				
Source: USDA, 1984 Agricu	Itural Outlook Co	onference.			

a result, there could be a difficult adjustment over the next few years as many highly leveraged farmers try to reduce their debt loads by liquidating some of their farm assets.

Agricultural bankers responding to the Federal Reserve Bank of Kansas City's quarterly agricultural credit survey reported that, during the second and third quarters of 1983, exits from farming due to financial stress were 2.8 times higher than bankers considered normal. This still represents a very small proportion of all farmers. Partial liquidations (selling some assets but remaining in business) were 3.5 times higher than bankers considered normal. On balance, the resolution of farm credit problems that have accumulated over the past decade will require extra forbearance by lenders, a more disciplined lending policy by the FmHA, and a willingness by borrowers to recognize financial problems and work with lenders in solving them.

Export sales

The nation's farm exports declined for the second straight year in fiscal 1983 (Chart 3). The value of U.S. agricultural exports was \$34.8 billion, 11 per-

cent less than the weakened export level in fiscal 1982 and 21 percent less than the peak in fiscal 1981. This decline in export value combined with an increase in agricultural imports to reduce the nation's agricultural trade balance sharply from \$26.6 billion in fiscal 1981 to \$18.6 billion in fiscal 1983. The volume of farm exports declined for the third consecutive year, falling to 144.8 million metric tons, 8 percent less than a year ago.

Weak export performance in 1983 provides further evidence that growth in agricultural trade in the 1980s may be disappointing. Optimistic expectations that the rapid growth in farm exports during the 1970s would continue still have not materialized. And without strong export markets, American farmers must eventually come to grips with the chronic problems of oversupply.

Farm exports remained depressed in 1983 for most of the same reasons that exports declined in 1982. Lingering world recession limited the purchasing power of many countries, especially developing countries, which make up a primary market for U.S. farm products. And difficulties in repaying foreign debts further restricted the import growth of many developing countries. The U.S. dollar rose

CHART 3 U.S. agricultural exports



against foreign currencies, raising prices of U.S. farm products to most foreign purchasers (Chart 4). Finally, competing global food supplies remained abundant in 1983. In spite of a 39 percent decline in U.S. grain production, world output fell only 6 percent in 1983. Thus, a combination of both supply and demand factors led to declining U.S. export sales.

The outlook for farm exports in 1984 is somewhat brighter. The world economic recovery that began in some industrialized nations in 1983 may begin spreading to developing countries as 1984 unfolds and lead to some increased sales for U.S. farm products. Economic recovery notwithstanding, the large foreign debt burden will still limit demand in many developing nations. With the U.S. dollar probably remaining relatively strong in 1984, as large prospective federal budget deficits hold real interest rates high in the United States, U.S. farm exports may remain high priced in the currencies of trading partners. Barring major shocks in world weather patterns, world food supplies should be large in 1984, especially if both U.S. and foreign producers respond to current high U.S. prices by increasing output. On balance, export volume may decline. Higher U.S. commodity prices, however, should increase export value as much as \$4 to \$5 billion.

Policy agenda

Farmers, their special-interest groups, and agribusinesses will be discussing a range of policy issues in 1984. In many respects, their efforts to increase public awareness of these issues will serve as a prelude to writing major farm legislation in 1985. The issue agenda is expected to include agricultural export growth, production control and price

CHART 4 Price of corn at Gulf port (first guarter 1980 = 100)



supports, soil conservation, and credit availability.

But agriculture now has broadened its interest to policy issues well beyond narrowly defined sector policies. It is now generally recognized that broader economic and trade policies may be more important to the wellbeing of farmers than narrowly defined farm policy. Farmers and agribusinessmen increasingly will turn attention to macroeconomic policies, trade policy, and other broad issues to improve U.S. economic performance. For example, farmers will probably join the debate over fiscal policy and how best to deal with the prospective budget deficits. Other issues, such as cargo preference and domestic content legislation, will probably be considered as well.

Current laws require that certain proportions of U.S. exports be carried in U.S. flag ships when taxpayers' money is used to fund the exports, as in Public Law 480 food aid. Cargo preference is sometimes specified for other reasons, as in the Soviet grain agreement. Because shipping in U.S. bottoms is nearly always more costly than shipping in foreign-flag ships, this kind of legislation has important competitive implications for farmers.

Domestic content legislation would require that U.S. produced goods contain some specified proportion of U.S. produced components. Although such legislation is primarily intended to protect the U.S. auto and electronics industries, many farmers fear it would bring additional barriers to entry for U.S. farm products in foreign markets.

More directly related to agricultural interests is possible legislation to increase food-aid expenditures, export credit, and export credit guarantees. As such legislation could increase farm exports, it has widespread support among U.S. farmers and agribusinesses. But others have doubts. Increased sales on credit to debt-ridden foreign customers could turn out to be thinly disguised foreign aid. Some also question the effect of such legislation on the export subsidy policies of foreign competitors.

Even though the 1984 U.S. winter wheat crop has been planted, wheat producers are lobbying for Congress to amend next year's program. Producers argue that without a more generous program to cut acreage, many farmers will stay out of the wheat program. If that happens, wheat production could exceed use by a wide margin, adding to already burdensome surpluses. Producers say that paid acreage diversion and a higher PIK payment are needed to draw down planted acreage, production, and most important, carryover stocks.

Congress has passed and the President has signed a revision of the longstanding dairy support programs. Under the change, milk price supports have been lowered 50 cents to \$12.60 per hundredweight. The legislation provides for a 15-month paid diversion program. Individual producers can contract to reduce their milk production by 5 to 30 percent from a base period. A producer will then receive government payments of \$10 per hundredweight of reduction to offset the costs of cutting production. A 50 cent per hundredweight deduction on milk sales is provided through the end of 1984. The paid diversion and deduction authority applies only to the 48 contiguous states. The legislation also provides that mid-1985 supply levels could trigger fur4 ther downward or upward adjustments in milk price supports. Beef and pork producers voiced strong opposition to the plan, fearing that it will increase the 1984-85 dairy-cow slaughter, boost meat supplies, and reduce livestock prices.

The year ahead

The solid gain in net farm income in 1983 should be followed by an additional gain in 1984. The crop outlook appears bright as 1984 begins because of the sharp drawdown in carryover stocks of most crops. The size of the 1984 harvest, however, will be the chief factor in determining the outlook for crop prices. Livestock producers face unprofitable prices in early 1984. But steadily improving consumer demand throughout the year due to economic expansion and potentially significant declines in feed grain prices should strengthen profits for most livestock producers in the latter three quarters of the year.

The crop outlook

The outlook is bright for most crops because of sharp reductions in supplies, but large prospective spring plantings cast a shadow over the outlook.

After a year of sharp cutbacks in seeded acreage, plantings of major crops are likely to be much larger in 1984. They could be close to the large acreages of the early 1980s. Although higher commodity prices will be the major reason for the larger planted acreage, another will be less generous government acreage reduction programs. Farmers will receive no payments in 1984 on acreage diversions required for participation in government farm programs. PIK payments will be available on additional cutbacks in wheat acreage, but at a much less generous rate than in 1983 (Table 4).

The outlook for wheat producers is burdened by near-record wheat supplies. Wheat prices have not benefited from the large reductions in stocks that characterize other major crops. To the contrary, wheat carryover stocks could total nearly 1.5 billion bushels when the 1983-84 marketing year ends, approaching the record supply of last year.

Wheat demand will be boosted by sharply higher feed use resulting from high feed grain prices. Economic expansion could boost domestic use more than 15 percent. But because of increased foreign supplies and weak demand abroad, exports likely will fall 7 percent in 1984 to 1.4 billion bushels (Table 5). Compounding the problem of large U.S. wheat supplies is a more than doubling of free stocks, the stocks outside CCC ownership and loans

TABLE 4 Commodity program highlights — 1984

Wheat	Corn	Grain Sorghum	Barley	Oats	Upland Cotton
	(de	ollars/bushel)			(cents/lb.)
\$4.45	\$3.03	\$2.88	\$2.60	\$1.60	\$0.81
3.30	2.55	2.42	2.08	1.31	.55
30%	10%	10%	10%	10%	25%
0	0	0	0	0	0
10-20%*	0	0	0	0	0
at of production					
r	\$4.45 3.30 30% 0 10-20%*	(dd \$4.45 \$3.03 3.30 2.55 30% 10% 0 0	(dollars/bushel) \$4.45 \$3.03 \$2.88 3.30 2.55 2.42 30% 10% 10% 0 0 0 10-20%* 0 0	(dollars/bushel) \$4.45 \$3.03 \$2.88 \$2.60 3.30 2.55 2.42 2.08 30% 10% 10% 10% 0 0 0 0 10-20%* 0 0 0	(dollars/bushel) \$4.45 \$3.03 \$2.88 \$2.60 \$1.60 3.30 2.55 2.42 2.08 1.31 30% 10% 10% 10% 10% 0 0 0 0 0 10-20%* 0 0 0 0

including the FOR. Free stocks will increase to 689 million bushels as large amounts of wheat in the FOR are distributed to participants in the PIK program. Large free stocks mean substantial increases in demand will be necessary to raise market prices significantly.

In addition to large carryover supplies, wheat prices in 1984 also will be determined by forecasts for 1984 production. Generally favorable weather for winter wheat and low participation in acreage reduction programs point to a large harvest in 1984. Thus, with large supplies on hand and only modest improvement in total demand, farm level wheat prices may change little from the 1982-83 marketing year average price of \$3.53 a bushel to a range of \$3.50 to \$3.70 in 1983-84.

The price outlook for feed grains is bright because of much tighter supplies. With 1983 corn production down more than a half from the level in 1982, feed grain carryover stocks at the end of the 1983-84 marketing year will decline a record 77 percent in one year, to their lowest level since 1976. While feed grain supplies will be adequate to meet projected demand, carryover stocks will be quite low. Corn supplies in the 1983-84 marketing year will total 7.3 billion bushels, compared with demand forecast at 6.8 billion bushels. This comparison suggests carryover stocks of only 512 million bushels at the end of the marketing year. Stocks that low — only 8 percent of total use — would almost certainly result in higher prices to ration available supplies.

Feed grain prices will reflect not only tighter supplies but also prospects for a large 1984 crop. Because of high corn prices in late 1983 and early 1984, producers will plant a large acreage next spring. With normal yields, the corn crop will likely exceed 8 billion bushels. Corn exports are expected to about equal the 1.9 billion bushel level of last year. On balance, farm-level corn prices may average \$3.60 a bushel, compared with \$2.70 in the 1982-83 marketing year. The pattern for corn prices, however, may show very strong prices in early 1984, with sharp declines in late summer and fall if the crop is large. Sorghum prices are expected to average \$3.10 to \$3.40 a bushel at the farm level, with barley prices expected to be between \$2.55 and \$2.80.

The soybean outlook is dominated by even tighter supplies than for feed grains. Domestic utilization and exports are both expected to decline in response to higher prices, with total soybean use falling 15 percent. Total soybean supplies will drop even more, however, by more than one-fifth. As a result, carryover stocks are forecast to dwindle to 140 million bushels, about a third of the 1982 carryover. Ending stocks will be only 8 percent of expected demand, approaching the very low per-

TABLE 5 U.S. agricultural supply and demand estimates, November 14, 1983 (millions of bushels, bales, or metric tons)

· · · · · · · · · · · · · · · · · · ·	Market Oct. 1-	n (bu) ling Year -Sep. 30 ⁻ 1983-84‡	metr) Market	d Grains ic tons) ing Year* 1983-84‡	Market Sep. 1-	ans (bu) ting Year •Aug. 31 † 1983-84‡	Marke Jun 1	at (bu) ting Year •May 31 † 1983-84‡	Market Aug. 1	(bales) ing Year -Jul 31 1983-84‡
Supply							-			
Beginning stocks	2,286	3,140	71.1	98.1	266	387	1,164	1,543	6.6	7.9
Production and imports	8,398	4,122	255.3	135.7	2,230	1,537	2,816	2,411	12.0	7.5
Demand	0,570	4,122	200.0	155.7	2,250	1,557	2,010	2,411	12.0	7.5
Domestic Exports	5,674 1,870	4,875 1,875	174.3 53.9	155.8 55.3	1,204 905	1,064 720	928 1,509	1,080 1,400	5.5 5.2	6.0 5.6
Total	7,544	6,750	228.2	211.1	2,109	1,784	2,437	2,480	10.7	11.6
Ending stocks	3,140	512	98.1	22.7	387	140	1,543	1,474	7.9	4.0
*Marketing y †Estimated. ‡Forecast.	ear begins (October I f	or corn an	d grain sorg	ghum, July	y 1 for barle	y and oat	ŝ.		

Source: U.S. Department of Agriculture.

centage of 1976-77. Higher prices will be necessary to ration supplies this small.

As with feed grains, the strength in soybean prices will be tempered by prospects for a large 1984 crop. With normal yields, large plantings next spring could result in a crop of 2 billion bushels or more. Thus, while farm-level soybean prices are expected to average a record \$8.50 to \$9.50 a bushel in the 1983-84 marketing year, very strong prices in early months of the year could be followed by sustained declines if a large soybean harvest develops.

Cotton supplies also will be tight as 1984 begins. Carryover stocks at the end of the 1983-84 marketing year will total 4.0 million bales, a 49 percent reduction from a year earlier. Economic expansion will boost domestic mill use by about 9 percent and exports may grow by about 8 percent. Cotton prices could maintain recent gains for a few months because of the tighter supplies. But without a large acreage reduction program in 1984, U.S. production may increase and cotton prices will again come under downward pressure.

The livestock outlook

Livestock producers look forward to a better year in 1984. The pattern of livestock profits may differ substantially, however, between the first quarter and the rest of the year. Larger red meat supplies and higher feed grain prices in the first part of the year will reduce livestock profits. But for the year as a whole, total meat production is expected to decline 2 percent from 1983's record level. Moreover, consumer demand should improve steadily in 1984 as the economic expansion continues, substantially increasing livestock prices after the first quarter of the year.

Beef production is expected to decline 3 to 4 percent in 1984. Large fed and nonfed slaughter in the first quarter will likely be followed by cutbacks in beef output over the remaining quarters. In the second half, nonfed slaughter will probably drop well below year-earlier levels. With fewer cattle in feedlots, total beef production could decline 6 to 8 percent in the second half.

Thus, profits for both cattle feeders and ranchers should improve after the first quarter. Feeder cattle supplies will probably tighten as the year advances. However, feeder cattle prices are not likely to be much higher than fed cattle prices for the first few months of the year. Then, as cattle feeding margins improve through the spring and summer months, feeder cattle prices likely will be bid to a substantial premium over fed cattle prices.

Choice steer prices at Omaha may average in the low to mid \$60 per hundredweight range in the first quarter and in the mid to upper \$60 range in the second quarter. Strong consumer demand should partially offset the large meat supplies coming to market in the first half. Prices in the upper \$60 range should be typical in the third and fourth quarters. Prices could be even higher if red meat supplies decrease more than expected.

However, the recently enacted dairy legislation could have a significant effect on cattle prices in 1984. Its provisions to reduce dairy herds are likely to increase dairy cow slaughter enough to depress beef prices.

Pork producers also face tight profit margins early in the year, with higher profits expected later in the year. Pork supplies will be large in the fourth quarter of 1983 and first quarter of 1984 as a result of herds being liquidated in response to high feedstuff costs and low hog prices. Pork production in the first quarter could be 8 percent higher than a year earlier, with a slight increase in the second quarter. But declines in production of perhaps 6 to 8 percent in the third and fourth quarters could result in a 2 percent decline in pork output for 1984 as a whole. However, if producers do not liquidate part of the breeding herd by early 1984, larger supplies later in the year will put pork prices under downward pressure.

Prices for barrows and gilts at the seven major markets are expected to average in the low to mid \$40 per hundredweight range in the first quarter of 1984. As pork supplies begin to tighten in the second quarter, prices could average in the mid to upper \$40 per hundredweight range. If red meat supplies decline as expected in the second half of 1984, pork prices then could average in the low to mid \$50 range.

Sheep inventories likely will continue declining throughout 1984. That suggests lower lamb production in the year ahead. Lamb prices also will benefit from general strength in red meat. On balance, lamb prices are expected to average between \$56 and \$61 per hundredweight, compared with about \$56 in 1983.

Prospects for broiler producers appear unfavorable in early 1984 as high feed costs cut into profits. Nevertheless, a 3 percent year-over-year increase in broiler output is expected for 1984. Steady increases in consumer demand coupled with tighter meat supplies may push broiler prices to the low 50 cent a pound range in the second half of the year. Turkey production is expected to decline less than 1 percent in 1984. During the first half of 1984 turkey prices should be close to 60 cents per pound, rising to the upper 60 cent range in the second half of the year.

The 1984 outlook for dairy producers will be shaped by recently enacted legislation. Herd size could be reduced by as many as a million cows and production reduced substantially under provisions that pay farmers for reducing output. If reductions in dairy herds and milk production are substantial, dairy prices would rise above CCC support levels. The USDA might then decide to sell part of its stock of butter, cheese, and dried milk to limit consumer price increases of dairy products.

Farm income

Net farm income is expected to improve modestly in 1984. Crop prices should be strong through midyear, but the prospect for large crops and continued softness in export markets threaten the longer term price outlook. Overall, crop cash receipts should increase primarily on the strength of greater output. As crops may be large, inventory adjustments could add substantially to 1984 farm income. Livestock prices will be strong most of the year, contributing to higher livestock cash receipts. As in 1983, direct government payments will be an important part of total farm income. On balance, net farm income in 1984 could reach the low \$30 billion range. Net cash income is likely to decline because of substantial increases in farm expenses resulting from greater use of farm inputs.

Uneven distribution of farm income gains in 1983 will lead to further financial stress for some farmers in 1984. Many farmers that suffered severe drought damage in 1983 and did not participate in the PIK program face substantial financial difficulty. As a result, a fairly high level of farm foreclosures and partial asset liquidations can be expected in 1984. As in the past two years, liquidations will represent only a small percentage of all farmers and will be confined mostly to highly leveraged farmers. Even though the current period of financial stress has continued four years, the farm sector as a whole has remained remarkably resilient.

Agricultural credit conditions probably will stabilize in 1984. Ample credit will be available at commercial banks and Farm Credit System outlets to meet the loan demands of qualified farm borrowers. With many counties declared disaster areas because of the drought, large amounts of FmHA disaster assistance and economic emergency loans also will be available to farmers. Average interest rates for farm operating loans remained fairly steady in 1983 around 14.0 percent. Farm loan interest rates may be steady to only slightly lower in 1984 as lenders replace loanable funds in their portfolios at lower cost than when certificates of deposit were issued six to 18 months ago.

Farmland values may continue to be soft in 1984. Because of some continued liquidations, additional farm real estate will be offered for sale. The high debt levels of many farmers, however, will probably keep buyers cautious. Current indications are, though, that after having been largely out of the market for a couple of years, farmers and other investors are beginning to make farmland purchases again. If 1984 crops are large, exports markets continue weak, and carryover stocks begin to build again, farmland values will remain soft beyond 1984.

Food prices

Reduced grain and livestock supplies will mean higher consumer food prices in 1984. Retail food prices increased only 2 percent in 1983, the smallest increase since 1967 and the eighth year of the past nine that food prices rose less than the overall inflation rate. But retail food prices may rise by 5 to 7 percent in 1984, somewhat ahead of the generally expected overall inflation rate. Higher meat prices beginning in the second quarter will be an important component of food price increases.

Conclusion

The U.S. farm sector is recovering from its deep, longlasting recession. Farm income improved in 1983 and further improvement is likely next year. Improvement in 1983, however, was largely due to record high government subsidies to farmers. In 1984, farm income growth will be determined more by supply-demand relationships.

High prices for crops in early 1984 will boost farm cash receipts, feed costs for livestock producers, and intended crop plantings. High crop prices also will limit growth in export sales. Barring serious production problems elsewhere in the world, U.S. production will determine crop prices in the second half. Reduced livestock output will raise prices and improve profitability for producers. Consumer food prices are now expected to increase 5 to 7 percent in the year ahead. Both total farm income and net farm income should improve somewhat from 1983 levels.

More than the usual number of uncertainties may affect the agricultural sector's performance in the year ahead. Forecasts of improving farm income are based on continued expansion of the U.S. economy and a broadening of economic recovery to trading partners. Forecasts of declining crop prices later in 1984 are based on normal crop production. Since carryover stocks are low, another serious drought would drive feed grain and oilseed crop prices sharply higher. Forecasts for higher livestock prices might not be realized if feed grain prices move higher or if dairymen sharply reduce their herds.

Farm financial conditions may improve in 1984. Farm asset values increased in 1983 after two years of decline and perhaps could increase again in 1984. Farm real estate values, however, may be relatively flat in the year ahead. Finally, the number of farmers going out of business may continue relatively high in 1984. Although representing only a small proportion of all farmers, those going out of business will be highly visible.

On balance, some growth in farm income and further improvement in farm financial conditions are likely in 1984. Thus, better times may be ahead for U.S. agriculture.

1983 Index Economic Review

"After Deregulation: The Regulatory Role of the Federal Reserve," June.

"Alternative Views of Exchange-Rate Determination," February.

"Bank Deregulation and Concentration — What Policy for Mergers?" November.

"Better Times Ahead for Agriculture," December.

"The Decline in Business Profitability: A Disaggregated Analysis," January.

"The Effect of Alternative Discount Rate Mechanisms on Monetary Control," March.

"The Effects of Deficits on Interest Rates," May.

"Financial Condition of Agricultural Lenders in a Time of Farm Distress," July-August.

"Financing Agriculture in the 1980s," July-August.

"Government Lending: Some Insights from Agriculture," September-October.

"The Impact of New Economic Information on the Volatility of Short-Term Interest Rates," February.

"Inflation and Recession, 1979-82: Supply Shocks and Economic Policy," June.

"Inflation Uncertainty and Inflation Hedging," September-October.

"Money Growth Volatility, Uncertainty, and High Interest Rates," November.

"The 1980's: A Turning Point for U.S. Agricultural Exports?" April.

"NOW's and Super NOW's: Implications for Defining and Measuring Money," January.

"Recent Developments at Banks and Nonbank Depository Institutions," July-August.

"Should the Federal Reserve Establish a Real Interest Rate Target?" June.

"Stock Prices and the Economy," November.

"Taxation of Corporate Income," September-October.

"Trends in Corporation Finance," March.

"The U.S. Economy and Monetary Policy in 1983," December.

"Wage Behavior in the United States: 1907-80," April.

"Why are So Few Financial Assets Indexed to Inflation?" May.