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The Banking Activity

The Banking Activity

1. What is a bank?
2. What does a bank do?
3. When does a bank fail?
4. The last financial crisis
5. The global banking scenario



1. What is a bank?



What?
financial assets



Who?
financial institutions



Where?
financial markets

The Spanish Financial System



Banks

**Credit
Institutions**

**Stock
brokers**



**Insurance
companies**

**Leasing
companies**

**Securities
agencies**

**Pensión
funds**

**Investment
funds**

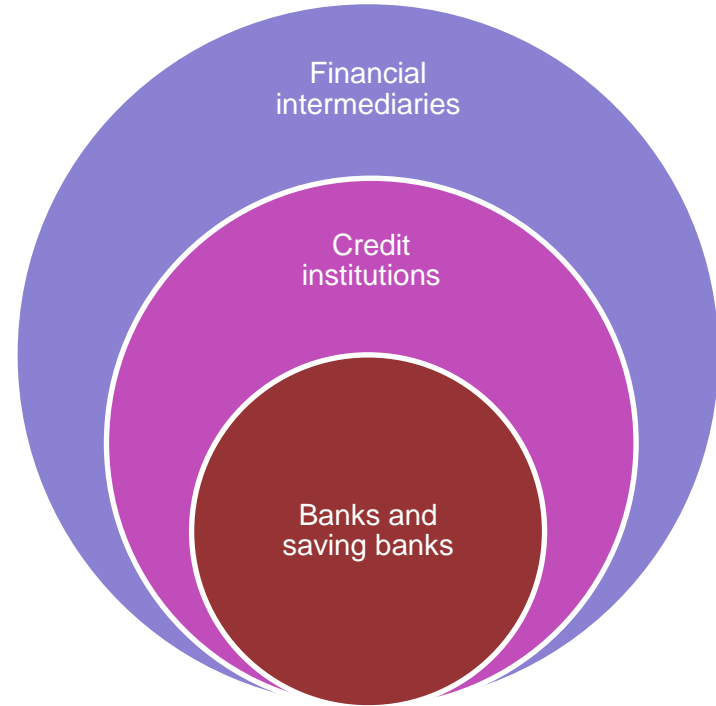
1. What is a bank?

Credit Institutions

1. Official Credit Institute
- 2. Banks**
3. Saving Banks and Spanish Confederation of Saving Banks
4. Credit Unions
5. Financial Credit Establishments
6. Electronic money institutions

1. What is a bank?

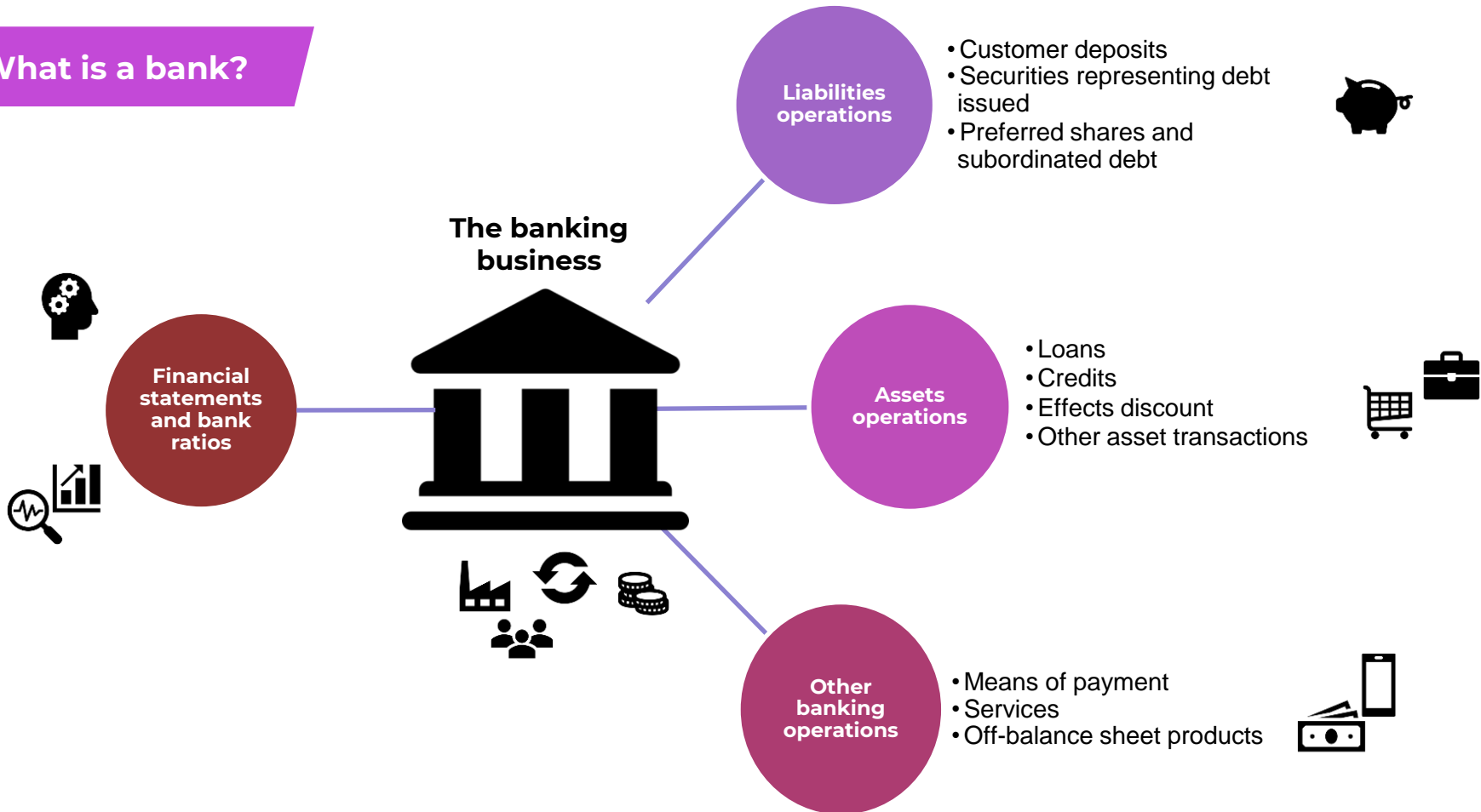
Banks and saving banks are classified within credit institutions. They receive and have in their custody deposits and grant loans or credits to others



Banking system

Set of banking entities (banks and savings banks) that operate within an economy

1. What is a bank?



2. What does a bank do?

- 1) **Banking intermediation**
- 2) **Payment processing**
- 3) **Creating money**
- 4) **Transmitting monetary policy**

2. What does a bank do?



1) **Banking intermediation** matching up creditors and borrowers by **taking in deposits & lending loans**

- Fundraising or **liability operations** through liability products (current accounts, deposits...)
- Investment or **asset operations** through asset products (loans, credits, discount of effects ...)

2. What does a bank do?

Support customers in collections / receipts and payments

- ✓ from buyers to sellers
- ✓ from employers to employees
- ✓ from taxpayers to governments

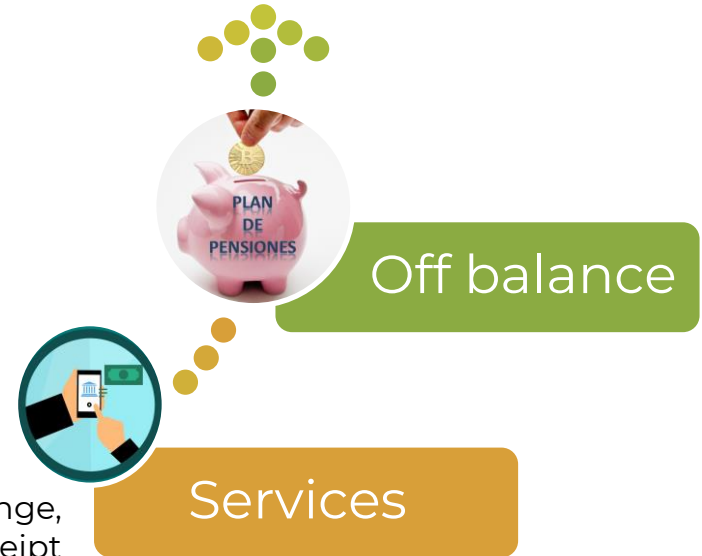
Payment system - complex network

- Local, national, and international banks
- Government central banks
- Private clearing facilities that match up what banks owe each other

Transfers, checks, bills of exchange, international payment service, receipt management, payroll service, debit and credit cards...

2) Payment processing

Insurance
Pension plans
Investment funds



2. What does a bank do?

3) Creating money

The banking system as a whole **creates bank money**

Deposits: are not required all at once →

- A small percentage to reserves (in the government central banks):
Minimum Reserve Ratio (MRR)
- The remainder for loans that return to the banking system as new deposits



2. What does a bank do?

How much bank money can you create with an initial € 100?

The **bank money multiplier** is equal to the inverse of the minimum reserve ratio (MRR)

Up to what limits can banks create bank money?

$M = \frac{1}{CRM}$ ¿Por qué?

Si $CRM = 2\% \rightarrow \begin{cases} 2\% \text{ a reservas} \\ 98\% \text{ en circulación} \end{cases}$

DEPOSITADO	→	En circulación
100	→	$0.98 \cdot 100 = 98$
$0.98 \cdot 100$	→	$0.98^2 \cdot 100 = 96.04$
$0.98^2 \cdot 100$	→	$0.98^3 \cdot 100 = 94.12$
$0.98^3 \cdot 100$	→	$0.98^4 \cdot 100 = 92.24$
⋮		⋮

Total dinero = $100 + 0.98 \cdot 100 + 0.98^2 \cdot 100 + 0.98^3 \cdot 100 + 0.98^4 \cdot 100 + \dots = 100 (1 + 0.98 + 0.98^2 + 0.98^3 + 0.98^4 + \dots)$ \ominus

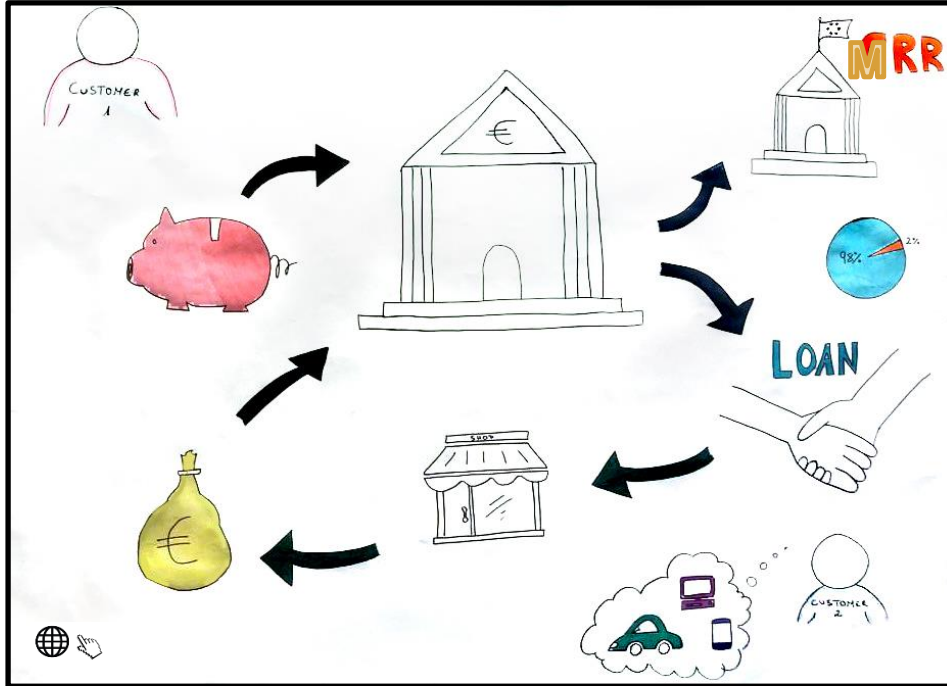
sucesión geométrica decreciente de razón $r = 0.98$

SUMA de sus INFINITOS TÉRMINOS $S = \frac{a_1}{1-r} = \frac{100}{1-0.98} = \frac{100}{0.02} = 5000$

$\ominus 100 \times \frac{1}{0.02} = 100 \cdot \frac{1}{\frac{2}{100}} = 100 \cdot \frac{100}{2} = 100 \times 50 = 5000 = M$

$\boxed{M = \frac{1}{0.02} = \frac{1}{CRM} = 50}$

2. What does a bank do?



- A loan passes into the circular flow and becomes deposits, generating new surplus reserves
- A maximum of surplus reserves can be lent
- The banking system, as a whole, increases bank money

The ECB implements EU economic & monetary policy

Aim: to **keep prices stable** (i.e. to safeguard the value of the euro)
⇒ to support economic growth and job creation

The ECB controls money supply and inflation by setting the interest rates at which it lends to commercial banks in the eurozone

Eurosystem's instruments:

- open market operations
- standing facilities
- minimum reserve requirements for credit institutions (MRR)

Source: <https://www.ecb.europa.eu/mopo/implement/html/index.en.html>

3. When does a bank fail?

*When it is unable to repay the deposits
(an obligation it has with its depositors)*

- A matter of confidence:

If depositors and other creditors / investors perceive - right or wrongly- that the bank has problems, they can demand their deposits payment almost immediately

→ “Run on deposits”: fast withdraw of many funds

→ Bank panic atmosphere



3. When does a bank fail?

Main banking financial ratios

Banking Business Guarantees

Liquidity	Profitability	Solvency	Efficiency	Credit quality
<ul style="list-style-type: none">• Be able to convert deposits into cash	<ul style="list-style-type: none">• Generate profits: looking at the return on equity (RoE) and the return on assets (RoA)	<ul style="list-style-type: none">• Have enough equity to absorb losses, regulated by Basel III and evaluated by stress tests	<ul style="list-style-type: none">• Ratio of administration expenses to gross margin	Non-performing loans (NPL) ratios, provisioning effort, cost of risk...

Read more: [Analysing differences in bank profitability: Europe versus the US](#)

Funcas SEFO Vol. 8, No. 2_March 2019

3. When does a bank fail?

Bank bankruptcy safeguards established by regulation

Deposit Guarantee Fund	Reserve requirements	Capital requirements	Risk control	Banking supervision
<ul style="list-style-type: none">• Confidence!	<ul style="list-style-type: none">• Liquidity!	<ul style="list-style-type: none">• Solvency!	<ul style="list-style-type: none">• NPL!	<ul style="list-style-type: none">• Stress test• EBA Control!

4. The last financial crisis



4. The last financial crisis

2007

- Bankruptcy of several [Hedge Funds](#) of Bear Stearns (US investment bank)
- Bankruptcy of Northern Rock (UK bank, specialized in mortgages)
- 100B\$ injection of the central banks of the US, EU and UK
- Liquidity crisis in the markets

2008

- Bankruptcy and rescue of two of the main American mortgage entities
- Bankruptcy of Lehman Brothers, Morgan Stanley and Goldman Sachs
- Bank of America is forced to buy Merrill Lynch
- Rescue of AIG (American International Group, insurance sector) to “avoid” global systemic risk

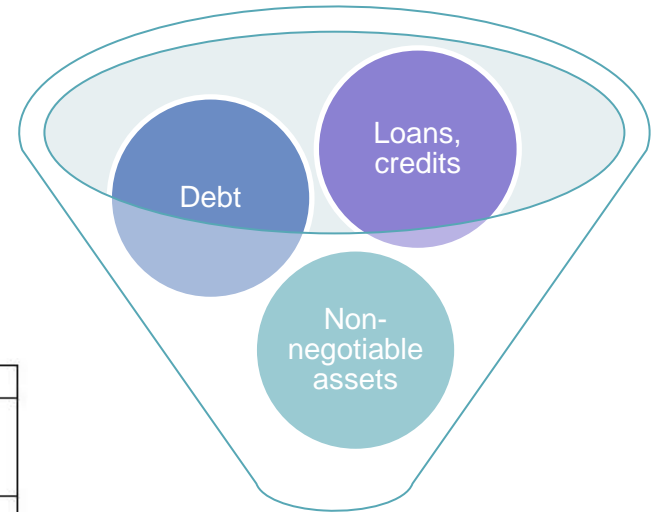
2009/10

- Sovereign debt crisis → Crisis of the eurozone
- Difficulty of growth of European countries
- Increase of the risk premium
- Troika (European Commission, IMF and ECB)

4. The last financial crisis

Securitization

Commercial bank balance sheet	
Assets (what the bank owns & what is owed to the bank)	Liabilities (what the bank owes)
<p>Cash, central bank reserves, bonds etc (liquid assets)</p> <p>Loans the bank has made to its customers (illiquid assets)</p>	<p>Customer deposits</p> <p>Shareholder equity</p>



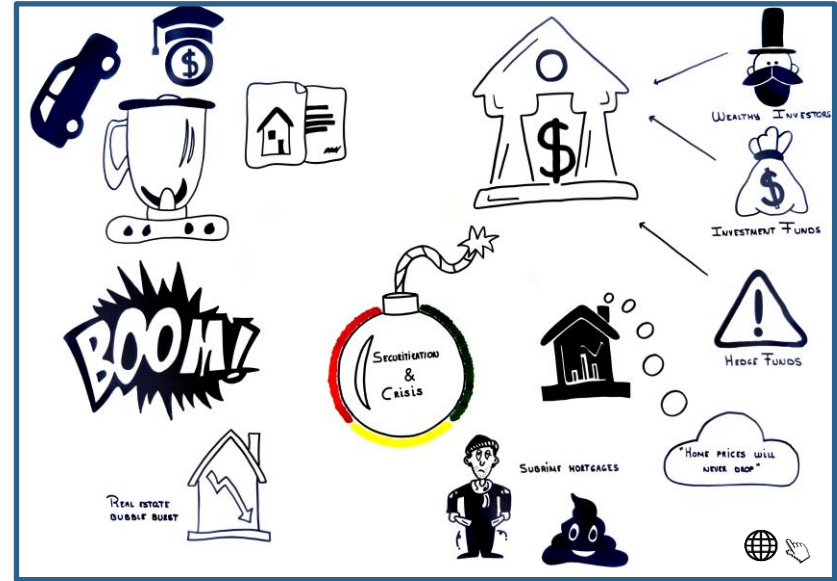
Securitization bonds SPV, CDO
(negotiable instruments)

It allows banks to DUMP the loans and SELL them in the market, to obtain funds that can be lent again!

The assets leaves the balance sheet BUT bank continues to benefit from the profitability generated by them!

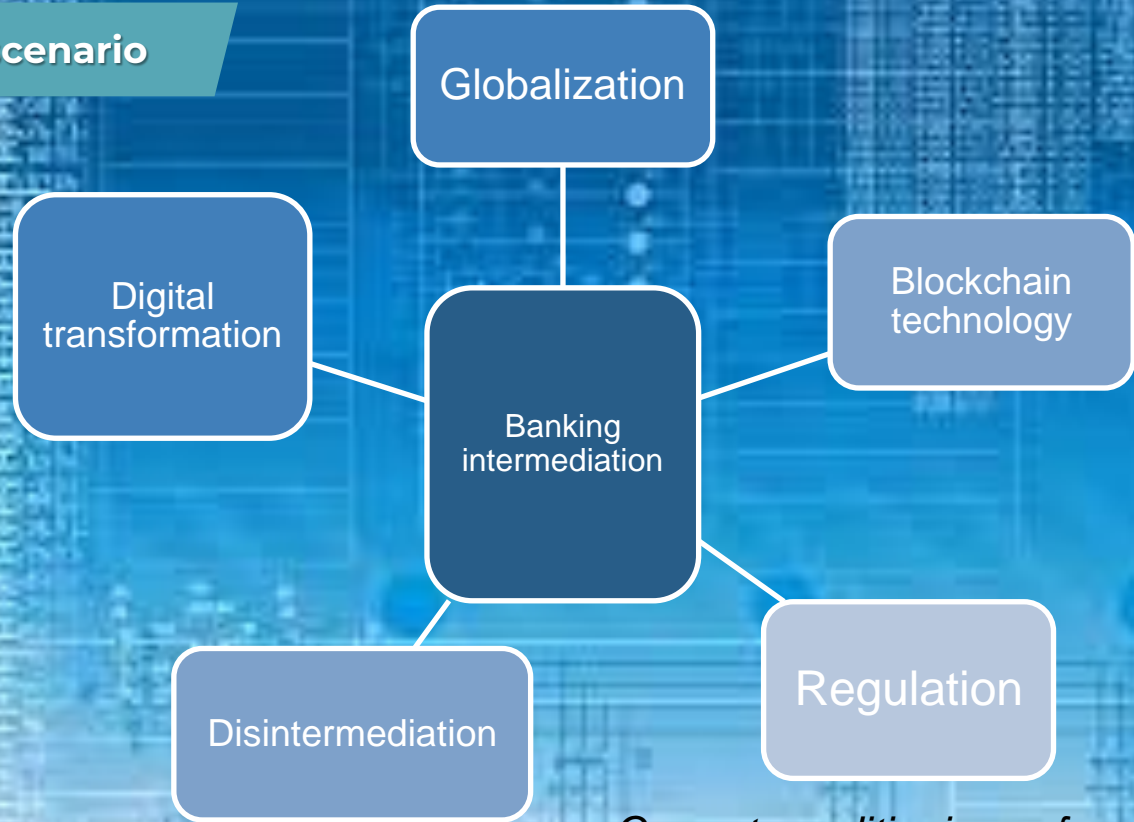
4. The last financial crisis

Securitization



- Issuer: receives cash + reduces the RISK of its business
- Buyer: receives a profit (regular payments)
- Extended practice in USA (since 1985), later in Europe
- Supports the demand for mortgage loans in recent years
- Also effective for financing SMEs

5. The global banking scenario



*Current conditionings of
banking intermediation*

5. The global banking scenario

Globalization

Process of integration of world markets → geographical and functional ~~barriers~~

→ free circulation of investors and international financial flows

Traditional banking

OUTDATED!

- Increase in the size of markets and competitiveness → possibility of cheaper financial products
- Increase in risk, cut in margins, greater debt...
- Linked to financial and banking crises → almost permanent instability of financial markets
- Companies are obliged to improve their information systems
- Adaptation of banking strategies

5. The global banking scenario

Currently the banking sector is **highly regulated**, however, before the last financial crisis:

Regulation



DEREGULATION

Reduction, revision or partial elimination of legislation for the benefit of the markets

NO more **EXCLUSIVITY** of banks on certain products! No more traditional barriers. Greater flexibility

DISINTERMEDIATION

New competitors and the incursion of banks into businesses that were left out

5. The global banking scenario

Disintermediation

Process of loss of presence of traditional financial intermediaries between saving and investing economies



Banks

Traditional intermediaries doing the traditional banking business

Other companies

- State
- Insurance companies
- Securities agencies
- Non financial companies

New banking services

- Competitive environment
- Bursting into new niche markets
- Situations of uncertainty
- New financial products

5. The global banking scenario

Examples of
disintermediation



5. The global banking scenario

NEOBANK



Nano Finance



Blockchain & Digital transformation

e-payment



REGTECH

Regulatory processes through technology

