

MU Guide

Establishing the Transfer Price: Balancing Businesses

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Establishing an equitable transfer price is part of the marketing agreement between a farm business and a producer-owned, value-added business. The transfer price is the farm price received upon initial delivery, or sale, of the commodity (Figure 1). On the other side of the transaction is the price set by the value-added business for the commodity as an input. The transfer price is different from any other commodity sale because the producer has a stake in the profitability of the farm business and post-farmgate business.

Because the goal of the farm business is to sustain profitability, one of the objectives is to maximize price received. Similarly, because the goal of the producer-owned, value-added business is to sustain profitability, one of the objectives is to minimize the price paid for inputs. These can be conflicting objectives when the same person has ownership in both the pre- and post-farmgate business. Even though the producer ultimately receives dividends from ownership in the post-farmgate business, the timing of the payment can cause cash-flow problems. If this continues, then subsequent periods of cash-flow difficulty can cause problems with debt repayment. Establishing an equitable transfer price allows for the farm business and the value-added business, respectively, to receive and pay a price that reflects the business risk.

A change in philosophy

Traditional cooperatives use patronage refund payout mechanisms, such as a revolving fund or payout upon the death or a specified age of a patron, to allow the cooperative to hold funds in escrow for financial shortfalls. The new producer-owned businesses are organized to allow for short-term (sometimes immediate) payout. However, producer-owned businesses

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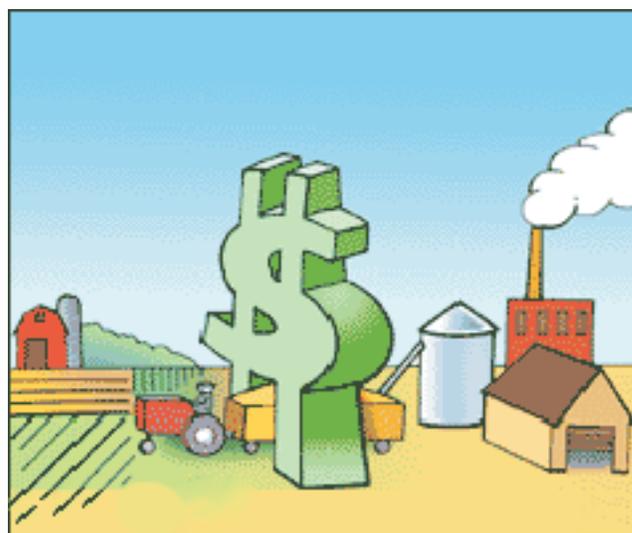


Figure 1. Transfer price is the farm price received upon initial delivery of the commodity.

must also be able to meet short-term cash-flow needs and long-term debt obligations.

A margin business knows the input price, and the output price is based on value needed to cover the margin of operation and return on investment. The traditional cooperative operated as a margin business in which a percentage of the margin was allocated to member-patron returns (profits), which could be used to cover financial shortfalls. The new producer-owned model returns a high percentage of the profits at least annually.

Not like owning stock

The new model of producer-ownership appears, at first glance, like owning stock — shares are purchased, dividends are received, and ownership of shares often is transferable. There is, however, one large difference. In most public or private companies, input and output prices are negotiated based on targeted profit margin objectives. When the company is vertically integrated and one of the enterprises is not profitable, it is sold off.

Often producer-owners have a conflict because they supply the input. Whereas the profitability of a farm business depends on maximizing the price received, a producer-owned business depends on minimizing the price paid. *It becomes difficult to negotiate an equitable price with oneself, and it can be difficult to unload one of the enterprises when each is dependent on the other!*

Cash flow and debt obligations

Cash flow is the ability of a business to meet short-term cash outflows (payables) by generating short-term cash inflows (receivables). Establishing a transfer price that fluctuates with commodity markets can cause financial stress on the producer-owned, value-added business, especially when a delivery premium is paid. If the transfer price is too high, then meeting short-term cash-flow payables may be difficult. To meet cash-flow needs, obtaining short-term operating loans may be required.

Debt obligations are regular payments made to creditors. If cash-flow problems persist, then the need to meet debt obligations may become a serious problem.

Alternative specifications of the transfer price

Tables 1, 2, and 3 outline three examples of alternative transfer prices for corn-based ethanol production. Table 1 outlines profitability over a range of commodity prices when the transfer price is the commodity price plus a \$0.05/bushel delivery premium. Tables 2 and 3 outline profitability, over a range of commodity prices, using window and cost-plus contracts, respectively.

The window contract allows the transfer price to fluctuate between \$2.25/bushel and \$2.75/bushel, but when the commodity price is below \$2.25/bushel, the transfer price stays at \$2.25/bushel and when the commodity price above \$2.75/bushel, the transfer price stays at \$2.75/bushel. In a cost-plus contract, the transfer price is the farm business cost of production plus a \$0.10/bushel premium. The cost of production should always be established before the start of new crop delivery.

An alternative to setting a cost-of-production price would be to use a set price ratio, say 0.50 as the ratio of ethanol price to corn price (ethanol price divided by corn price). For example, a \$1/gallon ethanol price and

a \$2/bushel corn price would yield a ratio of 0.50. This ratio should be set prior to the start of delivery for each new crop year. Suppose the producer-owner board of directors set the target price ratio at 0.50 and there is a \$1/gallon contract for the sale of ethanol. Then the corn price paid to producer-owners per their delivery requirements to the ethanol plant is \$2/bushel.

When the transfer price is the commodity price plus a delivery premium (Table 1), profitability in the farm business and in the value-added business moves in opposite directions. The value-added business suffers financially when the commodity price moves upward. This situation would cause significant cash-flow concerns and possible debt obligation problems when high prices are sustained over time.

When a window contract (Table 2) or cost-plus contract (Table 3) is established, the effects of fluctuations in commodity price on financial viability are spread between the farm business and the value-added business. Clearly, the cost-plus contract offers the value-added business more protection from price volatility. However, establishing a standard cost of production across producers can be difficult.

Final thoughts

Establishing an equitable method for determining the transfer price can reduce the need for the producer-owned, value-added business to borrow additional operating funds or make additional equity calls. Moreover, shutting down the value-added business during rough financial times can lead to problems with output contracts and personnel. An issue that heightens the need for an equitable transfer price for livestock producers is that, unlike crop producers, they do not benefit from a price floor established by government farm programs. Much of the transfer price decision will depend on the percentage of the farm business output allocated to meeting contractual obligations of the value-added business. A larger percentage will complicate the transfer price issue, whereas a smaller percentage provides more flexibility.

Managers of the farm business and the producer-owned, value-added business could use risk management (hedging) strategies to lessen the effects of variability in commodity prices. However, such strategies may not be sustainable over extended periods.

Table 1. Producer-owned ethanol plant where the transfer price = commodity price + \$0.05/bushel delivery premium.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
A. Farm business cost of production	\$2.40	\$2.40	\$2.40	\$2.40
B. Commodity price	\$2.00	\$2.50	\$2.95	\$3.95
C. Transfer price (B + \$0.05)	\$2.05	\$2.55	\$3.00	\$4.00
D. Ethanol plant price paid for corn needed to break even	\$2.70	\$2.70	\$2.70	\$2.70
Returns (\$/bushel)				
E. Farm business (C - A)	(\$0.35)	\$0.15	\$0.60	\$1.60
F. Producer-owned ethanol plant (D - C)	\$0.65	\$0.15	(\$0.30)	(\$1.30)

Note: Ethanol and coproduct prices assumed to be sold under long-term contracts.

Table 2. Producer-owned ethanol plant where the transfer price = window contract.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
A. Farm business cost of production	\$2.40	\$2.40	\$2.40	\$2.40
B. Commodity price	\$2.00	\$2.50	\$2.95	\$3.95
C. Transfer price	\$2.25	\$2.55	\$2.75	\$2.75
D. Ethanol plant price paid for corn needed to break even	\$2.70	\$2.70	\$2.70	\$2.70
Returns (\$/bushel)				
E. Farm business (C - A)	(\$0.15)	\$0.15	\$0.35	\$0.35
F. Producer-owned ethanol plant (D - C)	\$0.45	\$0.15	(\$0.05)	(\$0.05)

Notes:

1. Ethanol and coproduct prices assumed to be sold under long-term contracts.
2. The window contract is a contract that allows the transfer price to fluctuate between \$2.25/bushel and \$2.75/bushel, but when the commodity price is below \$2.25/bushel the transfer price is fixed at \$2.25 and when the commodity price is above \$2.75/bushel the transfer price is fixed at \$2.75/bushel.

Table 3. Producer-owned ethanol plant where the transfer price = cost-plus contract.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
A. Farm business cost of production	\$2.40	\$2.40	\$2.40	\$2.40
B. Commodity price	\$2.00	\$2.50	\$2.95	\$3.95
C. Transfer price	\$2.50	\$2.50	\$2.50	\$2.50
D. Ethanol plant price paid for corn needed to break even	\$2.70	\$2.70	\$2.70	\$2.70
Returns (\$/bushel)				
E. Farm business (C - A)	\$0.10	\$0.10	\$0.10	\$0.10
F. Producer-owned ethanol plant (D - C)	\$0.20	\$0.20	\$0.20	\$0.20

Notes:

1. Ethanol and coproduct prices assumed to be sold under long-term contracts.
2. Cost-plus contract is such that the transfer price is the the farm business cost of production + \$0.10/bushel



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