



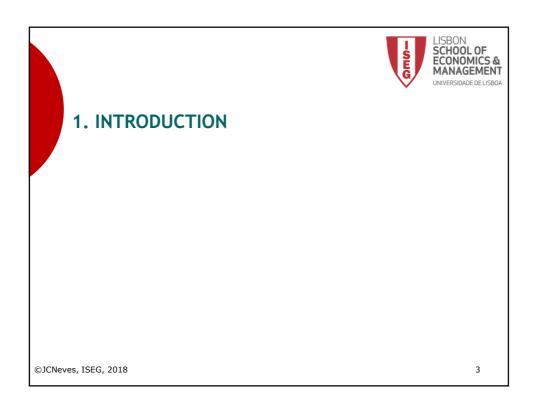
Corporate Finance (Corporate Investment Appraisal)

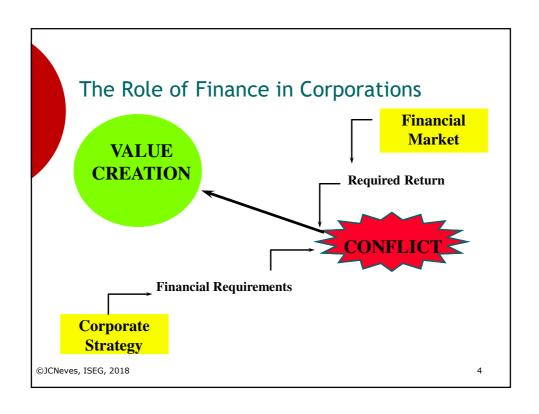
João Carvalho das Neves Professor of Finance, ISEG <u>icneves@iseg.ulisboa.pt</u> 2018-2019

Course Outline

- Introduction
- Assessing Business Performance
 - Case study assigned for evaluation: UNILEVER, PLC
- Estimating the Cost of Capital
 - Case Study: TELUS
 - Case study assigned for evaluation: APPOLO TYRES
- Capital Budgeting
 - Case Study: New Heritage Doll
- Designing a Capital Structure
 - Case Study: RM Furniture Kraft (A) and (B)
- o Dividend policy and share repurchasing
 - Case Study: Strong Motors

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The fundamental principle of finance

Net Present Value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows:

$$NPV = -I_0 + \sum_{i=1}^{n} \frac{CF_i}{(1+k)^i}$$

Where

CF_i = net cash (inflow-outflow) during the period i

I_o = total initial investment expenses

k = discount rate, and

i = number of time periods

NPV is used in most strategic decisions (e.g. capital budgeting to analyze the profitability of an investment or project, new issues, Debt tender offer) as well as operational decisions (discounts to customer for collecting in advance).

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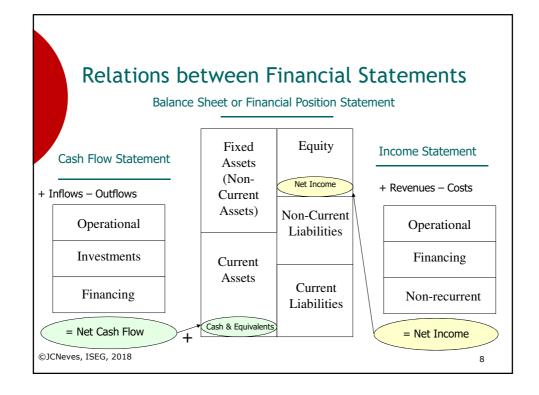
2. ASSESSING PERFORMANCE

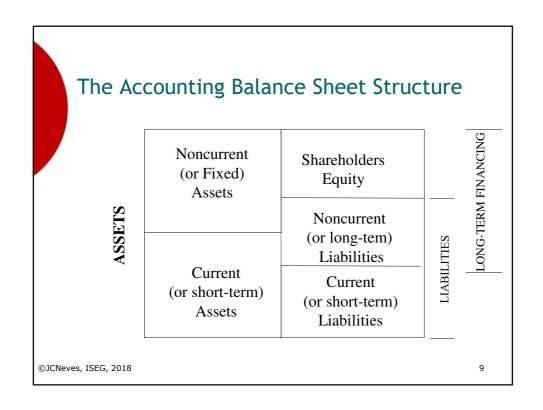
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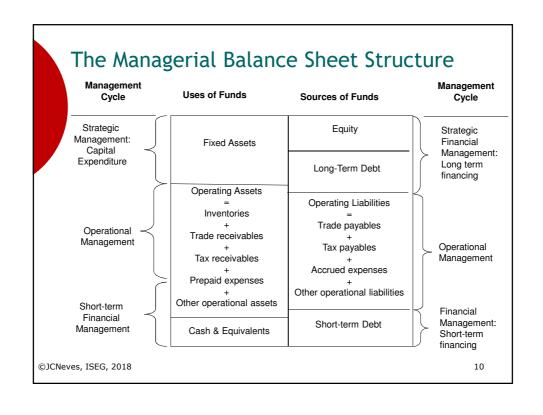
2. Assessing Performance Outline

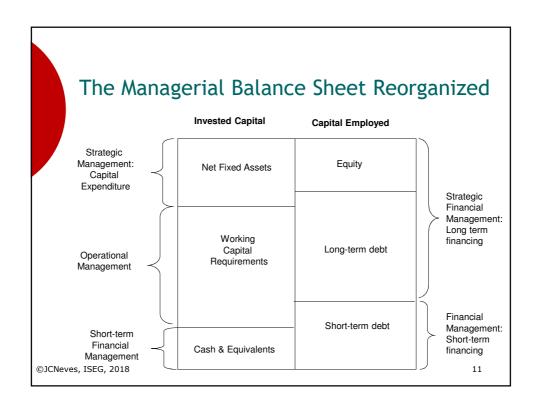
- 1. The managerial balance sheet
- 2. Traditional measures of liquidity
- 3. Liquidity based on the funding structure of working capital
- 4. Improving liquidity through better management of the operating cycle
- 5. Financing strategies
- 6. Assessing profitability
- 7. Assessing operating and financial risk
- 8. Analyze of shareholder's value creation
 Case study assigned for evaluation: UNILEVER, PLC

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The coherence with capital budgeting and company valuation

Capital Budgeting Coherence:

Capital Expenditure = Fixed Assets Investment + Δ Working Capital Requirements + Minimum Cash

Company Valuation Coherence:

Enterprice Value =

Market Value of Equity + Market Value of Debt - Cash & Equivalents

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The use of ratios when assessing performance

- <u>Raises questions</u> about the time-line performance of the company
- o Better understanding of the effect of strategic decisions
- Evaluation of the performance in <u>comparison</u> to competitors
- No absolute interpretation. Requires a benchmarking:
 - Capital return vs. cost of capital
 - · Actual ratios vs. Historical ratios
 - Actual ratios vs. Objectives or Budget based ratios
 - Company ratios vs. competitor or sample of competitors ratios
 - Company ratios vs. Industry or Sector ratios

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Balance Sheet Structure Analysis: Financial Strength

Financial Structure Analysis Based on the Accounting BS

$$\begin{array}{c} O \ \ Debt \ ratio = \\ \underline{ \ \ \ \ \ \ \ \ \ \ \ } \\ Equity+Liabilities \end{array}$$

O Debt structure = Short-term liabilities
Liabilities

O Assets Structure = Net fixed assets Total assets Capital Structure Analysis Based on the Managerial BS

$$\bigcirc \ \ \textit{Debt ratio} = \frac{\textit{Debt}}{\textit{Equity+Debt}}$$

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Other measures of financial strength

In order to have a better understanding of the company's capabilities to repay debt you may use ratios that include income items or cash based items, particularly recurring items:

 Typical ratios used in the market to analyze debt repayment capability:

$$Net \ debt \ to \ EBITDA = \frac{Debt - Cash \ \& \ equivalents}{EBITDA}$$

$$Coverage \ of \ short \ term \ debt = \frac{EBITDA}{short \ term \ debt}$$

I prefer to use the following ratios to have a better view on the capabilities of debt reimbursement:

- $\bigcirc \ \ \, \textit{Estimated repayment (number of years)} = \frac{\textit{Debt-Cash \& equivalents}}{\textit{Recurring Cash Earnings}}$
- \circ Coverage of short debt = $\frac{\textit{Recurring Cash Earnings}}{\textit{short term debt}}$

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Additional ratios of financial strength analysis

o The coverage of interest expenses uses the following ratios:

$$Times\ interest\ earnings = \frac{Operating\ income}{Financial\ expenses}$$

Or if you prefer a cash basis ratio:

$$Interest\ coverage = \frac{EBITDA}{Financial\ expenses}$$

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Traditional Measures of Liquidity: Based on Accounting Balance Sheet

- $\bigcirc \quad \textit{Current ratio} = \frac{\textit{Current assets}}{\textit{Current liabilities}}$
- Acid test or quick ratio =
 <u>Cash & equivalents+Accounts receivables+Short term investments</u>

 Current liabilities
- $\circ \quad \textit{Cash ratio} = \frac{\textit{Cash \& Equivalents}}{\textit{Current liabilities}}$
- A less conventional ratio:
 - Cash in days of sales = $\frac{Cash \& equivalents}{Sales \ revenue} \times 365$

The cash & equivalents are seen here as a buffer of security for potential delays of collection period from customers.

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Liquidity based on the funding structure of working capital

$$NLB = WC - WCR \ge 0$$

$$\frac{NLB}{S} = \frac{WC}{S} - \frac{WCR}{S}$$

WC - Working Capital

WCR - Working Capital Requirements

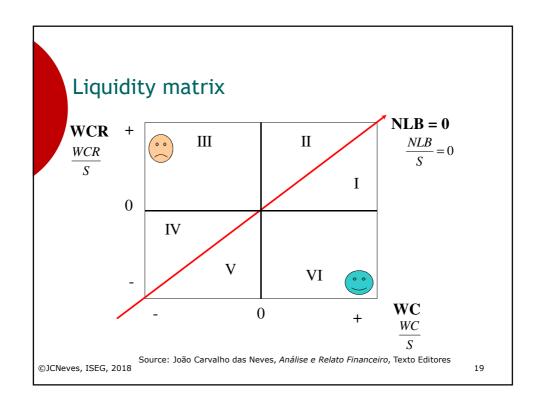
NLB - Net Liquid Balance

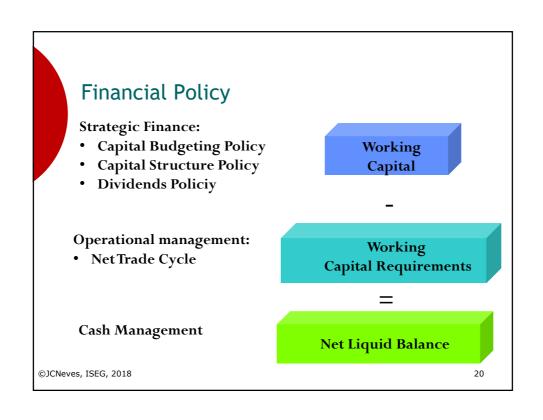
 $WC = Long \ term \ financing - Net \ fixed \ assets$ Long-term financing is equity plus long-term liabilities.

Working capital requirements (WCR) is the amount of working capital required by operations:

WCR = Operating Assets - Operating Liabilities

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Levels of decision

	WC -	WCR =	= NLB
Board of Directors	Policy Maker & Decision	Policy Maker	Overall Policiy Is Critical
Operational Managers	Advisor and Execution	Decision and Execution	Execution is critical
Financial Director	Advisor and Execution	Advisory and Control	Decision and Execution

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Analysis of Financial Strength and Liquidity

- What is the liquidity of the company?
- o Is the financial Structure adequate?
- Is the financing policy consistent with the strategy, growth, risk and dividends policy?
- o Any areas that need change of policy?

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