Introduction to Industry Analysis (Porter's Five Forces)

SUBMITTED BY: Michael Moore, University of Pennsylvania

GRADE LEVEL(S): 9, 10, 11, 12

☰ OVERVIEW:

In this lesson, students think critically about investment choices. Toward that end, the lesson focuses primarily on the Porter's Five Forces framework. After the lesson, students should be able to define the five tenets of Porter's Five Forces and apply the framework to different companies/industries in order to evaluate their investment potential.

☰ NBEA STANDARD(S):

- Entrepreneurship, IV. Finance

☰ RELATED ARTICLES:

- "The Strength of Small: How Nanotechnology Is Blowing Our Minds"
- "The Investor Lifecycle: Changing Priorities, Changing Portfolios"
- "Strengths, Weaknesses, Opportunities, Threats: The SWOT Analysis"
- "Show Me the Money: Analyzing Porter's Five Forces"
- "Portfolio Managers: The Challenge Is Picking More than One Winning Stock"
- "Portfolio Management: Making Decisions about Your Investments"
- "Macchiatos in Mumbai: Starbucks Comes to India"
- "Investing with Purpose"
- "Financial Ratios: Evaluating a Company's Health and Worth"
- "Big Data and Your Future as a Data Scientist"

- "10 Terms New Investors Should Know"

NBEA Standard(s):

- Finance: Saving and Investing
- Finance: Protecting Against Risk
- Finance: Financial Decision Making
- Management: Industry Analysis

Objectives/Purposes: The purpose of this lesson is for students to think critically about investment choices. Toward that end, the lesson focuses primarily on the Porter's Five Forces framework. After the lesson, students should be able to define the five tenets of Porter's Five Forces, and apply the framework to different companies/industries in order to evaluate their investment potential.

Tying it all Together:

The lesson is divided into five parts: (1) Introduction, (2) Definitions, (3) Group Work, (4) Guided Reading, and finally (5) Practice

Introduction (5 mins)

You can use this lesson without using other lessons in the unit. However, this lesson relies on a basic knowledge of the SWOT (Strengths, Weaknesses, Opportunities, Threats) framework (introduced in lesson 4 of this unit). We will introduce the lesson through that lens.

For classes who have already covered SWOT, introduce the lesson by talking generally about how investors make decisions. Have the class work in small groups or work together to brainstorm all of the various ways in which investors make decisions. If the students do not bring up SWOT on their own, introduce it for them.

SWOT stands for Strengths, Weaknesses, Opportunities and Threats. Write out the acronym and the four tenets on a chalkboard or dry-erase board. Because the four tenets are somewhat intuitive, encourage students to provide definitions for you. Eventually, you should come up with something similar to these definitions:

Strengths refer to those things that a company does well; in particular, strengths refer to sources of competitive advantage—positive attributes that set one company apart from its competitors. This might include things like customer service, good products, a strong brand, as well as good financial characteristics (e.g., high gross margins, low costs, healthy financial ratios etc.).

Weaknesses refer to those areas where a company is lacking in comparison to its competitors. These are often the opposite of strengths: bad customer service, bad brand recognition (or bad reputation), weak products as well as poor financial characteristics (e.g., low gross margins, high costs, unhealthy financial ratios etc.).

Opportunities refer to external, or environmental factors that can help the business. For example, independent of a company's strengths or weaknesses, there might be opportunities for growth in the industry. There might be a shift in consumer preferences, or a change in industry regulation, all of which could benefit a company in the long run.

Threats are also external factors, but ones which may hurt a company's prospects. The current economic downturn, for instance, might be a threat to companies that sell primarily luxury goods.

Definitions (5-10 mins)

In this lesson, we will be comparing SWOT analysis with Porter's Five Forces. After reminding students of the SWOT framework, it might be useful to ask students what weaknesses they think the SWOT analysis has. Is SWOT useful? Why or why not? Would you base an investment decision solely on SWOT? Why or why not?

The Porter's Five Forces model can be used to analyze either an industry or a company's position within an industry. For purposes of this lesson we will use it to analyze industries.

This discussion should lead to a brief description of Porter's Five Forces. These forces are:

1. Threats of new competition
2. Threats of substitute products
3. Bargaining power of customers
4. Bargaining power of suppliers
5. Strength of competition

In this lesson, it is important for students not only to understand what these five forces are, but what influences each. We will first draw out very basic definitions of each. Afterwards, students will perform an activity to understand how these forces work, then teachers can provide more in-depth discussion of the forces.

Introduce the lesson with five (5) very quick definitions, using the cell phone service industry as an example. In the U.S. there are four primary cell phone service providers: Verizon, Sprint, T-Mobile and AT&T.

Threats of new competition refer to the threat of other firms (competitors) entering your market. The threat of new cell phone competitors is fairly low. There are significant investment costs to start a cell phone service company (e.g., purchase spectrum infrastructure, develop a sales network, etc.). The costs associated with these investments as well as having to develop brand recognition may keep some companies from entering the industry.

Threats of substitute products refer to the threat of customers shifting to a similar product. The threat of substitute products is moderate. There are a few substitute products, such as Skype, Vonage, a landline or Facetime. However, they may not be great substitutes for a cell phone, because they are not as convenient to use. With this said, customers may switch to these substitutes because they are cheaper.

Bargaining power of customers refers to the power of customers to influence the pricing of products. The bargaining power of consumers is low. Consumers have practically no ability to bargain with cell phone service providers. There are a lot of consumers and very few cell phone providers. It is true that a single consumer can leave Verizon and take his/her business to AT&T, but this will not affect Verizon on a large scale. Cell phone service providers on the most part provide pricing plans that are similar (i.e. within a range of $10-15). They try to differentiate on various perks outside of pricing, such as unique phones. For example, AT&T at one point had an exclusive deal with Apple for its i-Phone.

Bargaining power of suppliers refers to the power of suppliers who provide the materials that are needed to make a product or for a product to function. The bargaining power of suppliers (cell phone manufacturers) is relatively low. There are very few cell phone service providers who will purchase cell phone and there are a lot of cell phone manufactures. The only time where this power dynamic might shift is when a cell phone manufacturer has a unique product. This was the case with Apple when it first came out with its i-Phone.

Intensity of competitive rivalry refers to the pricing competitiveness in the industry between firms. As noted above, the competitive rivalry is modest-to-low in the cell phone service industry. The cost of a cell phone plans has not varied much. If one of the four companies dropped its contract price then the other companies would follow suit. As a result, all four companies would lose out because their profits would be significantly reduced. Therefore, cell phone companies try to avoid competing on price. For example, how may cell phone commercials from the big four companies do you see where they advertise monthly contract prices? Typically they will compete on service area covered or other features (i.e. unlimited data).

Group Work (10-15 mins)

After providing very cursory definitions of Porter's Five Forces, split the class into five groups. Assign each group to one of the five forces. Each group will have five to ten minutes to think about what influences their force.

For example: What influences the threat of new competition? In what types of industries is the threat to new competition high? In what types of industries is the threat to competition low?

Have each group create a list of 3-5 things that might influence how their force relates to different companies/industries. Once groups are finished, have them report out.

In general, the teacher should use the group examples to talk about several different things.

Threats of new competition are influenced by barriers to entry (i.e. things that prevent others from starting a new business or entering a new market). These barriers include sunk costs, strong existing brands, and industry profitability. Low sunk costs, few existing brands, high profitability will all increase threats to new competition.

Threats of substitute products are driven mostly by consumer preference, switching costs, number of products on the market. If consumers are indifferent to substitutes, face low switching costs, and there are very few existing products, then there will be a high threat of substitute products.

Bargaining power of customers is influenced by how dependent a company is on its customers. If customers buy in large volumes, and customers can easily switch from one product to another, then customers will have a lot of bargaining power.

Bargaining power of suppliers is influenced by how dependent a company is on its suppliers. If a company has few potential suppliers and relies on very specific inputs then the bargaining power of suppliers will be very high.

Finally, intensity of competitive rivalry depends on how many companies there are in the market, bargaining power of customers, how differentiated products are, and pricing power. If an industry has low customer bargaining power and companies can differentiate their products based on features and not price, then the competitive rivalry is usually minimal. An example of an industry that has high competitive rivalry would be the personal computer (PC) market. PC's are fairly similar, for example, what are the differences between a Dell and HP home computer? Do customers have a lot of choices when it comes to purchasing a computer?

Guided Reading (5-10 mins)

After going through Porter's Five Forces in detail, have students read through the article, "Macchiatos in Mumbai: Starbucks Comes to India." As students read, encourage them to think about the India cafe industry using Porter's Five Forces.

Practice (10-15 mins)

In this activity, students will be conducting an industry analysis using Porter's Five Forces. The teacher should split the class into groups. Each group should be assigned a specific industry, and industries should be as diverse as possible. The more diverse the industries, the more insightful the Five Forces analyses will be. Some example industries include (e.g., Auto Manufacturers, Beverages, Oil Companies, Drug Manufacturers, Apparel Stores, Drug Stores, Airlines, Restaurants and Software).

Give each group 5-10 minutes to conduct a Five Forces analysis of their given industry. Afterwards, have each group give a short presentation of their findings. As a class, compare and contrast the different industries covered by each group.

Practice Outside of the Classroom:

If your students have been following the lessons in this unit, each student will have chosen a company to investigate using financial documents. For homework, have the student continue their financial analysis of this company's industry using Porter's Five Forces. If the teacher is interested in a longer-term project, she can have students build a prospectus. Using student homework from the past 4 lessons, the student can build a written argument in favor, or against, investing in their chosen company.

What Worked and What I Would Do Differently: