

# A Practical Guide to Transfer Pricing Policy Design and Implementation

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Guest Contributing Author:  
David North

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To optimize a company's transfer pricing policy there is, unfortunately, no standard template and no standard service available from consultants. While numerous consultant service providers will happily sell you a \$90,000 "transfer pricing study," the function of this data analysis is to support a policy once it's in place and to defend it in case of tax audit. It won't help you to develop the policy. When it's time to define the best transfer pricing policy for your company, you have to solve the problem yourself.

The difficulty in determining the best transfer pricing policy for the company is the same as the difficulty in solving a problem of simultaneous equations in algebra. The solution must satisfy more than one objective and there are multiple variables to solve for. The method of tackling the problem is also the same. Break it down into a sequence of smaller steps that are easier to solve in isolation. First, clearly lay out the objectives. What demands must the optimum policy satisfy? Second, identify each of the options available. Third, determine which combination of the available options will best satisfy the objectives. Next, once the best mathematic methods have been identified for calculating the prices of each product type (raw material vs. semi-finished vs. finished goods), define and address the internal, political obstacles to approval and implementation of the new policy. Finally, solve the administrative problem of maintaining, updating, and controlling price masterfile data.

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**“First, clearly lay out the objectives. What demands must the optimum policy satisfy?”**

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The problem becomes more complex when factoring in cross-border transactions. The questions involved in intercompany trade between business units within one country are a sub-set of those involved in the international situation. In other words, transfer pricing for a multinational is a lot more complicated than for a domestic business. This article addresses the cross-border (multinational) situation in order to cover all aspects of the problem.

## Policy Objectives

Generally, there are two objectives that a transfer pricing policy should satisfy: prevent double taxation and prevent obstacles to sales/profits.

**Prevent double taxation.** The transfer price for intercompany transactions between legal entities in two different countries will determine the share of taxable income for each of those countries' governments. The selling unit has a taxable profit on the intercompany sale and the buying unit has a deductible cost on a future sale of that item or of the product in which that item will be a component. The tax regime with jurisdiction over the selling unit may decide that the transfer price and their taxable profit is too low and unilaterally impute a higher number to tax or impose a penalty. The tax regime with jurisdiction over the buying unit may deem the transfer price too high and disallow the deductibility of the cost to the buying unit. In either case it means double taxation for the consolidated corporation. Therefore, the objective is to implement a transfer pricing method that will be accepted by both countries' tax regimes.

Getting the profit split wrong can also result in self-imposed over-taxation. Imagine a company with a manufacturing subsidiary in the U.S. and a sales & distribution unit in Mexico, which sells only the product of the parent company. The manufacturing company sets the transfer price just below the market sales price in Mexico, leaving too little gross margin to cover Mexico's selling, general and administrative costs. At the end of the year, Mexico reports a net operating loss to the Mexican tax authorities. The US has a taxable profit. Mexico doesn't pay tax on its loss (until the transfer pricing auditor shows up), but that loss can't be deducted from the taxable profit the US will pay. Since the corporation didn't set transfer prices to spread its taxable profit between the two countries, it will pay income tax on an amount higher than its consolidated net profit.

**Prevent obstacles to sales & profits.** Put bluntly, this means transfer prices shouldn't be set so low that the selling business unit can't afford to supply the product and shouldn't be set so high as to price the product out of the end market. This error would seem so obvious that the reader might assume it couldn't happen in the real world. However, this is where transfer pricing policies often go wrong. Misunderstanding of cost accounting and different market price levels in different price-isolated markets can cloud the picture, as a transfer pricing policy is designed to accommodate misguided management incentives rather than the business itself.

## **Available Options – Transfer Price Calculation Methods**

The 34 member countries of the Organization for Economic Cooperation and Development (OECD) have all agreed to accept five different methods for the calculation of transfer prices. Unless you're dealing with a single border with a non-OECD country this is the place to start. As a side note, Brazil and India are the two large countries that unilaterally impose their own transfer price margin calculations. Intercompany trade with these countries should be dealt with as an exception after setting a standard policy for all others.

The OECD guidelines are written with the assumption that the method selection will be based on the single objective of achieving the most accurate possible emulation of an arms'-length transaction. In fact, the five methods themselves are ranked in order of theological preference. However, given the practical challenges of satisfying multiple demands, the effective manager will realize the need to dismiss these philosophical musings as merely decorative in function. Therefore, instead of listing them according to the order of preference given in the guidelines, the five methods are listed here based on the factors which drive the calculation.

### **Method Based on Selling Entity's Cost (best for use with sales of raw materials or components not for finished goods):**

#### *Cost Plus Method*

Transfer price is calculated as some estimate of unit cost plus a percentage mark-up.

## Method Based on Comparable Transactions:

### *Comparable Unrelated Party Method (CUP)*

The CUP method calculates transfer prices to be comparable to the price and conditions of similar transactions between the taxpayer and an unrelated party or between two unrelated parties. In other words, the transfer price is set to be the same as the end market price.

## Methods Based on Buying Entity's End Customer Sales Price

### *Resale Price Minus Method (RPM)*

Transfer prices are set so as to leave a certain percentage gross margin at the buyer business unit. In other words, the end selling price is determined by the market then the transfer price is calculated by subtracting a fixed percentage from the end selling price. The fixed percentage gross margin left at the buyer business unit is based on and justified by comparison to gross margins earned by comparable third parties.

### *Transactional Net Margin Method (TNM)*

Transfer price is calculated so as to leave a target net operating profit associated with the transaction stream at the buying business unit. In other words, transfer prices are set such that the business unit which buys the item and sells it to a third party can demonstrate that the associated revenue, less the intercompany transfer price payments minus a reasonable allocation of SG&A expenses, results in net profit which is a certain percentage of revenue. This percentage is supposed to be justified by showing that other independent competitors make the same net profit in the same market. Of course no such data is publicly available in most cases. A net profit of 2-3% for a sales & distribution operation is a good rule of thumb in most countries.

## Other Methods

The guidelines say other methods that satisfy the general principals should be acceptable, but it would be unadvisable to devise a non-sanctioned method in the hopes that tax auditors will later deem it compatible with the OECD guidelines' general theory. For practical purposes, the only "other" option available is the one defined as an example – the profit split method.

### *Profit Split Method*

The profit split method is intended for project style transactions with complex intercompany involvement. The profit from the project is calculated and divided between the different business units involved.

It's acceptable to "mix & match" these methods. In other words, a cost plus method may be used to calculate prices for semi-finished components, while a hybrid of the RPM method and the TNM method is used for finished goods.

## Selecting a Method

We have limited ourselves to methods satisfying the tax objectives. Now we select from these options to satisfy the business objective. As stated above, the objective is to keep transfer pricing out of the way of end market pricing, but there are various confusing factors which can lead policymakers astray. In order to avoid the traps, keep the logic simple by sticking to a clearly defined objective. This can be done if we accept that market-related questions (such as sales price control and market-driven end prices for different price-isolated markets) should be addressed separately *before* transfer price policy is designed to support them. All questions of internal performance indicators and management incentives should be modified *afterward* to accommodate transfer price policy.

The best way to ensure that transfer prices don't become an obstacle to sales is to select a method whereby the transfer price is calculated based on the final sales price of the item. This would generally mean using some combination of TNP and TNM and would set the transfer price for an item at enough of a discount from the average net revenue per unit to leave the local tax authority satisfied. These methods will always result in a transfer price lower than the end market price. The policy will also have to include calculation of a "floor" price below which the company will lose money on the transaction (see below).

Of course, this logic can't be applied to semi-finished components or parts that the company does not sell to third party customers. For these items the method is usually going to have to be some form of "cost plus"

(if other suppliers are available for these items the CUP method might also be possible). Use of these methods alone could result in a total product cost for the business unit doing final assembly which is higher than the price at which they can sell it to a third party. To prevent that problem, the policy will require a separate calculation of a price "ceiling" (see below).

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## The Critical Concept of Contribution Margin for Floors, Ceilings, Incentives and Implementation

To determine the optimum transfer price policy for a company and to ensure successful implementation of that policy, the company's management must understand the concept of contribution margin.

- If we set transfer price based on the end sales price without any consideration of contribution margin, there's nothing to stop us from selling at prices so low the company loses money.
- If we transfer components at cost plus, without considering the end selling price, we may end up building products that cost more to make than the company can sell them for in the local market.

- If our manufacturing plant management only sees a part of the profit on a product ultimately sold to the end customer by another business unit in another country, they may choose to allocate limited capacity to production that is less profitable, in total, to the parent corporation.

For all these reasons it's imperative to understand the value added by incremental intercompany sales. Unfortunately, conventional cost accounting methods often yield, and experience managers often accept, misleading analysis. To correctly address these questions and to optimize transfer pricing policy, it is essential to understand the concept of contribution margin.

Traditional cost accounting methods establish a standard or estimated cost for any manufactured item by calculating an estimate of the direct variable inputs plus an allocation of fixed factory "overhead." The direct variable cost is straightforward. It's the cost of the material and direct labor needed to build one unit. The allocation of fixed overhead can be misleading. This is the cost of the general costs associated with the factory which do not increase or decrease in relation to changes in production volume. These costs are totaled and divided by the number of units expected to be produced and that amount is added to the standard or estimated "cost" of the product. This is misleading because it doesn't cost that much more to produce one more unit. Once the decision has been made to run that factory, those costs are incurred and the decision of whether or not to make an incremental sale will have no effect on them. Once it's decided to run that plant and incur those fixed overhead costs, the relative value of any product sale or sales transaction stream is the amount that the transaction contributes toward paying those fixed costs and, hopefully to a profit above and beyond that. That's called the "contribution margin" and it's calculated by subtracting all variable costs (those costs which are incurred due to making the incremental sale) from the net revenue of the transaction.

Here's an example of how the failure to understand contribution margin in relation to transfer pricing can damage a company.

*Example:*

A family-owned manufacturer of machine tooled products has a factory and its main market in the U.S. Over the past 20 years the company has raised prices to cover rising costs, but foreign competitors have also entered the market so that each unilateral price increase reduces market share and sales volume. With each reduction in volume the company allocates the same fixed factory overhead costs to fewer units of production throughput so the cost per unit appears to rise. That prompts the CEO to demand another price increase which, in a vicious cycle, reduces sales volume. In the post-war years the company was highly profitable and was the dominant player in the U.S. market, but since then it's lost half its market share and is starting to post operating losses.

To address the cost problem, the company starts an experimental manufacturing subsidiary in China. To address the volume problem the company establishes sales & distribution subsidiaries in China and Europe.

The American CEO grew up in the town where the U.S. plant is located. He wants to keep jobs and operations in that factory and outsource as little to China as possible. He wants the U.S. operation to remain economically viable and he mistakenly thinks this can be achieved by maximizing the transfer prices at which it sells its product to the Chinese and European subsidiaries.

None of the company's senior managers understand the concept of contribution margin. They mistakenly believe that if they agree to any sales price below the standard cost (about 50% of which is fixed overhead cost allocations) the company will "lose money."

The company does not have experience with best practices of internal price controls. Salesmen are prevented from "giving away the store" by requiring the CEO's authorization for any price adjustments. Since this micromanagement can't be projected to business on other continents, it's assumed the transfer price policy will perform the function of price control and will prevent managers in China and Europe from selling "below cost" and "losing money."

In order to accommodate management's misconceptions, transfer pricing for American-made parts sold to the Chinese factory is calculated as standard cost plus 15%. The transfer price for finished goods sold to the European and Chinese subsidiaries for resale to their local markets is calculated as the same discount from U.S. list price as for major U.S. distributor customers. What management has not taken into account is that market prices for this product line are significantly lower in Europe than in the U.S. and lower in China than in Europe.

The company could sell its products in Europe and China at prices which would contribute to the bottom line in consolidation but its misguided transfer pricing policies ensure that its finished good exports are priced too high for those markets, while parts are sold to the Chinese plant at transfer prices that ensure the products manufactured there can only be sold at a negative gross margin for the Chinese subsidiary.

At one point the European General Manager negotiates a deal to sell 10,000 units of product to a major customer for \$1,000 each but the transfer price is \$1,010 so he calls the corporate office to ask for a transfer price exception. The direct variable cost per unit is \$490 and shipping costs another \$10 so the deal would add \$5 million to the company's operating profit but the fully loaded standard cost with allocations of fixed overhead included is \$1,005 per unit so the CEO thinks he'll lose money and rejects the deal.

Eventually the CFO convinces the CEO that there's no hope trying to make money at foreign price levels. The European business is closed down. To cut costs production is pulled out of the low-cost Chinese plant for consolidation in the high-cost U.S. plant. The company's financial situation continues to deteriorate.

## Calculation of the Cost Floor

As explained above, it's best to calculate transfer prices for finished goods based on external sales prices, but such a policy must also include a separate calculation of a floor price level - the level below which the company does not want to engage in the business. The floor price level should be based on contribution margin calculations and is either the point at which the contribution from the transaction is negative or so low that it doesn't justify production or administrative resources which would best be devoted to more profitable business.

## Calculation of the Cost Ceiling

As calculated above, it's generally necessary to calculate transfer prices for semi-finished parts or components using a cost plus or CUP method, but such policies must also include a separate calculation of a ceiling price level – the level above which the transfer price on the component will drive the total cost of the finished product too high to make a profit on the sale of that product. The ceiling price level should also be based on contribution margin calculations and is the point at which the contribution margin of the product in which it is to be incorporated is negative or unacceptably low. This ceiling calculation should function like a red flag requiring the attention of managers authorized to review the make/buy decision for that component or special reduction of transfer price.

## Keys to Successful Implementation – Before and After Policy Implementation

### Performance indicators and management incentives

Any material volume of intercompany transactions will affect the indicators used to monitor performance of the distinct business units involved, as well as the performance bonus incentives paid to their managers. Any change in transfer pricing will impact those indicators and incentives, and that impact must be considered if political resistance is to be avoided.

The problem is that the traditional unit of measure for accounting, reporting and performance measurement is the business unit. By definition, transfer pricing means that the true costs and benefits of the transactions involved are being split between different business units.

The key here is, again, contribution margin. Unless the intercompany sales business in question is the sole or central business of the originating business unit, the fixed overheads of that unit are not affected by it and the value of it can only be measured as the variable contribution that it makes to the consolidated profit of the corporation. In short, the key performance indicator for intercompany business is the consolidated contribution margin of that business. Therefore, to solve the problem of performance measurement and incentives two problems must be addressed.

- The traditional cost accounting methods have been around for a long time. It can be very difficult for managers to get their heads around the idea that the company can make money selling an item for less than the standard cost. If contribution margin is to be used as a performance indicator, the company's management must be educated to understand and accept it.
- Traditional accounting systems consolidate bookkeeping in the form of financial statements at the business unit level before consolidating these to form the company's financial statements at the corporate level. In order to calculate the contribution margin on a particular product line the external sales and variable cost data pertaining to that product must be extracted from the bookkeeping systems of different business units and then consolidated by a separate management reporting system.

Unless these two issues are properly addressed, it will not be possible to properly measure the value of the business under the transfer pricing policy. That, in turn, will make it impossible to properly manage that business.

*Example:*

Over several decades of acquisitions, an American company had grown to be a \$4 billion manufacturer of housewares, hardware, and office products. Each of the company's 14 "divisions" had come in as a distinct acquisition and was managed and accounted for as a unique business unit manufacturing its own product line at one or two factories within the U.S. Each had a distinct management team headed by a Division President and Division V.P. Controller team motivated by strict rules of financial discipline. Managers were told that "a budget is a contract" and for a business unit to fall short of budgeted operating income was a threat to the job security of its management team. Performance bonuses were based on annual budget targets of operating income and cash flow, and they were an unusually high proportion of compensation – 67% of base salary for Division Controllers and 133% of base for Division Presidents if budget were met and higher if budget were exceeded. Any business that couldn't achieve and maintain operating income of 15% of sales was to be sold off.

The company had a strategy of customer base rationalization whereby it focused on achieving high volumes with a few "big box" retailers. As these customers began to "globalize," the company confronted the limitation of its own domestic footprint and began a few experiments to explore foreign expansion. One of these was the International Division. The International division was established to buy products manufactured by the other divisions within the U.S and sell them through sales and distribution entities in other countries. Sales warehouse facilities in England and France came as part of the acquisition of an office products company made in the same year. These were added to a pre-existing facility in Puerto Rico and a start-up was initiated in Mexico. A marketing manager from another division was promoted to be Division President and a finance manager with multinational experience was hired to be Division Controller. In the next few months the company made acquisitions that added facilities in Australia and Argentina. The new Division President drew up a first year budget and assembled a management team. The new Division Controller got to work integrating the various international offices.

Not much thought went into transfer pricing. The company's U.S. manufacturing divisions sold directly to the International Division's overseas entities at standard cost plus 5%. By the end of the first fiscal year, the International division was doing \$100 million in sales – but there were problems.

The managers of the manufacturing divisions distained the intercompany orders from International. They were required to maintain an operating profit of 15% of sales and were highly motivated to maximize operating income of their own business units, but International orders only gave them standard cost plus 5%. As a consequence they gave International orders the lowest priority for order fill and on-time delivery. This in turn made order completion and on-time delivery even more difficult for the International Division with its intercontinental supply lines.

Half way through the year the exchange rate for several Asian currencies collapsed, making it impossible to sell any of the company's products there for more than the U.S. dollar denominated standard cost plus 5%.

Despite these problems the \$100 million in annual sales of the International Division were contributing \$17 million or 17% to the consolidated operating profit of the company, and this in

just its first year as a start-up division. Unfortunately, this significant contribution was invisible to the company's senior management because it was divided between the International Division and the manufacturing divisions. What the company's senior management did see was that the International Division finished the first fiscal year with an operating profit that was only 7% of sales and far short of budget. The recently hired V.P. Division Controller was fired to set an example. The International Division was ordered to cut costs and thus starve itself of resources and, while still in start-up mode, began shrinking. Before the next fiscal year was finished the decision was made to disband the International Division.

### **Further tax considerations**

Establishing the method of calculating transfer prices is only the first (albeit the most challenging) step that should be taken to protect the company from double taxation. Different tax regimes in different countries will demand different levels of documentation and justification. Tax auditors in many countries will be satisfied by evidence of a taxable net income of 2-3% on product imported from a parent manufacturing company. Other countries will demand more, but what they demand tends to come in the form of a few universal concepts.

**Documentation of method:** It's one thing to choose a price calculation method that the tax authority accepts, it's another thing to prove it. To provide this support, a written policy stating the method should include transaction records to show how the transfer price was calculated on individual transactions.

**Documentation supporting method:** While some authorities may accept 2-3% taxable profit, others may demand evidence that it shouldn't be more. If the method in use is cost plus, documentation of the originating business unit's cost may be required – from invoices and payroll records to cost accounting calculations. If the method is based on comparative price or margin (e.g. CUP, RPM or TNM methods) the standard form of supporting documentation is the “transfer pricing study” mentioned in the first paragraph of this article. The transfer pricing study is an analysis of transactional data from other companies dealing in a similar product in the same market in order to demonstrate that the taxable profit left to the tax man is similar to what it would be if the intercompany transaction had been made between independent parties at “arm's-length.”

**Uniformity of policy:** Uniformity of application throughout the company should make a transfer pricing method more defensible. In other words, it will be more difficult to defend against assessment if many different methods are used for different products in different countries than if one calculation method is used for all finished goods transactions between all countries and a second method used for all semi-finished components traded between all countries.

### **System Maintenance**

Once the right transfer pricing methods have been identified and approved, after problems with performance indicators have been resolved, and when pricing studies and documentation filing systems have been worked out for tax support, the problem of how to get the right price applied to the intercompany invoice remains. Some thought will have to be given to how prices will be loaded into the data bases from which invoice prices are posted. Administrative processes must also be developed to update the transfer prices as changes in exchange rates, costs, and other inputs to the transfer price calculation change the transfer price that results from those calculations.

About the author:

David North is the Corporate Controller for L.S. Starrett Company and has 30 years' financial management leadership experience with a variety of global manufacturing organizations. David's finance and accounting expertise includes internal controls, SEC reporting, and treasury and risk management.

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