

## Implementation of the U.S. Production Flexibility Contract Program

In this section, we describe the goals and operation of the U.S. PFC program. We also discuss some of the implications of its program design for the creation of wealth and the distribution of payment benefits within and outside the agricultural sector.

### Program Goals

Decoupled payments were introduced in the United States with the 1996 FAIR Act. The payments, called Production Flexibility Contract payments, were fixed, annual lump-sum installments totaling about \$36 billion over 1996-2002. PFCs have also been called Agricultural Market Transition Assistance (AMTA) payments. PFC payments accounted for an average of 9 percent of net farm income over 1996-2001.

The decoupling of U.S. farm support was complementary to the market liberalization principles developed in the Uruguay Round, but the motivation for the FAIR Act was due almost entirely to domestic considerations (Young and Westcott; Orden et al.; Tweeten and Zulauf). These included the large Federal budget deficit, a growing dissatisfaction with the restrictive program rules linked to supply management (completing a trend since 1985 toward increased planting flexibility), and producer demands for more flexibility to respond to world market conditions. In addition, favorable commodity market conditions in 1996 helped to reduce farmers' opposition to the planned reduction in government payments in the FAIR Act.

Implementation of the decoupled program was relatively straightforward. Operators of base acres were given predetermined lump-sum payments. Base acres were fields previously enrolled in supply management programs for wheat, rice, corn, barley, oats, sorghum, and cotton. Payment amounts varied according to field-specific historical crop production and per acre yields.

The contracts allowed almost full planting flexibility, but some restrictions were placed on land use. Most important, the land could not be put to a nonagricultural use, such as a residential or industrial use. However, the land could be fallowed, converted from cropland to pasture or forest, or planted to any crop (except for fruits and vegetables unless it was used that way in the past). Participants also had to comply with conservation and wetland provisions. Payments were made directly to operators of program acres, including tenants, not to landowners.

In the case of share-crop tenancy arrangements, payments were split between tenants and landowners on the basis of the tenancy agreement. Program eligibility was transferable with the sale or lease of base acres.

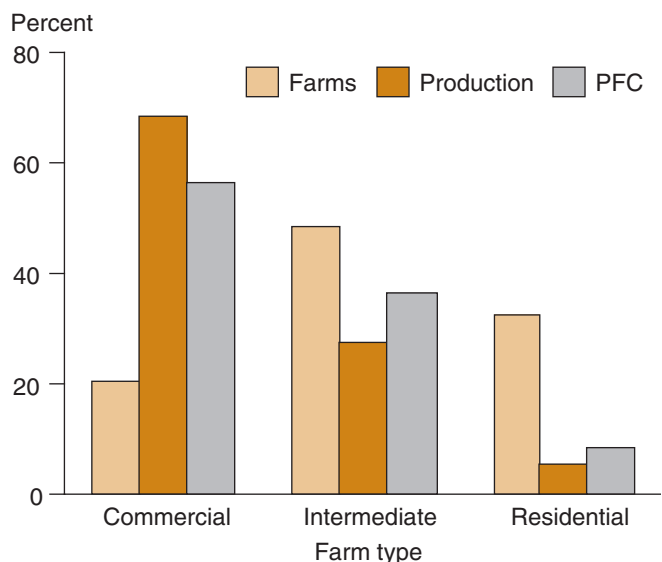
Nearly all eligible producers signed up their qualified acreage, with over 211 million acres, or 99 percent of eligible acreage, enrolled in the program. Eligible acreage was about half of the total 434 million cropped acres at the time.

By design, the lump-sum amount given to producers was not related to current production. However, because the lump sum was based on past production levels, there was a strong correlation between farm size and payment levels (fig. 2). For example, the largest farms (classified as "commercial" farms in the USDA farm typology, with over \$250,000 in sales) made up only 20 percent of all recipients, but due to large acreage, they received over half the payments in 2001. At the other end of the spectrum, "residential farms" make up about a third of the recipients but because of their small acreage, they received only 8 percent of the payments. Intermediate farms, on the other hand, were more proportionately represented, making up 48 percent of the recipients and receiving 36 percent of the payments.

In 1996 and 1997, decoupled PFC payments made up nearly all the direct government support to producers (some operators received conservation payments and

Figure 2

**Commercial farms are fewer but account for over half of PFC payments and two-thirds of production on recipient farms in 2001**



Source: ARMS, 2001.

payments for minor commodities). Over the life of the FAIR Act, however, the decline in world commodity prices led to increased use of marketing loans which compensate producers for low prices, and the provision of additional, ad hoc government support to agriculture. These reduced the role of decoupled payments and resulted in subsidies linked to current commodity prices and/or production levels having a larger share in total payments to agriculture (fig. 3).

### Decoupled Payments Continued in the 2002 FSRI Act

In the 2002 FSRI Act, decoupled subsidies, now called “direct payments” will total about \$5 billion annually, including the addition of oilseeds and peanuts to the program. Other payments to farmers will include counter-cyclical payments and marketing loan benefits. For direct payments, the FSRI allows farmers to elect to update their acres from the 1981-85 planting history used in the FAIR Act to a more recent (1998-2001) planting history or keep their existing bases. Yields associated with direct payments are kept unchanged, except for oilseeds and peanuts.

### Market for Base Acres and Decoupled Payments

Land markets have a unique role in determining the value and distribution of decoupled payments within U.S. agriculture because, by design, payments are made to operators of base acres enrolled in the program. Land prices reflect expectations about current and future returns from agricultural production, government

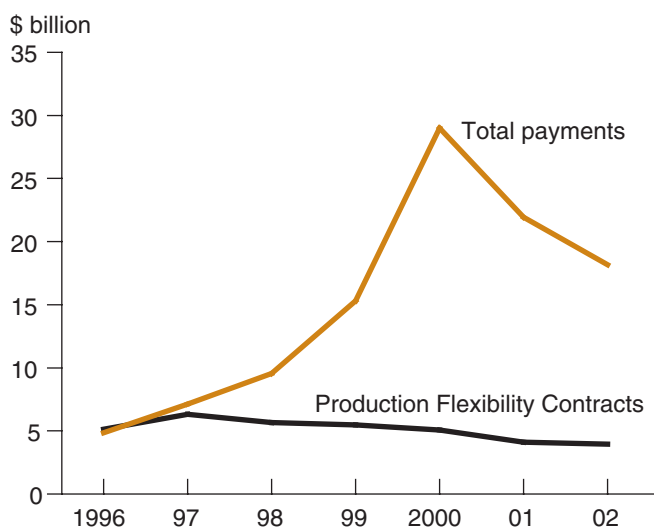
payments (including future government payments), and the value of land in alternative uses (for example, residential or commercial use). Land rental prices reflect only the expected returns over the rental period, and in the case of farmland, this will include its value in agricultural production plus the value of government payments. Land rents also reflect transaction costs for landlords and tenants incurred in negotiating leases.

Both coupled and decoupled subsidies are capitalized into land values and rents, but the pathways are different. A coupled subsidy, such as a per unit commodity price support, motivates commodity production in order to qualify for and to maximize benefits. The subsidy augments market returns from the sale of a commodity, which in turn increases returns to the labor, capital, and land employed in its production. In the short run, labor and capital can be attracted into the sector by the increase in wages or capital returns. In contrast, land is in comparatively limited supply and is difficult to substitute for, so its price is bid up the most. Land therefore typically captures much of the benefit of a production subsidy, although returns to all inputs to production are likely to increase somewhat. At the same time, expanded production may lead to falling market prices and to rising costs of intermediate inputs. Lower commodity prices benefit consumers, although they increase subsidy costs for taxpayers in a market price support program. Increased intermediate input prices tend to reduce the net value of the subsidy to producers.

Unlike coupled subsidies, decoupled payments are predetermined lump-sum payments. Since they do not change commodity or input prices or require current production, they do not create incentives to alter production to acquire or maximize the subsidy. They consequently do not interfere with how markets determine prices and do not affect variable input costs or market returns to farm land, labor, or capital. Buyers and renters can acquire the right to the fixed, known stream of decoupled payments simply by owning or renting program acres. In theory, the payments can be almost fully capitalized into land values, adjusting for administrative costs of the program and the buyer’s subjective discount rate on future benefits. Note, however, that land capitalization of decoupled payments means that tenant-operators may not benefit from the payments (see box, “Payment Eligibility: Alternatives to Base Acres”).

Some contend that land capitalization reduces the competitiveness of U.S. producers by inflating the cost of land for new entrants and others renting or buying. However, their receipt of the payments compensates

Figure 3  
**PFC payments account for one-third of payments to farmers over the FAIR Act**



Source: *Agricultural Outlook*, Nov. 2002.

for higher land costs. Renters and new buyers who receive PFCs are largely no worse off than if the programs did not exist at all, as long as their subsidy expectations continue to be met.

### **Land Rentals Reduce Benefits of Decoupled Payments for U.S. Farm Operators**

About 60 percent of the acreage enrolled in the PFC program was rented in 1996. This rental rate was significantly higher than rental rates for all farmland (42 percent), which includes base acres as well as other cropland, wetlands, woodlands, and range land. Land rental arrangements can extend over several years or be as short as a single crop year, so that rents are presumably more reflective of short-term expectations about commodity prices and government payments than the sale price of land.

Tenants who operate rented base acres can lose the benefit of decoupled payments if landowners raise the rent or alter the terms of the share rental agreement. This potential pass-through of program benefits to landlords can dilute the payments' benefits to producers. The active rental market in program acres suggests that a sizable portion of PFC payments may have been passed through to nonoperator landowners. Between 1998 and 2001, the price of renting cropland rose despite an overall decline in commodity prices and overall receipts from crop sales.<sup>3</sup> Over the 1996-2001 period, the cost of buying

cropland also increased (fig. 4). An explanation for the increased costs of renting or owning cropland, despite declining market returns, is that renters and buyers are bidding for rights to government payments. In competitive land markets, the value of the known stream of future decoupled payments can be fully captured by those who own base acres.

The cropland rental and value statistics may actually understate the relative rate of increase in base acre rents because they are based on all cropland, including land that was not receiving government payments.

Perfect pass-through of program benefits means that 100 percent of the payment is passed through to landowners through increased rental rates. Assuming perfect pass-through, the share of acres that is rented is therefore the same as the share of the total PFC program expenditure that is passed through to landlords. If pass-through of rents has been perfect, tenants may have passed through to landlords up to 60 percent, or \$3.084 billion of the \$5.1 billion spent on PFCs in 1996 (table 2).

All sizes of farms rent in some base acres, but pass-through is potentially greatest on commercial farms, which receive most of the payments. Large farms rent up to two-thirds of the base acreage that they operate, and therefore may pass through a larger share of their payments to landlords than smaller farms. In fact, if pass-through is perfect, commercial farms (with sales greater than \$250,000) may ultimately receive the same level of payment benefit as smaller farms.

<sup>3</sup>National-level cash rent estimates go back only to 1998, so they are not shown in figure 4. Cash rents rose during 1996-2001 in many States, including the Corn Belt States of Ohio, Indiana, Illinois, Iowa, and Missouri (USDA, NASS, "Agricultural Cash Rents, 2001, Summary").

### **Payment Eligibility: Alternatives to Base Acres**

A payment that avoids being bid into the price of land may be desirable to some, but all payments involve some tradeoff between maintaining their linkage to farming and being divorced from production decisions. Eligibility for decoupled payments could be attached to inputs or characteristics other than land. For example, as an alternative to base acres, a stipend could be paid to individuals who operated farms in some fixed base period. Allowing these producers to move into other occupations, including retirement, if it would benefit them economically would be important for minimizing production distortions because it would allow them the flexibility to maximize their returns. Without this mobility, the payments would be coupled. The payments would be fully capitalized if the rights to the stipend were transferable.

In 1996, Mexico considered transforming its PROCAMPO payments, an annual income transfer paid to farmers, into a fully transferable, long-term bond in response to a rural credit crisis. Mexican farmers could sell the PROCAMPO bond in financial markets for cash or use it to provide collateral for loans. The program was not implemented, partly because of concern about the political viability of the program in the long term. If the transfer of bond ownership were allowed, PROCAMPO benefits might have become payable to nonfarmer bond holders, weakening the rationale of the payments as a farm support program. The European Commission is considering a program similar to the Mexican bond proposal (Swinbank and Tangermann; Kelch, Hasha, and Normile).

## Land Values and Expectations

Some argue that expectations can effectively “couple” income transfers to current production decisions by creating expectations about future benefits. It is useful to distinguish between expectations about changes in the level of support and expectations about changes in the rules of eligibility.

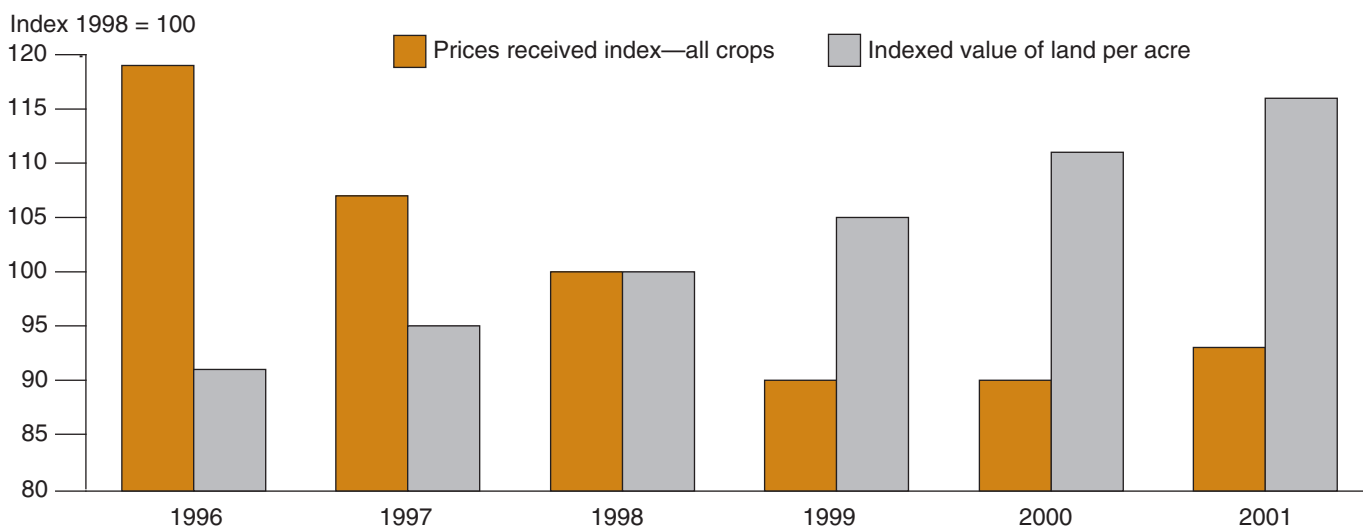
Expectations of changes in payment rates or levels will change expected wealth in a lump-sum fashion. The current price of land reflects anticipated changes in payment levels and therefore in the value of land assets and the wealth level of current owners. These expectations will then affect primarily household consumption, savings, and work decisions.

Expectations about changes in the terms of payment eligibility can distort current production. For example, beliefs that future payments will depend on a constant crop mix create incentives to keep current base acres in production of program crops rather than to take advantage of the planting flexibility allowed by the program. It should be noted, however, that farmers who took advantage of planting flexibility in the 1996 FAIR Act were not subject to any loss of their base acres in the 2002 FSRI update. More likely are expectations that lead farmers to expand current acreage in program crops beyond their existing base acres in order to “build base” in anticipation of future base updating opportunities.

Expectations about program benefits are no doubt a factor in farm production decisions, but it would be difficult

Figure 4

### Crop prices trended down and flattened over 1996-2001, but the cost of buying cropland went up over the same period



Source: USDA, *Agricultural Statistics*, 2001.

**Table 2—Potential pass-through of PFCs from tenants to landlords: Largest farms may pass through most of their program benefits to landlords**

Farm size/ value of production	PFC payments received, 1996	Share of operated base acres that are owned, 1996	PFC payments retained	PFC payments passed through
	\$ Million	-----Percent-----	-----\$ Million-----	
\$9,999 or less	30	80	24	6
\$10,000-\$49,999	314	62	195	119
\$50,000-\$99,999	373	55	205	168
\$100,000-\$249,999	1,379	42	580	799
\$250,000-\$499,999	1,699	33	562	1,137
\$500,000-\$999,999	683	37	251	433
\$1,000,000 or more	622	32	200	423
All farms	5,100	41	2,016	3,084

Note: Aggregate retention and pass-through data differ slightly from the aggregate rental rate due to different payment rates by class of farm.  
Source: ARMS, 1996.

to determine whether these effects are significant or even measurable, and they are likely smaller than farmers' expectations about market prices. Also, base building benefits are arguably more heavily discounted without consistent and predictable regulations for annual base updating. As with the 1996 Act, annual updates are not allowed in the 2002 Act, and base acreage and yield selections are one-time occurrences. Furthermore, the large share of rented acres in program base acres would require coordination between tenants seeking to maximize their current market returns and landlords seeking to maximize program benefits, and would presumably be reflected in lower rents to tenants.

### Who Owns U.S. Farmland?

Since the ultimate beneficiaries of decoupled government payments are likely those who own base acres rather than those who rent them, there is a natural interest in knowing more about who these owners are. Those who rent out land include active farmers who choose to rent out to another active farmer. To be considered an active farmer, the farming operation must generate, or have the potential to generate, sales (not including rental income) of at least \$1,000 per year. Owners can also be "nonoperator landlords" who take neither a management interest in the operation of the land they own nor derive any income from any other farming operation.

Our knowledge about ownership of base acres is incomplete because many landowners are not operators and therefore are not included in USDA surveys. ARMS data identify ownership and rental of base acres only for

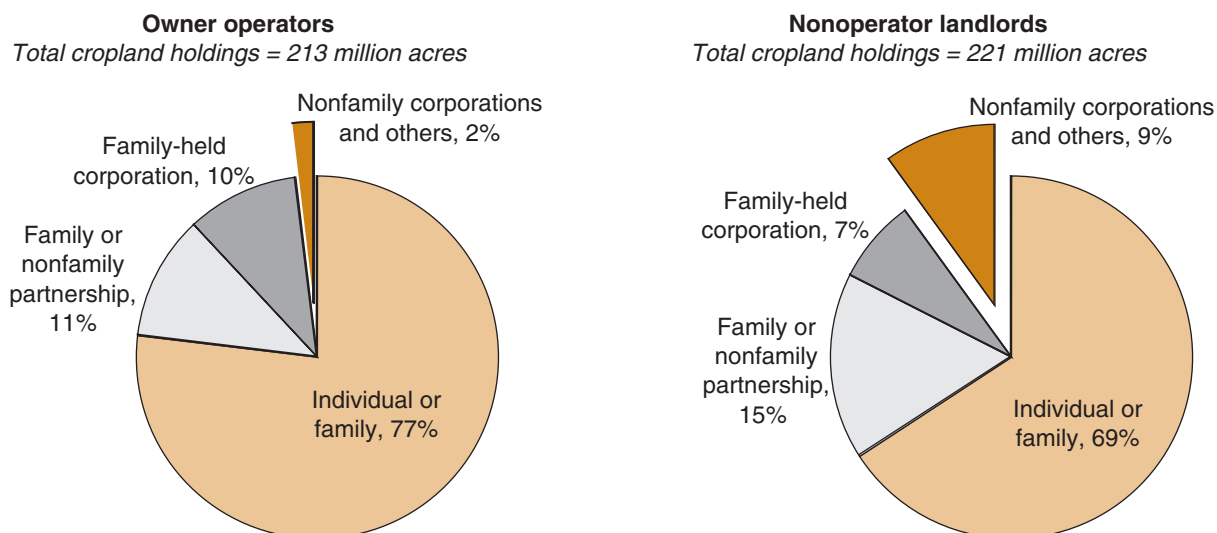
active farmers. The 1999 AELOS, or Agricultural Economics and Land Ownership Survey (USDA, NASS), is an exception because it identifies characteristics of both active-farmer and nonoperator landlords, but does not distinguish their land ownership according to its status in farm programs. Accordingly, our discussion of landowner characteristics is drawn from AELOS, and therefore relates to aggregate U.S. cropland, rather than program acres.

According to AELOS, 35 percent of rented acres are rented from one active farmer to another, while farmers rent the other 65 percent from nonfarming landlords. AELOS data on nonoperator landlords' residency show that many have links to the farm sector, in that they are retired farmers, widowed spouses, or heirs. Nonfarming landlords are usually local, with 85 percent living within 50 miles of the land they are renting out, and 29 percent living on the farm itself. Moreover, the average age of nonoperator landlords is 63 years, 10 years older than the average age of operators. These descriptive data suggest that cropland rental arrangements are serving the needs of both tenants (often large farms) wishing to increase the acreage they control and landlords (often older farmers themselves or other local individuals or families) who prefer to rent out cropland than farm it themselves.

A variety of ownership arrangements exists for land rented out to active farmers. Individuals or some type of family organization (either joint ownership, partnership, or corporation) own most rented farmland. Nonfamily partnerships, corporations, or some other type of organization own a small share of rented farmland (fig. 5).

Figure 5

### Most landowners (both owner operators and nonoperators) are sole proprietor individuals or families



Source: AELOS, 1999, tables 76 and 78.