



Equity

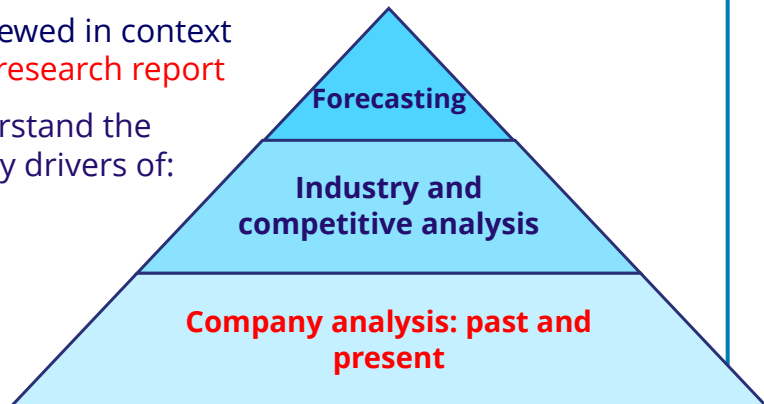


Company Analysis: Past and Present



Exam Focus

- This module must be viewed in context of the preparation of a **research report**
- The analyst must understand the **business model** and key drivers of:
 - Revenue
 - Op. profit
 - W. cap
 - Capital investment
 - Capital structure



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Revenue Drivers

Top down

- Market share
- Market size
- GDP growth

Bottom up

- Volumes
- **Prices**
- Understand each product line/segment

Consider pricing power—ability to set prices without affecting sales volumes

Driven by market structure

- Perfect competition (low) to monopoly (high)
- Also consider position in the market (e.g., low cost producer maintains share with low prices)

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Operating Profitability

Key measures and concepts

- Understanding the nature of costs as fixed vs. variable and implications for forecasting profit

$$\text{operating profit} = [Q \times (P - VC)] - FC$$

- Calculating the DOL (degree of operating leverage)

$$\text{DOL} = \frac{\% \Delta \text{ operating profit}}{\% \Delta \text{ sales}}$$

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Operating Profit: CFA Institute Example

Ribbon Energy Ltd. provides the following guidance for analysts:

	Next 12 Months
Sales vol. ('000s barrels)	167,197
Production costs per barrel	\$17.34
Depreciation, depletion, and accretion	\$1,415m
General and admin	\$150m

Assuming an oil price of \$62.50 per barrel, calculate:

1. The contribution margin per barrel
2. The estimate of operating profit
3. The DOL by considering the impact of a 5% fall in volumes

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Operating Profit: **Solution**

1. Contribution is P-VC. We assume that the production costs are variable and the other costs are fixed.

=

2. Operating profit =

3. If volumes were 5% lower, operating profit would be:

– \$1415 – \$150m =

This is a drop of 6.3%:

DOL =

=

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Operating Profitability

- Be careful with which margin you are provided with
 - GP (proxy for contribution) vs. EBITDA vs. operating
- Output is the major driver of profitability
 - Economies of scale (decline in costs as vol. grows)
 - Economies of scope (decline in costs as costs shared across product lines)
- DOL is important for consideration of risk and capital structure

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Working Capital

- There is an importance of understanding the cash conversion cycle and the link to financing of the business:
 - Short cash conversion cycle is less of a cash drain
 - $DSO + DOH - DPO$
- Calculate the cash conversion cycle using the following information from the Tesco Plc 2023 financial statements. Use year-end balance sheet figures for simplicity.

	£m		£m
Revenue	65,762	Trade receivables	1,315
Gross profit	3,661	Trade payables	9,818
		Inventory 2023	2,510

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Working Capital: **Solution**

Cost of sales = $65,762 - 3,661 = 62,101$

DSO = =

DOH = =

DPO = =

DPO calculated
with COGS rather
than purchases in
this reading

Working capital cycle = $7.3 + 14.8 - 57.7 =$

This indicates that operations are actually a **source of cash** for the grocery retailer.

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Capital Investments and Capital Structure

Sources of capital

- CFO (inc. net working capital, if negative)
- Debt issuance
- Equity issuance
- Asset disposals

Uses of capital

- Cash and investments on hand
- Net working capital (if positive)
- Capital expenditure
- Additions to intangibles
- Acquisitions
- Debt paydown
- Dividends and share repurchases

It is important for an analyst to understand this flow and to consider whether investors' capital has been invested wisely.

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Key Measures

$$\bullet \text{ DFL} = \frac{\% \Delta \text{ net income}}{\Delta \% \text{ operating income}}$$

$$\bullet \text{ Unlevered returns} = \text{ROIC} = \frac{\text{net operating profit less adjusted taxes}}{\text{net operating assets (invested capital)}}$$

- Economic profit if ROIC > WACC

- Levered returns = ROE (DuPont)

Net margin × asset turnover × equity multiplier

Operating margin × interest burden × tax burden



ROIC excludes cash and investments

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Key Measures: Example

Using the relevant information from below, what is the estimated ROE?

Gross margin = 35%

EBIT margin = 6%

Interest burden = 0.9

Tax burden = 0.8

Dividend payout = 0.6

Asset turnover = 2.5x

Equity multiplier = 1.5x

ROE =

=

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Solutions

Operating Profit: **Solution**

1. Contribution is P-VC. We assume that the production costs are variable and the other costs are fixed.

$$\$62.5 - \$17.34 = \$45.16$$

$$2. \text{ Operating profit} = 167.197\text{m} \times (\$62.5 - \$17.34) - \$1,415 - \$150 = \$5,986\text{m}$$

3. If volumes were 5% lower, operating profit would be:

$$(167.197 \times 0.95)\text{m} \times (\$62.5 - \$17.34) - \$1,415 - \$150\text{m} = \$5,608\text{m}$$

This is a drop of 6.3%

$$\text{DOL} = 6.3\% / 5\% = 1.26 \times$$

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Working Capital: **Solution**

$$\text{Cost of sales} = 65,762 - 3,661 = 62,101$$

$$\text{DSO} = \frac{1,315}{65,762} \times 365 = 7.3 \text{ days}$$

$$\text{DOH} = \frac{2,510}{62,101} \times 365 = 14.8 \text{ days}$$

$$\text{DPO} = \frac{9,818}{62,101} \times 365 = 57.7 \text{ days}$$

DPO calculated with COGS rather than purchases in this reading

$$\text{Working capital cycle} = 7.3 + 14.8 - 57.7 = -35.6 \text{ days}$$

This indicates that operations are actually a **source of cash** for the grocery retailer.

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Key Measures: Example

Using the relevant information from below, what is the estimated ROE?

Gross margin = 35%

EBIT margin = 6%

Interest burden = 0.9

Tax burden = 0.8

Dividend payout = 0.6

Asset turnover = 2.5x

Equity multiplier = 1.5x

$$\text{ROE} = 6\% \times 0.9 \times 0.8 \times 2.5 \times 1.5 = 16.2\%$$

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