

# Maintaining Profit When Prices Are Rising

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Over time supplier prices follow a one-way street; they increase. Whether the price increases are small or large, they represent a major profit opportunity for distributors. Unfortunately, that opportunity is often squandered.

This report examines the relationship between supplier price increases and distributor profitability from two perspectives:

- **The Profit Impact**—An analysis of how a specific supplier price increase can cause profit to either increase or decrease.
- **Maintaining Profit**—An examination of the strategies required to ensure that price increases do not diminish profit.

## The Profit Impact

Exhibit 1 demonstrates the impact of a supplier price increase under three different scenarios. The exhibit represents performance for an illustrative distributor.

As can be seen in the first column, the firm generates \$20.0 million in sales, operates on a gross margin of 25.0% of sales and produces a bottom-line profit of 2.5% of sales or \$500,000.

In thinking about price increases, it is essential to understand fixed and variable expenses. Fixed Expenses are overhead costs which tend to remain constant regardless of sales volume. Variable Expenses are items that rise and fall with sales, such as commission, bad debts and interest on accounts receivable.

For the typical firm, variable expenses are estimated to be 5.0% of sales or \$1,000,000 on \$20.0 million of sales. Fixed expenses are \$3,500,000.

Three different scenarios for responding to supplier price increases are presented in the exhibit. All three assume that inbound prices have been increased by 5.0%. For demonstration purposes it is assumed that the price increase applies to all purchases by the firm. Any price increase by an individual supplier would follow the exact same pattern shown in the exhibit.

The first strategy, labeled *Dollar for Dollar*, reflects a highly-competitive situation. The firm increases its outbound prices by the same dollar amount as the increase in inbound prices. That is, if the supplier increases prices on an item by one dollar, then outbound prices are increased by the same dollar.

The result is that Cost of Goods Sold and Net Sales increase by the exact same amount, \$750,000. This leaves Gross Margin exactly as it was before. Fixed Expenses remain constant while Variable Expenses increase right along with sales. The net result is that profit falls to \$462,500. To be precise, the Dollar for Dollar strategy will always cause profit to fall.

The column labeled *Percent for Percent* outlines the profit impact if the firm faces almost no competition. In this case, both inbound Cost of Goods and Net Sales are increased by the same 5.0%. Fixed Expenses again remain constant while variable expenses increase with sales. The result is that profit literally explodes, increasing to \$700,000. In this case price increases are clearly the distributors friend. Again, this happens every time with Percent for Percent.

In reality, competition is almost never so severe that the Dollar for Dollar scenario is necessary. In most cases, though, competition is at least tough enough that the Percent for Percent scenarios is also difficult to implement. Some middle ground approach is almost always required. However, the closer the outbound price increase can be matched to the inbound increase, the better.

Since every competitive situation is different, it is not possible to suggest what price increase might be possible. What can be done is determine what price increase would enable dollar profit to remain constant. That is shown in the column labeled *Profit Maintenance*.

In this case an outbound price increase of 3.9% is required (for the purists reading this, the figure is actually 3.94737%). This results in a new sales figure of \$20,789,474.

Nothing in the previous paragraph is self-evident. Therefore, it is useful to explain the calculations behind the price increase. It is an easy, albeit tedious, calculation that every firm should understand.

The calculation is a variation of the break-even formula. It starts with summing the new Cost of Goods Sold (reflecting the supplier price increase), Fixed Expenses and the current Pre-tax Profit (\$500,000). This total figure is then divided by 100% minus the variable expense percentage. In this case that equals 95.0%. The result is the sales volume required to maintain profit at its existing. In this case, sales of \$20,789,474.

The break-even formula doesn't indicate what the firm should do. It can only provide guidance on the size of the outbound price increase needed to maintain the current profit level. Whether the firm should be content to target for that level or try to move closer to the supplier price increase percentage is an open issue.

## **Maintaining Profit**

Theoretically, raising outbound prices in the face of inbound price increases should be easy. After all, when talking to customers there is an ideal villain—the suppliers. In competitive markets, the theoretical model quickly becomes irrelevant. There are four actions that can help alleviate the pricing challenge.

**Profit Analysis**—The firm should calculate its own level of price increases needed to keep profit constant (3.9% for the sample firm). This will at least provide a guideline as to the minimum outbound price increase needed.

**Response Time**—Prices on all merchandise, including what is already in stock should be increased immediately. The fact that the items in stock were bought at a lower price point is immaterial.

**Advance Buying**—Whenever there is a suggestion that prices are going to go up, the distributor should do as much advance buying at the old prices as the firm's cash position will allow. Advance buying is always advantageous.

**Education**—Everybody in the firm, especially the sales force needs to be aware of the need to maintain price integrity. The temptation to “meet competition” cannot be eliminated, but it can be minimized.

## Moving Forward

Supplier price increases are a permanent part of the distribution world. Firms must have specific plans in place for addressing them in order to at least maintain profit, or ideally increase it.

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### About the Author:

Dr. Albert D. Bates is Principal of the Distribution Performance Project and a Senior Advisor to Benchmarking Analytics. His latest book, ***Breaking Down the Profit Barriers in Distribution***, is available online at Amazon and Barnes & Noble. It covers concepts that every decision maker should understand.

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**Exhibit 1**  
**The Profit Impact of Different Strategies for Dealing With Supplier Price Increases**  
**For an Illustrative Distributor**

<b>Summary</b> <b>Income Statement--\$</b>	<b>Current</b> <b>Results</b>	<b>Supplier Price Increase Strategy</b>		<b>Profit</b> <b>Maintenance</b>
		<b>Dollar for</b> <b>Dollar</b>	<b>Percent for</b> <b>Percent</b>	
Net Sales	\$20,000,000	\$20,750,000	\$21,000,000	\$20,789,474
Cost of Goods Sold	<u>15,000,000</u>	<u>15,750,000</u>	<u>15,750,000</u>	<u>15,750,000</u>
Gross Margin	5,000,000	5,000,000	5,250,000	5,039,474
Variable Expenses	1,000,000	1,037,500	1,050,000	1,039,474
Fixed Expenses	<u>3,500,000</u>	<u>3,500,000</u>	<u>3,500,000</u>	<u>3,500,000</u>
Total Expense	<u>4,500,000</u>	<u>4,537,500</u>	<u>4,550,000</u>	<u>4,539,474</u>
Profit Before Taxes	\$500,000	\$462,500	\$700,000	\$500,000

<b>Summary</b> <b>Income Statement--%</b>				
Net Sales	100.0	100.0	100.0	100.0
Cost of Goods Sold	<u>75.0</u>	<u>75.9</u>	<u>75.0</u>	<u>75.8</u>
Gross Margin	25.0	24.1	25.0	24.2
Variable Expenses	5.0	5.0	5.0	5.0
Fixed Expenses	<u>17.5</u>	<u>16.9</u>	<u>16.7</u>	<u>16.8</u>
Total Expense	<u>22.5</u>	<u>21.9</u>	<u>21.7</u>	<u>21.8</u>
Profit Before Taxes	2.5	2.2	3.3	2.4