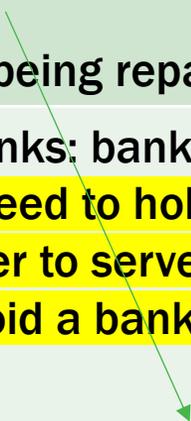


3.2 Money creation (*)

Cash money (also called public money)	Scriptural money (also called private money)
Issued by central banks (monopoly!)	Issued by commercial banks (to their customers) Issued by central banks (to commercial banks)
Money creation: bringing additional cash money into circulation (**)	Money creation: granting new loans
Money destruction: taking money out of circulation	Money destruction: loans are being repaid
When banknotes emerged, all banknotes were “backed” by gold (or other precious metals, such as silver)	Restriction for commercial banks: banks can create scriptural money, but banks need to hold a minimum cash reserve in order to serve their customers (this in order to avoid a bank run)
As the economy grew, the gold standard disappeared, banknotes are now backed by the central bank guarantee of “legal tender” >>> banknotes = now fiduciary money	 <p>PROFIT MODEL!</p>

(*) M3 was +/- 16.000 billion € in 2023

(**) In the eurozone, cash money is put into circulation by the national banks

Extra: profit model of commercial banks



Influenced by the **interest rates of the central bank** that are applicable to commercial banks lending money in case of money shortage to grant loans

Influenced by the **interest rates of the central bank** that are applicable to commercial banks depositing money in case of money surpluses

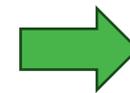
MONETARY POLICY INSTRUMENTS: *see later*

The principle of scriptural money creation

(Simplified) balance sheet of commercial bank ABC

ASSETS		LIABILITIES	
Cash reserve	10 billion €	Deposits initial customers	10 billion €
Loans	90 billion €	Deposits new customers	90 billion €
Total	100 billion €	Total deposits	100 billion €

1) Starting-point: customers deposit money (10 billion €); the money is put in the cash reserve (= assets) and appears as deposits (bank accounts = liabilities)



**CASH
MONEY**

2) Assumption: ABC needs to hold minimum 10% of all deposits in cash

3) The combination of 1) and 2) results in the possibility for ABC to create loans at a maximum of 90 billion € (loans = assets; deposits of new customers = liabilities)



**SCRIPTURAL
MONEY**

The principle of scriptural money creation

(Simplified) balance sheet of commercial bank ABC

ASSETS		LIABILITIES	
Cash reserve	10 billion €	Deposits initial customers	10 billion €
Loans	90 billion €	Deposits new customers	90 billion €
Total	100 billion €	Total	100 billion €

Formulas:

Total deposits:

CR

$$D = \frac{\text{CR}}{\text{mcr\%}}$$

$$100 = 10 / 10\%$$

Scriptural money created :

$$\text{SMC} = D - \text{CR}$$

$$90 = 100 - 10$$

Link to monetary policy (see later)

If central banks adopt a RESTRICTIVE MONETARY POLICY	If central banks adopt a EXPANSIONARY MONETARY POLICY
<p>This means: restricting money creation</p> <p>The mcr% will be increased; this will reduce the commercial banks' possibility to create scriptural money</p>	<p>This means: facilitate money creation</p> <p>The mcr% will be lowered; this will increase the commercial banks' possibility to create scriptural money</p>

Example ABC:

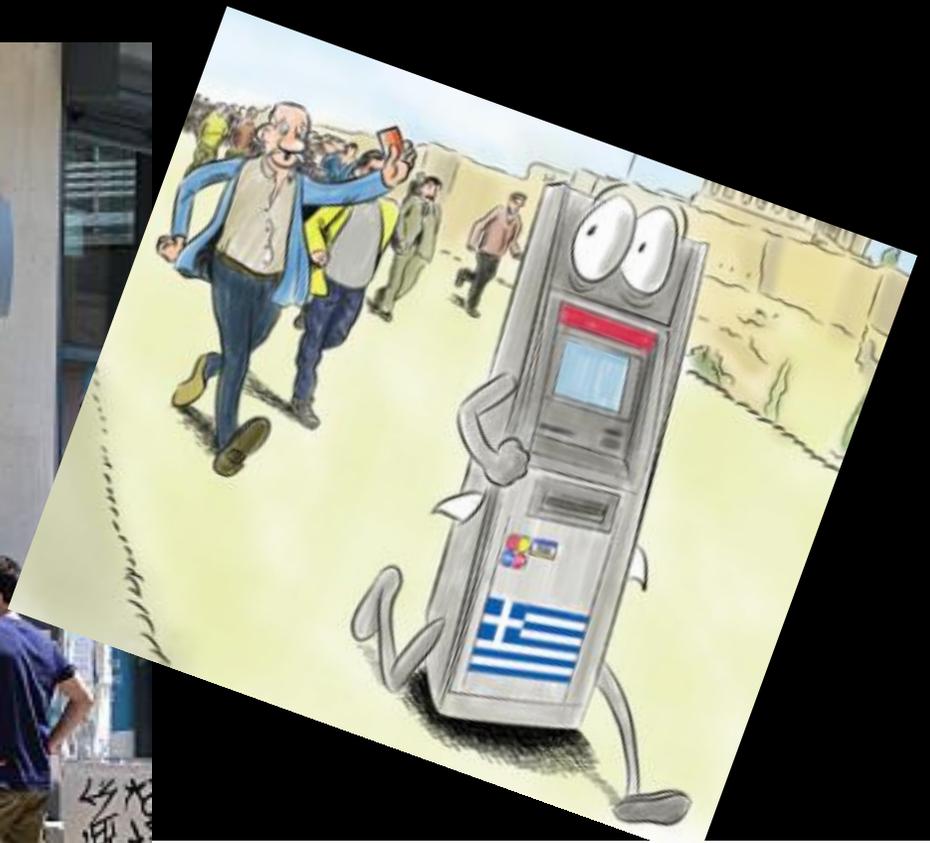
mcr% increases from 10% to 20%

$$D = 50 = 10 / 20\%$$
$$SMC = 50 - 10 = 40$$

Example ABC:

mcr% decreases from 10% to 5%

$$D = 200 = 10 / 5\%$$
$$SMC = 200 - 10 = 190$$



Why bankrun?

How avoid bankrun?

How save bank:

4. MONEY MARKETS

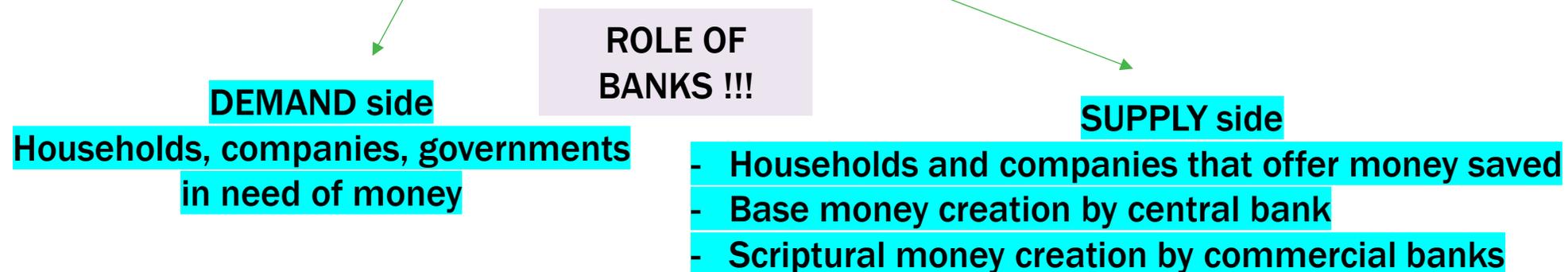
4.1 WHAT IS THE MONEY MARKET?

The money market is the market where short-term funds are traded.

WHO? financial institutions and other traders in money or credit

WHAT? who wish to either borrow or lend

HOW LONG? participants borrow and lend for short periods, typically up to twelve months



4.2 THE PRINCIPLE OF MONEY CREATION BY CENTRAL BANKS

(Simplified) balance sheet of central bank XYZ

ASSETS	LIABILITIES
1 Reserves foreign currencies	5 Cash money in circulation
2 Gold reserves (monetary reserves)	
3 Government bonds	
4 Loans to commercial banks	6 Deposits commercial banks
Total	Total BASE MONEY

1:

4:

2:

5:

3:

6:

The principle of money creation by central banks

BASE MONEY SUPPLY INCREASES:

More money is put in circulation
(LIABILITIES INCREASE) because:

- Foreign currency reserves increase (ASSETS INCREASE)
- Gold reserves increase (ASSETS INCREASE)
- Government bonds increase (ASSETS INCREASE)
- Loans to commercial banks increase (ASSETS INCREASE)

ASSETS		LIABILITIES	
1 Reserves foreign currencies		5 Cash money in circulation	
2 Gold reserves (monetary reserves)			
3 Government bonds		6 Deposits commercial banks	
4 Loans to commercial banks			
Total		Total	BASE MONEY

The principle of money creation by central banks

BASE MONEY SUPPLY DECREASES:

Less money is put in circulation
(LIABILITIES DECREASE) because:

- Foreign currency reserves decrease (ASSETS DECREASE)
- Gold reserves decrease (ASSETS DECREASE)
- Government bonds decrease (ASSETS DECREASE)
- Loans to commercial banks decrease (ASSETS DECREASE)

ASSETS		LIABILITIES	
1 Reserves foreign currencies		5 Cash money in circulation	
2 Gold reserves (monetary reserves)			
3 Government bonds			
4 Loans to commercial banks		6 Deposits commercial banks	
Total		Total	BASE MONEY

5. CAPITAL MARKETS

5.1 WHAT IS THE CAPITAL MARKET?

The capital market is the market where securities such as shares and bonds are traded.

WHO? investors and other traders in shares and bonds

WHAT? participants who need capital and participants who offer capital

HOW LONG? participants invest in financial products with a medium-term or long-term lifespan

DEMAND side

Example: companies needing capital to finance investments

Example: governments needing capital to finance budget

ROLE OF STOCK MARKET !!!

SUPPLY side

Example: households buying shares and bonds
Example: insurers, fund managers and other investors buying shares and bonds

5.2 THE DIFFERENCE BETWEEN BONDS AND SHARES



VS



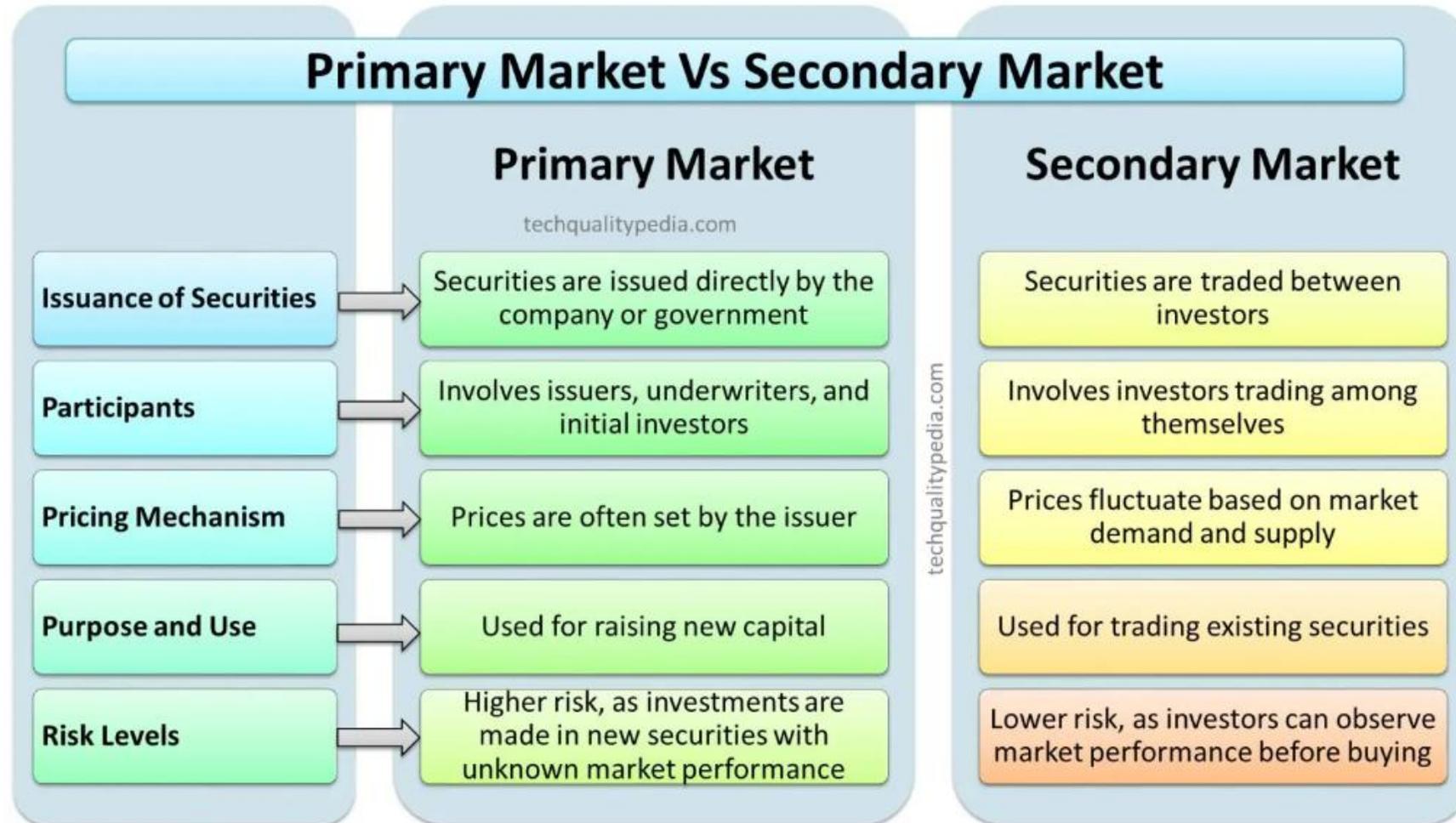
BONDS

- ✓ Issues of debt
- ✓ Debt that is made with an investor for cash in exchange for payouts of interest
- ✓ Typically traded over the counter (OTC)
- ✓ Generally lower risk, lower reward
- ✓ Since 1929 have earned around 6% each year
- ✓ Can be made as corporate, municipal, or treasury bonds

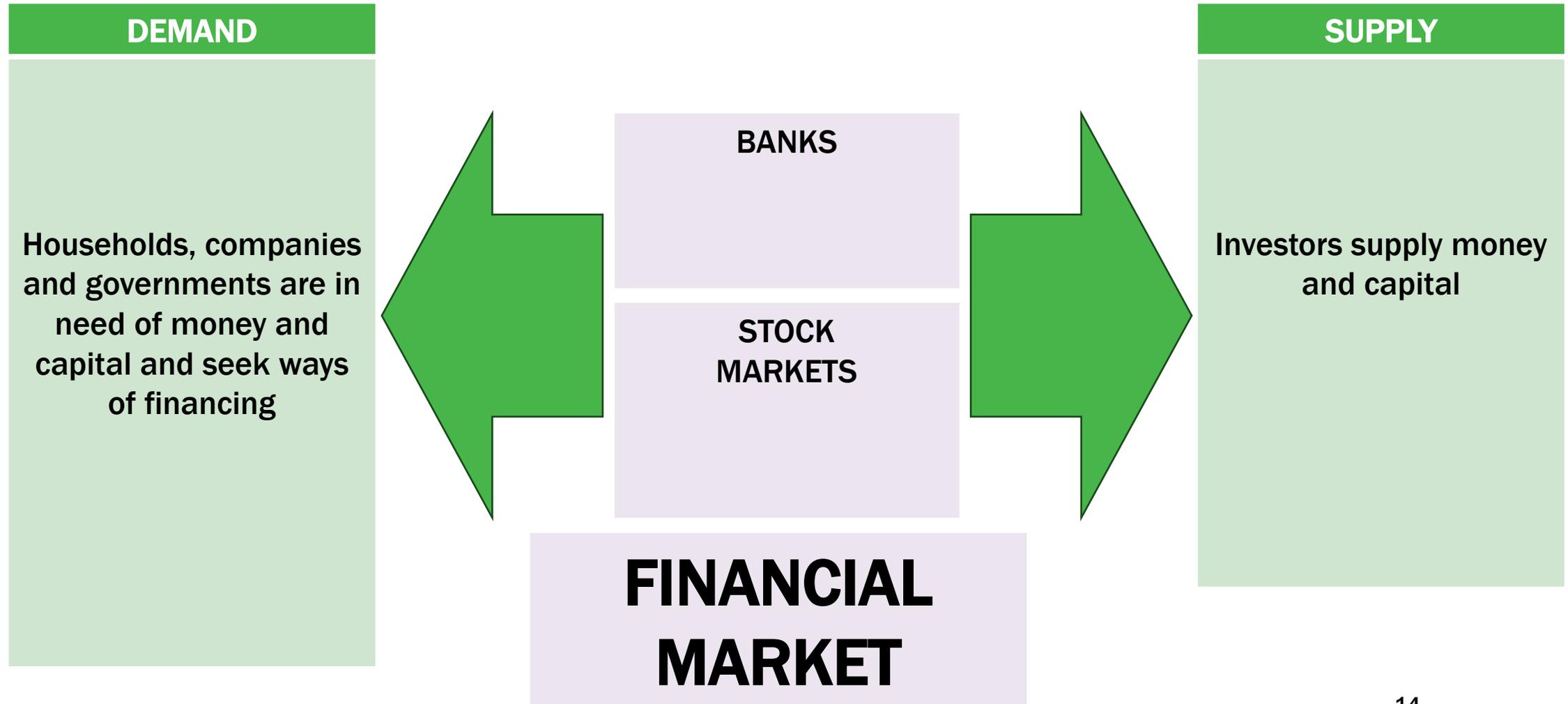
SHARES

- ✓ Issues of a stake of ownership in a company
- ✓ A claim to a company's assets and earnings that often gives the investor voting rights and pays **dividends**
- ✓ Typically traded through a central exchange (like NYSE)
- ✓ Generally higher risk, higher reward
- ✓ Since 1929 have earned around 10% each year

5.3 THE PRINCIPLE OF PRIMARY AND SECONDARY MARKETS



5.4 INTERMEDIARY ROLE OF BANKS AND STOCK MARKETS = FINANCIAL MARKET



Example	DEMAND	SUPPLY	Intermediary role
Households investing in new home	Mortgage loan	Money of savers	BANKS
Companies investing in expansion	Investment credit	Money of savers	BANKS
	Selling shares (capital increase)	Investors	STOCK MARKETS
	Selling bonds (private bond loan)	Investors	STOCK MARKETS
Government financing debt	Selling bonds (government bond loan)	Investors	STOCK MARKETS

The intermediary role of banks and stock markets = financial market is crucial because they provide

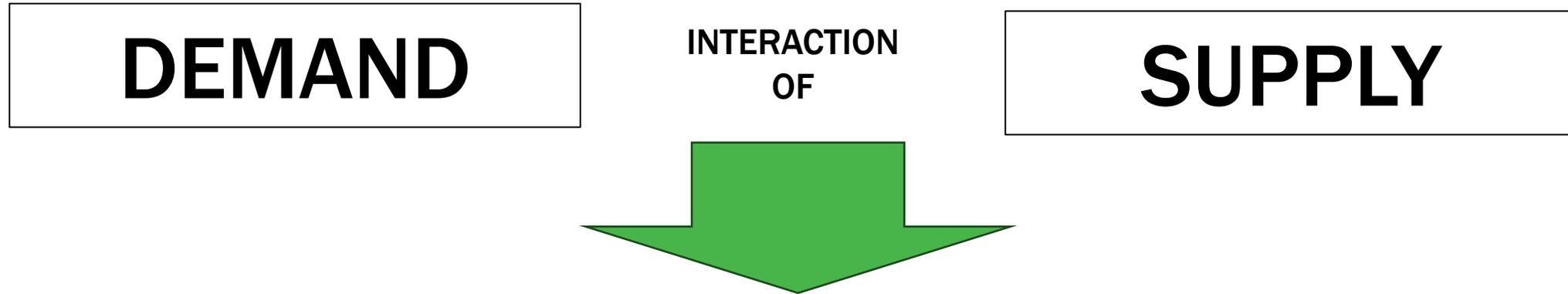
MONEY + CAPITAL = OXYGEN

for economic growth

Remark:

Technically speaking, the financial market also includes foreign currency market

5.5 PRICE ON MONEY AND CAPITAL MARKETS



PRICE OF MONEY AND CAPITAL
Short-term interest
Long-term interest
Share price

Remark:

Price of money and capital is also influenced by the monetary policy of the central bank

PRICE OF MONEY AND CAPITAL	EXPLANATION
SHORT-TERM INTEREST	<p>Short-term interest rates apply to money borrowed for a short period (a few months or a year)</p> <p>Example: 1-year interest = 2,79% (8/1/2025)</p>
LONG-TERM INTEREST	<p>Long-term interest rates are based on government bonds (10-year interest)</p> <p>Example: 10-year interest = 3,05% (8/1/2025)</p>
SHARE PRICE	<p>Price of a single share on the stock market</p> <p>A stock market index indicates the price average of the company shares included in it. The share price of larger companies weighs more heavily in this respect than that of smaller companies. Well-known examples of stock market indices are the Dow Jones and the BEL-20</p>

Remark:

The link between interest rates and inflation will be dealt with later on

The principle of a share price

The price is created by the demand and supply of a particular share.

When demand for a share is high but supply remains the same, its price will rise. Similarly, when the supply of a share falls, but demand remains the same, prices rise.

For falling prices, the opposite is true; then demand falls or supply rises.

Demand for certain shares may vary for various reasons.

- * company performance
- * the general economic trend (including interest rate levels)
- * investor confidence

5.6 UNDERSTANDING THE FINANCIAL NEWS

Nieuwe staatsbon op 1 jaar brengt netto 1,93 procent op

De nieuwe staatsbon op 1 jaar waar je vanaf donderdag kan op intekenen heeft een netto rendement van 1,93 procent. Dat laat het Federaal Agentschap van de Schuld weten.

Compact translation in English:

Explanation:

Rente op spaarboekjes in België lager dan in de meeste eurolanden

De gemiddelde rente die Belgische banken gaven op spaarrekeningen in november 2024 lag, met 1,03 procent, lager dan in de meeste andere eurolanden. Dat zegt Eric Dor, professor aan de IÉSEG School of Management.

Voor de professor weerspiegelt dit de strategie van Belgische banken om te profiteren van passieve spaarders “die hun geld op gereguleerde spaarrekeningen laten staan zonder te reageren op de zeer lage rente” en om alleen te concurreren op termijnrekeningen om dynamische spaarders aan te trekken die op zoek zijn naar een goed rendement.

Compact translation in English:

Explanation:

Variabel lenen blijft duurder dan lenen met vaste rente

In normale omstandigheden is het goedkoper een hypothecaire lening af te sluiten met een jaarlijks aanpasbare rente dan met een vaste rente. Dat heeft onder meer te maken met het normale verloop van de rentecurve waarbij de kortetermijnrente - die de basis vormt voor de leningen met variabele rente - beduidend lager ligt dan de langetermijnrente. Banken zijn bij een variabele rente ook veel beter ingedekt tegen stijgingen van de marktrente, omdat hogere rentes doorsijpelen in het tarief dat de klant betaalt.

Compact translation in English:

Explanation:

Obligatie: schatkist geeft nieuwe staatsbons uit

(ABM FN) België geeft op 4 december nieuwe staatsbons uit. Dit maakte het Federaal Agentschap van de Schuld donderdagmiddag bekend.

Het gaat om een staatsbon op 1 jaar en een staatsbon op 8 acht jaar.

Op donderdag 21 november 2024 zal voor elke staatsbon de coupon vastgesteld worden.

Compact translation in English:

Explanation:

The image shows the VodafoneZiggo logo in the background, which is a red and white circular emblem. The foreground shows a blurred office interior with glass partitions and modern lighting.

VodafoneZiggo lanceert succesvol tweede groene obligatie ter ondersteuning van duurzaamheidsstrategie

VodafoneZiggo heeft de succesvolle uitgifte afgerond van zijn tweede groene obligatie. Daarmee heeft het bedrijf 575 miljoen euro opgehaald om de duurzaamheidsstrategie van het bedrijf verder te ondersteunen. Na de uitgifte van zijn eerste groene obligatie in 2020 blijft VodafoneZiggo zich inzetten voor de financiering van duurzame projecten. Onder het Green Bond Framework garandeert VodafoneZiggo dat het equivalent van de opbrengst binnen 36 maanden wordt toegewezen aan projecten, die in lijn zijn met de klimaat- en milieudoelstellingen van het bedrijf.

Compact translation in English:

Explanation:

Beursgang moet Coolblue verder helpen groeien

Webwinkel Coolblue wil deze maand een beursgang maken in Amsterdam. Daarbij geeft het bedrijf nieuwe aandelen uit en verkopen ook bestaande aandeelhouders stukken. Met de opbrengst van de aandelenverkoop wil Coolblue verdere groei financieren. Het is de bedoeling dat met de uitgifte van nieuwe aandelen 150 miljoen euro wordt opgehaald.

Compact translation in English:

Explanation:

Amerikaanse langetermijnrente tikt kaap van 5 procent aan en dat doet beurzen bloeden

De rente op Amerikaanse tienjarige staatsobligaties is voor het eerst in 16 jaar boven de kaap van 5 procent gestegen. Dat is in de eerste plaats slecht nieuws voor de beurzen, die vandaag diep in het rood doken, maar ook voor bedrijven, overheden en op termijn ook voor gewone burgers.

Compact translation in English:

De Bel20, de korf met de 20 belangrijkste aandelen op de beurs van Brussel, is vandaag tot op het diepste niveau in drie jaar tijd gezakt. Aanleiding is de Amerikaanse langetermijnrente die voor het eerst sinds 2007 – het begin van de grote kredietcrisis – boven de psychologische grens van 5 procent is geklommen.

Explanation:

De rente op Amerikaanse staatsobligaties met een looptijd van 10 jaar is een belangrijke indicator voor de financiële markten. Beleggers vermoeden dat de hoge rente nog een lange tijd zal aanhouden, ook door het beleid van de Amerikaanse en Europese centrale banken, die door de hoge rente de inflatie de kop in willen drukken.

Lage rente 2024 leidt al tot all-time high Nederlandse beurs

En jij maar denken dat het slecht ging op de Nederlandse beurs. Niet dus. Er is een record gebroken: AEX-index is hoger dan ooit. En dat lijkt te danken aan de verwachting van lagere rentetarieven.

Compact translation in English:

Explanation: