Corporate Financial Analysis (CFA)
Introduction to 25743

- Overview of the subject
- Analyses of Financial Statements
- Understanding the Industry
- Corporate Strategy

Lecturers:
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Electronic Readings

We are providing readings in pdf (check UTS Online)

- You do not have to buy a textbook- this saves you $140+
- UTS pays the copyright charges for you
- available on UTS online
- All lecture slides will be available on UTS online

Structure of the subject: CFA - 25743

Part I – Lecture 1 to Lecture 4

Week 1: Subject overview, Industry Analysis;

Week 2: Profitability analysis, comparative analysis, cash flows analysis;

Week 3: Market Valuation: Relative Equity Valuation Techniques;

Week 4: Quality of Financial Statement and Reliance on Accounting Numbers

Assignment #1 (10 marks) covers topics in Week 1 to Week 4

Structure of the subject: CFA - 25743

Part II – Lecture 5 to Lecture 11– Corporate Valuation

Week 5: Corporate Valuation Techniques - Advanced Estimation of Discount Rates;

Week 6: Corporate Valuation Techniques - Calculating Free Cash Flows (PART I);

Checkpoint #1: Drop-in Session for Q&As (Thursday 30 April 2015 12pm-3pm);

Week 7: Corporate Valuation Techniques - Calculating Free Cash Flows (PART II);

Week 8: Corporate Valuation Techniques - Forecasting Free Cash Flows;

Week 9: Corporate Valuation Techniques – Terminal Value + Putting All Together;

Week 10: Corporate Valuation Techniques – Special Cases (Young firms, Distressed firms, etc.);

Week 11: **Checkpoint #2: Revision Class of MCQs and Essay Questions**

Assignment #2 (20 marks): covers topics in Week 1 to Week 10.

Online Quiz (15 marks)

- The quiz will be administered electronically on UTS online (check the subject outline and UTS Online) on Saturday 23 May 2015 between 8:00pm and 9:00pm. **This test will last a total of 30 minutes.**

Be aware that:

1) You will be allowed only 1 attempt for each test (as such, you are advised to carefully check your internet connection before starting the test). If you miss a scheduled test you could automatically receive 0 marks for that test;
2) Each test will present one question at a time. *You will not be able to change the answer to a question that has already been submitted;*
3) Once started, the test must be completed in one sitting;
4) Students will be able to see the timer option before they begin the Test.

Final Exam (55 marks)

It will cover all topics from Week 1 to Week 10.

Final Exam - Part 1: 25 MCQs (total 50% of 55 marks)

Final Exam - Part 2: 5 Essay questions (total 50% of 55 marks)

Extra Material and Support:

a) Several practice questions (essay questions) will be posted on UTS online. Plenty of material to be ready for the final exam;

b) Several MCQs will be included in the slides;

c) Excel programs (.xlsx files) will be posted on UTS online to guide you through the computation of variables used in valuation (e.g. operating lease converter, R&D converter, synthetic cost of debt, valuation spreadsheets, estimation of discount rates, simulations, etc.);

d) Use the discussion board on UTS Online;

e) Guest Lecturers (fundamental analysts) from the CBD (more info on this will be posted on UTS online).

Group assignments #1 and #2

- **Team-based** projects;
- In week 2, we will post on UTS online the name and ticker code of an Australian company for Assignment 1 and 2.
- Assignment #1 (10/30 marks): Analysis of the industry; corporate strategy, profitability, quality of financial reporting, relative valuation (weeks 1 – 4). Check the subject outline for submission deadline of Assignment #1.
- Assignment #2 (20/30 marks): Corporate valuation (weeks 1 – 10). Check the subject outline for submission deadline of Assignment #2.

“Rules of Engagement”…

Overview of Lecture 1

We shall

- Introduce the topic of Corporate Financial Analysis
- Review firm's financial statement;
- Create common size financial statements;
- Analyse the industry;
- Analyse the factors behind firm's strategy;

I. INTRODUCTION TO

CORPORATE FINANCIAL ANALYSIS

What is Corporate Financial Analysis?

- Can be **internal** or **external**
- Internal: evaluates firm prospects and risks for the purpose of making business decisions
- External: evaluate firm prospects and risks for making consumption, investment or credit decisions

Who undertakes Corporate Financial Analysis? Internally...

Internal users

Managers & Directors

- Performance evaluation of firm
- Financial forecasting
- Assists strategic decisions relating to operations, investment, dividend policy and financing

Who undertakes Corporate Financial Analysis? Externally…

Creditors (including bankers) & Credit Analysts

Credit evaluation (liquidity, solvency) and default prediction

Suppliers & Customers

External users

Regulators & Trade Unions

Equity investors & Financial Analysts

Valuation of shares

Research report recommending buy/hold/sell

Security Analyst: What to expect from the job?

- Corporate valuation consists of a top-down analysis of the company.
- Example: Security Analysis of Kraft Foods Inc. (**Industry**: Packaged Food) :

Top-Down Approach for Kraft Foods Shares		**Who is responsible for this analysis:**
Macroeconomic prospects	With most of Kraft Foods' earnings originating in the US, the analyst inquires about the future health of the US economy.	In-house economist assist the analyst by providing macroeconomic forecasts (e.g., *GDP, interest rates, etc.*)
Capital markets	Will the US stock market increase in price over the long term? Even given strong performance, Kraft stock price is heavily dependent on general market conditions	In-house market strategist supplies an opinion on likely market movements (e.g., *if he/she believes the market to go up → 65% stocks, 25% bonds, 10% cash; if he/she believes the market to go down → 35% stocks, 50% bonds, 15% cash*)
Packaged food industry	Demand and pricing trends in the US packaged food industry affect Kraft's operations. Are more competitors entering the business? Are more people eating out, instead of cooking at home?	The security analyst is responsible for studying the industry (e.g., *What new products are being offered? Is price/cost structure changing? Which competitors are stronger?)*
Kraft Foods ▪ **Business analysis** ▪ **Financial analysis**	A thorough analysis of Kraft's management, and financial condition is required to predict earnings and value sensibly	The security analyst is responsible for evaluating the company and predicting its earnings reliably!

Example: Top-down analysis of Coca Cola (NYSE:KO)

Economy

- GNP growth in the United States.
- Timing of business cycle.
- GNP growth in principal foreign markets of Coca-Cola.
- Relationship between GNP and soft drink consumption in multiple countries.
- Demographics: Young people drink more soft drinks than older people.
- Fashion trends: Are soft drinks being replaced by fruit juices, iced teas, or bottled water?
- U.S. and foreign income tax rates.
- U.S. currency value versus foreign currencies: affects exports and accounting translation of overseas revenues into U.S. dollars.

Capital Markets

- Interest rates: Higher rates impact Coca-Cola financing costs.
- Stock market: Higher share prices could lessen financing costs and spur acquisitions.

Soft Drink Industry

- Demand trends: Is cola consumption rising?
- New products: Is the company keeping up with new products and brand names?
- Competitors: Is the competition expanding production capacity and advertising?
- Government: Will government regulation or legal liability cripple the industry?
- Raw materials: What are the anticipated prices of sugar and corn syrup, two principal raw materials?

Company-Specific

- Causes of past and present profitability.
- Growth expectations.
- Predicted profit margins.
- Product mix and new products.
- Acquisition: Will acquisitions contribute to growth?
- Management changes: Can new management carry out the plan?
- Balance sheet issues: What's leverage going to be? Are share repurchases a possibility?
- Dividend policy.

Information Sources for Corporate Analysis

Source of Information

- **Economic Data**
  (e.g., GDP growth, interest rates, industry growth, industry concentration, competition, etc.)
  - Economic Indicators;
    Industry Statistics;
    Trade Reports.
- **Annual Report**
  - Chairman letter
    Mission Statement
    Managaent Discussion & Analysis (MD&A)
    (e.g., new projects, new markets, M&As, divestitures, etc.)
  - **Financial Statements**
    (e.g., Sales, NI, EPS, Assets/Liabilities, profitability ratios)
- **Others:**
  Commentaries;
  Press Releases;
  Financial Newspapers.

I. Source of Information

Financial Statement Analysis

Financial Statement Analysis

- This analysis is the beginning of your stock valuation: *Why did sales go up or down? Why did profit margins change? Is there a reason for the increase in the inventory-to-sales ratio?*

- To answer these questions the analyst must prepare financial projections using the Balance Sheet, Income Statement, and Statement of Cash Flows

- *<u>Assumption</u>: these statements can be used because they are not misleading or fraudulent (more on this in Lecture 3)*

Example: Financial Statement of Neiman Marcus Inc. (Luxury Retailer)

The Neiman Marcus Group, Inc., Summary Financial Data (in millions)

	Fiscal Year Ended July 30		
	2003	2004	2005
Income Statement Data			
Net sales	$3,080	$3,525	$3,822
Cost of goods sold	1,995	2,228	2,386
Selling, general, and administrative expense	780	848	907
Depreciation	83	99	108
One-time items, net[a]	15	4	9
Earnings before interest and taxes (EBIT)	$ 207	$ 346	$ 412
Interest on debt and other, net	19	19	16
Earnings before taxes	188	327	396
Income taxes	79	121	146
Net income	$ 109	$ 206	$ 250
Earnings per share	$ 2.30	$ 4.19	$ 5.02
Balance Sheet Data			
Cash	$ 207	$ 368	$ 854
Working capital, net	716	978	1,092
Total assets	2,105	2,618	2,661
Long-term debt	325	325	250
Shareholders' equity	1,146	1,370	1,574

[a] To reflect items associated with division closing, accounting change, goodwill impairment, and sale of private-label credit card operation

What can we say about NM?

1. NM was profitable and growing;
2. Its principal expenses was *COGS* (which is expected for a retailer that resells products made by others);
3. NM was *conservatively leveraged* (with cash exceeding long-term debt);
4. *One-time charges reduced earnings* (and are not really one-time charges as they recur every year)

Example: Neiman Marcus Inc. (cont'd)

- An issue with eyeballing the financial statement in this way is that there are too many variables changing at the same time hence it becomes difficult to understand what is going on;

- *Percentage growth statistics (in sales, profits, and cash flow) are key drivers in establishing business value;*

- *Analysts tend to use two simple methodologies to examine the time series trend in financial variables:*
  - ***Percentage Change Analysis***
  - ***Common Size Analysis***

Example: Neiman Marcus Inc.
A. Percentage Change Analysis

The Neiman Marcus Group, Inc., Normalized Financial Data Percentage Changes

	Fiscal Year Ended July 30		
	2003	2004	2005
Income Statement Data			
Net sales	+5%	+14%	+8%
Cost of goods sold	+4	+12	+7
Selling, general, and administrative expense	+3	+9	+7
Depreciation	−3	+19	+9
Earnings before interest and taxes (EBIT)	+28	+58	+20
Interest on debt	+5	0	−16
Earnings before taxes	+29	+63	+22
Income taxes	+37	+43	−22
Net income	+27%	+77%	+22%
Earnings per share	+26%	+71%	+21%
Balance Sheet Data			
Cash	+16%	+78%	+132%
Working capital, net	+14	+37	+12
Total assets	+8	+24	+2
Long-term debt	+7	0	−23
Shareholders' equity	+11	+20	+15

What can we say about NM?

1. Considering that inflation was only 3% p.a. over the 2003-2005 period, NM was a *growth* company. This is evident from recorded revenue growth of 5%, 14%, and 8%;
2. Reflecting a small earnings base in 2002 (not shown in the table), earnings improvements far *outpaced* sales gains;
3. All these figures however mask the *cyclical* nature of luxury goods retailing

Example: Neiman Marcus Inc.
B. Common-Size Analysis

- Divide the balance sheet items by the **total assets**, and the income statement items by the **total revenue.** This method facilitates: (1) comparison of operating results between years, and (2) the evaluation of NM against its industry peers.

The Neiman Marcus Group, Inc., Normalized Common Size Data

	Fiscal Year Ended July 30		
	2003	2004	2005
Income Statement Data			
Net sales	100.0%	100.0%	100.0%
Cost of goods sold	64.7	63.2	62.4
Selling, general, and administrative expense	25.3	24.1	23.7
Depreciation	2.7	2.8	2.8
Earnings before interest and taxes (EBIT)	7.2%	9.9%	11.0%
Interest on debt	0.6	0.5	0.4
Earnings before taxes	6.6	9.4	10.6
Income taxes	2.8	3.5	3.9
Net income	3.8%	5.9%	6.7%
Balance Sheet Data			
Cash	9.8%	14.0%	32.1%
Working capital, net	34.0	37.3	41.0
Total assets	100.0	100.0	100.0
Long-term debt	15.4	12.4	9.4
Shareholders' equity	54.4	52.3	59.2

Note: A lower cost of goods sold increased earnings; cash rose as a percentage of assets.

What can we say now about NM?

1. I/S data indicates that profitability increased as a percentage of sales. For instance, EBIT rose from 7.2% to 11%, and Net Income climbed from 3.8% to 6.7%. A primary contributor to these increases was COGS, which fell from 64.7% to 62.4%.
2. B/S data indicates a large gain in cash and a decline in debt. WC (as a % of assets) rose from 34% to 41%, BUT if cash is excluded, WC dropped from 24.2% to 8.9% suggesting a more efficient use of assets!!

How to identify INDUSTRY economic characteristics?

- Economic characteristics indicate what financial statement relationships are expected
  - Different industries have different expectations

  - We can create **COMMON-SIZE FINANCIAL STATEMENTS** <u>also</u> <u>to compare industries or firms across different industries</u>

Example: Common-size Financial Statement and INDUSTRY economic characteristics

	Grocery Store Chain	Pharmaceutical Company	Electric Utility	Commercial Bank
Balance Sheet at End of Year				
Cash and Marketable Securities	.7%	11.0%	1.5%	261.9%
Accounts and Notes Receivable	.7	18.0	7.8	733.5
Inventories	8.7	17.0	4.5	—
Property, Plant, and Equipment, net	22.2	28.7	159.0	18.1
Other Assets	1.9	72.8	29.2	122.6
Total Assets	34.2%	147.5%	202.0%	1,136.1%
Current Liabilities	7.7%	30.8%	14.9%	936.9%
Long-Term Debt	7.6	12.7	130.8	71.5
Other Noncurrent Liabilities	2.6	24.6	1.8	27.2
Shareholders' Equity	16.3	79.4	54.5	100.5
Total Equities	34.2%	147.5%	202.0%	1,136.1%
Income Statement for Year				
Revenue	100.0%	100.0%	100.0%	100.0%
Cost of Goods Sold	(74.1)	(31.6)	(79.7)	—
Operating Expenses	(19.7)	(37.1)	—	(41.8)
Research and Development	—	(10.1)	—	—
Interest	(.5)	(3.1)	(4.6)	(36.6)
Income Taxes	(2.2)	(6.0)	(5.2)	(8.6)
Net Income	3.5%	12.1%	10.5%	13.0%

Drivers of Profit Margins Across different Industries

- **Grocery store chain**
  - Low barriers; non-differentiated products; extensive competition; low profit margin (NetIncome/Sales=3.5%). Profits are in volume. Since they need few assets to generate sales (retail space), asset turnover is very high (2.9=100%/34.2% times per year)➔ $1 of revenue generates a profit of 3.5 cents (or grocery stores earn 10.15 cents (=3.5%x2.9) for each $1 invested in assets.

- **Pharmaceutical company**
  - High barriers to entry (high R&D expenses, government approval for new drugs, patents); very high profit margins (12%), BUT high business risk (liability for product problems or risk of better competitors' drugs); therefore usually low level of long-term debt (12.7%).
  - <u>Patented products</u>: high margins versus <u>Generic products</u>: low margins

- **Electric Utility**
  - Main assets are capital intensive plants (PPE = 159% in previous balance sheet). Due to large investments, regulators permit monopoly positions BUT set the rates of electric services. High profit margins (10.5%) to offset low asset turnovers (0.5=100%/202%). Nowadays, elimination of monopoly and reduction in margins.

- **Commercial Bank**
  - Main assets= investments in financial securities and loans (733%). Financing for banks comes from customers' deposits and short-term borrowings (937%). Banks need to be liquid to face redemptions →high level in cash (262%). Profit margin small on loans (you can always shop around for a mortgage). The high profit margin (13%) comes from fee-based services (e.g. M&A, structured financing to businesses). Asset turnover only 0.09 times per year reflecting the interest revenues from home loans (currently 5-6% per year).

Multiple choice practice questions

Throughout the lectures, multiple choice questions may be introduced at different times to provide some practice at answering this type of question;

There will also be online practice multiple choice questions ***before the final exam***.

Several Weekly Challenges will be available starting from Lecture 3.

MCQ 1: Which one of the following business concerns is expected to have the highest proportion of its assets as property, plant and equipment?

A. Grocery
B. Pharmaceutical
C. Electric utility
D. Banking

Economic Drivers of Competition

- As a financial analyst you focus on two factors which determine a company's profitability and competitive edge:

Industry Structure

- Industry Attractiveness

Strategic Positioning Within the Industry

- Sustainable Competitive Advantage

  - An analyst must focus on the health of the industry, not just the company's position and profitability

II. INDUSTRY STRUCTURE

& ANALYSIS

Table 10
Survey responses to the question:
How useful are the following for determining your earnings forecasts (stock recommendations)?

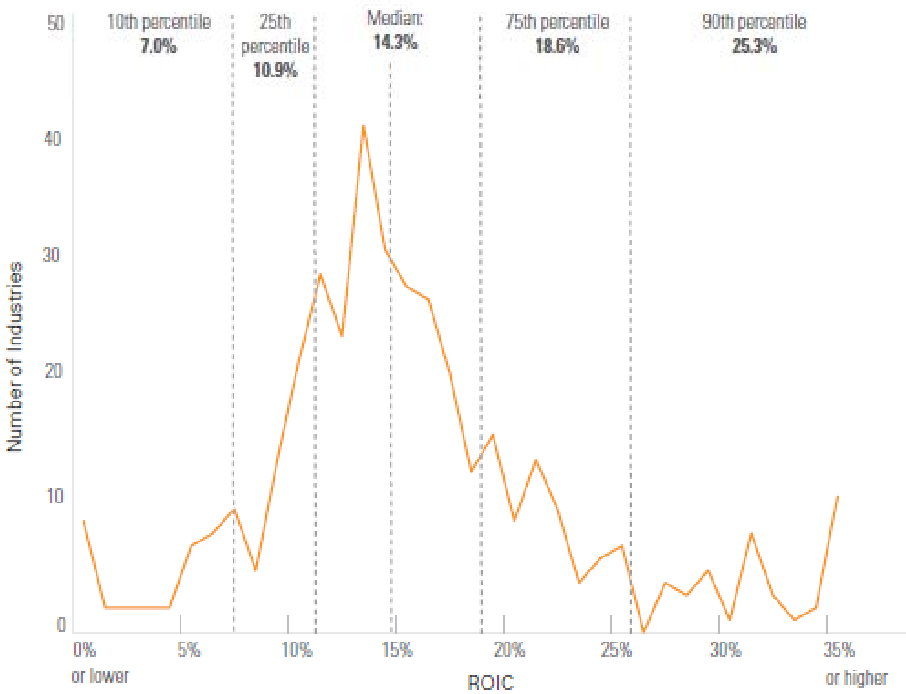
Panel A: Summary statistics for the EF version

	Responses	% of Respondents Who Answered Very Useful (5 or 6)	Not At All Useful (0 or 1)	Average Rating
(1)	Your industry knowledge	79.35	0.54	5.15***
(2)	Private communication with management	65.76	3.26	4.70***
(3)	Earnings conference calls	61.96	1.63	4.67***
(4)	Management's earnings guidance	61.41	1.63	4.65***
(5)	Quality or reputation of management	46.45	2.73	4.22***
(6)	Primary research (e.g., channel checks, surveys, etc.)	46.20	14.13	3.96***
(7)	Recent 10-K or 10-Q	42.39	4.89	4.16***
(8)	Recent earnings performance	41.30	3.26	4.18***
(9)	Your stock recommendation	7.07	42.39	2.06***
(10)	Other analysts' earnings forecasts	7.07	36.41	2.16***
(11)	Recent stock price performance	3.80	46.74	1.72***
	Total possible N = 184			

Source: L. D. Brown, A.C. Call, M.C. Clement, (2013). "Inside the "Black Box" of Sell-Side Financial Analysts"

Why some Firms/Industries are more profitable than others?

Average Return on Invested Capital in U.S. Industries, 1992–2006

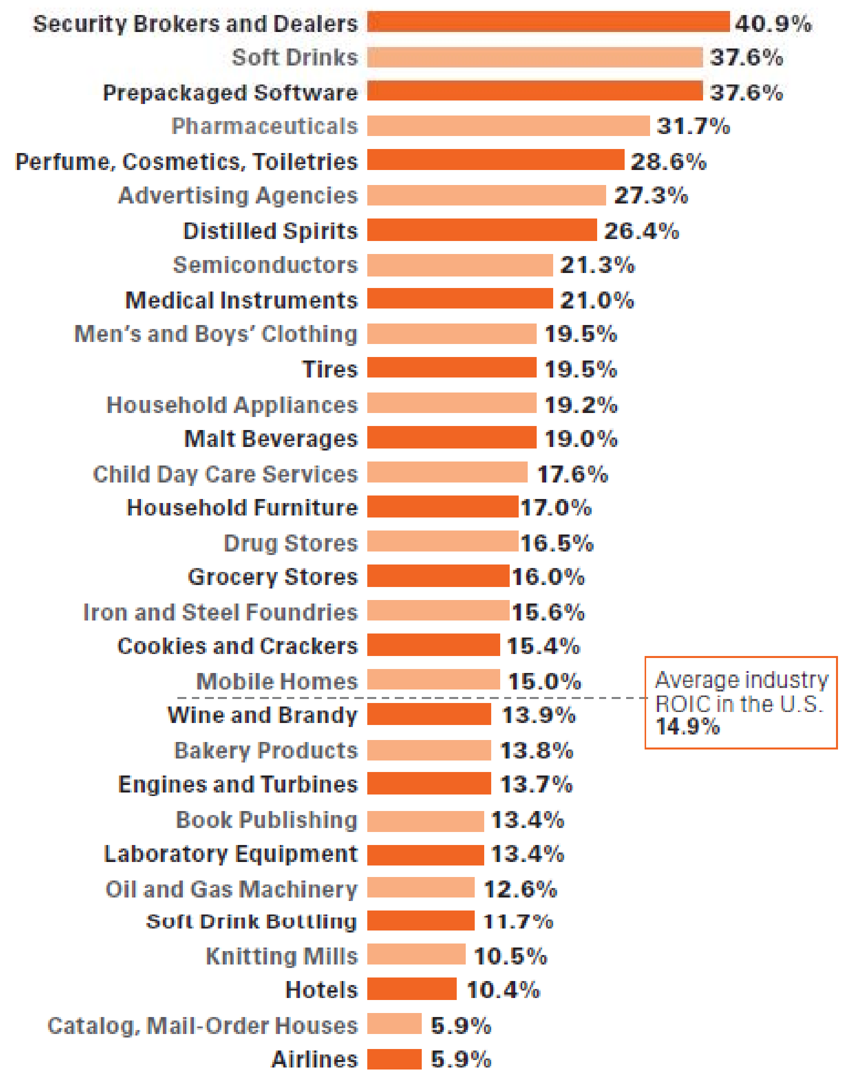


Return on invested capital (ROIC) is the appropriate measure of profitability for strategy formulation, not to mention for equity investors. Return on sales or the growth rate of profits fail to account for the capital required to compete in the industry. Here, we utilize earnings before interest and taxes divided by average invested capital less excess cash as the measure of ROIC. This measure controls for idiosyncratic differences in capital structure and tax rates across companies and industries.

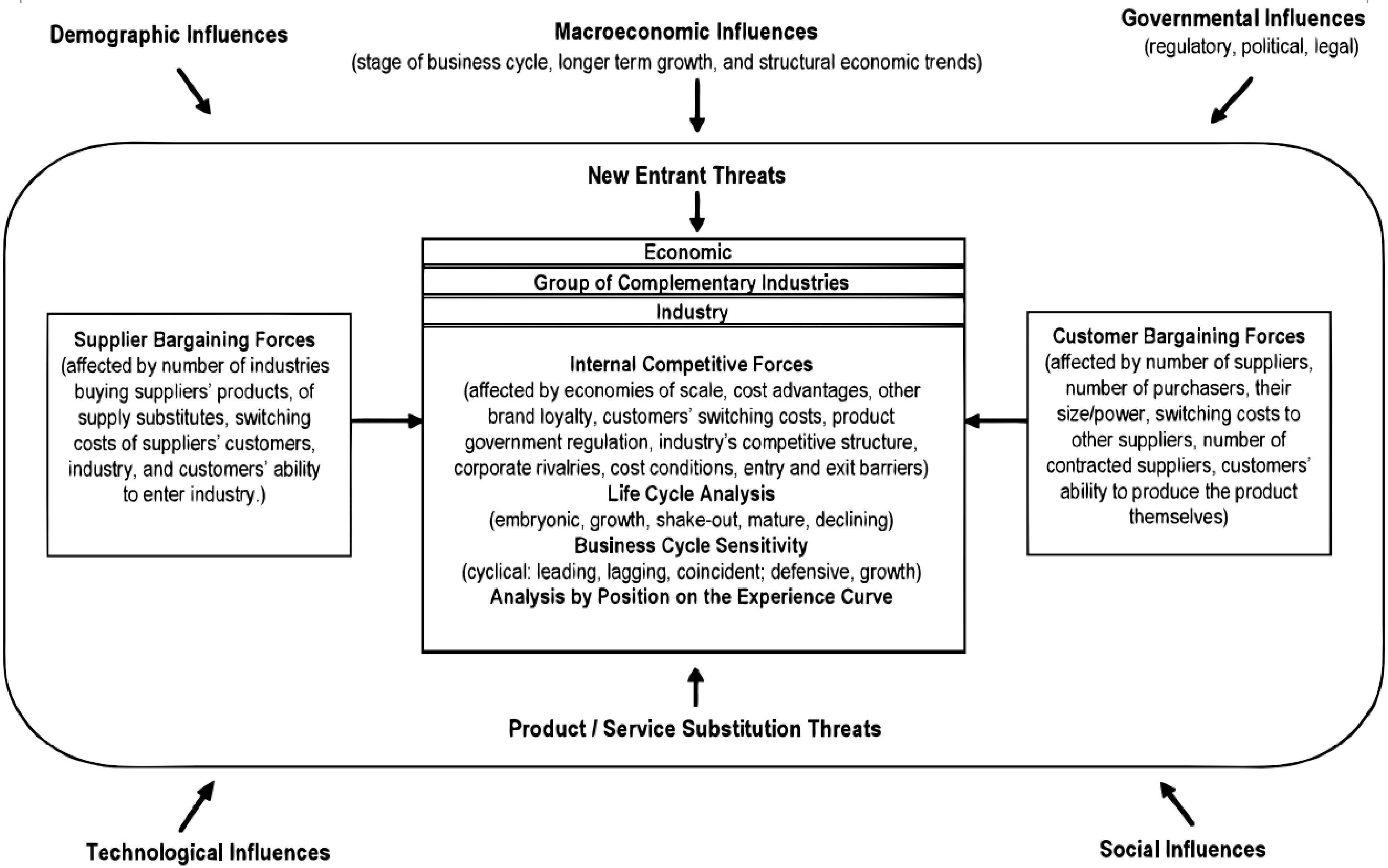
Source: Standard & Poor's, Compustat, and author's calculations

Profitability of Selected U.S. Industries

Average ROIC, 1992–2006



A Framework for Industry Analysis

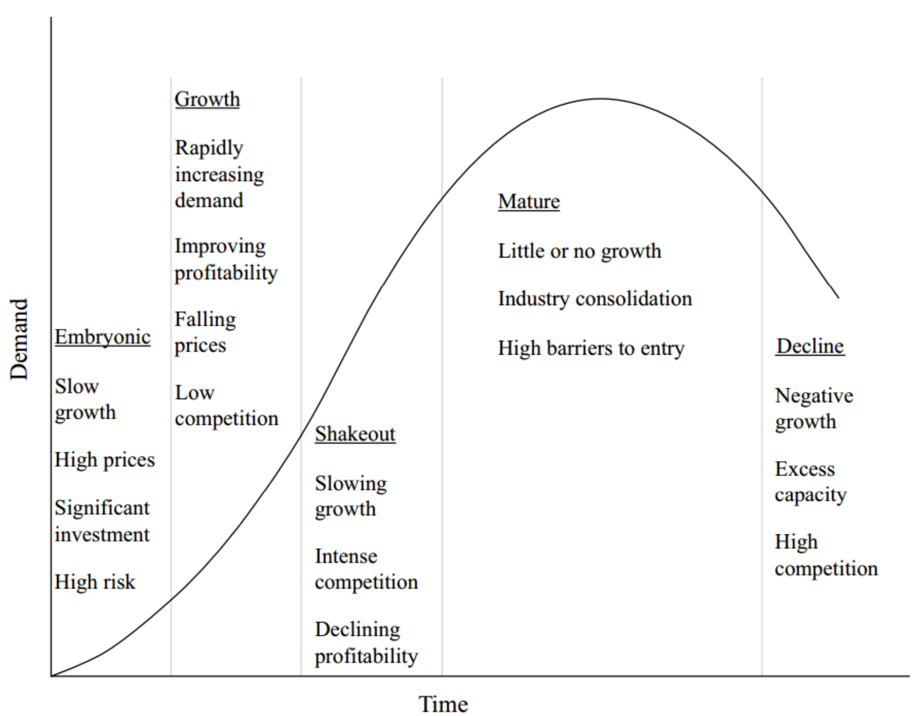


Industry Analysis: Classification

- Industries are classified in two ways:

1. Where they are in their life cycle:

An Industry Life-Cycle Model



Source: Based on Figure 2.4 in Hill and Jones (2008).

1. ***Embryonic***: *the industry is struggling to establish a market for its products. Cash needs for WC and fixed assets are substantial, yet the industry is only marginally profitable. 7 out of 10 start-up businesses fail to survive this stage. Many such pioneering enterprises are backed by venture capitalists or operating companies.*

2. ***Growth***: *Industry's product acceptance established (analysts have a brief history for estimating future demand). Roll-out begins; Sales and earnings accelerate.*

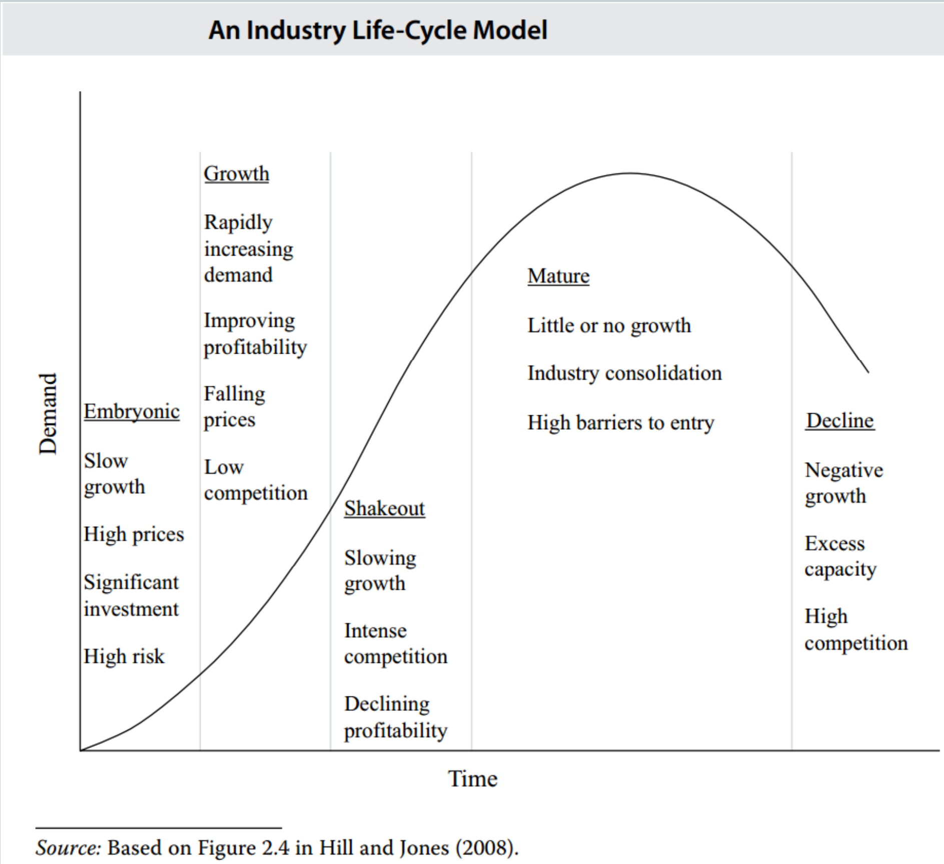
   A classic growth industry spurs demand for a product that the consumer didn't know he needed (e.g., Apple's iPod sparked a demand for Internet-enhanced music players, which few people realized they needed beforehand).

   Rapid-increased sales and fat profit margins. This continues until new competitors, attracted to the high returns, enter the business. As competition stabilizes and market penetration reaches practical limits, the industry progresses to the mature phase.

Industry Analysis: Classification

- Industries are classified in two ways:

1. *Where they are in their life cycle:*



3. ***Mature:*** *Industry trend line corresponds to the general economy. Participants compete for market share in a stable industry*

4. ***Decline:*** *Demand for the industry's products decreases (due to shifting tastes or technologies) and the remaining participants fight over shares of a smaller market.*

   With no new capacity and diminished profit margins, the industry attracts little new capital and incumbents begin to exit the sector.

   As demand dries up, numerous companies fail and consolidation of the remaining participants accelerates.

   The better-managed survivors anticipate this fate and avoid it by using excess cash to diversify into more promising industries.

Industry Analysis: Classification

- Industries are classified in two ways:

2. ***How they react to the economy's business cycle:*** Wall Street characterises industries by the way in which they react to business cycles:

- **Growth Industry**: achieves an above-normal growth rate in sales and earnings independently of the business cycle (*e.g., the Internet retailing in the US sailed through the 2001 recession with ever higher revenues*);

- **Defensive Industry**: exhibits reasonably stable performance throughout the business cycle. They usually fall into the mature stage of the life cycle (*e.g., (1) electric and gas utilities, or (2) food, cigarette, and beer companies as demand for such product/services remain inelastic; (3) government contractors since they spend irrespective of whether economy grows*)

- **Cyclical Industry**: tracks the economic cycle because they produce discretionary products (*e.g., the auto industry is cyclical because consumers defer large purchases to better times*)

BUT…*be careful* as industry classification can be self-deceptive at times

Example #1: Internet service industry in the 1990s. At the beginning, analysts compared this industry to cable TV in the 1970s as they where both home wired and both required monthly subscription charges. **BUT**, internet service was NOT a quasi-monopoly like cable TV and consumers' switching costs were lower than for cable TV. Internet services fell *eventually* into a ***Growth*** classification.

Example #2: Not all companies in a mature industry are mature companies. The mature pharmaceutical industry has both **mature** companies (with operating problems, expiring patents, and shortage of new drugs) and **young** biotech-oriented firms carrying premium P/E ratios.

Example: Snapshot of the Pharmaceutical Industry

Established Chemical-based Companies	Forward P/E
Bristol-Myers Squibb	20
Eli Lilly	16
GlaxoSmithKline	14
Newer Biotech Companies	**Forward P/E**
Abraxis Bioscience	26
Cephalon	31
Genzyme	32

BUT…***be careful*** *as* industry classification can be self-deceptive at times

Example #3: **GoPro** makes cameras that you can attach to yourself and record video of your activities. It is designed for high-energy physical activities, including running, rock climbing, swimming or hunting.

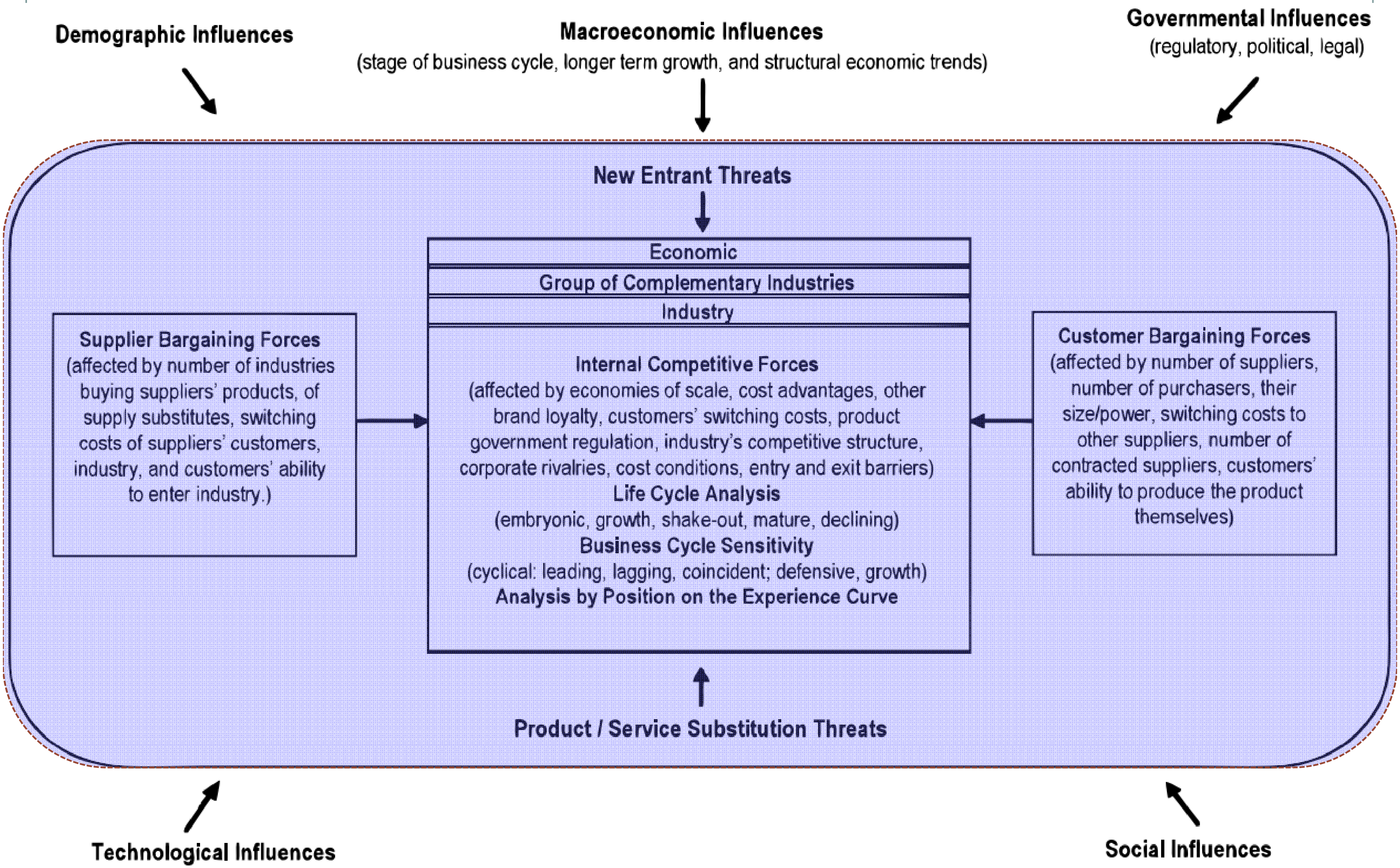
Which Industry? Is it Camera, Electronics, Leisure, or Social Media?

	Camera	All Electronics	Leisure Products	Social Media	GoPro
PE	21.64	25.43	52.86	350.11	260.97
PBV	1.34	1.38	2.38	11.29	70.85
EV/EBIT	9.57	12.69	15.15	107.54	123.53
EV/EBITDA	5.30	5.81	11.04	48.88	84.95
EV/Invested Capital	1.42	1.29	2.31	23.85	65.92
EV/Sales	0.66	0.41	1.37	11.77	8.53

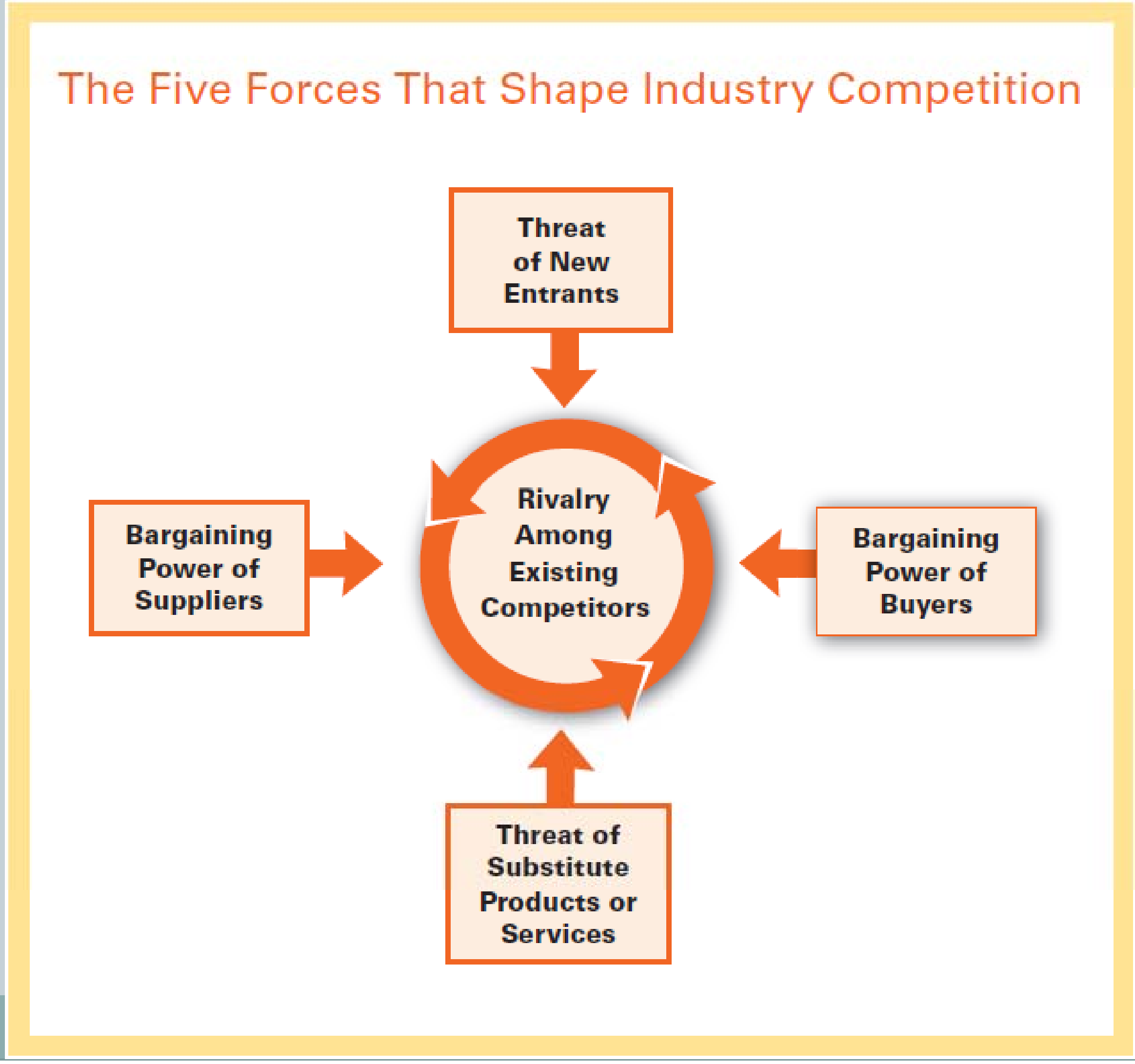
Based on market prices on 10/15/14 & trailing 12-month data

- Notice that the market was pricing GoPro in 2014 more as a social media company than as an electronics, camera or leisure product company. Only recently, GoPro resembles much more the industry group of Camera products.

A Framework for Industry Analysis



FORCES that define the economics of an Industry: Porter's Five Forces



Porter's Five Forces (see readings on UTSonline)

1. **Buyer Power is high if:**
   - Fewer buyers or purchase volumes are large relative to size of vendor (because it affects vendors' economies of scale).
   - Products are standardized or undifferentiated.
   - Buyer faces few switching costs in changing vendors;
   - Buyer can threaten to integrate backward (e.g. Starbucks and coffee beans production);
   - Product price is low hence buyer are price insensitive (e.g. soft drinks);

2. **Supplier Power is high if:**
   - Few suppliers (e.g. Microsoft monopoly vs. fragmented PC assemblers);
   - Diversified supplier does not depend heavily on an industry for its revenues (e.g., WOW and Masters);
   - Switching costs are high for buyers (e.g., Bloomberg terminals used by banks);
   - Supplier posing a credible threat of forward integration;
   - If products are differentiated (e.g. coffee beans; patented pharmaceutical drugs) or no substitutes available (e.g. pilots' unions).

3. **Rivalry Among Existing Firms is high if:**
   - Rivalry is among numerous competitors (*intensity* of competition) with equal size or power (e.g. groceries or domestic airline) and/or is based on price war (*basis* of competition);
   - Slow (mature) industry growth (fight for market shares) and high exit barriers (capital equipment cannot be easily sold), high fixed or storage costs;
   - CEOs aspire to be leaders in the industry (prestige, compensation incentives, empire-building, etc.).
   - Price wars can occur if products are undifferentiated or perishable (e.g. computers), fixed costs are high but marginal costs are low (e.g. aluminum industries), low switching costs for customers

Porter's Five Forces (see readings on UTSonline)

4. Threat of New Entrants is low if:

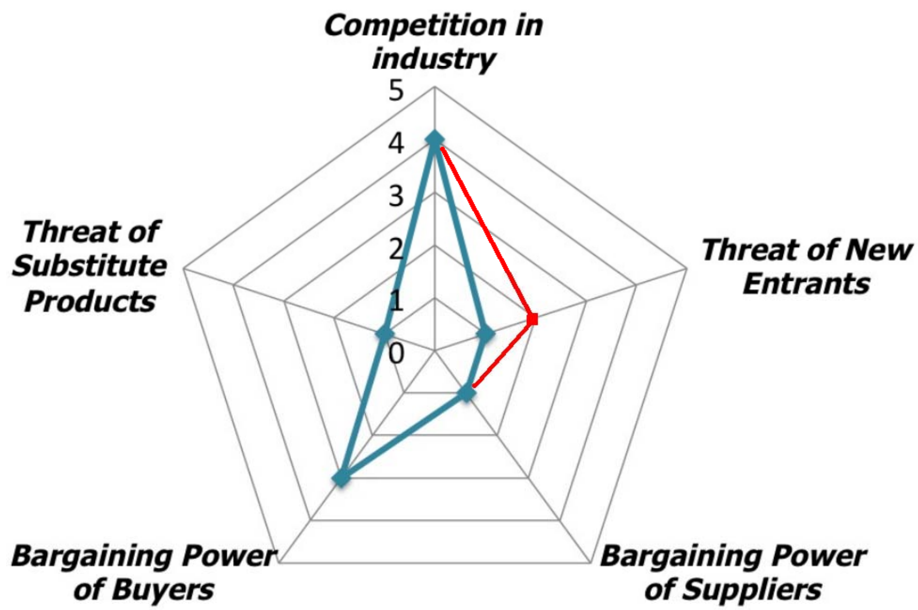
- High capital requirements (e.g. Property Plant and Equipment, inventories, or sunk costs if unsuccessful venture such as start-up costs, marketing & advertising expenses, and R&D expenses)
- Large incumbent's economies of scale in research (e.g. Intel) or production line (off-shore drilling or bulk chemicals);
- High buyers' switching costs (e.g. Reuters trading platforms);
- Unique product offering or brand image (e.g. Apple);
- Incumbents control the wholesale and retail distribution channels (e.g. shelf space of WOW products vs Dairy Farmers). In this case, new entrants could be forced to bypass the existing distribution channels (low-cost carriers e.g. Tiger encourages clients to book online rather than with travel agents);
- Strong government policy on patent protection for pharmaceuticals (e.g. Hoffmann La Roche), licenses (e.g. taxi services) or restriction on foreign investments (e.g. in utilities sector or existing vs. off-the-plan real estate);
- Expected retaliation by incumbents with price wars or clout with distribution channels or customers. This depends on the amount of resources available to incumbents to fight back.

5. Threat of Substitutes is high if:

- Poor brand loyalty or low switching costs (e.g. from travel agencies to Webjet.com.au or Hotels.com)
- Change in the industry business model (e.g. Kodak and Fuji world leaders of photographic films and the advent of digital photography; plastic as a substitute of steel for car components).
- If substitutes offer an attractive price-quality trade-off. For instance, internet-based phone services (Viber) threaten long-distance phone services; Online video rentals (Netflix) or cable TV (Foxtel) threaten brick-&-mortar video rental outlets

Rivalry Among Competitors (4 - **HIGH**): WOW and WES are the two major competitors in the supermarket industry in Australia (~70% market share) followed by Metcash and ALDI. The high level of concentration in the Australian grocery market makes the rivalry among incumbents particularly high (score =4).

Threat of Substitutes (1 - **LOW**): Hotels, cafes and restaurants compete with supermarkets and grocery stores for the consumer dollar. Over the past decade, the number of Australians eating out has increased and households now spend a greater percentage of their income on meals outside their home. Consumer spending on hotels, cafes and restaurants are expected to increase in 2015-16. This may pose threats to revenues for F&L retailers.



Threat of New Entrants (2 - **LOW**): Many potential players are hesitant to enter the F&L industry, due to the overwhelming power of WES and WOW. The huge capital investment required by the geographic network of stores distributed strategically across the Nation and the difficulty to access the local suppliers network impose high barriers to entry in the industry. Nonetheless, discount retailers like ALDI or COSTCO elevate the threat of new store openings across Australia (e.g., Aldi is opening in SA and WA). Also, more recent opportunities for new entrants in the differentiated product range of organic foods.

Bargaining Power of Buyers (3 - **MODERATE**): In general, the supermarket industry is characterised by standardized or undifferentiated products, and consumers face lowswitching costs in changing their providers of F&L products. This elevates the bargaining power of buyers.

Bargaining Power of Suppliers (1 - **LOW**): Suppliers not only offer products that are **undifferentiated** but they also depend heavily on the retail distribution channels offered by WOW and WES. There are **low switching costs** for WOW as there are many alternative suppliers available in local and international markets. Further, WOW can **integrate backward** in its supply chain by increasing the current percentage (out of the total) of private label items. Despite ongoing pressures from the Australian Food and Grocery Council (AFGC) for a more stringent code of conduct to govern the way retailers influence their powers over F&L suppliers, WOW and WES will continue to exert pressures on local producers.

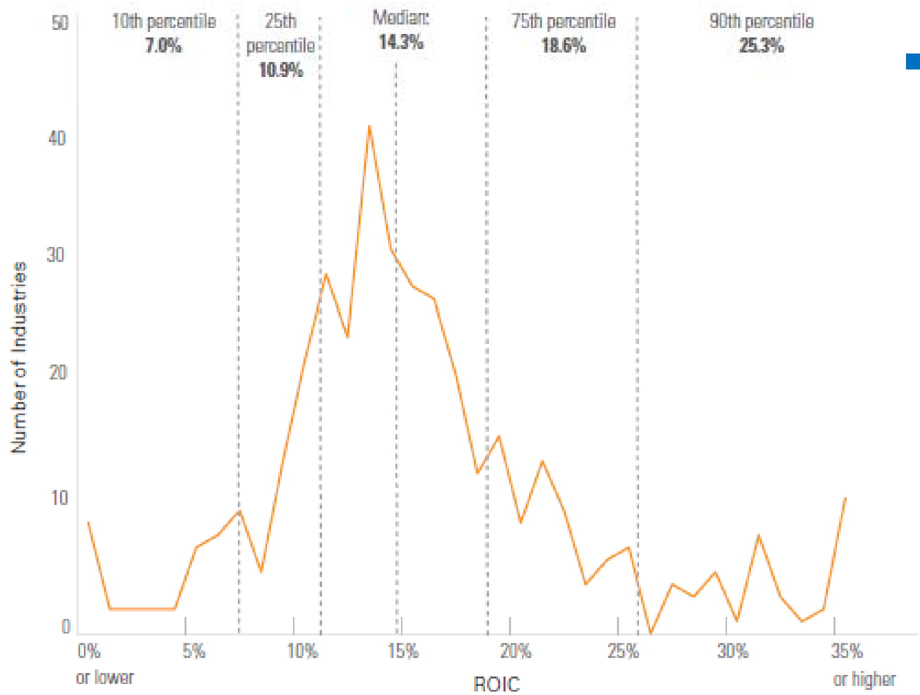
Example #2: PepsiCo US (High margins)

FORCES	FEATURES	HIGH/LOW POWER	IMPLICATION FOR PROFIT MARGIN
Supplier power	**a)** PepsiCo produces the concentrate or syrup; **b)** Pepsi is independent from supplier for raw materials; **c)** Size of PepsiCo is larger than that of any of its suppliers.	LOW	HIGHER
Buyer power	**a)** Few sellers (PepsiCo and Coca Cola) and many buyerss **b)** Brand Loyalty and total domination of distribution channels; **c)** Buyers are insensitive to prices as beverage prices are very low.	LOW	HIGHER
Intensity of rivalry	**a)** PepsiCo and Coca Cola tacitly avoid price wars **b)** Competition on brand image; **c)** Access to key distribution channels (e.g. fast food, grocery stores shelf space, restaurants).	MODERATE	MODERATE
Threat of entry	**a)** High entry barriers (brand recognition, domination of distribution channels, etc.); **b)** Differentiated product (secret ingredients); **c)** Economies of scale; **d)** Expected retaliation (from both PepsiCo and Coca Cola).	LOW	HIGHER
Threat of Substitutes	Few similar products (e.g. PepsiCo purchased Tropicana and Gatorade).	LOW	HIGHER

Conclusion: Soft drink/ beverage industry rates low across almost all the Porter's 5 forces => High Profit Margins

...it is because of different Forces shaping each Industry

Average Return on Invested Capital in U.S. Industries, 1992–2006

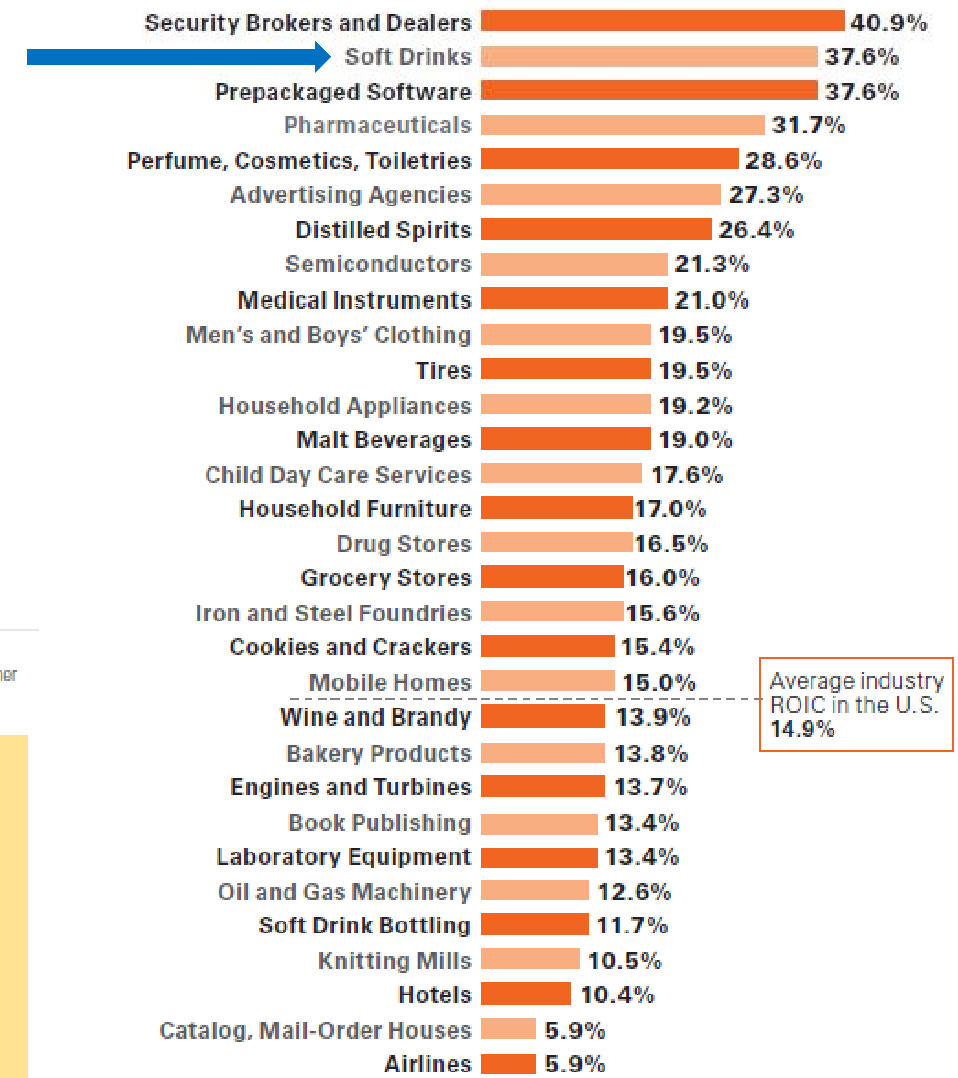


Return on invested capital (ROIC) is the appropriate measure of profitability for strategy formulation, not to mention for equity investors. Return on sales or the growth rate of profits fail to account for the capital required to compete in the industry. Here, we utilize earnings before interest and taxes divided by average invested capital less excess cash as the measure of ROIC. This measure controls for idiosyncratic differences in capital structure and tax rates across companies and industries.

Source: Standard & Poor's, Compustat, and author's calculations

Profitability of Selected U.S. Industries

Average ROIC, 1992–2006



MCQ 2: Which of the following relates to a reduction in bargaining power of suppliers for Woolworths Ltd?

A. There are fewer suppliers

B. Suppliers sell differentiated quality products

C. Consumers demanding more organic products

D. Woolworths stores sell more own label products

E. All of the above

MCQ3: Which one of the following is true?

A. Lower supplier power implies lower profit margin

B. Higher buyer power implies higher margin

C. Price competition implies a higher margin

D. Patent rights implies a higher margin for incumbent

MCQ4: Which one of the following is a high barrier to entry in the IT sector?

A. Government has enforced licensing requirements for new firms

B. Government has abolished restrictions on 100% foreign ownership in the IT sector.

C. Industry is not capital intensive

D. Venture capital facilitates entry of new firms

MCQ5: Which one of the following will most likely indicate lower buyer power?

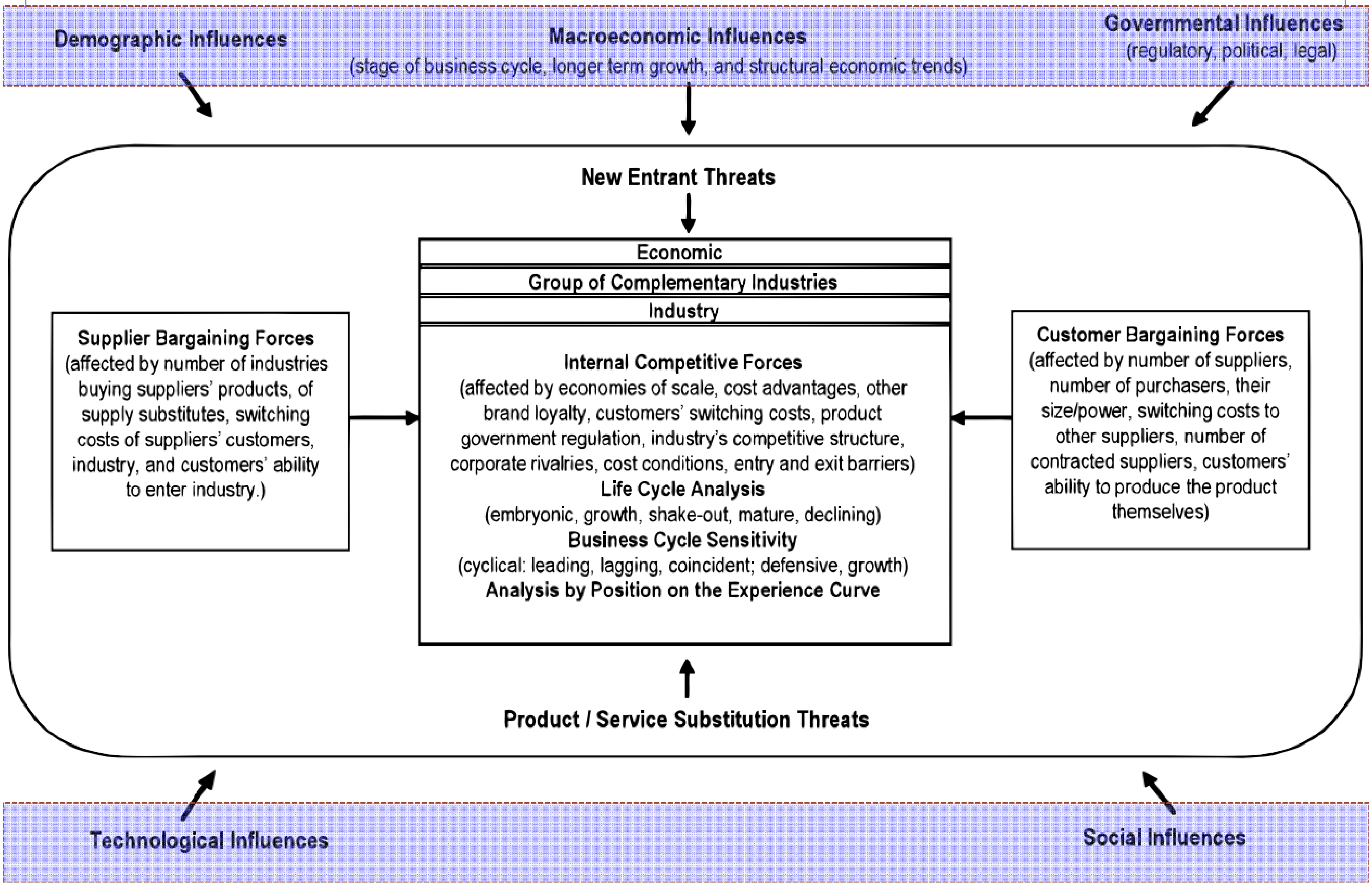
A. Firms sell commodity-like products

B. Firms engage in forward integration

C. Firms have low pricing power

D. Firms sell undifferentiated products

A Framework for Industry Analysis (cont'd)



External Factors affecting each Industry

- **No industry operates in a vacuum:** Each is subject to numerous *external factors* that significantly impact sales and earnings:

Industry Analysis: Key External Factors Affecting Sales and Profitability	
Technology	For established industries the question is: Does the industry face obsolescence from competing technologies? (e.g., *Typewriters replaced by word processors; VHS replaced by DVD*) Infant industries introducing new technologies pose a different question: Will the market accept innovation?
Government	Government plays a large role in many industries. New regulations can impact an industry's sales and earnings (e.g., *Basel II capital requirements of banks*). In certain cases, government policies fuel new industries (e.g., *the solar power industry*).
Social	Changes in lifestyle spark many industries. The rise of two-earner families fueled the growth in the convenience food and restaurant industries. .
Demographic	Demographic shifts are closely watched by analysts. (e.g., *the graying of America supports nursing home stocks; Demographic is also a factor in the golf equipment industry, as baby boomers reduce strenuous activity in their later years*).
Foreign	Industries are subject to foreign influences. (e.g., *overseas textile firms decimated the U.S. textile industry*). Higher income levels in developing nations, meanwhile, contribute to huge overseas demand for U.S. software, movies, and music.

NB: These **external <u>Factors</u>** are NOT to be confused with the **five <u>Forces</u>** (see Porter, 2008).

Example: The US Casino Gambling Industry: External Factors

1. *Technology:*

Opportunities	Threats
▪ Improved player-tracking technology boosts revenues. ▪ Better slot machines attract new gamblers and enhance revenues from existing customers. ▪ Technology permits gambling over the Internet.	▪ Internet technology allows offshore gambling sites to attract customers away from U.S. locations. ▪ Technology enables new entrants to compete with established firms more easily.

2. *Government:*

Opportunities	Threats
▪ More states can legalize casino-style gambling. ▪ Most states cling to the oligopoly model for gambling, preserving profitability. ▪ Federal government can approve Internet gambling and reserve it for domestic companies, thus opening a vast new market.	▪ States can increase gambling taxes. ▪ States can weaken oligopoly model by approving more casinos. ▪ New laws can leave companies more susceptible to lawsuits regarding customers' gambling addictions.

Example: The Casino Gambling Industry: External Factors (cont'd)

3. *Social:*

Opportunities	Threats
▪ Gambling is increasingly viewed as an entertainment, rather than a dangerous vice.	▪ In the past, American culture cycled between an acceptance of legalized gambling and a near total prohibition. Will the cycle turn?

4. *Demographic:*

Opportunities	Threats
▪ Older people gamble more than younger people. The US population is aging fast, suggesting more demand	▪ No perceived threats

5. *Foreign:*

Opportunities	Threats
▪ Rising affluence of Asian and Latin American clientele boosts revenue from gambling tourism. ▪ Gradual growth in small, foreign-based casinos encourages gamblers to visit big-time meccas, such as Las Vegas and Atlantic City.	▪ Internet gambling that is conducted offshore diverts U.S. customers. ▪ Attempt by Macao casinos to duplicate Las Vegas-type environment may divert Asian customers of U.S. properties.

III. BUSINESS STRATEGY

How does the firm achieve superior performance WITHIN an Industry ?

Differentiation (Higher Price)

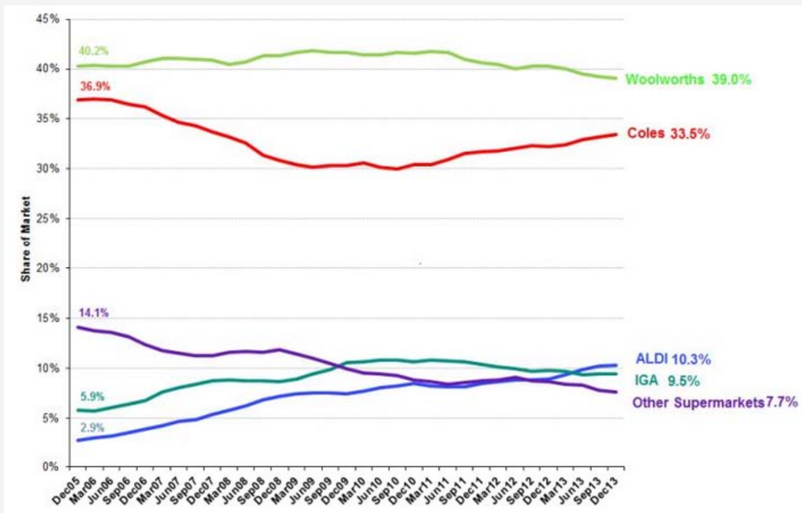
Competitive Advantage

Lower Cost

Example: **How Important is Corporate Strategy**
The *Fresh Food People* or the *Cheap Cheap People*???

- The '***Down Down***' campaign has been successful for Coles (WES), driving its outperformance in same-store sales over the past 20 quarters (Woolworths lags Coles and Aldi in consumer perception of cheap prices).

Proportion of all grocery dollars spent at each supermarket



Source: *Roy Morgan Single Source (Australia), January 2005 - December 2013, latest 12 months to December 2013*

WOW is "*stuck in the middle*" with a non-unique strategy

- WOW has responded in 2014 by transitioning from the *Fresh Food People* to the Cheap Cheap people by hiring the former Coles executive Tony Phillips, as its chief marketing officer to launch its new 'Cheap Cheap' strategy.

As an analyst, do **NOT** confuse a firm's **Operational Effectiveness** with **Strategic Positioning**

Operational Effectiveness

- Assimilating, attaining best practices (e.g., having the most modern machines, how to motivate the sales force, having the latest software, etc.)

↓

Doing the same things better!

Strategic Positioning

- Creating unique value proposition (firms with sustainable competitive advantage do NOT compete on same strategy of competitors)

↓

Doing things differently to deliver superior value

Proposition (1): If firm is not operationally effective, strategy does not matter (e.g., Saab)

Proposition (2): If firm is ONLY operationally effective, competitive edge is short lived because it is very easy for competitors to become operationally effective (e.g., Japanese firms in the 80's)

Set of firm's strategic choices: Framework for corporate strategy analysis

1. Nature of product or service: Unique-high or commodity-low profits?

2. Degree of integration within the value chain: Vertical integration or only certain phases?

3. Degree of geographical diversification: diversify into new countries → growth, but also risk

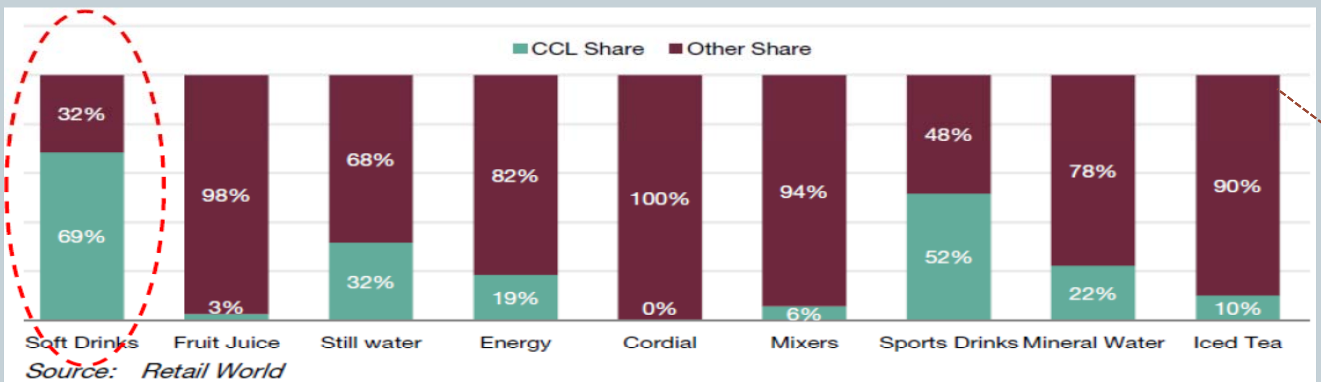
4. Degree of industry diversification: Single or multiple industries?

➔ Corporate strategy determines the so-called firm's *sustainable competitive advantage (SCA).* **Without a strong SCA, a company's customers are ready for the taking by competitors.**

Example: COCA COLA AMATIL (CCL)

1. Differentiation of product/service (HIGH):

- CCL competes with *differentiated* products offering CSDs energy drinks and juices (Coca-Cola, Diet Coke, Coke Zero, Fanta, Sprite, Sprite Zero, Lift, Kirk's, Deep Spring water, Glaceau, Appletiser, Powerade, Monster), snack foods and alcoholic beverages;
- *Brand recognition and domination* of distribution channels permit it to sell a somewhat differentiated product from those of its competitor (e.g. Asahi Hld);



Schweppes, Solo and Pepsi (Asahi), Lipton (Unilever), Tru Blue, Frucor (Danone)

- *Ability to respond to changing consumer preference*: health-conscious consumers moving away from sugary, high-calorie beverages, prompted a shift to low and no-sugar carbonated soft drinks (e.g. Coke Zero, Deep Spring water, Monster, Glaceau vitamin water)

Example: COCA COLA AMATIL (CCL)

2. Degree of integration within the value chain (HIGH)

- Contrary to the US, in Australia CCL is the *sole bottler* of Coca-Cola products hence maintaining control over the entire supply chain→ strong **forward integration** (***same for Asahi with Pepsi***) → low buyer power;

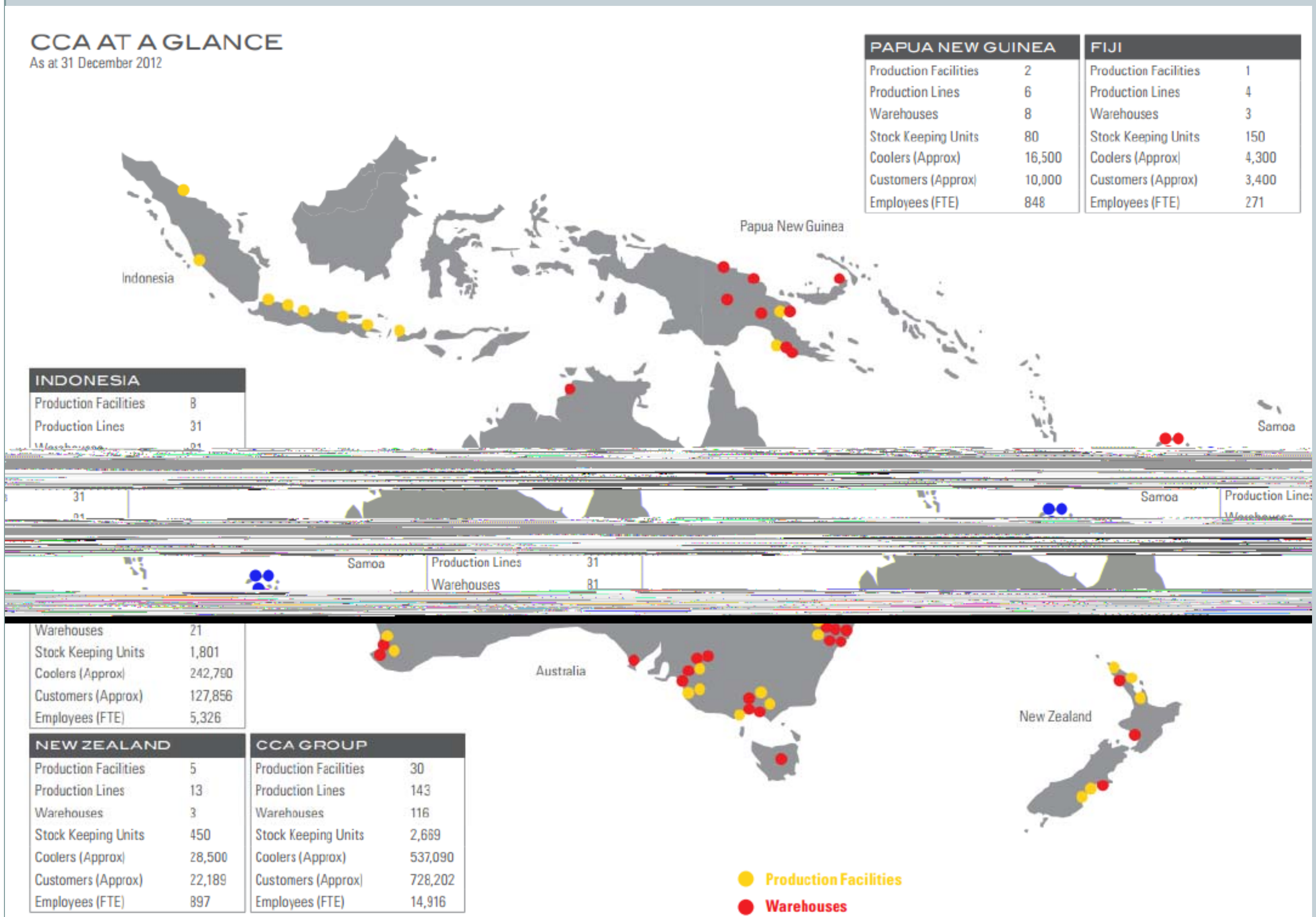
- CCL has *well-established contracts* with large food and beverage retailers, caterers and restaurants (→strong control of distribution);

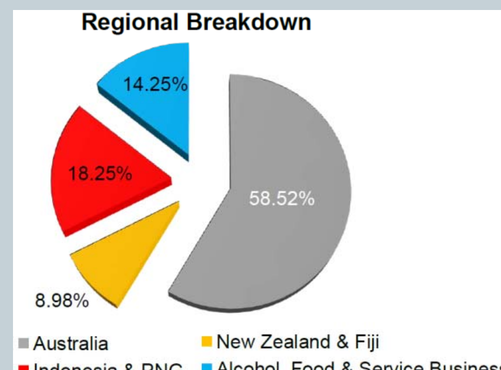
- CCL invests in new product development, syrups and concentrates manufactured → **backward integration** (through TCCC which holds 30% of CCL) → unlikely that CCL is dependent on suppliers of raw materials. Since syrup is secret→ low supplier power.

- *Domination by acquisition* of other beverage and distribution companies (e.g. 90% holding of *Fosters* in 2012, exclusive distribution of *ABSOLUT Vodka*, *Jim Beam* and *Remy Martin* in 2006, and *Neverfail Springwater* in 2003).

Example: COCA COLA AMATIL (CCL)

3. Degree of geographical diversification (HIGH)





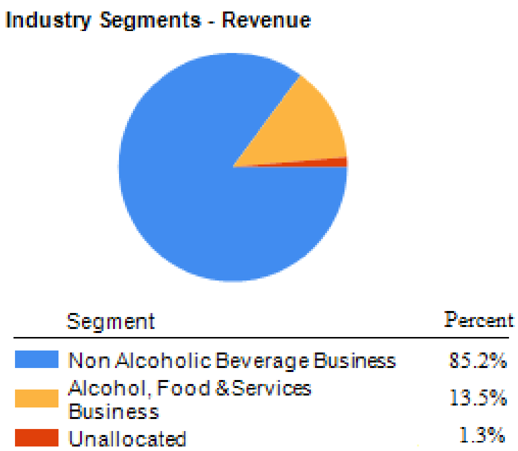
Example: COCA COLA AMATIL (CCL)

3. Degree of industry/segments diversification (MEDIUM)

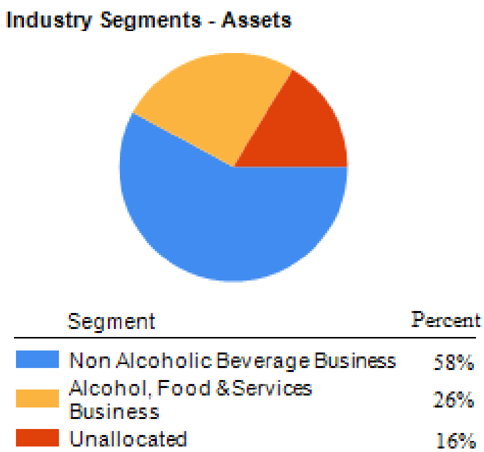
Operating Divisions

Segment Name	Revenue (AUD000)	Profits (AUD000)	Assets (AUD000)
Non Alcoholic Beverage Business	4,142,000	774,800	3,486,500
Alcohol, Food & Services Business	659,200	93,200	1,559,800
Unallocated	66,700	-276,200	982,700

Revenue



Assets



Key Ratios

Segment Name	Profit as % of Revenue	Profit as % of Assets
Non Alcoholic Beverage Business	18.7%	22.2%
Alcohol, Food & Services Business	14.1%	6.0%
Unallocated	-414.1%	-28.1%
Company	**12.2%**	**9.8%**

Example: COCA COLA AMATIL (CCL) What about the Soft Drinks Industry?

- Life Cycle of the CSDs' Industry :

Life Cycle Stage	Mature	Regulation Level	Medium
Revenue Volatility	Medium	Technology Change	Medium
Capital Intensity	Medium	Barriers to Entry	Medium
Industry Assistance	Medium	Industry Globalization	High
Concentration Level	High	Competition Level	Medium

See: Wall Street Journal (May 7th, 2013)

- **Weaknesses**: the industry revenue has grown at a weak compound annual rate of 1.0%. Why?
  - Deteriorating economic conditions;
  - Bad weather conditions (e.g. Queensland, Vic, NSW floods in 2011, 2012, 2013);
  - Changing consumer trends: rising health awareness and concern at the high sugar content of CSDs;
- **Strengths**: the industry growth could reach 2-3% over next five years if:
  - Boost in the demand for sport and energy drinks;
  - Increased innovation by major players such as Asahi;
  - Introduction of more environmentally friendly packaging and products to meet demand.

Where do I get information about the firm and the industry in my assignment?

- You will be provided with dataset for Assignment 1 and 2. This dataset will be posted on UTS online in Week 2 and contain information on firm's financial statement, industry averages, etc..
- For additional information (e.g. notes to financial statements) use:
  - Companies' Annual Reports available on their website or on the ASX website (http://asx.com.au/asx/statistics/announcements.do)
- For market data (prices, returns, mcap, number of share, etc.): use Yahoo Finance http://au.finance.yahoo.com/q?s=CCL&ql=1;
- For analysts' consensus estimates → FinAnalysis (or ask your Lecturer).
- For Industry analysis → IBIS World (available through the Library website)

Next Week

Profitability Analysis