

Pepita Disco PPM: Margins and Elasticity

One morning in January 2012 Carolina Araujo walked across the factory floor, through the curing room, and into the executive offices at Pepita Disco PPM (Productos Para Mascotas) SRL,¹ Uruguay's second-largest producer of beef-based dog food, treats, and toys. She had recently taken over the family business after her father's retirement, and while she respected the company's nearly eighty-year history, she felt that Pepita Disco had grown complacent with its market share and was basically preserving the status quo. Carolina planned to re-energize the employee base and grow Pepita Disco's business faster than the overall market.

Pet Products Market in Uruguay

Uruguay's pet products industry grew in direct proportion to the country's emergence as a global beef producer in 1995, when the World Organization for Animal Health declared its cattle free of foot-and-mouth disease. Combined with certain political developments in neighboring Argentina that had hampered the exportation of Argentine beef, this certification launched more than a decade of explosive growth in the Uruguayan beef market, which had until the late 1970s been under heavy governmental control. Uruguay's 3 million residents were outnumbered nearly four-to-one by its cattle, and the country enjoyed a strong reputation in the higher-end organic and grass-fed beef segment. Total beef production in 2011 was 380 million metric tons of carcass weight, 75% of which was exported for a total exportation value of approximately UYU 14.1 billion.²

After a cow was slaughtered, those parts not exported in carcass form were sold to—among other buyers—pet product manufacturers such as Pepita Disco, which separated them into component parts and rendered them (i.e., heated them to melt the fat they contained) to produce pet treats. Uruguayan pet product manufacturing totaled UYU 700 million in 2011, with the vast

¹ Sociedad de Responsabilidad Limitada, effectively a limited liability partnership structure that is popular among small and medium-sized enterprises in Uruguay.

² As of July 1, 2012, one Uruguayan peso (UYU) was worth approximately US\$0.0461, or slightly less than five cents.

majority exported with a distribution pattern similar to that of Uruguayan beef. The United States accounted for more than half of all exports, followed by Canada, Israel, and the European Union.

Because of the high quality of the cattle used as inputs, Uruguayan pet product manufacturers tended to specialize in higher-margin, lower-volume products that were sold primarily through specialty retail channels. Hypermarket chains such as Wal-Mart and Target tended to sell lower-quality bulk dog food and treats made with grain filler and reconstituted animal parts. The trend toward purchasing higher-end pet products in developed markets had spurred impressive growth in the category, with total production growing at an 8.2% compounded annual growth rate (CAGR) in the five years ending in 2011, and a forecasted 6.5% CAGR for the next five years.

Wenaewe SA (a subsidiary of ERRO, a large Uruguayan diversified conglomerate) led the market with a 37.2% share. Though Wenaewe and Pepita Disco constantly battled for the number-one position, the rest of the market was highly fragmented among many wholly owned subsidiaries of Uruguay's thousands of small family-held cattle ranches. Wenaewe and Pepita Disco held approximately two-thirds of the market between them, but the next five largest competitors in the market accounted for less than 10% market share.

Pepita Disco

Founded in 1934 by Carolina's great-grandfather, Pedro Mateo Araujo, Pepita Disco was originally a family-owned farm producing English Hereford cattle to supply the nascent Uruguayan military. In the 1960s the company spun out its ranching operations to refocus on its core competency in rendering unused cattle parts for a variety of industrial applications. When Carolina's father, Lorenzo Castillo Araujo, took over in 1994, he again refocused the company, this time exclusively on the high-end pet products market.

Pepita Disco produced a wide array of upscale dog toys and treats, such as bully sticks and other chew toys made from muscles and tendons, real beef bones (often cross-sections of cow femurs), and its own proprietary line of Doggie Beef Jerky made from lean trimmings (see **Figure 1**).

Figure 1: Pepita Disco Products



Bully Sticks



Real Beef Bones



Doggie Beef Jerky

The company employed more than fifty people in its sole location in Durazno, some three hours from the capital city of Montevideo on the south Atlantic Ocean. Despite the company's respectable 10% net margin, Carolina found herself increasingly frustrated with the company's stagnant earnings growth, which had only averaged 2.7% over the past three years under her father's oversight. Determined to meet or exceed the overall market's far more robust growth projections, she began to contemplate various options to increase sales and margins.

Assignment

Use the financials in **Table 1** to answer the following questions.

Table 1: Pepita Disco Performance, 2011 (UYU in millions)

Units sold	100 million units
Revenue	200
Variable costs	
Materials	30
Direct labor (manufacturing, sales)	40
Operational costs (manufacturing, inventory, delivery)	30
Other variable costs	20
Margin on sales	80
Fixed costs	
Marketing and advertising	10
Research and development	10
Other fixed costs (e.g., head office)	40
Net margin	20

For each question, calculate the absolute change in Pepita Disco's current net margin, as well as the percentage change, that would occur as a result of the change described. For example, a change in net margin from 20 to 22 would be an absolute change of +2, and a % change of +10%.

In answering each question, consider only the impact of the changes suggested in that question. Answer each question in isolation—do not carry over changes from one question to the next. However, do realize that any change in volume will also cause a change in variable costs, since variable costs increase or decrease automatically when volume changes. For this reason, you may find that it is useful to calculate variable costs as per-unit amounts so that it is easy to adjust the financials when volume changes. For questions that require you to calculate the effect of price changes given a particular elasticity, remember that elasticity indicates the percentage that volume will change as a result of a 1% change in price.

Assume variable costs will change proportionally with volume.

1. What would be the absolute and percentage changes in net margin if Pepita Disco were to:
 - a. Reduce research and development 10%?
 - b. Reduce marketing and advertising 10%?
 - c. Reduce all fixed costs 10%?
 - d. Reduce all variable costs 10%?
 - e. Get its salespeople to sell 10% more?
 - f. Raise its price 10%?
 - g. Lower its price 10%?
 - h. Reduce research and development 10% and, as a result, unit sales decreased 5%?
 - i. Reduce marketing and advertising 10% and, as a result, unit sales decreased 5%?
 - j. Reduce variable costs per unit 10% and, as a result, unit sales decreased 10%?
 - k. Motivate its manufacturing staff and salespeople by paying them 10% more and, as a result, unit sales increased 10%?
 - l. Raise its price 10% with an elasticity of -1.7 ?
 - m. Lower its price 10% with an elasticity of -1.7 ?

Now, imagine a similar company, called Yuckles Pet Products, which sells more expensive products than Pepita Disco. It has exactly the same revenues, total fixed costs, and total variable costs as Pepita Disco, so its financials look exactly the same except that Yuckles sold 40 million units.

2. What would be the absolute and percentage effect on net margin if Yuckles were to:
 - a. Raise its price 10% with an elasticity of -1.7 ?
 - b. Lower its price 10% with an elasticity of -1.7 ?