Corporate Finance
(Corporate Investment Appraisal)

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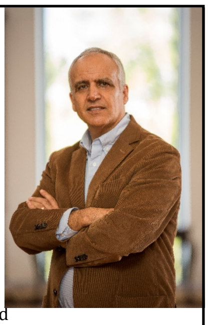

Actual: Professor and Diretor of the Post-Graduation in Real Estate Management and Valuation, ISEG University of Lisbon; Member of the General and Supervisory Board, EDP – Energias de Portugal SA, Vice-President for Finance and Audit; Non-executive Member of Board, MONTEPIO VALOR; Founder and Consultant, ZENACTION BUSINESS CONSULTING & COACHING

Biography:

- Ph.D. Business Administration, Manchester Business School; MBA and MSc in Management, ISEG.
- Executive programs in Banking, Finance and Leadership: SIYLI (Search Inside Yourself Leadership Institute), INSEAD, IMD, HEC, London Business School, N.Y. Stern University, Wisconsin University Madison, Harvard Kennedy School - Harvard University, Creative Leadership Center, Manchester Business School.
- Visiting Professor. International: HEC Paris, EM Lyon, Copenhagen Business School, Universidade Federal de Minas Gerais and Fundação D. Cabral (Brasil), CEM (Macao). Portugal: FEPorto, Universidade Católica, Universidade do Algarve, Universidade de Évora, Universidade de Coimbra.
- President of the Central Administration of the Health System during the Troika intervention (2011-2014). Board Member (CFO) SLN (Conglomerate) and BPN (Bank) as member of the team of Mr. Miguel Cadilhe. Turnaround Manager and Trustee: Torralta, Casino Hotel de Tróia and TVI. Associate Consultant, Coopers & Lybrand (now PWC). Executive Director CIFAG/IPE (Executive Training). Deputy Controller, Cometna Industrial Metalurgica e Metalomecânica. Consultant for major corporations: SONAE, SIBS, UNICRE, CGD, CIMPOR, SECIL, SEMAPA, etc.
- Author of several books: Análise e relato financeiro, Controlo de gestão, Avaliação de empresas e negócios, Avaliação da performance estratégica da empresa, ABC das fusões e aquisições, Análise de investimentos imobiliários, BPN: Estado a mais, supervisão a menos.

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Course Outline

- Introduction
- Assessing Business Performance
  - Case Study
- Estimating the Cost of Capital
  - Case Study
- Capital Budgeting
  - Case Study
- Designing a Capital Structure
  - Case Study
- Dividend policy and share repurchasing
  - Case Study

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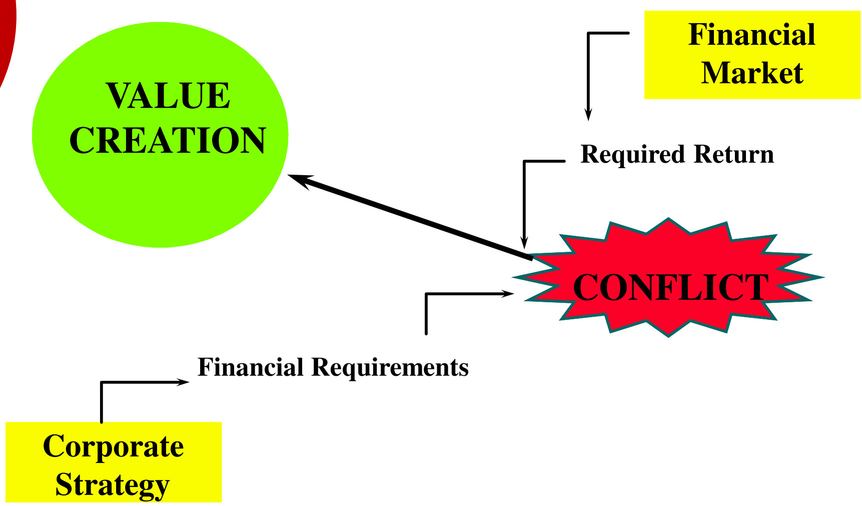
1. INTRODUCTION

The purpose of a corporation

- Since 1997, the Business Roundtable, America's most influential group of corporate leaders, has agreed on one principle: "The paramount duty of management and of boards of directors is to the corporation's stockholders"

The Role of Finance in Corporations



ESG a new trend in investments

- Environmental, social, and governance (ESG) criteria are an increasingly popular way for investors to evaluate companies in which they might want to invest.
- Many mutual funds, brokerage firms, and robo-advisors now offer products that employ ESG criteria.
- ESG criteria can also help investors avoid companies that might pose a greater financial risk due to their environmental or other practices.

On 19th August 2019, 181 of the most USA influential CEOs agreed on an updated definition of "the purpose of a corporation"

While each of our individual companies serves its own corporate purpose, we share a fundamental commitment to all of our stakeholders. We commit to:

- Delivering value to our **customers**. We will further the tradition of American companies leading the way in meeting or exceeding customer expectations.
- Investing in our **employees**. This starts with compensating them fairly and providing important benefits. It also includes supporting them through training and education that help develop new skills for a rapidly changing world. We foster diversity and inclusion, dignity and respect.
- Dealing fairly and ethically with our **suppliers**. We are dedicated to serving as good partners to the other companies, large and small, that help us meet our missions.
- Supporting the **communities** in which we work. We respect the people in our communities and protect the environment by embracing sustainable practices across our businesses.
- Generating **long-term value for shareholders**, who provide the capital that allows companies to invest, grow and innovate. We are committed to transparency and effective engagement with shareholders.

Each of our stakeholders is essential. We commit to deliver value to all of them, for the future success of our companies, our communities and our country.

The fundamental principle of finance is

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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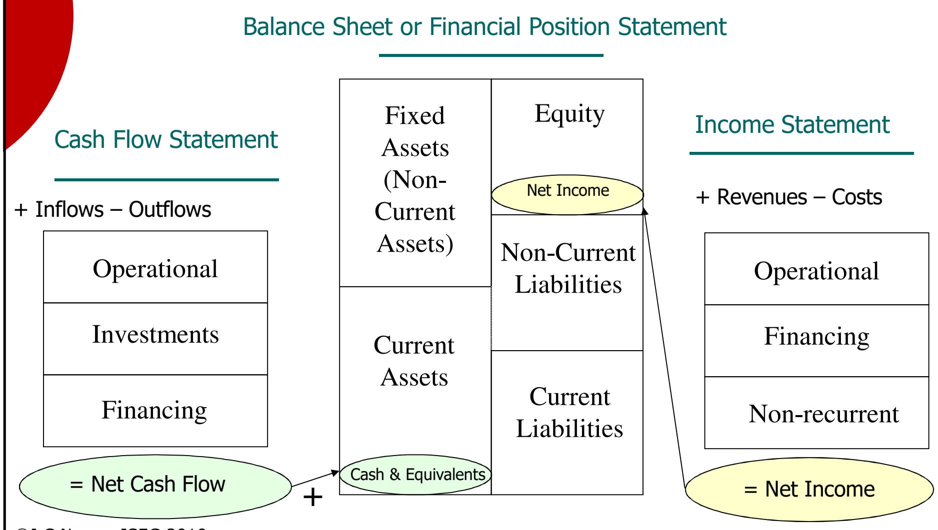
2. ASSESSING PERFORMANCE

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: UNILEVER, PLC

Relations between Financial Statements



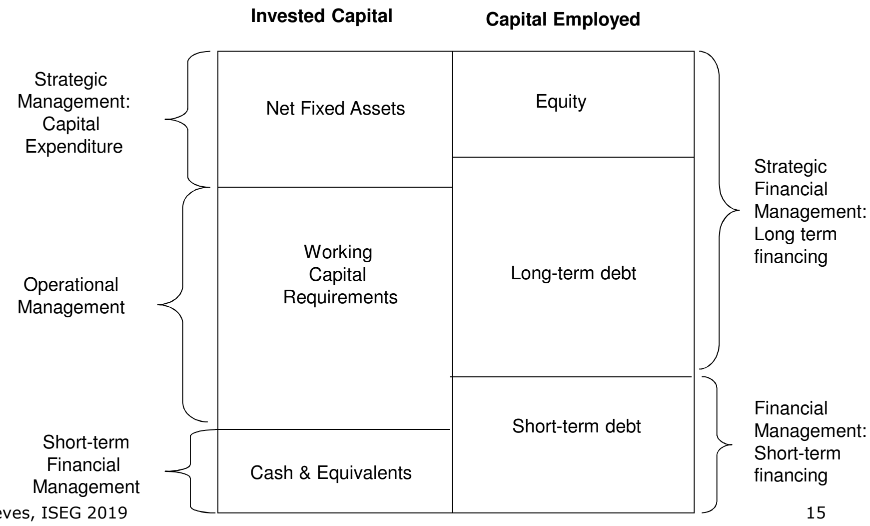
The Accounting Balance Sheet Structure

ASSETS			LIABILITIES	LONG-TERM FINANCING
	Noncurrent (or Fixed) Assets	Shareholders Equity		LONG-TERM FINANCING
		Noncurrent (or long-tem) Liabilities	LIABILITIES	LONG-TERM FINANCING
	Current (or short-term) Assets	Current (or short-term) Liabilities	LIABILITIES	

The Managerial Balance Sheet Structure

Management Cycle	**Uses of Funds**	**Sources of Funds**	**Management Cycle**
Strategic Management: Capital Expenditure	Fixed Assets	Equity	Strategic Financial Management: Long term financing
		Long-Term Debt	
Operational Management	Operating Assets = Inventories + Trade receivables + Tax receivables + Prepaid expenses + Other operational assets	Operating Liabilities = Trade payables + Tax payables + Accrued expenses + Other operational liabilities	Operational Management
Short-term Financial Management	Cash & Equivalents	Short-term Debt	Financial Management: Short-term financing

The Managerial Balance Sheet Reorganized



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The coherence with capital budgeting and company valuation

Capital Budgeting Coherence:

$$\textit{Capital Expenditure} = \textit{Fixed Assets Investment} + \Delta\, \textit{Working Capital Requirements} + \textit{Minimum Cash}$$

Company Valuation Coherence:

$$\textit{Enterprise Value} = \textit{Market Value of Equity} + \textit{Market Value of Debt} - \textit{Cash \& Equivalents}$$

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The use of ratios when assessing performance

- Raises questions about the time-line performance of the company
- Better understanding of the effect of strategic decisions
- Evaluation of the performance in comparison 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

Balance Sheet Structure Analysis: Financial Strength

Financial Structure Analysis Based on the Accounting BS

- $Debt\ ratio = \frac{Liabilities}{Equity+Liabilities}$
- $Debt\ structure = \frac{Short\text{-}term\ liabilities}{Liabilities}$
- $Assets\ Structure = \frac{Net\ fixed\ assets}{Total\ assets}$

Capital Structure Analysis Based on the Managerial BS

- $Debt\ ratio = \frac{Debt}{Equity+Debt}$
- $Debt\ structure = \frac{Short\text{-}term\ debt}{Debt}$

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:

- $Estimated\ repayment\ (number\ of\ years) = \frac{Net\ Debt}{Recurring\ Cash\ Earnings}$
- $Coverage\ of\ short\ debt = \frac{Recurring\ Cash\ Earnings}{Short\ term\ debt}$

Additional ratios of financial strength analysis

- 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:

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

Traditional Measures of Liquidity: Based on Accounting Balance Sheet

- $Current\ ratio = \frac{Current\ assets}{Current\ liabilities}$
- $Acid\ test\ or\ quick\ ratio = \frac{Cash\ \&\ equivalents + Accounts\ receivables + Short\ term\ investments}{Current\ liabilities}$
- $Cash\ ratio = \frac{Cash\ \ \&\ Equivalents}{Current\ liabilities}$
- 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.

Liquidity based on the funding structure of working capital

$$\mathbf{NLB = WC - WCR \geq 0}$$

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

WC - Working Capital
WCR - Working Capital Requirements
NLB - Net Liquid Balance

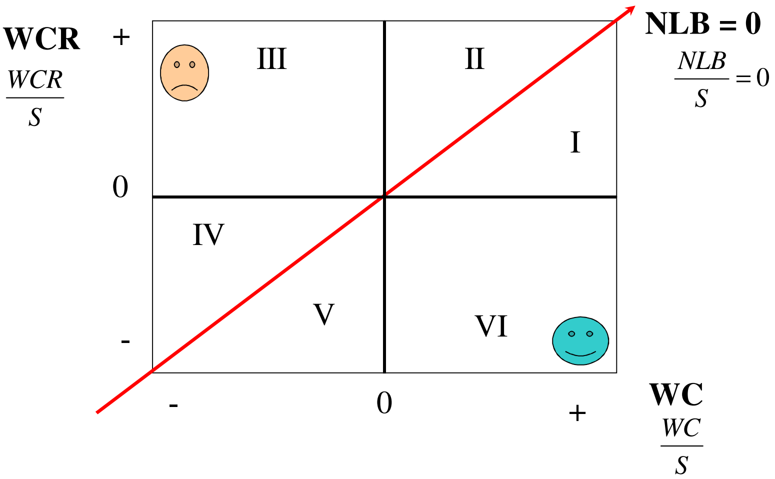
$$WC = Long\ term\ financing - Net\ fixed\ assets$$

Long-term financing is equity plus long-term liabilities.

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

$$WCR = Operating\ Assets - Operating\ Liabilities$$

Liquidity matrix



Source: João Carvalho das Neves, *Análise e Relato Financeiro*, Texto Editores

Financial Policy

Strategic Finance:
- Capital Budgeting Policy
- Capital Structure Policy
- Dividends Policy

Operational management:
- Net Trade Cycle

Cash Management

Working Capital

-

Working Capital Requirements

=

Net Liquid Balance

Levels of decision

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

Analysis of Financial Strength and Liquidity

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