FEDERAL RESERVE BANK OF CHICAGO

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**THE PAYMENT IN KIND (PIK) PROGRAM** was formally announced by President Reagan last week. The program, under discussion for the past couple of months, offers farmers the opportunity to receive title to crops as compensation for removing additional land from production. The details of the program are more attractive to farmers than previously discussed, particularly with respect to the in-kind compensation rates and the possibilities for avoiding carrying charges for up to five months on the crops to be received as payment. A high level of participation is expected among farmers, offering the hope that in time significant strides will be made in correcting the huge overhang of stocks now holding prices at depressed levels.

The PIK program is available to producers of corn, sorghum, wheat, rice, and cotton on farms that have a 1983 base acreage for any of those crops. To the consternation of many farmers, it is not available to producers of other crops such as barley or soybeans. The sign-up period for the PIK program will begin on January 24 and extend through March 11. The sign-up period that started last fall for other features of the 1983 feed grain and wheat programs will also terminate on March 11. Once enrolled, stiff penalties will likely insure that farmers comply with the PIK requirements.

PIK is a voluntary program, as are the previously announced programs that are designed to encourage farmers to reduce their 1983 crop acreage. Farmers need not comply with the PIK requirements to maintain eligibility for CCC loans, reserve entry, and other 1983 feed grain and wheat program benefits. Eligibility for those benefits can be protected by meeting the combined requirements of the previously announced acreage reduction program (ARP) and the paid diversion program (PDP). However, farmers desiring to participate in the PIK program must meet the PIK requirements as well as the combined requirements of the ARP and the PDP. To comply with the ARP and PDP requirements, feed grain and wheat farmers must limit the acreage devoted to those crops in 1983 to an amount at least 20 percent less than the farm's base acreage for those crops. Farmers who plant at that upper limit must also devote an acreage equivalent to 20 percent of the base acreage to approved conservation uses. The latter requirement, in essence, precludes the 1983 harvesting of any crop on the acreage devoted to conservation uses.

The PIK program offers farmers two potential options for receiving grain or cotton as compensation for removing still more land from production. Under the so-called 10 to 30 option, the additional acreage removed from production could range, at the farmer's discretion, from a minimum of 10 percent of the base acreage to a maximum of 30 percent. When added to the ARP and PDP requirements, this implies that a farmer complying with the corn or wheat PIK program would limit his 1983 acreage of that crop to an amount at least 30 to 50 percent below the farm's base acreage, depending on the level of PIK participation selected. A similar range would prevail on the acreage that must be devoted to conservation uses. For each PIK acre diverted to conservation uses, farmers will subsequently receive an amount of grain that is equal to a specified percentage of the farm's established per acre yield. The specified percentage is 80 percent for corn and 95 percent for wheat. (The higher percentage for wheat was adopted as an extra consideration to winter wheat growers who have already suffered the costs of planting their 1983 wheat).

Another PIK option allows farmers to submit a bid on the so-called "whole-base" diversion feature. The bid, to be made at sign-up, should specify the percentage of the farm's per acre program yield that would be acceptable as payment in kind for each PIK acre removed under the whole-base diversion option. The bids may or may not be accepted by the USDA. If the bid is accepted, the farmer must reduce the 1983 acreage of the crop to zero and divert an acreage equal to the farm's base acreage of that crop to conservation uses. If the bid is not accepted, the farmer need only comply with the restrictions on planting and conservation use acreage of the other programs in which he enrolled.

The USDA's decision whether to accept or reject whole-base bids will be made one week after the sign-up period. The decision will depend on the level of sign-up for the 10 to 30 PIK option, the supply/demand situation for each commodity, and conditions in the local community. If bids are to be accepted in any given county, the lowest bids will be accepted first, with ties settled by the date and time of the earliest bid received. No bids in excess of the specified percentage compensation for the 10 to 30 PIK option will be accepted and no bids will be accepted in a county where the total amount of diverted acreage would exceed 50 percent of the total base acreage in the county.

To illustrate the options and the mechanics of the 1983 feed grain program, assume a farm with 350 tillable acres, a 200 acre corn base, and an established corn program yield of 120 bushels per acre. To be eligible for CCC loans, entry into the farmer-owned reserve, and—if applicable—deficiency payments on the farm's 1983 corn production, the farmer must abide by the combined ARP and PDP requirements. Those requirements limit his 1983 corn acreage to no more than 160 acres (20 percent less than the corn base, the sum of the 10 percent reduction for ARP and the 10 percent reduction for PDP). At that acreage level, the farmer must also devote 40 acres to conservation uses. The remaining 150 acres can be planted to any crop other than corn. At this level of participation, the farmer would receive a cash diversion payment equal to $3,600, which is the product of the corn diversion payment rate per bushel ($1.50), the farm's per acre program yield (120 bushels), and the PDP land diversion requirement (10 percent of 200 acres, or 20 acres). If the national average price of corn received by farmers in the first five months of the 1983/84 marketing year is less than the target price for corn, the farmer will also receive a cash deficiency payment. The deficiency payment rate per bushel will be equal to the difference between the target price ($2.86) and the higher of the loan rate ($2.65) or the five-month average price. The maximum possible deficiency payment in this instance would be $4,032, the product of the difference between the target price and the loan rate (21 cents), the program per acre yield (120 bushels), and the acreage planted to corn (160 acres). The recent practice of offering one-half of the assumed maximum deficiency and paid diversion payment in advance will be suspended through March 11, but resumed thereafter for the 1983 program.

In addition to the above level of participation, the producer could enroll in PIK in return for in-kind payment benefits. If the farmer selected a 25 percent diversion under the 10 to 30 PIK option, his 1983 corn acreage would be limited to 110 acres (45 percent less than the corn acreage base, the sum of the 20 percent reduction for ARP and PDP and the selected PIK option of 25 percent). The farmer must also devote 90 acres (45 percent of the 200 acre base) to conservation uses, but is free to plant the remaining 150 acres to any crop other than corn. This level of PIK participation would not alter the land diversion payment in the example of the previous paragraph. But since the actual corn acreage planted is lower with PIK participation, the maximum cash deficiency payment would be cut to $2,772. As compensation for participating in PIK, however, the farmer would be entitled to 4,800 bushels of corn (the product of 80 percent of the per acre program yield of 120 bushels, or 96 bushels, and the 50 PIK acres diverted). The farmer, at his option, can take possession of that entitlement when the harvest season in his area begins (mid- to late-October in the Midwest) or at any time up to five months thereafter. During this period, the CCC will make storage payments at an annual rate of 26.5 cents a bushel for wheat and corn. At the end of the five months, the entitlement is automatically transferred to the farmer. Once transferred, the storage payments stop and the farmer is free to sell, store, or feed the corn.

If the farmer had submitted a whole-base PIK bid of 70 percent of the established corn yield, and if the bid were subsequently accepted, no corn could be harvested on that farm in 1983. The entire corn base of 200 acres—20 of which would be considered PDP acreage and 180 of which would be PIK acreage—would have to be devoted to conservation uses. The remaining 150 acres could be planted to any crop other than corn. The cash land diversion payment would be the same as discussed above. But since there is no corn acreage, the farmer would not receive a cash deficiency payment. His in-kind PIK compensation, however, would be 15,120 bushels of corn, which is equivalent to his bid of 70 percent of the per acre program yield of 120 bushels per acre (84 bushels) times the 180 acres of PIK diversion.

**Transferring grain to farmers** could result in a number of logistical problems. To minimize the problems, grain used in the PIK exchange will come from stocks already owned by the CCC and, more importantly, from grain already owned by farmers but serving as collateral for outstanding CCC loans. Farmers who enroll in PIK and who already have such loans outstanding must accept as their PIK entitlement the grain they already have under CCC loan. To effect the transaction, the loan and accumulated interest charges will be forgiven on the date that the entitlement is transferred to the farmer. CCC loans that are scheduled to mature before the entitlement transfer will be extended, with storage payments at an annual rate of 26.5 cents per bushel commencing at the time of maturity and ending at the time the entitlement is transferred. Farmers who must forfeit farm-stored reserve CCC loans for their PIK compensation will receive an additional seven-month storage payment on that grain. Farmers who enroll in PIK but do not have existing grain under a CCC loan will receive their PIK grain from CCC stocks. If possible, the CCC will provide the grain to these participants in an approved warehouse located in the same county as the participant or in an adjacent county.

**Other 1983 program provisions and clarifications** were also announced in conjunction with the PIK program. For instance, PIK participants who carry FCIC insurance on the acreage they do plant will be eligible for higher yield guarantees with no corresponding increase in FCIC premium payments. PIK participants who divert 10 to 19 percent of their acreage will receive 6 percent higher yield guarantees from the FCIC. A PIK diversion of 20 to 29 percent will boost the yield guarantee by 8 percent, while a 30 percent PIK diversion will result in a 10 percent boost in yield guarantees.

The 1983 reserve entry features have been altered from last year's program. CCC loans on grain entering the farmer-owned reserve will not be at a premium rate relative to the regular support loan rate. Moreover, direct entry of 1983 corn into the reserve will not be permitted. Instead, reserve entry will be permitted only at the expiration of the regular nine-month CCC loan.

Some of the major program clarifications pertain to the applicability of PIK entitlements to the statutory payment limitations and the restrictions on selling CCC stocks. Although subject to possible legal challenges, the USDA has determined that PIK entitlements are not subject to the $50,000 ceiling on government payments to individual program participants. Moreover, the USDA has determined that the transferring of CCC stocks to PIK participants is not a violation of the statutes that prohibit the CCC from selling its grain at prices less than 110 percent of the loan rate, or 110 percent of the reserve release price when the farmer-owned reserve program is in place.

**The implications of the PIK program** are generally couched in terms of short- and long-run prospects. From the standpoint of the agricultural sector, success of any program, PIK or otherwise, will depend on its ability to correct the huge overhang by pulling carryover stocks down to a reasonable balance with utilization. Correcting the overhang in corn will require roughly a one-third decline in production. It will probably take more than a year to achieve a production decline of that size.

Compliance with the PIK program will hinge on a number of factors. For most farmers, these include the relationship of their established farm program yield to the yield that they could expect from planting all their acreage, the pattern of prices through the sign-up period, and—if they don't forward price—the price that they expect to prevail when selling their 1983 crops and PIK grain. Despite the uncertainties associated with these factors, most analysts believe that the attractiveness of the PIK program will result in a high level of compliance.

USDA analysts believe that compliance in the various programs will be sufficient to reduce harvested corn acreage and production by 18 percent in 1983. Roughly comparable declines are also projected for wheat acreage and production. Although these would be large year-to-year swings by historical standards, other analysts believe that the acreage cuts could be even larger, but are doubtful of the projected production cuts. Historically, years of large acreage declines are often associated with substantial increases in per acre yields which mitigate the cut in production. In 1961, for instance, harvested corn acreage fell nearly 20 percent from the year before. But the average per acre yield jumped 14 percent from the then prevailing 1960 record, resulting in only an 8 percent decline in production. In 1972, corn acreage fell 10 percent. But per acre yields rose to another high, limiting the decline in production to 1 percent. Farmers who participate in programs that remove acreage from production tend to divert their least productive, high-risk land, and plant the most productive acres. Also, they tend to increase per acre fertilization rates and adopt other practices that enhance yields on the acreage planted. Because such practices will no doubt prevail in 1983, it is likely that—weather permitting—the cut in production will be considerably less than the cut in acreage. At best, perhaps only half of the needed adjustment in corn production can be expected in 1983. Therefore grain prices in the short run may be slow to rise from current levels.

Prospects for a substantial decline in 1983 acreage and the eventual working-off of the large supplies portend adverse short-run effects on farm input supply firms. In particular, farmers' purchases of seed, chemicals, fertilizer, fuel, and grain storage facilities will no doubt be considerably lower in 1983. A large cut in acreage also would delay a turn-around in the three-year slump in purchases of farm equipment. USDA analysts have projected that the PIK program may result in a 3 to 4 percent decline in input purchases by farmers in 1983. But since these projections do not include the pre-PIK cutbacks that had been anticipated, many input supply firms are likely to experience considerably larger declines. The PIK program will no doubt prolong the current weakness in farm loan demand. However, PIK entitlements can apparently be assigned to creditors. This should provide another source of collateral to buffer loans to farmers most affected by the prolonged earnings squeeze in agriculture.

While the short-run implications of PIK are not favorable for input supply firms and provide little hope of a significant near-term recovery in grain prices, the longer-term prospects are considerably brighter. PIK is a bold program that, given two or three of years of operation, promises to make significant strides in correcting the huge overhang of grain stocks. The likelihood that the program will attract widespread participation this year suggests that market prices in 1984 could be supported close to the loan rate. Farmers who participate in PIK will be assured of the target price ($2.86 a bushel for corn) on the grain they do produce in 1983. Moreover, their return via PIK entitlements and paid diversion from the land they take out of production will likely be favorable—compared with the alternatives—if prices hold up during the marketing of the PIK entitlements. If these prospects are realized, the agricultural sector may find itself in a much less stressful situation beginning in 1984.

Gary L. Benjamin

## Selected agricultural economic developments

| Subject | Unit | Latest period | Value | Percent change from Prior period | Percent change from Year ago |
|---|---|---|---|---|---|
| **Index of prices received by farmers** | 1977=100 | December | 127 | – 1.6 | – 1 |
| Crops | 1977=100 | December | 116 | – 1.7 | – 5 |
| Livestock | 1977=100 | December | 138 | – 1.4 | + 4 |
| **Index of prices paid by farmers** | 1977=100 | December | 155 | – 0.6 | + 3 |
| Production items | 1977=100 | December | 149 | 0 | + 3 |
| **Producer price index*** *(finished goods)* | 1967=100 | December | 285 | + 0.1 | + 4 |
| Foods | 1967=100 | December | 258 | + 0.2 | + 2 |
| Processed foods and feeds | 1967=100 | December | 251 | + 0.1 | + 3 |
| Agricultural chemicals | 1967=100 | December | 286 | – 0.4 | – 3 |
| Agricultural machinery and equipment | 1967=100 | December | 320 | + 0.6 | + 6 |
| **Consumer price index**** *(all items)* | 1967=100 | December | 292 | – 0.4 | + 4 |
| Food at home | 1967=100 | December | 278 | – 0.2 | + 2 |
| **Cash prices received by farmers** | | | | | |
| Corn | dol. per bu. | December | 2.27 | + 6.6 | – 5 |
| Soybeans | dol. per bu. | December | 5.45 | + 2.1 | – 9 |
| Wheat | dol. per bu. | December | 3.50 | + 0.6 | – 8 |
| Sorghum | dol. per cwt. | December | 4.03 | + 6.6 | + 2 |
| Oats | dol. per bu. | December | 1.45 | + 3.6 | –25 |
| Steers and heifers | dol. per cwt. | December | 56.90 | – 1.6 | – 1 |
| Hogs | dol. per cwt. | December | 53.50 | + 1.9 | +37 |
| Milk, all sold to plants | dol. per cwt. | December | 14.00 | 0 | 0 |
| Broilers | cents per lb. | December | 24.3 | – 0.8 | – 1 |
| Eggs | cents per doz. | December | 55.4 | – 2.8 | –16 |
| **Income** *(seasonally adjusted annual rate)* | | | | | |
| Cash receipts from farm marketings | bil. dol. | 3rd Quarter | 143 | – 0.8 | – 2 |
| Net farm income | bil. dol. | 3rd Quarter | 17 | – 8.4 | –39 |
| Nonagricultural personal income | bil. dol. | December | 2,572 | + 0.1 | + 5 |

*Formerly called wholesale price index.

**For all urban consumers.

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