# Profitability impacts of cost and pricing decisions essay sample 

Business, Company

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## Executive summary

In understanding cost and pricing dynamics in relation to profitability, at least four issues face the cost accountant in tracing product or service costs, the value of which will be used as an essential input in pricing decisions. These are complexity, accuracy, ease of estimation, and time. Joint cost allocation is an example of a complex cost tracing due to inevitable data gaps. Sunk costs exemplify a type of cost the accountants normally consider as marginal and, therefore, may be ignored in the cost trace. Opportunity costs also possess a unique characteristic in its " potentiality" by nature, although quantifiable based on its history, and pose a special challenge when deciding whether it will be factored into the product or service price. This essay looks into the profitability implications of general and new-product pricing strategies. The general pricing approaches include cost-pricing,
break-even, value-based, value pricing, competition-based, and activitybased. Each differ in its exactness and estimation process for pricing and the importance it placed over market perception of product or service value or that of the competition. The new-product pricing strategies include marketskimming and market-penetrating methods, which essentially espouse opposing tactics in relation to profit generation and the market.

The variegated approaches in cost and pricing decisions reflect different needs and objectives, thus impacting profits differently. Nonetheless, a return to the basics notion of business and profitability must be considered in choosing a strategy for an organization. Decisions that lead to losses make no sense in profit-oriented organizations. The point of pricing is to establish costs and a margin of profit that makes the most sense to business owners. Accurate cost determination is imperative to achieve profit targets. However, other factors must also be considered in the pricing decision without sacrificing unnecessarily its profitability.

## Introduction

The ultimate aim of any business is net profit, not net loss. Such outcome involves a strategic management of costs and pricing. Mathematically, profit is the difference between total revenue and total expenses. To generate profit, a presumption of recognizing all possible expenses in the costing of products or services exists. However, tracing costs are no simple task to do. The more common challenges in cost tracing include complexity, accuracy, ease of estimation, and time. Market leaders like The Coca-Cola Company achieved such exemplary profitability performance without rigorous attitude
towards its costs of doing business.
Tracing all the direct and indirect costs for one product involves an array of actual and cost estimates, and is already a complex undertaking. Tracing the same for more than one product will be exponentially complex. Inaccuracies in measuring costs increase with cost complexity. These inaccuracies had an impact on the costs assigned to each product. Erroneously higher product cost allocations directly result to more expensive products; and the more expensive the product is, the less likely the market pays for it. Cost allocation and pricing follows the economic principle of substitution, which provides that a knowledgeable buyer will not pay more for a product or service more than he or she would have to spend to acquire a similar product or service.

Estimation of costs also poses significant difficulties. The accountant working in a manufacturing plant that produces ten products using the same cost driver (e. g. electricity use) a serious problem in determining how much electricity cost to assign to each product. Furthermore, would it be costefficient to trace the exact electricity cost for each product considering the time it would take to do so in terms of research works? he cost of tracing electrical cost?

## Practices of cost allocation

The Coca-Cola Company manufactures, markets, and sells beverage in two major business segments: concentrate business and finished products business (The Coca-Cola Company [TCCC], 2013). Its concentrate business manufactures beverage concentrates, which it used as " beverage base" for
its nonalcoholic sparkling beverage brands: Coca-Cola, Diet Coke, Fanta and Sprite. Its finished product business manufactures " still beverages" such as enhanced waters, juices and juice drinks, ready-to-drink teas and coffees, and energy and sports drinks.

In the concentrate business, there is no direct information available on whether the Company uses different machines to produce concentrates for each brand. However, knowing its special attention to costs and the high manufacturing technology available today, it can be reasonably presumed that a single machine, or a few of the same machine, is being used to generate the beverage concentrate; simply set the concentration ratios into the machine, put in the raw materials (e. g. water, high fructose corn syrup and/or sucralose, saccharin, or acesulfame potassium, carbon dioxide), and the concentrate comes off for appropriate large-volume bottling for shipment to specific bottling companies around the world (TCCC, 2013). All these are direct costs in the same way that other raw materials used in packaging are: polyethylene terephthalate resin, preforms and bottles, glass and aluminum bottles, aluminum and steel cans, plastic closures, aseptic fiber packaging as well as labels, cartons, cases, and postmix packaging.

Since there is no available figure for all these costs, this essay will be limited to discussing conceptually instead of using actual costs.

The concentrate production machine represents an asset that generates joint production costs each batch of beverages ran and dependent on the volume of concentrates produced per batch. In order to properly establish the machine cost, the Company usually depreciate the concentrate machine (assumed for discussion as a single machine) within a standard and uniform
depreciation period, say 10 years or 5 years, using a specific depreciation method, such as the straight method. So the annual depreciation cost for the concentrate machine is the quotient between the total costs of acquiring the machine (not just the price tag) divided the number of depreciation years (e. g. 10 years). So if the machine was acquired for an overall cost of $\$ 1$ million, the annual depreciation cost of the machine is around $\$ 10,000$, representing the joint costs in producing the concentrate (Lips, 2014).

The total joint costs can be proportionately allocated per measurement unit, based on an allocation factor, to obtain the standard costs per measurement unit (' budgeted costs'; ' forecast costs') (Lips, 2014). If the machine can produce one billion liters of beverage concentrate annually, it allocated cost per liter will be around $\$ 0$. 00001 . What if market demand per annum for each soft drink brand is 500 million liters for Coke Regular, 200 million for Diet Coke, 150 million liters for Fanta, and 150 million liters for Sprite? Then the machine costs per liter will be as follow: $\$ 5,000$ for Coke Regular, $\$ 2$, 000 for Diet Coke, $\$ 1$, 500 each for Fanta and Sprite.

These machine costs per brand per volume production per year are later on included in the full cost analysis, a basic rationale of cost allocation (Jiambalvo, Chapter 6).

However, acquisition costs depreciated annually for 10 years are not the only cost attributed to the use of the concentrate production machine. These costs include maintenance costs (e. g. service cost, parts cost, grease expense) and personnel costs (machine operator costs). Maintenance costs are usually considered a sunk cost as they are usually irrecoverable (Walia, 2014; Park \& Jang, 2013). Knowing the tight ship the Company is keeping
with regards to its costs and expenses, it is reasonable to assume that even sunk costs will be recognized as part of the production cost, not simply thrown away unrecognized as a " free" cost in favor of the beverage consumers (Jiambalvo, 2004). By principle, it is most likely that sunk costs are not allowed in the Company.

With regards to the machine operator costs, no information is available on the actually practice used by the Company. Three possible approaches may be used in recognizing these costs. First, the costs may be included in the administrative expenses (e. g. salaries) instead of including it in the cost of goods sold (COGS). This approach allows the Company to factor these costs into the price of the product during the pricing decision later on. However, it is troublesome in the reporting side of accounting as personnel costs are usually lumped together under a single expense entry (administrative expenses).

Second, these costs may be integrated into the COGS without recognizing it in the administrative expenses. This approach is easier because it does not involve setting aside specific salaries for inclusion in the costing of products under COGS, removing an additional step in the costing process that must be done in the first option.

Third, these costs may be recognized for reporting purposes under administrative expenses but operationally under production costs or COGS. This is the most flexible approach without removing the cumbersome steps involved in the first approach. It is also probably the most intelligent approach particularly in understanding the cost structure of product manufacturing. Moreover, this approach can be done by internal cost
management and reported differently.
There is no evidence, though, which cost allocation approach that the Company employed. What can be seen in its annual reports are standard presentation of costs and expenses based on the accounting principles generally accepted in the United States (TCCC, 2013). Perhaps, an internal look could reveal that, which this essay had limits of access in the Company. In regions where Coke 500 ml is being sold, such as Asia, South America, and South Africa, prices stand at less than $\$ 1.00$ per bottle, far below the $\$ 2.00$ price in Montpelier, Vermont (Humuch, 2014). These prices appeared to be not based on break-even pricing. Instead, it appears more like a marketpenetration pricing than value pricing decision. Moreover, dollar exchange rate could be a factor in the pricing discrepancy. In the absence of actual internal costing, two possibilities can only be surmised: (1) The total cost per unit for Coke 500 ml is too low it can still profit from a price of $\$ 0.10$; (2) Pricing in these regions had been designed for market penetration of new markets, and differences between these prices and the actual break-even cost per unit were spread and subsidized by markets with high price elasticity.

## Pricing decisions

Based on the general pricing strategies (Khoso, Ahmed and Ahmed, 2014), it is most likely that the Company is using the break-even pricing decision instead of the value-based pricing strategy. The reasons are first, the principle of value-based pricing is not rigorous in recognizing indirect costs (Coskun \& Yilmaz, 2013; Khoso, Ahmed \& Ahmed, 3014) and second, break-
even pricing is very rational in treating costs and profits (Khoso, Ahmed \& Ahmed, 2014).

Cost-plus pricing involves adding a sufficient profit margin on the cost of resources consumed to determine the price of a product or service (Coskun \& Yilmaz, 2013; Khoso, Ahmed \& Ahmed, 3014). This pricing strategy recognizes mostly direct costs, ignoring indirect costs. It is roughly like estimating the cost of a liter of Coke regular at $\$ 0.05$, and then simply multiplying it with a profit factor of 12.0 to get a distribution price of $\$ 0.60$. The rigor that the Company implements in managing costs and expenses will not be compatible with this type of pricing decision. It will be a grievous sin for the Company to ignore indirect costs in its pricing equation. Although a profit margin is added, the estimated factor may not adequately account for the ignored costs, resulting to low or zero profitability outcomes. Or, if it does account, the estimation factor represents a loose basis for accounting indirect cost cover for pricing. In a way of speaking, it is less rational; that is, rigorously rational. In brief, although this strategy can derive a profitable margin when market-tested for elasticity performance, the process includes some levels of vagueness that would not be rationally valid for rigorous cost managers, which the Company can be reasonably assumed to have. The ignored indirect costs are potential blind spots for, or " frivolous use of common resources" (Jiambalvo, 2004) in the eyes of, decision makers, which could be considered uncomfortably by rigorous cost managers. It avoids precision in cost allocation and accuracy in attributing costs as important bases for pricing decisions.

Conversely, break-even pricing, also known as ' target-profit pricing,' sets
the price on the costs of making and marketing a product, or to make a target profit (Khoso, Ahmed \& Ahmed, 2014). By default, costs must be rigorously accounted for before a " break-even" situation can be objectively defined. A cost manager cannot say that the cost per liter of $\$ 0.05$ for Coke Regular is the break-even cost when indirect costs had not been factored in the equation. For maximum effect, break-even costing may even include all costs and expenses related to business operation (e. g. COGS, selling, general and administrative expenses, other expenses, even a projected income tax payable) in order to ensure that the profit factor added into the pricing equation will closely approximate post-tax earnings with minor statistical variations from the mean price. This may show a higher breakeven cost. However, that cost represents a clear-eyed look into the actual costs of doing business and the extent profit can be generated based on the price elasticity of the products in their markets.

This pricing is a net profit strategy that usually recognizes both direct and indirect costs before determining the acceptable profitability target. This strategy had a better chance of achieving a satisfactory net profit than costplus pricing, provided meticulous cost tracing is done. This pricing decision is custom-made to fit the Coca-Cola rigor in determining its cost structure and controlling it. However, due to the price elasticity of its markets and the consistent leadership it plays in these markets, it is also expected that the Company incorporate a premium profit factor into the pricing equation to maximize profit potential in a manner that specifically adjusts with market demands (Jiambalvo, 2004). Nonetheless, no speculation on the profit factor will be mentioned here.

In January 2014, the Company announced an increase of its vending machine prices by 10 yen ( $\$ 0.09$ ) to 160 yen ( $\$ 1.37$ ), from 150 yen ( $\$ 1.28$ ) per 500 ml bottle since 1999, effective April when consumption tax increases to 8 percent (Omoto, 2014). In the latest price update in the United States (Montpelier, Vermont), the same product is priced at \$2. 00 (Humuch, 2014), with an average global price of $\$ 1$. 51 . The highest price is in Switzerland (Lausanne, Vaud) at $\$ 5.39$ (as of 3 August 2013) and the lowest was in Estonia (Harjumaa, Tallinn) at \$0. 10 (12 September 2012). Much of this pricing difference, however, cannot be solely accounted on cost basis. Market-penetration pricing appeared to be in play. These low priced locations could be new markets created. Dollar exchange may also be an important factor in these discrepancies.

## Conclusion

Cost and pricing decisions of organizations vary a lot depending on the depth of certainty in costs that the management is willing to use in their pricing strategies. In that variation flows also the variations in profitability. Cost-plus pricing strategy may not be as meticulous in recognizing indirect costs to its pricing decision as break-even pricing (Coskun \& Yilmaz, 2013; Khoso, Ahmed \& Ahmed, 3014). Certain pricing strategies, such as value-based and competition-based pricing may not show meticulous costing in their specific names. However, that does not necessarily indicate a careless regard for accurate cost determination. Each costing and pricing strategy is accompanied by specific objectives to accomplish as an integral part of the business and marketing strategies. In all these, wise cost and pricing
decisions must be faithful to the fundamental rationale of doing business: acceptable profit generation. Moreover, the cost allocation methods mentioned in this essay indicate a wide variety of costing strategies, so widely from the broad-based joint costing to the ' negligible' approach of sunk costing and the ' potential' pricing strategy. It is becoming obvious that arrays of costing and pricing strategies are available to organizations today, which they can use in their respective profitability goals.

The rigorous cost discipline of The Coca-Cola Company had been one of its advantages over its competitors. Its stingy attention to its direct and indirect costs as must-recognize data for its pricing decisions provides the company cost efficiency that its closest rival could not compete. Based on its image towards its cost management, it is reasonably believed that the Company is using a break-even pricing strategy, which it improved for optimal profitability using a premium profit factor that the market can comfortably absorb through the years. That's a wise and flexible strategy to pursue, no wonder it continued to be number for decades in its markets.

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