

TRANSFER PRICING

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Definition and Overview:

A transfer price is what one part of a company charges another part of the same company for goods or services. In the excerpt from *Casablanca*, Rick apparently loaned Ferrari 100 cartons of cigarettes for which he was never repaid. Now that Ferrari owns both the Blue Parrot and Rick's Café, he jokes about the fact that what was previously a debt that he owed to Rick, is now a "debt" from one nightclub that he owns to another nightclub that he owns. If Ferrari continues to transfer cartons of cigarettes between the two clubs, he might wish to establish a "transfer price" for cigarettes, but knowing Ferrari, he won't bother.

We will restrict attention to transfers that involve a tangible product, and we will refer to the two corporate entities engaged in the transfer as divisions. Hence, the transfer price is the price that the "selling" division charges the "buying" division for the product. Because objects that float usually flow downstream, the selling division is called the **upstream division** and the buying division is called the **downstream division**.

Transferred product can be classified along two criteria. The first criterion is whether there is a readily-available external market price for the product. The second criterion is whether the downstream division will sell the product "as is," or whether the transferred product becomes an input in the downstream division's own production process. When the transferred product becomes an input in the downstream division's production process, it is referred to as an **intermediate product**. The following table provides examples.

	An external market price is available	No external market price is available
The downstream division will sell "as is":	The West Coast Division of a supermarket chain transfers oranges to the Northwest Division, for retail sale.	A pharmaceutical company transfers that is under patent protection, from manufacturing division to its market division.
	An oil company transfers crude oil from	The Parts Division of an appliance

downstream division will use the transferred product in its own production process:

the drilling division to the refinery, to be used in the production of gasoline.

manufacturer transfers mechanical components to one of its assembly d

Transfer pricing serves the following purposes.

1. When product is transferred between profit centers or investment centers within a decentralized firm, transfer prices are necessary to calculate divisional profits, which then affect divisional performance evaluation.
2. When divisional managers have the authority to decide whether to buy or sell internally or on the external market, the transfer price can determine whether managers' incentives align with the incentives of the overall company and its owners. The objective is to achieve **goal congruence**, in which divisional managers will want to transfer product when doing so maximizes consolidated corporate profits, and at least one manager will refuse the transfer when transferring product is not the profit-maximizing strategy for the company.
3. When multinational firms transfer product across international borders, transfer prices are relevant in the calculation of income taxes, and are sometimes relevant in connection with other international trade and regulatory issues.

The transfer generates journal entries on the books of both divisions, but usually no money changes hands. The transfer price becomes an expense for the downstream division and revenue for the upstream division. Following is a representative example of journal entries to record the transfer of product:

Upstream Division:

- | | | | |
|-----|---|---------|---------|
| (1) | Intercompany Accounts Receivable | \$9,000 | |
| | Revenue from Intercompany Sale | | \$9,000 |
| (2) | Cost of Goods Sold – Intercompany Sales | \$8,000 | |
| | Finished Goods Inventory | | \$8,000 |

(To record the transfer of 500 cases of *Clear Mountain Spring Water*, at \$18 per case, to the Florida marketing division, and to remove the 500 cases from finished goods inventory at the production cost of \$16 per case.)

Downstream Division:

- | | | | |
|-----|-------------------------------|---------|---------|
| (1) | Finished Goods Inventory | \$9,000 | |
| | Intercompany Accounts Payable | | \$9,000 |

(To record the receipt of 500 cases of *Clear Mountain Spring Water*, at \$18 per case, from the bottling division in Nebraska)

Transfer Pricing Options:

There are three general methods for establishing transfer prices.

1. **Market-based transfer price:** In the presence of competitive and stable external markets for the transferred product, many firms use the external market price as the transfer price.
2. **Cost-based transfer price:** The transfer price is based on the production cost of the upstream division. A cost-based transfer price requires that the following criteria be specified:
 - a. Actual cost or budgeted (standard) cost.
 - b. Full cost or variable cost.
 - c. The amount of markup, if any, to allow the upstream division to earn a profit on the transferred product.
3. **Negotiated transfer price:** Senior management does not specify the transfer price. Rather, divisional managers negotiate a mutually-agreeable price.

Each of these three transfer pricing methods has advantages and disadvantages.

Market-based Transfer Prices:

Microeconomic theory shows that when divisional managers strive to maximize divisional profits, a market-based transfer price aligns their incentives with owners' incentives of maximizing overall corporate profits. The transfer will occur when it is in the best interests of shareholders, and the transfer will be refused by at least one divisional manager when shareholders would prefer for the transfer not to occur. The upstream division is generally indifferent between receiving the market price from an external customer and receiving the same price from an internal customer. Consequently, the determining factor is whether the downstream division is willing to pay the market price. If the downstream division is willing to do so, the implication is that the downstream division can generate incremental profits for the company by purchasing the product from the upstream division and either reselling it or using the product in its own production process. On the other hand, if the downstream division is unwilling to pay the market price, the implication is that corporate profits are maximized when the upstream division sells the product on the external market, even if this leaves the downstream division idle. Sometimes, there are cost savings on internal transfers compared with external sales. These savings might arise, for example, because the upstream division can avoid a customer credit check and collection efforts, and the downstream division might avoid inspection procedures in the receiving department. Market-based transfer pricing continues to align managerial incentives with corporate goals, even in the presence of these cost savings, if appropriate adjustments are made to the transfer price (i.e., the market-based transfer price should be reduced by these cost savings).

However, many intermediate products do not have readily-available market prices. Examples are shown in the table above: a pharmaceutical company with a drug under patent protection (an effective monopoly); and an appliance company that makes component parts in the Parts Division and transfers those parts to its assembly divisions. Obviously, if there is no market price, a market-based transfer price cannot be used.

A disadvantage of a market-based transfer price is that the prices for some commodities can fluctuate widely and quickly. Companies sometimes attempt to protect divisional managers from these large unpredictable price changes.

Cost-based Transfer Prices:

Cost-based transfer prices can also align managerial incentives with corporate goals, if various factors are properly considered, including the outside market opportunities for both divisions, and possible capacity constraints of the upstream division.

First consider the case in which the upstream division sells the intermediate product to external customers as well as to the downstream division. In this situation, capacity constraints are crucial. If the upstream division has excess capacity, a cost-based transfer price using the variable cost of production will align incentives, because the upstream division is indifferent about the transfer, and the downstream division will fully incorporate the company's incremental cost of making the intermediate product in its production and marketing decisions. However, senior management might want to allow the upstream division to mark up the transfer price a little above variable cost, to provide that division positive incentives to engage in the transfer.

If the upstream division has a capacity constraint, transfers to the downstream division displace external sales. In this case, in order to align incentives, the opportunity cost of these lost sales must be passed on to the downstream division, which is accomplished by setting the transfer price equal to the upstream division's external market sales price.

Next consider the case in which there is no external market for the upstream division. If the upstream division is to be treated as a profit center, it must be allowed the opportunity to recover its full cost of production plus a reasonable profit. If the downstream division is charged the full cost of production, incentives are aligned because the downstream division will refuse the transfer under only two circumstances:

- First, if the downstream division can source the intermediate product for a lower cost elsewhere;
- Second, if the downstream division cannot generate a reasonable profit on the sale of the final product when it pays the upstream division's full cost of production for the intermediate product.

If the downstream division can source the intermediate product for a lower cost elsewhere, to the extent the upstream division's full cost of production reflects its future long-run average cost, the company should consider eliminating the upstream division. If the downstream division cannot

generate a reasonable profit on the sale of the final product when it pays the upstream division's full cost of production for the intermediate product, the optimal corporate decision might be to close the upstream division and stop production and sale of the final product. However, if either the upstream division or the downstream division manufactures and markets multiple products, the analysis becomes more complex. Also, if the downstream division can source the intermediate product from an external supplier for a price greater than the upstream division's full cost, but less than full cost plus a reasonable profit margin for the upstream division, suboptimal decisions could result.

Negotiated Transfer Prices:

Negotiated transfer pricing has the advantage of emulating a free market in which divisional managers buy and sell from each other in a manner that simulates arm's-length transactions. However, there is no reason to assume that the outcome of these transfer price negotiations will serve the best interests of the company or shareholders. The transfer price could depend on which divisional manager is the better poker player, rather than whether the transfer results in profit-maximizing production and sourcing decisions. Also, if divisional managers fail to reach an agreement on price, even though the transfer is in the best interests of the company, senior management might decide to impose a transfer price. However, senior management's imposition of a transfer price defeats the motivation for using a negotiated transfer price in the first place.

Survey of Practice:

Roger Tang (*Management Accounting*, February 1992) reports 1990 survey data on transfer pricing practices obtained from approximately 150 industrial companies in the *Fortune* 500. Most of these companies operate foreign subsidiaries and also use transfer pricing for domestic interdivisional transfers. For domestic transfers, approximately 46% of these companies use cost-based transfer pricing, 37% use market-based transfer pricing, and 17% use negotiated transfer pricing. For international transfers, approximately 46% use market-based transfer pricing, 41% use cost-based transfer pricing, and 13% use negotiated transfer pricing. Hence, market-based transfer pricing is more common for international transfers than for domestic transfers. Also, comparison to an earlier survey indicates that market-based transfer pricing is slightly more common in 1990 than it was in 1977.

Tang also finds that among companies that use cost-based transfer pricing for domestic and/or international transfers, approximately 90% use some measure of full cost, and only about 5% or 10% use some measure of variable cost.

External Reporting:

For external reporting under Generally Accepted Accounting Principles, no matter what transfer price is used for calculating divisional profits, the effect should be reversed and intercompany profits eliminated when the financial results of the divisions are consolidated. Obviously, intercompany transfers are not arm's-length transactions, and a company cannot generate profits or increase the reported cost of its inventory by transferring product from one division to another.

Dual Transfer Pricing:

Under a dual transfer pricing scheme, the selling price received by the upstream division differs from the purchase price paid by the downstream division. Usually, the motivation for using dual transfer pricing is to allow the selling price to exceed the purchase price, resulting in a corporate-level subsidy that encourages the divisions to participate in the transfer. Although dual transfer pricing is rare in practice, a thorough understanding of dual transfer pricing illustrates some of the key bookkeeping and financial reporting implications of all transfer pricing schemes.

In the following example, the Clear Mountain Spring Water Company changes from a negotiated transfer price of \$18 per case (see the above example) to a dual transfer price in which the upstream division receives the local market price of \$19 per case, and the downstream division pays \$17 per case.

Upstream Division:

(1)	Intercompany Receivable/Payable	\$9,500	
	Revenue from Intercompany Sale		\$9,500
(2)	Cost of Goods Sold – Intercompany Sales	\$8,000	
	Finished Goods Inventory		\$8,000

(To record the transfer of 500 cases of *Clear Mountain Spring Water*, at \$19 per case, to the Florida marketing division, and to remove the 500 cases from finished goods inventory at the production cost of \$16 per case.)

Downstream Division:

(1)	Finished Goods Inventory	\$8,500	
	Intercompany Receivable/Payable		\$8,500

(To record the receipt of 500 cases of *Clear Mountain Spring Water* at \$17 per case, from the bottling division in Nebraska)

Corporate Headquarters:

(1)	Interco. Receivable/Payable – Florida	\$8,500	
	Corporate Subsidy for Dual Transfer Price	\$1,000	
	Interco. Receivable/Payable – Nebraska		\$9,500

(To record the transfer of 500 cases of *Clear Mountain Spring Water* from Nebraska to Florida, at a dual transfer price of \$19/\$17 per case.)

Corporate Subsidy for Dual Transfer Price is an expense account at the corporate level. This account and the revenue account that records the intercompany sale affect the calculation of divisional profits for internal reporting and performance evaluation, but these accounts—as well as the intercompany receivable/payable accounts—are eliminated upon consolidation for external financial reporting. To the extent that the Florida Division has ending inventory, the cost of that inventory for external financial reporting will be the company's cost of production of \$16 per case. In other words, the transfer price has no effect on the cost of finished goods inventory.

Transfer Pricing and Multinational Income Taxes:

When divisions transfer product across tax jurisdictions, transfer prices play a role in the calculation of the company's income tax liability. In this situation, the company's transfer pricing policy can become a tax planning tool. The United States has agreements with most other nations that determine how multinational companies are taxed. These agreements, called **bilateral tax treaties**, establish rules for apportioning multinational corporate income among the nations in which the companies conduct business. These rules attempt to tax all multinational corporate income once and only once (excluding the double-taxation that occurs at the Federal and state levels). In other words, the tax treaties attempt to avoid the double-taxation that would occur if two nations taxed the same income. Since transfer prices represent revenue to the

upstream division and an expense to the downstream division, the transfer price affects the calculation of divisional profits that represent taxable income in the nations where the divisions are based.

For example, if a U.S.-based pharmaceutical company manufactures a drug in a factory that it operates in Ireland and transfers the drug to the U.S. for sale, a high transfer price increases divisional income to the Irish division of the company, and hence, increases the company's tax liability in Ireland. At the same time, the high transfer price increases the cost of product to the U.S. marketing division, lowers U.S. income, and lowers U.S. taxes. The company's incentives with regard to the transfer price depend on whether the marginal tax rate is higher in the U.S. or in Ireland. If the marginal tax rate is higher in the U.S., the company prefers a high transfer price, whereas if the marginal tax rate is higher in Ireland, the company prefers a low transfer price. The situation reverses if the drug is manufactured in the U.S. and sold in Ireland. The general rule is that the company wants to shift income from the high tax jurisdiction to the low tax jurisdiction.

There are limits to the extent to which companies can shift income in this manner. When a market price is available for the goods transferred, the taxing authorities will usually impose the market-based transfer price. When a market-based transfer price is not feasible, U.S. tax law specifies detailed and complicated rules that limit the extent to which companies can shift income out of the United States.

Other Regulatory Issues:

Transfer pricing sometimes becomes relevant in the context of other regulatory issues, including international trade disputes. For example, when tariffs are based on the value of goods imported, the transfer price of goods shipped from a manufacturing division in one country to a marketing division in another country can form the basis for the tariff. As another example, in order to increase investment in their economies, developing nations sometimes restrict the extent to which multinational companies can repatriate profits. However, when product is transferred from manufacturing divisions located elsewhere into the developing nation for sale, the local marketing division can export funds to "pay" for the merchandise received. As a final example, when nations accuse foreign companies of "dumping" product onto their markets, transfer pricing is often involved. Dumping refers to selling product below cost, and it generally violates international trade laws. Foreign companies frequently transfer product from manufacturing divisions in their home countries to marketing affiliates elsewhere, so that the determination of whether the company has dumped product depends on comparing the transfer price charged to the marketing affiliate with the upstream division's cost of production.