

# **CASH MANAGEMENT & FINANCING CHOICES**

## **THE DEBT MARKET**



### **Lesson 5**

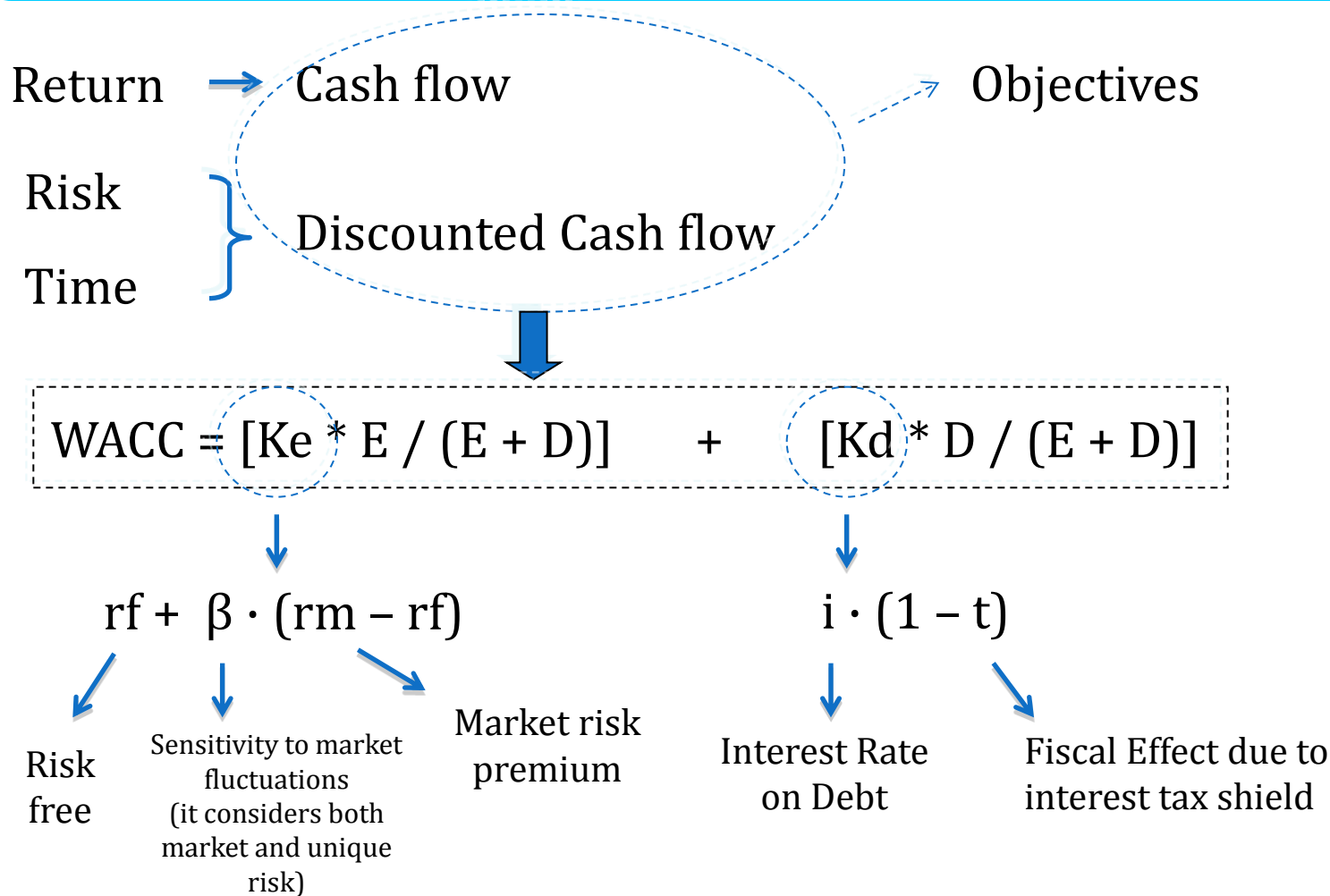
*Corporate Finance*

Castellanza, 3<sup>rd</sup> October 2018

# SUMMARY LESSON 4, SOME QUESTIONS

- What is the main objective for a shareholder?
- Describe the relationship between ROE and ROI
- Explain the main assumption for each of the four theories on capital structure
- Which are the key factors of a financial decision?
- Describe the relationship between risk and diversification
- Is it possible to eliminate market risk?
- What is the value of  $\beta$  if it is equal to the market portfolio?

# SUMMARY LESSON 4, SCHEME



# WACC – EXERCISE

K(e) 8%

K(d) 4%

<b>Assets</b>	<b>2012</b>	<b>Liabilities</b>	<b>2012</b>
Cash equivalent	200	Short term financial loans	1.780
Accounts receivable	4.210	Accounts payable	3.690
Inventories	2.070	Employee's termination pay	860
Other accounts receivable	550	Long term financial debt	4.000
Technical assets	6.350	Equity	2.000
Intangible assets	2.100	Reserves	2.000
Financial assets	100	Profit	1.250
<b>Total</b>	<b>15.580</b>	<b>Total</b>	<b>15.580</b>

# WACC – SOLUTION

$$[0,08 * 5.250 / (5.250 + 5.780)] + [0,04 * 5.780 / (5.250 + 5.780)]$$



$$[0,038] + [0,021]$$



$$\mathbf{WACC = 5,9\%}$$

## LESSON 5 - SUMMARY

- Source of financing
- Working capital management
- Financing working capital
- Financing Investments
- Equity and debt
- Managing debt

# SOURCE OF FINANCING

- A company finances its current business through the financial flows deriving from the difference between revenues and costs.
- Moreover, the company needs other financing sources (debt and equity) to cover investments in assets and working capital needs.

# WORKING CAPITAL MANAGEMENT

- Working capital is the **difference** between **current asset and current liabilities** (excluding cash and bank overdrafts), generally with maturities of less than one year.



*WC reflects the cash required to cover financing shortfalls arising from day-to-day operations*

- The level and dynamics of working capital are a key factor in company's liquidity position.
- Working capital is a key factor in the company's long-term success.



# WORKING CAPITAL MANAGEMENT

- The main objectives of working capital management are:
  - To increase profitability of the company;
  - To ensure that it has sufficient liquidity to meet short-term obligations as they fall due and continue in business.

# WORKING CAPITAL MANAGEMENT

- Because WC is so important, a company will need to formulate policies concerning the various components of WC.
- WC policies need to consider:
  - Nature of the company's business
  - The way in which current assets/liabilities are financed
  - Credit/Debit policies of a company's close competitors

# NET WORKING CAPITAL

+	Trade receivables
+	Other current receivables
+	Inventories
+	Deferred charges and prepaid expenses
-	Trade payables
-	Other commercial payables
-	Deferred revenues
<hr/>	
=	NWC

# NET WORKING CAPITAL – EXERCISE

Assets	2015	2016
Intangible assets	900	1.200
Tangible assets	7.000	8.100
Financial assets	100	100
Inventories	1.150	1.710
Accounts receivable	2.510	3.380
Other receivable	300	220
Deferred charges and prepaid expenses	20	70
Cash & cash equivalents	200	280
Total	12.180	15.060

Liabilities	2015	2016
Short term financial debt	1.450	1.100
Long term financial debt	1.600	2.480
Accounts payable	3.500	5.750
Deferred revenues	130	90
ETP fund	430	680
Mortgages	1.450	800
Equity	1.500	2.500
Reserves	1.740	740
Profit	380	920
Total	12.180	15.060

# NWC – SOLUTION

## First step

	2016	2015	Variation
Trade receivables	3.380	2.510	870
Other current receivables	220	300	-80
Inventories	1.710	1.150	560
Deferred charges and prepaid expenses	70	20	50
Trade payables	5.750	3.500	2.250
Other commercial payables	0	0	0
Deferred revenues	90	130	-40

$$\text{VAR. NWC} = 870 - 80 + 560 + 50 - (2.250 - 40)$$

## Second step

$$\text{VAR. NWC} = - 810$$

# WORKING CAPITAL MANAGEMENT

Trade receivables: after being collected they become cash

- Low levels:    ↓ need of cash (spontaneous source of financing); might affect profitability (e.g. discounts)
- High levels:    ↑ need of cash    ↑ long-term relationship with customers; liquidity can suffer

# WORKING CAPITAL MANAGEMENT

## Inventories

- Low levels:    ↓ need of cash    ↑ profitability    ↑ risk of running out of inventory.
- High levels:    ↑ need of cash    ↓ profitability    ↓ cost of possible interruption in the production process

# WORKING CAPITAL MANAGEMENT

Trade payables: debts to suppliers that become outflows of cash when they are paid

- Low levels:    ↑ need of cash    ↑ long-term relationship with suppliers
- High levels:    ↓ need of cash    ↓ probability to get discounts  
                         ↓ long-term relationship with suppliers



# WORKING CAPITAL MANAGEMENT

## Cash conversion cycle (CCC)

- It represents the interaction between the components of WC and the cash flows within a company.
- It represents the number of days for which financing is needed.
- The length of the CCC depends on the length of:
  - The inventory conversion period = INVENTORY DAYS
  - The trade receivables collection period = TRADE RECEIVABLES DAYS
  - The trade payables deferral period = TRADE PAYABLES DAYS

# WORKING CAPITAL MANAGEMENT

## INVENTORY DAYS

- Average time taken to consume raw materials in the production

$$\frac{\text{Inventories}}{\text{F.Y. purchases (excl. VAT)}} \times 365 = \text{Inventory Days}$$

# WORKING CAPITAL MANAGEMENT

## TRADE RECEIVABLES DAYS

- Average time taken by credit customers to settle their accounts

$$\frac{\text{Receivables}}{\text{F.Y. sales (incl. VAT)}} \times 365 = \text{Trade receivables days}$$

# WORKING CAPITAL MANAGEMENT

## TRADE PAYABLES DAYS

- Average time taken by a company to pay its trade payables

$$\frac{\text{Account payable}}{\text{F.Y. purchases (incl. VAT)}} \times 365 = \text{Trade payables days}$$

# WORKING CAPITAL MANAGEMENT

$CCC = \text{INVENTORY DAYS} + \text{TRADE RECEIVABLES DAYS} - \text{TRADE PAYABLES DAYS}$

- IF NEGATIVE: the company collects funds prior to paying for its payables.
- IF POSITIVE: if the company does not rely upon a significant Ebitda (REMEMBER: Ebitda is the first company's cash generator), it needs funds to finance its working capital.

# CASH CONVERSION CYCLE – EXERCISE

	2009	2010	2011
Trade receivables	103	128	141
Inventories	129	224	280
Trade payables	690	649	717
Sales (incl VAT)	12.314	15.414	16.938
Sales (excl VAT)	11.195	14.012	15.399
Purchases (incl VAT)	4.139	5.192	5.736
Purchases (excl VAT)	3.599	4.515	4.988

# CASH CONVERSION CYCLE - SOLUTION

	2009	2010	2011
<b>INVENTORY DAYS</b>	13,1	18,1	20,5
<b>TRADE RECEIVABLES DAYS</b>	3,1	3,0	3,0
<b>TRADE PAYABLES DAYS</b>	60,8	45,6	45,6

$$CCC_{2009} = 13,1 + 3,1 - 60,8 = - 44,6$$

$$CCC_{2010} = 18,1 + 3,0 - 45,6 = - 24,5$$

$$CCC_{2011} = 20,5 + 3,0 - 45,6 = - 22,1$$

# CASH MANAGEMENT

- The CCC provides management with a tool to measure how long the company must fund its operating cycle.
- The shorter the CCC, the less time capital is tied up in the business process.
- The goal of the business is to minimize its CCC, and thereby reduce the amount of outstanding working capital.



# CASH MANAGEMENT

Policies concerning WC are very important in case of:

- Expansion of the business.
- Recession of the business.

# CASH MANAGEMENT

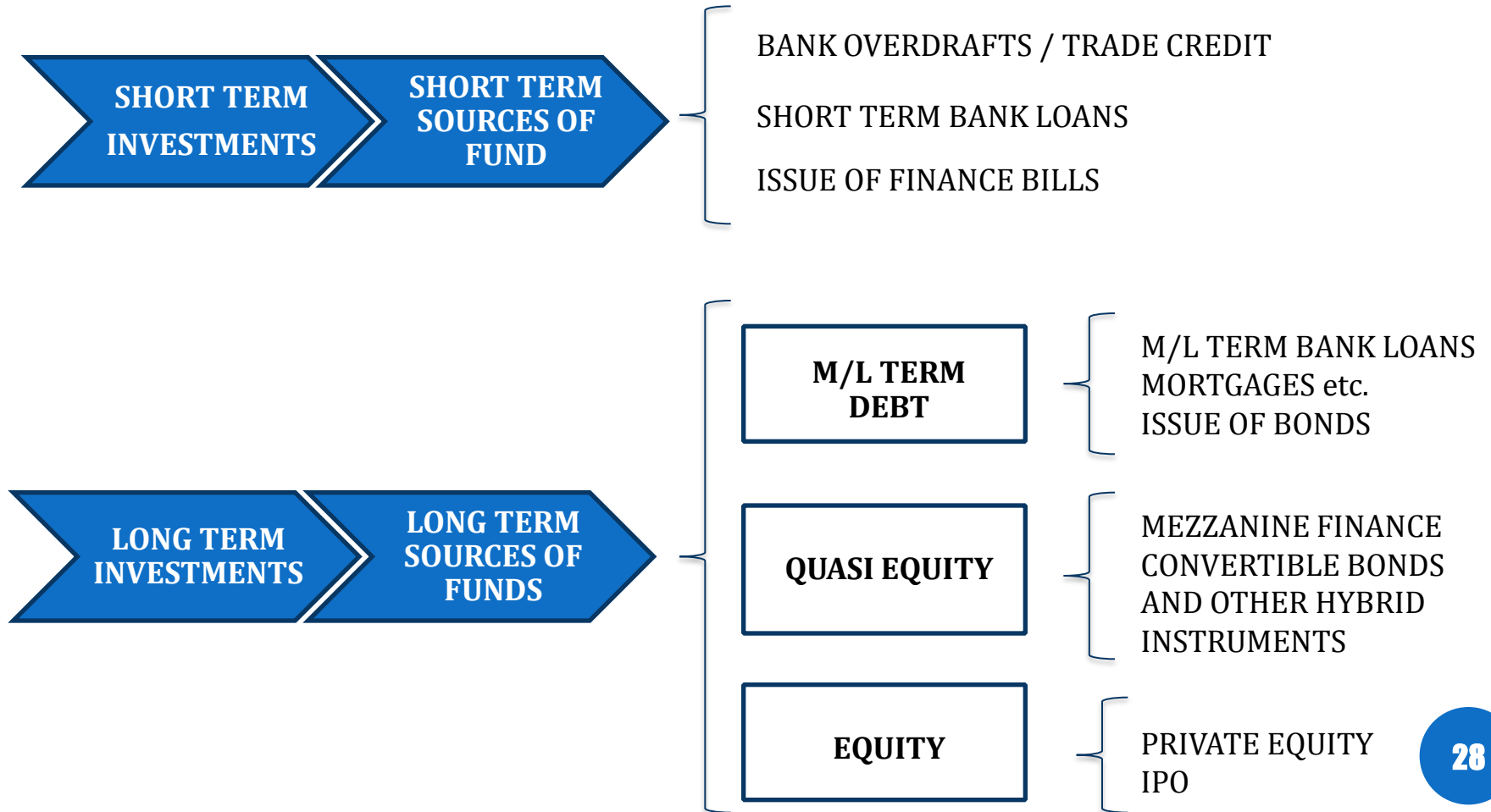
*“Cash is king”*

- Cash management = collecting, managing and investing cash to ensure financial stability and solvency.
- The optimum cash level depends mainly upon:
  - Forecasts of future cash flows
  - Efficiency with which the cash is managed
  - Availability of liquid assets
  - Borrowing capability

# CASH BUDGET

- Cash Budget is central to the management of cash.
- It shows the expected cash inflows and outflows, cash surpluses and deficits.
- Its primary purpose is to forecast when “new finance” will be needed and/or when surplus funds that can be invested will be on hand.

# FINANCING CHOICES



# FINANCING WORKING CAPITAL

- WC is usually financed with short-term sources of funds, like:
  - **Overdrafts:** agreement by a bank to allow a company to borrow up to a certain limit. Interests calculated on the outstanding debt.
  - **Short-term bank loans:** fixed amount of debt finance borrowed by a company from a bank. Short term repayment. Interests on the entire loan.
  - **Trade credit:** agreement to take payments for goods and services at a later date than the one at which goods are supplied and services are provided.

# FINANCING INVESTMENTS

- Investments in fixed assets (tangible, intangible and financial assets) are financed with:
  - **Equity** (shareholders capital increase)
  - **Shareholders loans**
  - **Financial debt**: e.g. loans, bonds, other structured financial instruments

It deals with the interest-bearing debts from banks or other money lenders.

Financial debts can assume different kinds and features depending on the duration, price, warranties and others.

# FINANCING INVESTMENTS

## “QUASI-EQUITY”

- This category includes some forms of financing which formally fall within financial debt but which technically present the features of hybrid instruments, classifiable between debt and equity. Among these instruments is possible to identify the convertible bonds, not bearing interests' funding, subordinated liabilities, mezzanine financing.

# EQUITY VS DEBT

- There is no commitment to pay a periodic return on equity, whereas there is such commitment on debt.
- There is no commitment to pay back the funds raised from shareholders.
- If the company is liquidated, creditors must be paid before shareholders.



# MANAGING DEBT

- In managing debt, the main factors to be considered are:
  - Cost in terms of interest rate
  - Transaction costs
  - Volume
  - Flexibility

# FINANCING CHOICES

Is there a “ONCE-AND-FOR-ALL” OPTIMAL CAPITAL STRUCTURE? No, there isn’t any absolute choice of capital structure.

○ The main factors to be considered are:

- Life-cycle of the company
- Shareholder preferences and return
- Opportunities or constraints in the capital market
- Macroeconomic conditions
- Financial balance and flexibility