CHARTA LEARNING · LESSON NOTES

Industry and competitive analysis

CFA Level I · Equity Investments

You will learn: Size up an industry before a company: group companies and find true peers, read the five competitive forces and the life cycle, pick the outside factors that matter, and measure an industry's size, growth, profits and market shares.

Running example: Examples follow a made-up company, Marlow Group ($ millions, round teaching numbers): supermarkets with revenue 600, operating profit 60 (margin 10%) and earnings 48; payments with revenue 400, operating profit 140 (margin 35%) and earnings 112. Group revenue 1,000, earnings 160, tax 20%.

1. Classifying companies and finding true peers

- Classification sorts companies into industries, because a company is judged against its peers: companies facing the same world. The common method is principal business activity, what the company mostly does.
- Commercial schemes such as the global industry classification standard (GICS) give each company one sector, chosen mainly by where most revenue comes from. It is reproducible: two analysts reach the same sector.
- Other groupings: by sensitivity to the business cycle (cyclical, such as car makers, against non-cyclical or defensive, such as food shops), more useful for asset allocation than competitive analysis; and by statistical similarity of returns, which shifts over time and is hard to explain.
- The right peers face the same demand drivers: customers, costs, threats. Treat a scheme as a starting point: check each firm's demand drivers and drop or split the misfits. A scheme lags: a transforming company keeps its old label until its revenue mix changes.

MARLOW (EXAMPLES 1 AND 2; STAPLES PEERS 12 TIMES EARNINGS, PAYMENTS PEERS 25 TIMES)

Value using the label (staples)	160 × 12	**1,920**
Groceries part; payments part	48 × 12; 112 × 25	**576; 2,800**
Sum of the parts	576 + 2,800	**3,376**
Label understates by	3,376 − 1,920	**1,456 (43%)**
Recession: groceries −4%, payments −10%; group earnings	46.08 + 100.8	**146.88 (−8.2%, not −4%)**

Watch out: Treating the sector label as the peer group: it comes from the biggest revenue line, but value follows earnings and demand drivers.

2. The five competitive forces

- Michael Porter's five forces explain why some industries earn money for decades: new entrants, substitutes, suppliers' power, buyers' power and rivalry. The weaker the pressures, the higher the returns an industry can sustain.
- New entrants arrive when profits look high unless barriers to entry stop them: economies of scale (unit cost falls as output rises), large capital requirements, regulation such as licences, strong brands, and costly switching.
- A substitute does the same job in a different way (streaming for cinema); a similar product from a competitor is rivalry, not a substitute.
- Buyers are strong when few, large, able to switch easily and facing undifferentiated products. Suppliers are strong in the mirror image: few, no substitute for the input, costly for you to leave. Profit leaks to the more concentrated end of the chain.
- Rivalry is fiercest when fixed costs are high, industry growth is slow, and products are undifferentiated; hard-to-sell plant keeps weak firms in. It is often where the other four forces show up, as falling prices.

FORCES IN NUMBERS (EXAMPLES 3 TO 5)

Scale: fixed cost 400, variable 2, price 5. Incumbent (400 units) cost per unit	400 ÷ 400 + 2	**3**
Entrant (40 units) cost per unit; loss	400 ÷ 40 + 2; (5 − 12) × 40	**12; −280**
Break-even volume	400 ÷ (5 − 2)	**133 units**
Per 100 of sales (suppliers 70, other costs 22, profit 8): suppliers +5%	100 − 73.5 − 22	**profit 4.5**
Buyers cut prices 3%; both at once	97 − 70 − 22; 97 − 73.5 − 22	**5; 1.5 (81% of profit lost)**
Price-cut trap: each firm 60 units at 12, profit; A cuts to 11 (90 units), B loses; B matches	8 × 60 − 400; 7 × 90 − 400; 8 × 30 − 400; 7 × 60 − 400	**80; A 230; B −160; both 20**

Watch out: Calling a rival's product a substitute. Cutting price was sensible for each firm and ruinous for both.

3. The industry life cycle

- Five stages, by return on capital: embryonic (small demand, high costs, extreme failure rates, losses); growth (rising demand, falling prices, little price competition, profit up); shakeout (capacity outruns demand, prices pushed down, weaker firms leave); mature (consolidated, high barriers, stable but unspectacular returns); declining (shrinking demand, overcapacity, price competition returns).
- The strongest profits come in late growth, exactly when the new capacity that ends the party is being planned.
- It is a guide, not a timetable: stages have no fixed length, and technology (streaming for television) or new rules can reset or end a stage. Ask whether capacity is growing faster or slower than demand. Marlow: groceries look mature, payments look like growth.

HOW A SHAKEOUT IS BORN (EXAMPLE 6: DEMAND 100 UNITS GROWING 30%, THEN 8%; CAPACITY BUILT FOR 30%)

Demand, year 3	100 × 1.3 × 1.3	**169**
Capacity, year 4 (year 3 assumed 185.9)	185.9 × 1.3	**242**
Demand, year 4	169 × 1.08	**183**
Use of capacity	182.5 ÷ 241.7	**75.5%**
Idle capacity	241.7 − 182.5	**59 units**

Watch out: Judging an industry by growth alone; reading the life cycle as a timetable or assuming the profit peak is in maturity.

4. Wider forces: PESTLE

- Around the company is the industry (five forces), and around that the wider environment: political (policy, tax, tariffs), economic (growth, rates, inflation, the cycle), social (ageing, tastes), technological (new methods), legal (wages, safety, competition, data) and environmental (climate, carbon prices, waste).
- They link to the five forces: new technology can lower barriers to entry; a tax can raise costs for the whole industry.
- The aim is not to fill all six boxes but to find the few outside factors that move demand, costs and competition over the forecast horizon.
- Rank them by chance × profit hit (a teaching device, not an official formula); the top ones go into the model as inputs and the small ones are noted and left out.

MARLOW SUPERMARKETS: CHANCE × PROFIT HIT, $ MILLIONS (EXAMPLE 7)

Online shift	80% × 9	**7.2**
Minimum wage rule (labour 90 = 15% of revenue, wages +6% = 5.4)	90% × (90 × 6%)	**4.86**
Packaging charge	30% × 12	**3.6**
Interest rates	50% × 6	**3.0**
Tariff on fruit (noted, left out)	25% × 4	**1.0**

5. Measuring the industry: size, growth, profit, share

- Judge the pond before the fish: how big, how fast growing, how profitable, and who holds the market. Size comes from company reports, industry bodies or a build-up; growth should be split into volume and price, and into cyclical swings and lasting structural change.
- Growth from price alone in a market that has run out of new customers is harder to repeat. Price growth depends on rivals behaving.
- Operating margin = operating profit ÷ revenue. ROIC (return on invested capital) = NOPAT (net operating profit after tax) ÷ average invested capital (start plus end, divided by two). Compare across firms and over time.
- Concentration ratio CR3 adds the top three shares; it says how many firms dominate, not who is gaining, so look at each firm's share trend. The Herfindahl index (HHI) squares every firm's share in per cent and adds them; big firms count far more.
- Single firm = 10,000; two firms at 50% = 5,000.

Market size = customers × take-up × spend each; Revenue growth = (1 + volume) × (1 + price) − 1; ROIC = NOPAT ÷ average invested capital; HHI = $s1^2 + s2^2 + \ldots$

MARLOW'S MARKET (EXAMPLES 8 TO 11)

Market size: 2m households × 75% use a supermarket × $2,000	1.5m × 2,000	**$3.0bn**
Marlow's share	600 ÷ 3,000	**20%**
Revenue growth (volume +1.5%, price +3.0%)	1.015 × 1.03 − 1	**4.5% (66% from price)**
ROIC (average capital (380 + 420) ÷ 2 = 400)	60 × (1 − 20%) = 48; 48 ÷ 400	**12%, spread 4 points over 8% cost of capital**
CR3 today / three years ago	30 + 20 + 15; 27 + 22 + 15	**65% / 64%**
HHI, four named firms (30, 20, 15, 10)	900 + 400 + 225 + 100	**1,625**

Watch out: Stopping at the concentration ratio: the leader gained 3 points while Marlow lost 2 underneath. Sizing one thing and measuring share of another.

Key takeaways

- A sector label is a starting point, not a peer group; value follows earnings and demand drivers.
- Five forces: entrants, substitutes, buyers, suppliers, rivalry. Weaker forces mean higher sustainable returns.
- Life cycle: embryonic, growth, shakeout, mature, declining; profits peak in late growth, and it is a guide not a timetable.
- PESTLE: pick the few outside factors that move the forecast, not all six boxes.
- Market size = customers × take-up × spend; revenue growth = (1 + volume)(1 + price) − 1.
- Read share trends, ROIC against the cost of capital, and the CR3 or HHI together.

Quick check

1. A firm earns 55% of revenue from machinery, 45% from lending. Sector under a revenue scheme, and the risk?
   Answer: Industrials. The lending half gets the wrong peers.
2. Demand growth slows from 30% to 8%, capacity was built for 30%, weak firms leave. Stage?
   Answer: Shakeout.
3. Volume grows 2% and price grows 5%. Revenue growth?
   Answer: 1.02 × 1.05 − 1 = 7.1%.

Summary notes for the Charta whiteboard lesson. Examples use made-up figures. Watch the full lesson at charta-learning.com.