Basics of Trade Margins

Prof Neeraj Sanan



Margins (the Line of ATL/BTL)

Margins are key to pricing, marketing spending choices, & customer profitability



But brand sells at multiple prices, in different channels and can have different costs. So...



Margins

• Unit Margin (Rs)

= Selling Price per Unit(Rs) – Cost per Unit(Rs)

• Margin (%) =
$$\frac{Unit\ Margin\ (Rs)}{Selling\ Price\ per\ Unit\ (Rs)} = \frac{Total\ Sales\ Revenue(Rs) - Total\ Cost(Rs)}{Total\ Sales\ Revenue(Rs)}$$

- "Unit" depends on business
 - e.g., "sticks", "packs", "cartons" for cigarettes "account", "customer", "loan", for bank
- You must know unit margins by heart



Margin: Construction

- Margin(%) for company selling multiple products
 - Do not take unweighted average of margins!
- Calculate total sales & total costs. For example

```
Total Sales = 20 jars of plum jam at $6 + 10 jars of orange jam at $8 = $200 total sales
```

Total Costs = 20 jars of plum at \$4.50 + 10 jars of orange at \$5.50 = \$145 total costs

Margin (\$) = Sales-Costs so Total Margin (\$) = \$55

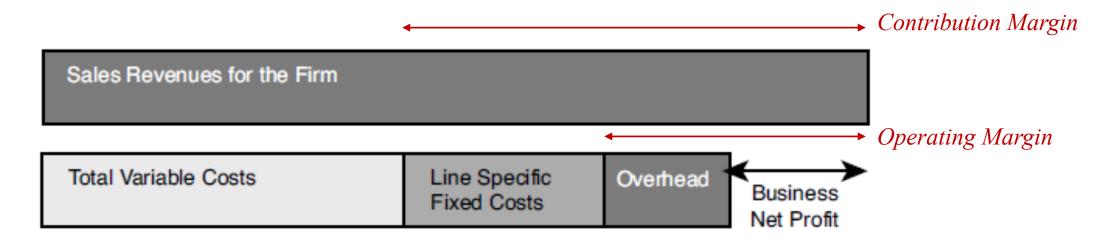
Margin (%): Plum=\$1.50/\$6.00=25%, Orange=\$2.50/\$8.00=31.25%

but company margin $\neq \frac{25\%+31.25\%}{2}$ or 28.125%. (weighted by volume)

Instead Margin (%) = $\frac{Total\ Margin(\$55)}{Total\ Sales(\$200)}$ = 27.5%. (weighted by value)



Net Profit: Construction



Simple View of Business – Revenues and Costs

- Overhead: Costs than cannot be directly tied to any specific product or division (e.g. headquarters staff)
- Allocation among divisions/ regions/ products can often be more art than science



Margin: What is included?

- Various costs may or may not be included
 - "Contribution margin" deducts only variable costs
 - "Operating margin" deducts cost of operations and variable costs
 - "Margin before marketing"
- Are rebates, customer discounts, broker's fees & commissions costs or deductions from selling price?



Margin % play: (Rs 30 off) vs (goods worth Rs 30 free)

• When Rebate classed as gift (worth Rs 30 free with Rs 100 purchase):

Impact on Margin (%) =
$$\frac{Unit \ Margin (30)}{Selling \ Price \ per \ Unit (100)} = 30\%$$

• When Rebate classed as price cut (Rs 30 price off):

Impact on Margin (%) =
$$\frac{Unit \ Margin \ (Rs \ 30)}{Selling \ Price \ per \ Unit \ (Rs \ 100 - Rs \ 30)} = 37.5\%$$



Margin % play: Price increase

• Margin (%) changes with rebate classification

Unit Margin (Rs) = Selling Price – Cost of Goods Sold & Rebate

$$= 100 - 50 - 20 = 30$$

• Price Increase of 1% = 101. 2% = 102

• Profit: 30 -> 31 30 -> 32

• 3.33% 6.66%



Averaging Margins:

- Margins
 - Vary by channel
 - Vary by SKU
 - Vary by territory
- Average Margin in Rs: Weighted by volume
 - = % of Unit Sales through Channel 1 * Margin in Channel 1 (Rs) + % of Unit Sales through Channel 2 * Margin in Channel 2 (Rs) + ... (continue to last channel)
- Average Margin %: Weighted by Value
 - = % of Dollar Sales through Channel 1 * Margin in Channel 1 (%) +% of Dollar Sales through Channel 2 * Margin in Channel 2 (%) +... (continue to last channel)



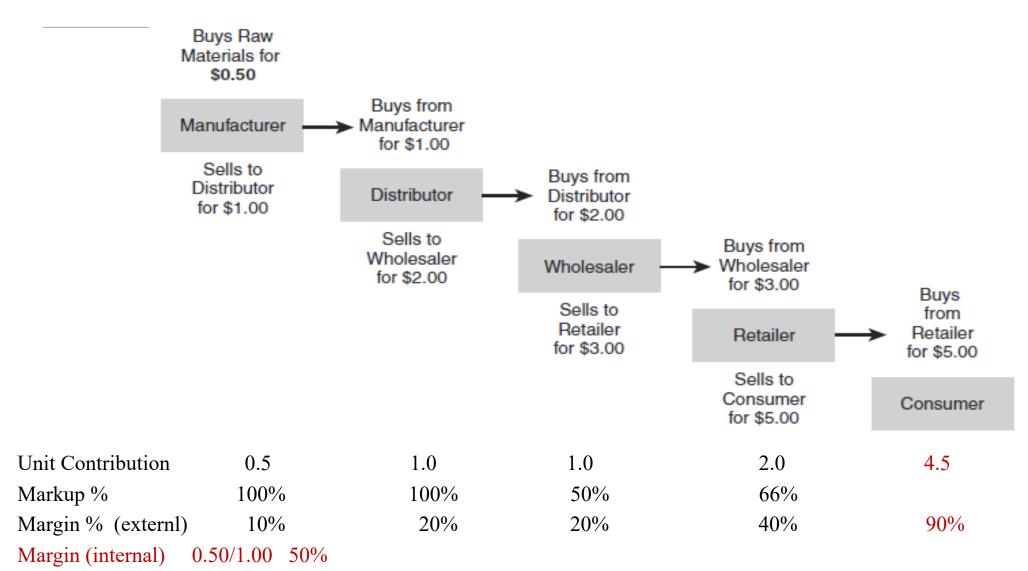
Margin vs Markup

- Some industries (particularly retail) calculate margins as % of cost, not selling prices
- Be familiar with your industry practice
- We recommend using margin for % of selling price and markup as % of cost

• Markup (%) =
$$\frac{Price(\$) - Cost(\$)}{Cost(\$)}$$



Margin vs Markup (channel language)





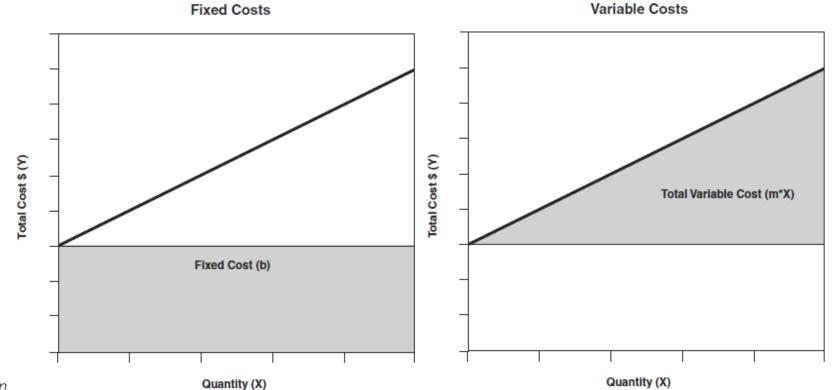
Variable and Fixed Costs

- Variable costs increase directly & predictably with unit sales volume
 - e.g., each product made uses Rs 10 of raw materials
- Fixed costs are <u>not</u> affected by short term sales changes
 - e.g., we must pay Rs100k rent on factory even if it doesn't produce anything
- Total Cost = Fixed Costs + Total Variable Costs
- Total Variable Cost (\$) = Unit Volume (#) * Variable Cost per Unit (\$)



Total Cost: Construction

- Total Cost (\$) = Variable Cost per Unit (Rs) * Unit Volume (#). + Fixed Costs(Rs)
- Equation of the form Y = mX + b, where Y = Total Cost, m is variable cost per unit, X is unit volume and b the fixed cost



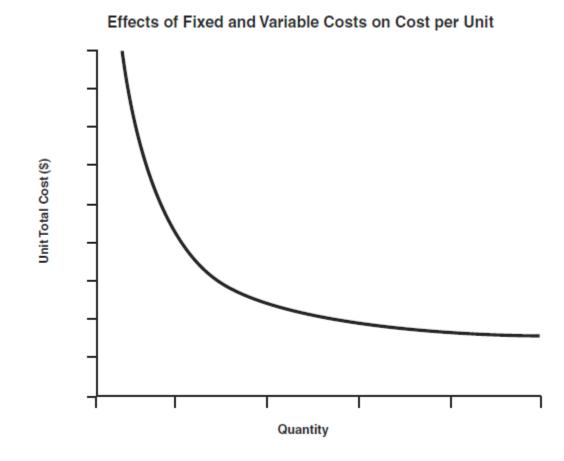


Total Cost per Unit

Total Cost per Unit

$$= \frac{Total \ Cost \ (\$)}{Quantity \ (\#)}$$

- As quantity rises total cost per unit declines as fixed costs are spread across more units
- At very high volume total cost per unit approaches variable cost per unit
 - Fixed cost per unit→0





Fixed & Variable Marketing Costs

Examples of Fixed Costs (ATL)

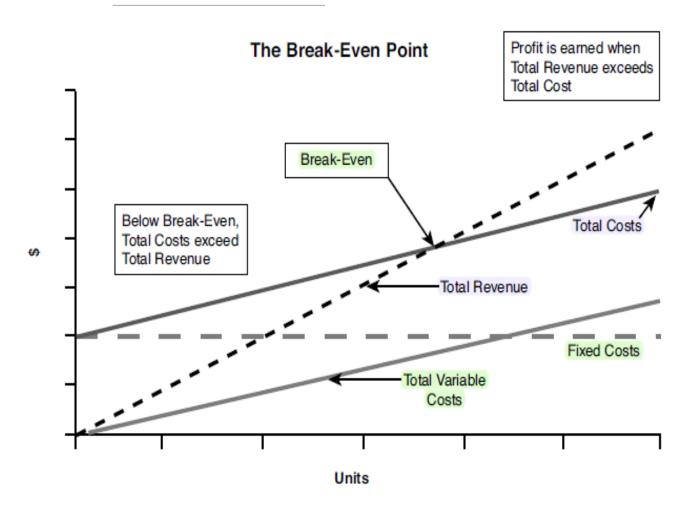
- Salesforce salaries
- Advertising
- Marketing staff
- Point-of-purchase promotion materials
- Cooperative advertising allowances
- Agency Retainer fees

Examples of Variable Costs (BTL)

- Salesforce commissions
- Bonuses contingent on sales goals
- Performance allowances to trade
- Coupons & rebates
- Bill-backs for local campaigns conducted by retailers



Breaking Even



- Break-even: sales needed to cover total cost
- Profit at break-even is zero.
- Break-Even Volume (#) = $\frac{Fixed\ Costs\ (\$)}{Contribution\ per\ Unit\ (\$)}$
- Post break even, margin = profit



Marketing: an expense or an investment?

- Accountants tend to consider marketing as an expense
 - They focus then on whether it is a necessary expense
 - Can it be cut?
 - Financial value = incremental sales
- However, marketers typically believe marketing activities generate lasting results
 - Incremental customer life time value
- If true much marketing may be an investment
 - But when?

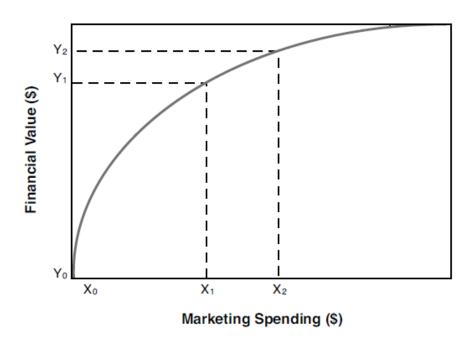


Construction

- If we estimate a baseline firm financial value without marketing (Y_0) & have the actual firm financial value now with marketing (Y_2) we can calculate financial value attributable to marketing, Y_2 Y_0
- Incremental value attributable to marketing can be "total" (Y_2-Y_0)

• MROI (%) =
$$\frac{(Y_2 - Y_0) - X_2}{X_2}$$

- Or value from a specific initiative (Y_2-Y_1) costing X_2-X_1
- Return on Incremental Marketing Investment: ROIMI (%) = $\frac{(Y_2 - Y_1) - (X_2 - X_1)}{(X_2 - X_1)}$



Optimize or saturate?



Customer Lifetime Value (CLV)

A Hypothetical Example to Illustrate CLV Calculations											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Number of Customers	100	90	80	72	60	48	34	23	12	6	2
Revenue per Customer		100	110	120	125	130	135	140	142	143	145
Variable Cost per Customer		70	72	75	76	78	79	80	81	82	83
Margin per Customer		30	38	45	49	52	56	60	61	61	62
Acquisition Cost per Customer	40										
Total Cost or Profit	-4,000	2,700	3,040	3,240	2,940	2,496	1,904	1,380	732	366	124
Present Value	-4,000	2,454.55	2,512.40	2,434.26	2,008.06	1,549.82	1,074.76	708.16	341.48	155.22	47.81

Marketing: Expense or Investment

- CEO, Accounts tend to consider marketing as an expense
 - When driving P&L
 - They focus then on whether it is a necessary expense
 - Can it be cut?
- Investors, marketers believe marketing activities generate lasting results
 - When driving valuation
 - Hence, cash burn is ok
 - But when is marketing a good investment?



Thank you

