Economics of Strategic Behavior

B8216 Spring 2022

Professor Laura Doval

Preliminary and subject to change

A. Administrative Information

Contact Information

Office: Uris 603

Email: laura.doval@gsb.columbia.edu

Office hours: Remote office hours via Zoom. Contact me to schedule a meeting

Required Materials

Bruce Greenwald and Judd Kahn (2005): Competition Demystified (CD)

Case studies, readings, and class handouts posted on Canvas.

B. Course Description

This course examines the underlying economics of successful business strategies, including:

1) The sources of long-run competitive advantage.

2) The dynamics of competition and competitive advantage.

3) Strategic interactions (competitive and/or cooperative) among firms.

Three characteristics distinguish our approach. First, we focus on fundamental strategic decisions that firms face rather than more detailed operation/managerial issues. Second, we seek broad principles that can be applied across many firms and markets, rather than anecdotal success stories or institutional details that apply only in limited cases or as a result of idiosyncratic factors. Finally,
we develop these broad principles from the framework of microeconomic theory. As such, potential answers will be subjected to the rigor of economic analysis to test their validity and applicability.

The approach toward teaching and learning is primarily inductive. That is, you will learn the concepts and principles outlined above largely through examples – this is the essence of the case study method. The goal is to carefully study specific business situations and decisions with the goal of extracting broader principles about business strategy, which will then be available to you in a wide variety of managerial contexts. Class time will be split roughly 65/35 between case discussions and lectures.

Good cases are necessarily complex and ambiguous. In preparing for case discussions, you may find sorting through this complexity and ambiguity to be frustrating. The problems presented in the case discussion may not have one correct answer. However, there will generally be a set of insights and solutions that are better than others. And it is in working through the messy details to find these insights and solutions – both in your own preparation and in-class discussion – that the concepts and principles introduced in the readings and lectures will come alive and be enriched for you.

C. REQUIRED PREREQUISITES AND CONNECTION TO THE CORE

The learning in this course will utilize, build on, and extend concepts covered in the following core courses:

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Connection</th>
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<tbody>
<tr>
<td>Managerial Economics</td>
<td>1. Understanding market competition and equilibrium thinking (in the short-run)</td>
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<td></td>
<td>2. Market equilibrium thinking (in the long-run) and barriers to entry</td>
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<td></td>
<td>3. Strategic Interaction among firms and Nash Equilibrium</td>
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<td></td>
<td>4. Pricing with market power</td>
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<tr>
<td>Strategy Formulation</td>
<td>1. Creation of value vs. value capture</td>
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<td></td>
<td>2. Competing firms</td>
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Students will be expected to have mastered these concepts and be able to apply them in the course.

D. COURSE SCHEDULE (Subject to change: see Canvas for latest updates)
Fundamentals of Strategy, Sources of Competitive Advantage

The first part of the course is focused on understanding the sources and dynamics of competitive advantages. It presents a simplified approach to business strategy, based on the notion that any long-run competitive advantage must rely on “barriers to entry.” Firms without competitive advantages should concentrate all their efforts on being efficient. Firms that do have competitive advantages need to design strategy with their competitors in mind.

<table>
<thead>
<tr>
<th>Session #</th>
<th>Topics Covered</th>
<th>Suggested Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>Introduction to Competitive Advantage; Industry Analysis</td>
<td>Enterprise Rent-a-Car CD Ch 1 to 3</td>
</tr>
<tr>
<td>Session 2</td>
<td>Competitive Advantage: Position-Based</td>
<td>Aldi The Economist CD Chapters 4 and 5</td>
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<tr>
<td>Session 3</td>
<td>Competitive Advantage: Capabilities-Based, Resource-Based, Mergers and Acquisitions</td>
<td>Capital One CD Chapters 6 and 7</td>
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<tr>
<td>Session 4</td>
<td>Competitive Advantage: Platform Markets, Building a Competitive Advantage, Dynamics</td>
<td>LinkedIn, Tesla</td>
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Managing Strategic Interactions

After having developed the basic tools for the analysis of competitive advantage, we will use game theory as a framework for analyzing shared competitive advantages. The basic issue is simply this:
when competitive advantage is shared with other firms, any action I take will generate a reaction by my competitors. How can I predict and incorporate those reactions in forming strategies so that I am not blindsided, and if possible, can even use them to my advantage? We will focus attention on two distinct strategic problems: Price Cooperation (Part II) and Strategic Entry (Part III). More concretely, can I find a way to move away from mutually destructive price competition, toward win–win games? How do I enter an industry, or avoid entry by new competitors?

**Part II: Price Cooperation and Industry Equilibria**

<table>
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<tr>
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<tbody>
<tr>
<td>Session 5</td>
<td>Game Theory &amp; Strategic Interactions; Dynamics of Collusion</td>
<td><em>Shrimp Game</em>&lt;br&gt;Game Theory Hand Out&lt;br&gt;CD Chapter 8 and 9</td>
</tr>
<tr>
<td>Session 6</td>
<td>Price Wars, Competition and Cooperation; Industry Structure</td>
<td><em>Philip Morris</em>&lt;br&gt;<em>Albert Heijn</em></td>
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<tr>
<td>Session 7</td>
<td>Competition and Cooperation&lt;br&gt;Guest Lecture I</td>
<td><em>Cereals</em>&lt;br&gt;<em>International Paper</em></td>
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<tr>
<td>Session 8</td>
<td>Guest Lecture II&lt;br&gt;The Economics of Antitrust</td>
<td><em>Pratt &amp; Whitney</em>&lt;br&gt;Antitrust Handout</td>
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**Part III: Strategic Entry and Course Wrap-up**

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<tr>
<th>Session #</th>
<th>Topics Covered</th>
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<tbody>
<tr>
<td>Session 9</td>
<td>Strategic Entry</td>
<td><em>Ryanair</em></td>
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Red Bull

Session 10
Strategic Entry, Data
Platform Antitrust

Session 11
Bargaining Power, Wrap Up

Session 12
Final Exam

Microsoft
Google Handout

Nintendo
E. COURSE REQUIREMENTS AND GRADING

The final grade will be based on:

Class Participation (35% - Individual/Type B)

Class participation is essential in order for you to get the maximum benefit from the course. To create proper incentives, your final grade depends on your class participation. Your class participation grade will be based on two metrics: (1) engagement and (2) contributions.

(1) Engagement. During class and in-between classes, you will be asked to complete small tasks. The fraction of tasks that you complete determine your engagement grade. These tasks include:

   Online Quizzes. For most sessions, there will be an online quiz posted on Canvas, to be completed before the beginning of the session. Questions are multiple-choice and/or require you to write a paragraph justifying your answer. Grading is based on the thoughtful completion of each of the quizzes. Your answers may be used in class and you may be called to discuss them.

   PollEverywhere. During most sessions, students will be asked to answer questions via PollEverywhere. Your answers will be used in class and you may be called to discuss them. Your PollEverywhere answers are also used implicitly, to track attendance.

(2) Contributions. Your in-class contributions are expected to be: Relevant: Are your comments related to the case and to the comments of others? Do they move the discussion forward? Do they bring clarity to the general discussion? Fact-Based: Have you used specific data from the case, from readings, or from personal experience to support the assertions that you are making?

Cold Calling. In addition to your voluntary participation, I regularly select a few students at random to open and/or lead the case discussion.

I ask that you deal with the cases as you find them; do not seek outside or post-case data on the firm or industry. Of course, if you already know things about the case, from previous experience, this can be very useful in case discussions. Please let me know about it in advance, and I will make a point to call on you at the appropriate time.
Case discussion constitutes more than half the class time, so there will be ample opportunity for each of you to participate. If you feel that you are preparing well but that I am not calling on you enough, please let me know so that I can address the problem.

**Case Write-ups (30% – Group/Type A)**

During the semester, students have to submit 6 case write ups. For each case, Section F lists the questions that students have to address in their write ups. Writeups are graded on a scale from 1 to 5 and contribute to 30% of the final grade. Students can work on their write ups by forming groups of at most four students (strict limit). Each group is responsible for submitting two write ups per each part of the course, for a total of six submissions:

- **Part I:** Aldi, The Economist, Capital One, LinkedIn, Tesla
- **Part II:** Albert Heijn, Philip Morris, General Mills, Pratt and Whitney
- **Part III:** RyanAir, Microsoft, Red Bull, Nintendo, Tesla

If a group or a student submits more than 6 writeups, only the first 6 will count for the final grade. Note, if two cases are discussed in the same session, you can only submit the writeup for one, not both.

**Due date.** Writeups are due the day before the case is discussed in class. Submit online via Canvas.

**Format.** Write-ups should be no longer than one page. This is an exercise in synthesis. Length does not translate in a higher grade. In answering the question, it is essential that you use concepts developed in class.

**Use.** I may occasionally call upon someone or a group to discuss his/her/their ideas. Write-ups are graded on scale from 1 to 5.

**Remote, open-book, case-based exam (35% – Individual/Type B)**

In-class open book case-based exam during the last class session. A case will be distributed one week prior to the date of the exam. Questions will be published on exam day. Students will be able to submit via Canvas.
F. PREPARATION QUESTIONS

Questions to answer if you submit a write-up. The same questions can be used by all students to prepare for class discussion, irrespective of whether they submit a write-up.

Enterprise

▪ Analyze Enterprise’s strategy and competitive position. Why has Enterprise been so successful?
▪ How attractive is the car-rental industry in terms of long-term profitability?

Aldi

▪ Discuss the main elements of Aldi’s strategy. Does this strategy result in a cost advantage in the discount grocery segment relative to Walmart?
▪ Does Aldi have a (sustainable) competitive advantage in the US? Yes or no?
▪ How should Walmart react to Aldi’s expansion? Should they imitate some of the key choices of Aldi’s? Should they go to a price war to stop Aldi’s expansion?

The Economist

▪ What explains the success of The Economist thus far? Why has it managed to succeed while so many other magazines are struggling?
▪ How was The Economist able to increase prices and circulation at the same time?
▪ What are the main industry threats that The Economist should be sensitive to? What are the main opportunities that it could take advantage of?

Capital One
What, if any, competitive advantages does Capital One have?

Are these advantages sustainable into the future?

As head of Capital One, what would be your strategic priorities?

LinkedIn

Consider the market in which Linkedin operates. Who are the company’s customers?

For each set of customers that you have identified in the previous question, what affects their willingness-to-pay (WTP)?

Describe Linkedin’s pricing strategy and its rationale? How is this market different from a “standard,” i.e. one-sided market? Explain.

Tesla

Should BMW expect Tesla to grow into a strong direct competitor like Audi (versus Tesla being either limited to a niche or a flash in the pan)? Is Tesla at a competitive advantage or disadvantage? How will that evolve?

What do you think of Tesla's entry strategy? What barriers did it have to overcome? How did it manage to do so? Will other firms follow in Tesla's footsteps?

How do you expect the industry to evolve?

Albert Heijn

Using data from the case, provide a comprehensive industry analysis of the food retail industry in the Netherlands at the beginning of the 2000s.

What kind of competitive advantage did Albert Heijn have at the beginning of the 2000s?

In your opinion, what is the strategic goal (if any) in Albert Heijn’s dramatic price cut in October 2003?

Philip Morris
Using data from the case, provide a comprehensive industry analysis of the tobacco industry during the 80s.

Now compare this industry with the segment of the car rental industry in which Enterprise operated in the 80s. From a competitive perspective, how is PM’s position different from Enterprise’s? What is the first-order difference between these two industries?

What accounts for Philip Morris’ dramatic shift in strategy in April 1993? What are its goals?

**General Mills**

- Provide an estimate of the cost of entry, namely initial investment in fixed costs to reach MES, for the RTE Cereal industry in the 80s.
- Using the framework developed in class, explain why the RTE Cereal industry has been such a profitable business in the 80s?
- Describe the role of the price leader in this industry. More generally, what industry problem does a price leader solve?

**Pratt and Whitney**

- Should Pratt & Whitney go ahead with the GTF? Or, was the decision made by previous management to pull back from new engine programs the right one? (Assume UTC’s cost of capital is 8%)
- Assume PW has decided to go ahead with the GTF technology, how should it proceed?
- How feasible do you think it is for P&W and GE to coordinate on a better industry equilibrium? Is cooperation so hard in this industry? Explain why.

**Red Bull**
- Describe Red Bull’s entry in the US market. What kind of strategy did the company adopt to successfully enter the market?
- Was it a strategic mistake for Coke to let Red Bull freely enter the US market? Did Coke have any competitive advantage to fight off the new entrant? If so, what were the sources of such an advantage?
- How was Monster able to catch up with Red Bull? Why didn't Red Bull react more aggressively to Monster’s entry?

**Ryanair**

- Describe Ryan Air’s entry strategy.
- Evaluate Ryan Air’s entry strategy. Will it succeed?
- Place yourself in the shoes of the CEO of BA or AL. How would you respond to Ryan Air’s entry?

**Microsoft**

- What, if any, competitive advantages does Google enjoy in search? Are these competitive advantages sustainable?
- Does Microsoft have a competitive advantage in search? What market share do they need to be profitable? Do you think they will be successful?
- How should Google respond to Microsoft?

**Nintendo**

- Nintendo successfully recreated the home video game business following the Atari-era boom and bust. How did it do so?
- How was Nintendo able to capture value from the home video game business? How did it prevent content developers (e.g., Electronic Arts) and distribution channels (e.g., Walmart, Toys'R'Us) from capturing this value themselves?