

# THE BOTTOM LINE

## Math to help your bottom line

Peter Chapman & Gary Morton

### Demystifying Mark Up Verses Margin

One of the best components of a solid relationship is to understand what the other party is saying and how they operate. Producers and processors are instinctively focused on production and retailers have the same level of focus on selling. For these reasons many producers look at their profit as mark up, while retailers look at their profit as gross margin.

### Mark up and margin is not the same thing!

Unfortunately many people think they are, and this can cause problems, miscommunication and potentially lost profits. We will explain each and share some insights into the impact this math and other calculations can have on your bottom line.

Suppliers typically think in terms of mark up percentages, the amount necessary to cover the total costs of doing business plus a profit. A problem when basing selling price on mark up calculations is that people think that they are making more because the markup percentage is mathematically greater than the margin percent. There is also the risk when using a standard percent mark up that the retail price gets set too high, or possibly too low.

Retailers think and use margins because it is more representative of what they actually earn from both a price and cost perspective. It is a top down calculation based on the selling price. Margins are what results from the sale, not on how the price was set. Monitoring retail margins gives the retailer more accurate information to manage a product's performance and overall bottom line value to the store.

Take a look at the calculations in Table 1, the table to the right; you'll see the difference between the mark up percentage and a margin percentage. A 50 % mark up is only a 33% margin. Confusion between the mark up% and margin% can lead to serious and costly miscommunication and miscalculations between you and your customer.

**Let's try and clear up any confusion you may be having!**

Mark Up %	Margin %
10	9.90
15	13.05
20	16.67
25	20.00
30	23.08
35	25.93
40	28.57
45	31.03
50	33.33
55	35.48
60	37.50
65	39.39
70	41.18
75	42.86
80	44.44
85	45.95
90	47.36
95	48.73
100	50.00
105	51.22
110	52.38
115	53.49
120	54.56
125	55.56
130	56.52
135	57.45
140	58.33
145	59.18
150	60.00

Table 1 %Mark up vs. %Margin



## Mark ups

A mark up is defined as the profit you make expressed as a percentage of the total cost of goods. In other words you start with the total cost of goods and add a percentage to arrive at a selling price. Many producers and processors use this method to arrive at their selling price. The concept of a mark up is illustrated in Table 2.

As mentioned earlier suppliers typically think in terms of mark up percentages, because it is straight forward and a fairly simple way to calculate a selling price that covers the cost of doing business plus a profit. A standard mark up percentage assures the supplier that even when there is a change in the cost structure, the selling price will cover their costs plus give them a profit. When using a mark up strategy, you need to monitor if the retail selling price is pushed to a level that is too high to attract customers, or too low to make a profit, impacting if a product will sell, or how much it will sell.

<b>Mark up</b>	
Total cost of production	\$1.00
Mark up	20%
Selling price	\$1.20

In Table 2 per unit profit in our example is 20 cents. The mark up is 20% but the margin is only 16.7%, see the markup verses margin comparison in Table 1 for reference.

Table 2 Mark Up %

## Gross margin

A gross margin is defined as the profit expressed as a percentage of the selling price. For gross margin, the starting point is the retail selling price as opposed to the cost of goods. Retailers will use this method to ensure they achieve the desired level or profit in a category or a department. They know to successfully operate the department, they need to achieve a specific level of gross profit, and so prices are set accordingly. The gross margin required will vary between different retail departments. When the retailer knows what a product needs to sell for and they know their margin%, they also know what they can pay for products.

<b>Gross margin</b>	
Cost of goods	\$1.00
Selling price (retail)	\$1.20
Gross margin	16.7%

The concept of gross margin is illustrated in Table 3. We will use the same selling price and cost of goods from Table 2 to illustrate the difference between mark up and gross margin. In this example the gross margin is calculated by dividing the 20 cents profit by the retail price. The cents per unit profit is still 20 cents.

Table 3 - Gross Margin%

Retailers in the food industry think in terms of gross profit. A solid relationship depends on both parties understanding each other. Retailers perceive suppliers who say, "You are making 20%" as people who do not understand their business. The retailer will only see this as a 16.7% margin.

There are many conversations between suppliers and retailers that decide \$1.20 will be the retail price. If they agree on 20% the supplier will expect to be paid \$1.00 and the retailer will expect to pay them 96 cents. You can see how the relationship will deteriorate and someone ends up covering the discrepancy.

In this example the supplier should be pushing for \$1.25 retail understanding the retailer wants to make 20%. If that is the focus from the start of the conversation the supplier will not be pushed to lower their selling price to 96 cents. The 4 cents will stay on your bottom line where you need them.

**The Problem**

As you see a 35% margin and a 35% mark up are not the same thing and it can be a serious problem if you have to cover the difference because of some misunderstanding on your part. We hear people say, "I don't seem to make as much as I should selling to retailers". Getting this right is a big opportunity to have a positive impact on your bottom line. Calculating your margins before the negotiation will put more dollars on your bottom line.

**The next case study will put this in a practical situation.**

**Case Study**

Table 4 is a brief case study comparing two producers selling a product for \$4.00, Producer #1 Fred is using mark up%, and Producer #2 Shelly is using margin %. The resulting difference is quite significant.

	Producer Sell \$	Distributor Sell \$	Retailer Sell \$
<b>Produce #1 (Mark up)</b>	\$4.00	\$5.00	\$6.75
Mark Up %	-	25%	35%
Mark Up \$	-	\$1.00	\$1.75
<b>Producer #2 (Margin)</b>	\$4.00	\$5.33	\$8.20
Margin %	-	25%	35%
Mark Up \$	-	\$1.33	\$2.87
Difference		\$1.33	\$1.12

Table 4 - Case Study Examples Markup verses Margin



## Mark Up% Example

Producer#1 (Fred): sells his product for \$4.00 to a distributor who needs to take a 25% mark up. So the distributor marks up his cost by 25% ( $\$4.00 \times 1.25 = \$5.00$ ) and sells to a retailer for \$5.00, receiving \$1.00 profit from the transaction. The retailer wants to make a 35% mark up selling to the consumer, so he marks up his cost by 35% ( $\$5.00 \times 1.35 = \$6.75$ ) and sells it for \$6.75/unit returning a \$1.75 profit from a 35% mark up.

## Margin% Example

Producer#2 (Shelly): also sells her product for \$4.00/unit to a distributor, but instead of a 25% mark up this distributor wants a 25% margin. To get a 25% margin the distributor has to sell the product to a retailer for \$5.33/unit and they receive \$1.33 (25% margin) from the transaction. The retailer now wants to make a 35% margin selling to the consumer, so the sell price must be \$8.20, which returns a \$2.87 profit to them from a 35% margin.

From this case study example it is clear that there is quite a difference between a mark up% and margin%, it does not give the same result. The margin% calculations result in a much higher selling price and return than by using the mark up% calculations. Using a margin% calculation the return to the distributor is 33 cents more/unit and at retail \$1.45 more/unit. Who is going to have to cover this difference, you or the buyer?

The following shows step by step how to calculate a gross margin percent and how to calculate a selling price when given a margin percent.

Step By Step How to Calculate a Gross Margin %		
	Example	Your Numbers
<b>Step#1</b> What is the selling price?	(A) \$ 15.00	(A) \$ _____
<b>Step#2</b> What is the cost?	(B) \$ 10.00	(B) \$ _____
<b>Step#3</b> Calculate Gross Margin (A - B=C)	(C) \$ 5.00	(C) \$ _____
<b>Step#4</b> Calculate the % (C ÷ A=D)	(C) 5 ÷ (A) 15 X 100 = (D) 33.3 % margin	(C) _____ ÷ (A) _____ X 100 = (D) _____%

Table 5 – Calculate Gross Margin Worksheet

This calculation will show you what your product will sell for at particular retail margin%.

Step By Step How to Calculate a Selling Price from a Given Gross Margin %		
	Example	Your Numbers
<b>Step#1</b> What is the gross profit margin?	(A) 35% (.35)	(A) ____% ( ____ )
<b>Step#2</b> Subtract the GPM from 1.0	(B) 1.0 -.35 = .65	(B) 1.0 - (A) ____
<b>Step#3</b> What is the cost?	(C) \$ 10.00	(C) \$ _____
<b>Step#4</b> Sell Price = C ÷ B	\$10.00 ÷ .65 = \$ 15.39 Sell Price	(C) ____ ÷ (B) ____ = \$ _____ Sell Price

Table 6 - Calculate Selling Price Given Margin %

## Bonus Tip: Understand the impact of discounting your price

The food industry has done a great job training the consumer to look for reduced prices. The level of items sold on temporary price reduction has continued to increase in recent years.

The advertising department can dream up so many names for the same thing...

Call them ads, in store specials, coupons, managers specials, multi saver, door crashers, 3 day sales, buy one get one free or roll backs, they are all the same thing, a discount from the regular price.

With consumers salivating for reduced prices there is more pressure than ever on suppliers to offer temporary reductions in price. Reality for suppliers is to offer discounts but the dollars will stay on your bottom line if you have the right level of discounts.

You need to do the math before you decide what the right level of discount should be. You will need to do more volume to deliver the same profit when you reduce your selling price.

Consider the following discount illustrations and how it impacts your bottom line.

	Normal Price	15% Discount	To Recover
Product Cost	\$0.80	\$0.80	\$0.80
Regular Selling Price	\$1.00	\$0.85	\$0.85
Regular Weekly Volume	10,000 units	10,000 units	40,000 units
Weekly Profit	\$2,000.00	\$500.00	\$2,000.00

Table 7 - Impact of Discounting

If you discount your price by 15% your profit per unit decreases to 5 cents/unit. Now you need to sell 4 times the volume or 40,000 units to generate the same amount of profit before the discount.

In other words a 15% reduction in selling price needs a 400% increase in sales to generate the same profit.

In some cases a volume increase will result in better efficiency and a lower product cost. If you can improve your product cost by 10% and reduce it to .72 per unit then you need to sell 15,384 units to deliver \$2,000 in profit. Now you require a 50% increase in sales to generate the same profit.

The sales lift required to generate the same profit increases exponentially relative to the level of discount. It is too easy to get caught up in the game of lowering prices without understanding the impact on profit.

### Make it up somewhere else

How often have you heard the words “we will have to make it up somewhere else”, during a conversation about price discounts? It is a lot tougher than you think.

	Normal Sale	15% Discount
Product Cost	\$0.80	\$0.75
Regular Selling Price	\$1.00	\$0.85
Regular Weekly Volume	10,000 units	17,500 units
Weekly Profit	\$2,000.00	\$1,750.00
Average company return	6%	

Table 8 - How Much It Takes to Make It Up

We will assume you offer the 15% discount and your selling price changes to .85. We will also assume that you get some efficiencies and your product cost reduces to .75 on these products. Your cents per unit profit has decreased to 10 cents. Volume will increase by 75%.

To make up the difference in profit with a rate of return of 6% you will need a sales increase of \$4,166 on another item just to get your profit back to a regular week. How will you generate that without another discount?

Discounting prices is a reality so you need to really consider the appropriate level of discount and if you can do it. Work through the math to understand the impact on your business. If you can reduce the level of discount slightly it will have a big impact on your bottom line.

Being prepared to talk about gross margin instead of mark up and understanding the impact of discounts are two ways you will grow your bottom line with SKUFOOD.

For more great information about growing the bottom line of your food business visit [SKUFOOD.com](http://SKUFOOD.com).

Join today! For only \$297/yr you get access to the only one stop shop dedicated to growing your food business bottom line.

Gary Morton      [gary@SKUFOOD.com](mailto:gary@SKUFOOD.com)    (902) 670-3992

Peter Chapman    [peter@SKUFOOD.com](mailto:peter@SKUFOOD.com)   (902) 489-2900

[www.SKUFOOD.com](http://www.SKUFOOD.com)

SKUFOOD is an online community dedicated to helping food producers and food processors grow their bottom line. If it won't help you grow your bottom line, it doesn't make it to SKUFOOD.