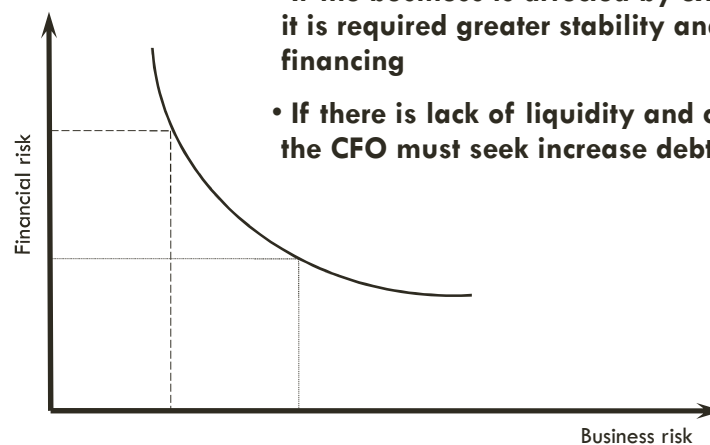


## FINANCIAL POLICY

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## FINANCIAL POLICY AND RISK



- If the business is affected by external forces... it is required greater stability and safety in financing
- If there is lack of liquidity and cash flow ... the CFO must seek increase debt maturities

## DETERMINANTS OF FINANCIAL POLICY

Corporate strategy and Long-term objectives

Cost of various types of financing

Impact on:

- Global risk
- Balance sheet ratios
- Interest expenses coverage and Debt service coverage

Perspectives on:

- Money market – liquidity and cost
- Inflation
- Volatility of revenues
- Corporate profitability
- Short term funding needs

## FINANCIAL ANALYSIS AND POLICY

Analysis of Business Risk:

- Business risk ratio analysis
- Expectations of changes in the future
- Corporate Strategy and Business Performance
- Strategic objectives

Financial Policy Design:

- Debt ratio
- Net debt to EBITDA
- Interest coverage
- Debt maturity
- Proportion of fixed and variable interest rate
- Exchange currency policy

## ESTIMATING THE AMOUNT OF REQUIRED EXTERNAL FUNDS

$$\text{Funding needs} = \Delta\text{Fixed assets} + \Delta\text{WCR} + \Delta\text{Cash} + \nabla\text{Debt}$$

$$\text{Internally generated funds: Net Profit} + \text{Noncash expenses} - \text{Dividends}$$

$$\text{External funds need} = \text{Funding needs} - \text{Internally generated funds}$$

$$\text{External funds need: } (\Delta\text{Fixed assets} + \Delta\text{WCR} + \Delta\text{Cash}) - (\text{Net Profit} + \text{Noncash expenses} - \text{Dividends})$$

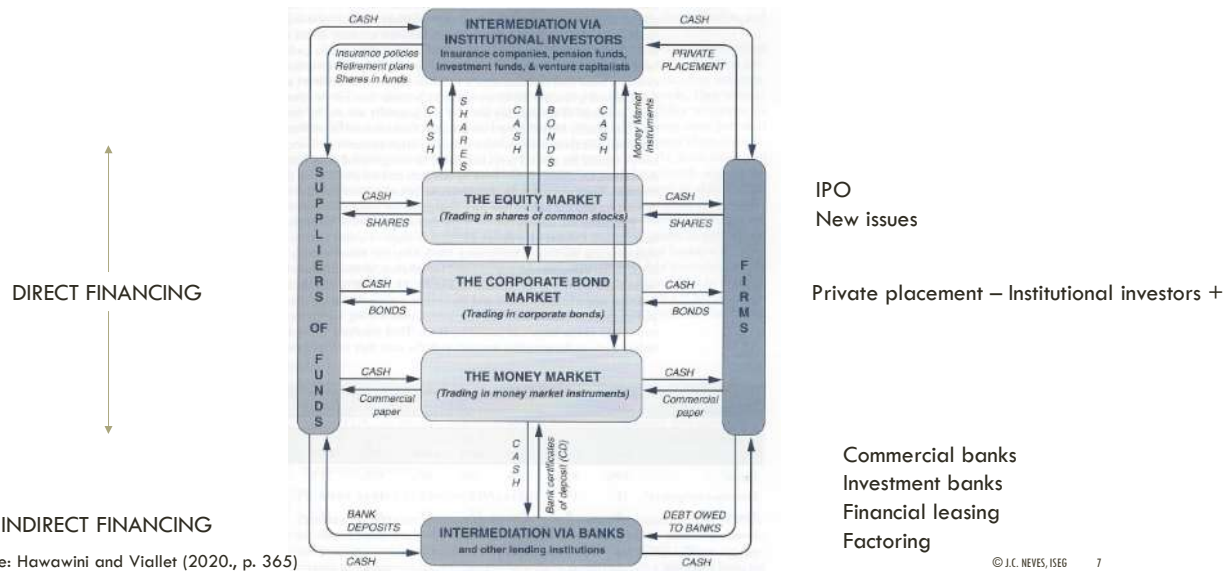
See Excel for an example

## MAIN SOURCES OF BUSINESS FINANCE

LONG-TERM	MEDIUM-TERM	SHORT-TERM
<i>Finances the whole business over many years</i>	<i>Finances major projects or assets with a long-life</i>	<i>Finances day-to-day trading of the business</i>
<i>Examples:</i>	<i>Examples:</i>	<i>Examples:</i>
Share capital Retained profits Venture capital Mortgages Long-term bank loans	Bank loans Leasing Hire purchase Government grants	Bank overdraft Trade creditors Factoring

Source: Tutor2you

# THE FINANCIAL SYSTEM



## RELATIVE SHARE OF ASSETS HELD BY FINANCIAL INSTITUTIONS IN THE US FROM 1860 TO 2017

Types of Financial Intermediary	1860	1900	1939	1970	1980	1990	2000	2010	2017
Banks <sup>2</sup>	89%	81%	65%	56%	56%	42%	29%	29%	29%
Insurance companies <sup>3</sup>	11	14	27	18	15	16	14	12	11
Pension funds	0	0	2	15	19	24	26	25	24
Investment funds	0	0	2	4	4	10	22	22	27
Other	0	5	4	7	6	8	9	12	9
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<b>Total (in billions of US dollars)</b>	<b>\$1</b>	<b>\$16</b>	<b>\$129</b>	<b>\$1,809</b>	<b>\$5,061</b>	<b>\$13,486</b>	<b>\$32,831</b>	<b>\$58,858</b>	<b>\$82,426</b>

<sup>1</sup> From 1860 to 1980, adapted from Kaufman and Mote, *Economic Perspectives* (pp. 2–21, May/June 1994), Federal Reserve Bank of Chicago. From 1990 to 2017, from the Board of Governors of the Federal Reserve System, *Flow of Funds Account*.

<sup>2</sup> Includes commercial and savings banks.

<sup>3</sup> Includes life, property, and casualty insurance companies.

## SECURITIES MARKETS

### • Primary and secondary markets

#### • Equity markets

- Stock exchanges – regulated markets supervised by the Exchange Stock Commission
  - Listed companies that meet the stringent conditions to be listed (or quoted)
  - Dealers - trade shares they own
  - Brokers – trade on behalf of a third party and do not own shares
- Over-the-counter markets – unlisted securities – smaller companies – dealers over the phone or by computer
- Institutional investors – Insurance companies, Pension funds, Investment funds

#### • Debt securities market or credit market

- Money market – maturity less than one year;
- Corporate notes – maturity between 1 and 5 years
- Bond market – corporate bonds exceeding 5 years maturity
- Green bond -

## USING DEBT CAPITAL MARKETS TO FUND CLIMATE SOLUTIONS

Green bonds were created to fund projects that have positive environmental and/or climate benefits.

The majority of the green bonds issued are green “use of proceeds” or asset-linked bonds.

Proceeds from these bonds are earmarked<sup>1</sup> for green projects but are backed by the issuer’s entire balance sheet.

There have also been green “use of proceeds”<sup>2</sup> revenue bonds, green project bonds and green securitised bonds.

1. Money is set aside for a specific purpose.
2. A short document that summarizes how a company that aims to secure additional capital is going to spend the funds



## Green Bond Principles

Voluntary Process Guidelines for Issuing Green Bonds

June 2018

Green Bonds enable capital-raising and investment for new and existing projects with environmental benefits.

- The Green Bond Principles (GBP), updated as of June 2018, are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond market by clarifying the approach for issuance of a Green Bond.
- The GBP are intended for broad use by the market: they provide issuers guidance on the key components involved in launching a credible Green Bond;
- they aid investors by ensuring availability of information necessary to evaluate the environmental impact of their Green Bond investments;
- and they assist underwriters by moving the market towards standard disclosures which will facilitate transactions.

## MAIN ISSUERS OF GREEN BONDS

Financial and non-financial corporate issuers have been the biggest source of green bonds in every quarter since Q3 2018

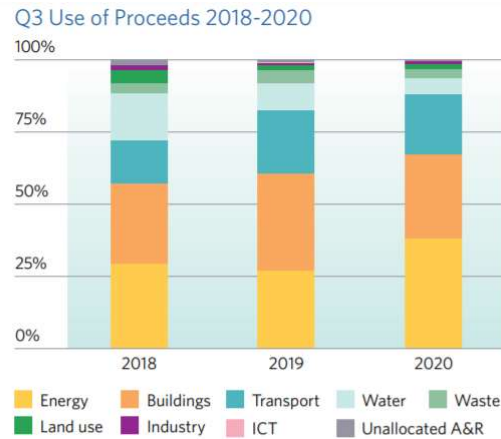
Q3 Issuer types 2018-2020



ABS – Asset-backed security which is collateralized by a pool of assets

## MAIN INDUSTRY ISSUERS

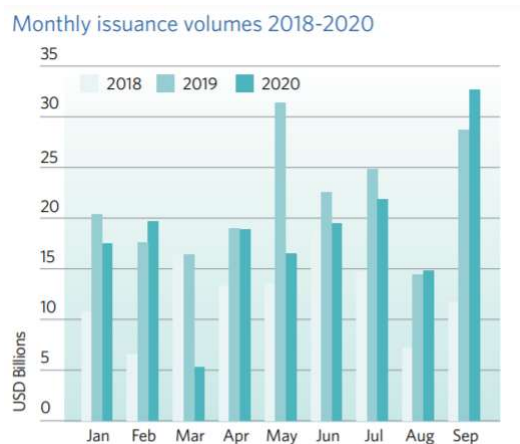
Energy (renewable energy), building (sustainable building) and transport (electric vehicles)



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## EVOLUTION IN 3 YEARS

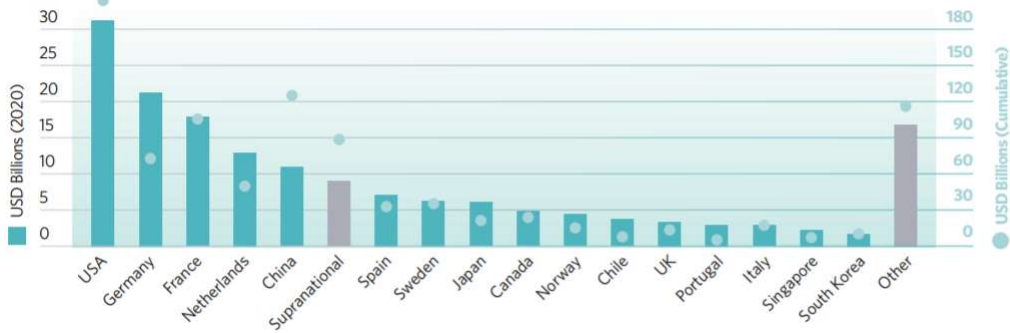
The global green bond issue exceeded \$ 250 billion in 2019, still representing a small share of the global bond market - about 3,5% of the total global bond issue (\$ 7.15 trillion).



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The country rankings for 2020 to the end of Q3 are led by USA (USD32.3bn), Germany (21.4bn) and France (17.8bn). While Chinese issuance (USD9bn) still has a way to go to meet its total for 2019 (USD31.4bn), it remains the country with the second largest cumulative total (USD105bn) after the USA (USD205bn)

Top 2020 countries: Amount issued (2020 vs. Cumulative)



The largest of these were German auto manufacturers **Daimler** and **Volkswagen**, both of which issued green bonds to support their transition to electric vehicles. EDP is the main issuer in Portugal

## EDP GREEN BONDS ISSUED IN 2020

**EDP issues a €750 million 7-year green bond**

TUESDAY 07, APRIL 2020

EDP issues a €750 million 7-year green bond

**EDP issues a €600 million 7-year bond**

WEDNESDAY 11, SEPTEMBER 2019

EDP issues a €600 million 7-year bond

**EDP issues a U.S.\$850 million 7-year green bond**

THURSDAY 17, SEPTEMBER 2020

EDP issues a U.S.\$850 million 7-year green bond

**EDP issues first EUR 600 million green bond maturing in October 2025**

TUESDAY 09, OCTOBER 2018

EDP issues first EUR 600 million green bond maturing in October 2025

**EDP Green Bond Framework:**

[https://www.edp.com/sites/default/files/edp\\_green\\_bond\\_framework\\_october\\_2018\\_vfinal\\_revisao\\_2019.pdf](https://www.edp.com/sites/default/files/edp_green_bond_framework_october_2018_vfinal_revisao_2019.pdf)



## KEY FIGURES OF GREEN BONDS

- \$US 69.4bn of issuance, the highest recorded in any third quarter period
- 314 deals from 191 individual issuers
- 52 benchmark issues of at least US\$ 500m
- Representation from 39 countries including 71 deals from the USA, 48 from Germany, 40 from Sweden, and 30 from Japan
- 73 debut green bond issuers from 29 countries

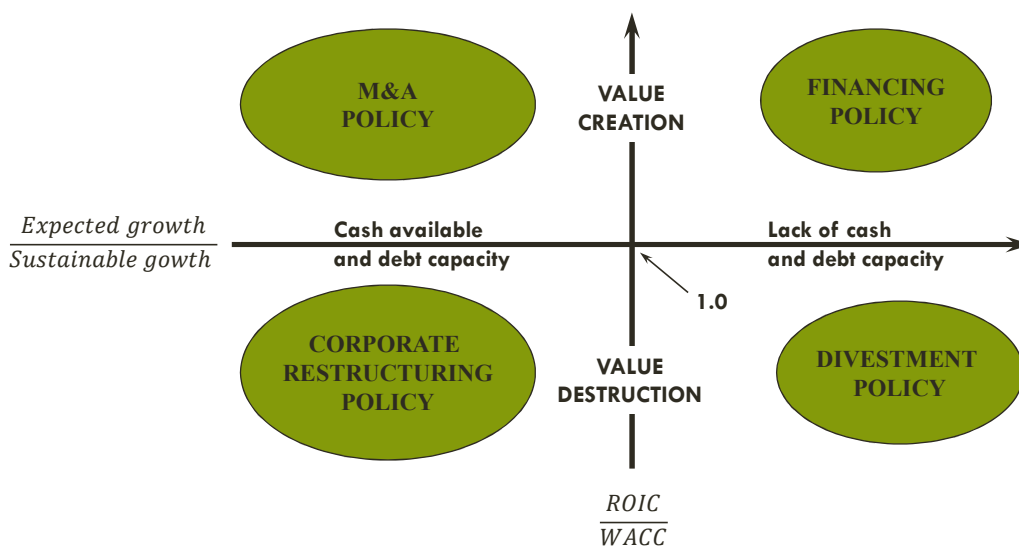
## LONG-TERM VS. SHORT-TERM FINANCING

	SHORT-TERM	LONG-TERM
Easy access		
Cost: watch the steepening and flattening Yield Curves		
Flexibility		
Stability		

## EQUITY VERSUS DEBT

	EQUITY	DEBT
High volatility of sales, operational profitability and operational cash flow	✓	
High operational and net profits		✓
High inflation		✓
High level of debt	✓	
Share price overvalued	✓	

## MATRIX GROWTH/VALUE AND CORPORATE POLICY



## HOW TO STRUCTURE THE LONG-TERM FINANCING

- Calculate the ratios of Matrix Growth/Value
- Identify the most relevant risk exposures  
(both from the treasurer and the controller)
- Identify desirable characteristics for the financial policy and priorities
- Identify and list the investor's clientele and other financiers (actual and potential)
- Be attentive to the evolution, aptitude and market conditions
- Combining all aspects and decide the financial policy

## RELEVANT EXPOSURES TO RISK FROM THE POINT OF VIEW

### TREASURER

- Interest rate risk
- Currency exchange risk
- Default risk



### CONTROLLER

- Business risk
- Financial risk



## DESIRABLE ATTRIBUTES FOR FINANCIAL PRODUCTS

	Objetives and concerns	Desirable attributes to financing
Treasurer		
Controller		

## TABLE FOR SUMMARY

Clientele			Attention +/-	Aptitude +/-	Market conditions
Geography	Sector	Instrument			
National	Stock exchange	Equity			
	F. Institutions	Debt			
	Public				
	Private				
International	Stock exchange	Equity			
	F. Institutions	Debt			
	Public Country				
	Private Country				
	Euro-debt				
	Euro-bond				

## DESIGNING THE FINANCING POLICY

