



# Pricing Tool Guide

## The Waterfall From Net Retail Price to Net Supplier Profit

A simple but powerful tool for understanding drivers of how price and trade drive profitability is the price waterfall chart. The price waterfall chart was popularized in a [Mckinsey Quarterly](#) article, “The Power of Pricing”<sup>1</sup>. It is a flexible tool and I have seen many variations of it. The form that I present below is an imaginary example that captures the basic principles of list price and trade promotion funding. Each company will probably want to develop their own version to fit their costs systems and the discussions that they want to have around pricing. For example, the version below is more fitting for a CPG company that sells through retailers. The McKinsey version was oriented around a business-to-business customer situation.

Price waterfalls improve the understanding of the connection between retail prices to consumers and supplier prices to them. While price elasticity research focused on changes in volumes with respect to price, the change of interest is at the retailer level and the price that actually determined the net sales a supplier reports to shareholders is the price to retailers. This is clearly not the same thing. In value chain terms, the difference between supplier and net sales and the retailers’ sales of the supplier’s products is their margin, but retail buyers across industry do not agree on a common definition of margin. This is especially true where different margin components accrue to different departments within the retailer. Still, understanding the accounting steps from retail prices to our internal profits offers a more rigorous basis to address questions about retail prices, retailer margin trends, trade spending, trade promotion ROI, and internal margin pressures.

The example below is an imaginary price waterfall chart that decomposes the path from net retail price to manufacturer net profit.



<sup>1</sup>Marn, Michael V.; Roegner, Eric V.; Zawada, Craig C. “ The Power of Pricing,” [McKinsey Quarterly](#), February 2003.



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## How to Create:

**Retail Price:** Starting from left to right, the first column represents the average price of the retailer for the manufacturer's product(s). It is itself a mix of promoted and non-promoted sales, which is of interest to the supplier as part of the plan to sell through that retailer. The difference between non-promoted and promoted sales is also a key driver of the fourth and fifth columns (trade-funded programming). Understanding how price, volumes, and promotional activity combine to produce this number is a key focus of post-plan evaluations of price and trade promotion effectiveness.

**Retailer Margin:** The second and fourth columns together represent the retailer's margin. The second column is that portion that is taken as a mark-up to list. This is sometimes called the front margin. This number does not appear on the supplier's P&L and so may be hard to discern except by doing this math. The fourth column is the portion that is being provided by the supplier through trade funds to fund either everyday or promotional pricing. Knowing the split between front and back margin helps to understand the supplier's degree of influence with the retailer and how best to respond to retailer pressure to improve margins. Suppliers may have many different types of programs that contribute to price/margin outcomes for retailers, but they all share this common purpose.

**List Price:** The third column represents the list price or gross sales line, which is the higher element in the supplier's P&L and, as the previous paragraph indicates, marks the dividing line between front and back margins for the retailers.

**In-store Experience:** The fifth column represents payments to retailers that contribute to the in-store experience. In-store experience is the second of the three main purposes of trade-spending. This could include payments for display support, in-store advertising, distribution, shelving, etc. Some retailers may count this as part of their margins, others may not, but in-store experience is becoming every more important to retailers, especially those trying to draw customers into brick-and-mortar locations. Again, there are many different types of programs that may want to be called out in customer waterfalls, but they all share this common purpose.

**Economic Efficiency:** These are payments by the retailer that share the incremental profits from retailers behaving in ways that drive collective profit. Ordering size and configuration are some examples.

**Discounts and Allowances:** Are primarily rewards for prompt payments of bills. In this case, the terms are defined as a percent of invoice, but other definitions could exist. This measure is one that should be examined over time as it reflects the time value of money, cash positions, and inventory management practices. For instance, should changes in interest rates be reflected in this rate? It also seems common for these funds



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to accrue to different departments within retailers than the buying unit. And so, while it is significant to the supplier's margins, it may not be visible to the retail buyer when calculating his/her margin.

**Payments to Third Parties:** Some trade funds may be used to pay third parties to conduct shopper-oriented activities at retailers, such as sports-promotions. These payments affect the supplier's net sales and, hopefully, drive volume, but the trade dollars do not flow through the retailer and so may not be appreciated by them as much as those that do.

**Net Sales and Profit:** The difference between the list price, the trade funds, and the discount and allowances generates net sales (excluding direct-to-consumer incentives). The difference between the net sales and the operating costs to produce the products sold is the net profit. How one wants to define the operating costs is not as straightforward as it might seem and it will depend on the conversation those making decision want to have and the time frame.

## How to Use:

So the waterfall is interesting, but what can one do with it? The answer is a lot:

1. One benefit of having the retailer margin information and the supplier's operating profit on the same scale is the ability to compare the split of profits between retailer and suppliers.
2. Knowing the collective margin and splits helps when analyzing potential pricing moves. For instance, the formula for collective profit optimization can use this information, as well as seeing how the profit split drives different optimization outcomes between the supplier and the retailer.
3. Comparing price waterfalls across customers identifies opportunities for trade efficiencies or incremental sales.
4. Comparing price waterfalls across time highlights trends in spending that may or may not be desirable.
5. And last, but certainly not least, reversing the price waterfall can provide a method for calculating list prices and trade rates that are better suited to the retail prices and margin expectations for the supplier and the retailer. This is particularly helpful for pack-deal realignments.