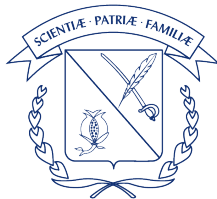


Financial Market

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FAEDIS

2024-07-17



UNIVERSIDAD MILITAR
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7 Banking market or “*Mercado Intermediado*”

8 Acknowledgments

- Check the message **Welcome greeting** published in the News Bulletin Board.
- Dear student please edit your profile uploading a photo where your face is clearly visible.
- The purpose of the virtual meetings is to answer questions and not to make a summary of the study material.
- This presentation is based on (Cardenas 2020, chap. 8)

Analyze the functioning of the financial market, identifying the types of intermediaries and instruments that are part of it

- The financial system is the set of entities whose main function is to channel the money of savers to those who wish to make investments
 - We are only going to focus on supervised financial entities. Therefore entities outside the law or unregulated are not going to be analyzed
 - Also ponzi schemes, pyramids or unregulated investment scheme are not analyzed.
 - However if you are interested in this topic check out ([Carvajal et al. 2009](#)) and ([Hofstetter et al. 2018](#))

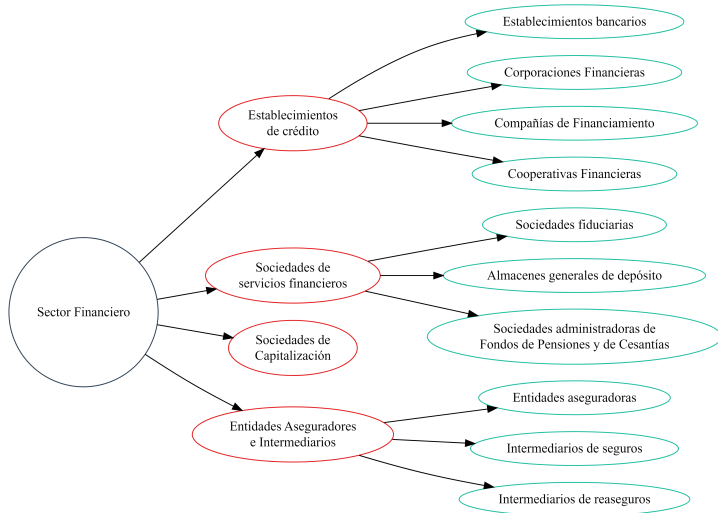


Figure 1: Financial system structure by supervised entities (C. de Colombia 1993)

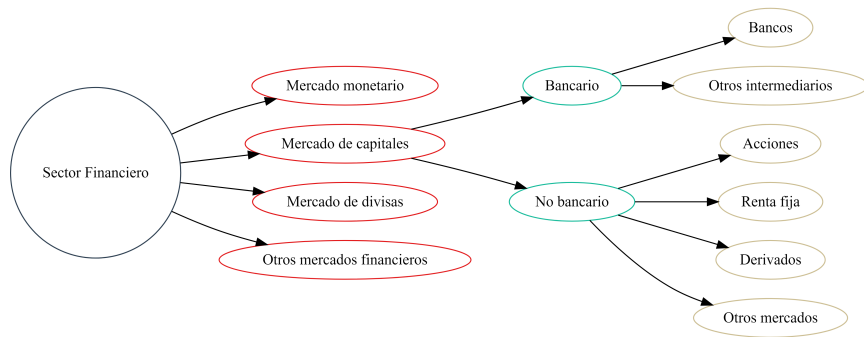


Figure 2: Financial system structure by markets entities (Cardenas 2020, chap. 8, p 264)

- *“Financial depth captures the financial sector relative to the economy. It is the size of banks, other financial institutions, and financial markets in a country, taken together and compared to a measure of economic output” (Bank 2016)*
- How it is measure using quantity indicators?¹
 - **Domestic credit to private sector (% of GDP)**
 - **Market capitalization of listed domestic companies (% of GDP)**
 - Share price times the number of shares outstanding (including their several classes) for listed domestic companies
- According to the literature the *“evidence suggests that both financial intermediaries and markets matter for growth and that reverse causality alone is not driving this relationship” (Levine 2005, p 866)*

¹These indicators doesn't measure the quality of financial depth

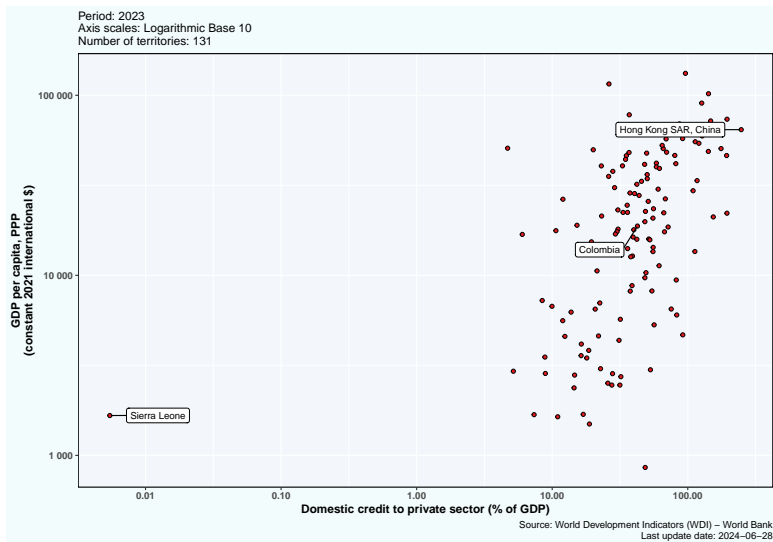


Figure 3: Financial depth vs Gross Domestic Product per-capita

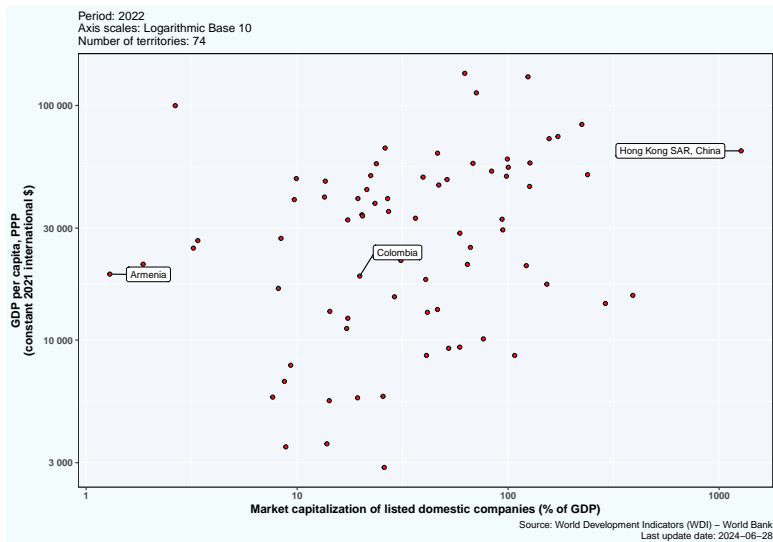


Figure 4: Financial depth vs Gross Domestic Product per-capita

- Financing is essentially the exchange of a sum of money today for a promise to return more money in the future. Therefore it is not surprising that such exchange can be problematic
 - **Information asymmetry:** in an exchange one party has more or better information than the other
 - **Adverse selection**
 - **Moral hazard**

- **Adverse selection** occurs when it is not possible to identify the quality of a product for a party that participates in a transaction. Therefore bad products are sold with good products where the consequence is that bad products take off good products from the market (**Wilson 1987**)
 - In the context of financial markets **adverse selection** occurs when an increase in interest rates induces good debtors to stop requesting loans, so that only those individuals with a higher probability of not paying the loan end up requesting loans

- **Moral hazard** is “*any situation in which one person makes the decision about how much risk to take, while someone else bears the cost if things go badly*” (Krugman 2009, p 63)
 - In the context of financial markets **moral hazard** occurs when debtors take riskier actions that increase the probability of default

- **Fixed income (Renta fija):** provides returns in the form of regular interest payments and repayments of the principal
 - Títulos de tesorería (TES)
 - Debt securities issued by the national government and administered by the Banco de la República.
 - The national government use this instrument to finance its activities
 - Certificados de Depósito a Término (CDT)

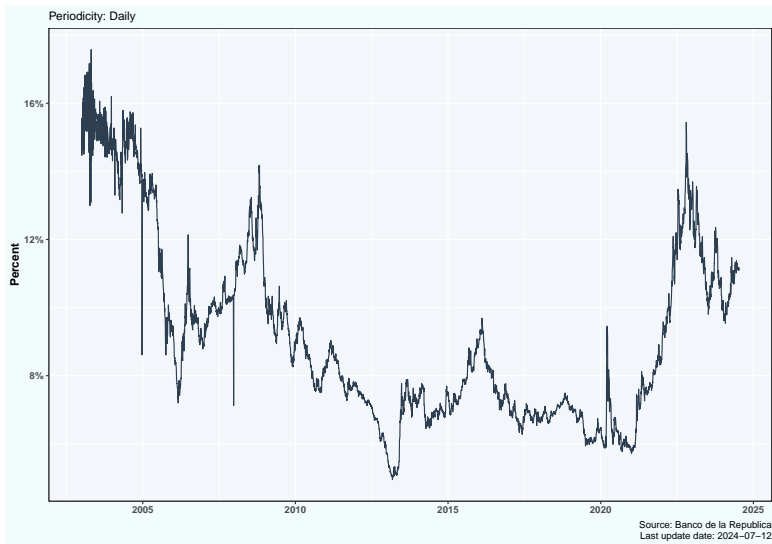


Figure 5: Interest rates TES zero coupon (COP, 10 years)

- **Equity (Renta variable):**

- Shares/Stocks
 - These instruments are issued by companies to raise funds from the general public
 - They represent a fractional ownership in the company that issue them

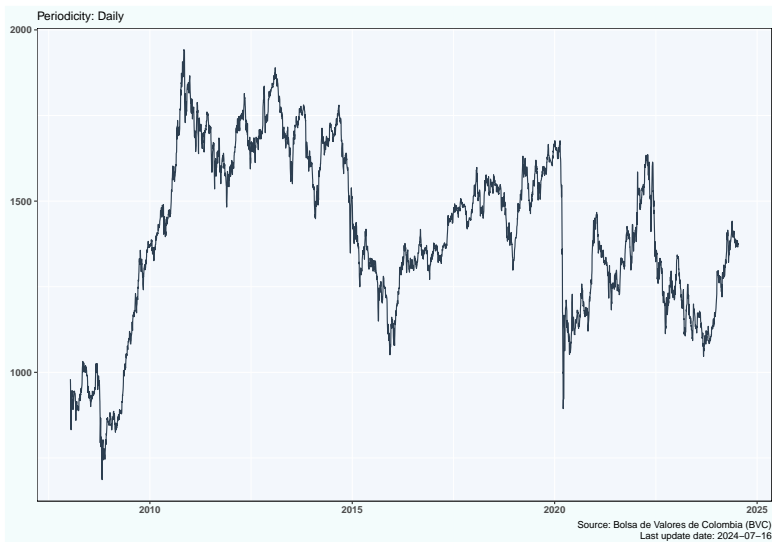


Figure 6: MSCI COLCAP Index

- **What is a bank?**

- *"A bank is an institution **whose current operations** consist in granting loans and receiving deposits from the public" (Freixas and Rochet 2008, p 1)*
 - Therefore the core activities of banks are related to deposits and loans

- **What functions banks perform?** (Freixas and Rochet 2008, p 2)

- Offering liquidity and payment services
- Transforming assets
- Managing risks
- Processing information and monitoring borrowers

- **Offering liquidity and payment services** (Freixas and Rochet 2008, p 2-4)
 - Banks offer short term credits to companies and individuals and have created networks that facilitate the transfer of funds between the bank accounts of economic agents
- **Transforming assets** (Freixas and Rochet 2008, p 5-6)
 - **Convenience of denomination:** banks collect small deposits to offer large loans
 - **Quality transformation:** bank deposits offer better risk-return characteristics than direct investments
 - **Maturity transformation:** banks transform securities with short maturities, offered to depositors, into securities with long maturities, which borrowers desire

- **Managing risks:**

- **Credit risk:** it is related to the the probability that a loan is no repaid
 - **Interest rate risk:** it is related to the difference between deposit rates, which change more, and lending rates, which are more stable
 - **Liquidity risk:** it is related to the difficulty a bank has in selling a loan compared to the ease with which a depositor withdraws his savings
- In the case of the Colombian context the framework to manage risks is known as **Sistema Integral de Administración de Riesgos (SIAR)** (S. F. de Colombia 2021, chap. 31)

Table 1: Supervised banking establishments

Type	Code	Abbreviate Name	NIT
1	1	Banco de Bogotá S.A.	860002964-4
1	2	Banco Popular	860007738-9
1	6	Itaú; Banco Itaú.	890903937-0
1	7	Bancolombia	890903938-8
1	9	Citibank	860051135-4
1	12	Banco GNB Sudameris	860050750-1
1	13	BBVA Colombia	860003020-1
1	23	Banco de Occidente	890300279-4
1	30	Banco Caja Social S.A.	860007335-4
1	39	Banco Davivienda	860034313-7
1	42	Banco Colpatria	860034594-1
1	43	BANCO AGRARIO DE COLOMBIA o BANAGRARIO.	800037800-8
1	49	AV Villas	860035827-5
1	51	Banco Credifinanciera S.A.	900200960-9
1	52	Bancamía S.A.	900215071-1

Source: Superintendencia Financiera de Colombia

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Table 2: Supervised banking establishments

Type	Code	Abbreviate Name	NIT
1	53	Banco W S.A.	900378212-2
1	54	Bancoomeva	900406150-5
1	55	Finandina Bic o Banco Finandina Bic o Finandina.	860051894-6
1	56	Banco Falabella S.A.	900047981-8
1	57	Banco Pichincha S.A.	890200756-7
1	58	Coopcentral	890203088-9
1	59	Banco Santander	900628110-3
1	60	Banco Mundo Mujer S.A.	900768933-8
1	62	Mibanco S.A.	860025971-5
1	63	Banco Serfinanza S.A.	860043186-6
1	64	Banco J.P. Morgan Colombia S.A., (la "Sociedad")	900114346-8
1	65	Lulo Bank S.A.	901383474-9
1	66	Banco BTG Pactual Colombia S.A.	901491551-0
1	67	BANCO UNIÓN S.A. (en adelante el "Banco" o la "Sociedad")	860006797-9
1	68	BANCO CONTACTAR S.A.	901702583-3

Source: Superintendencia Financiera de Colombia

Last update: 2024-07-17

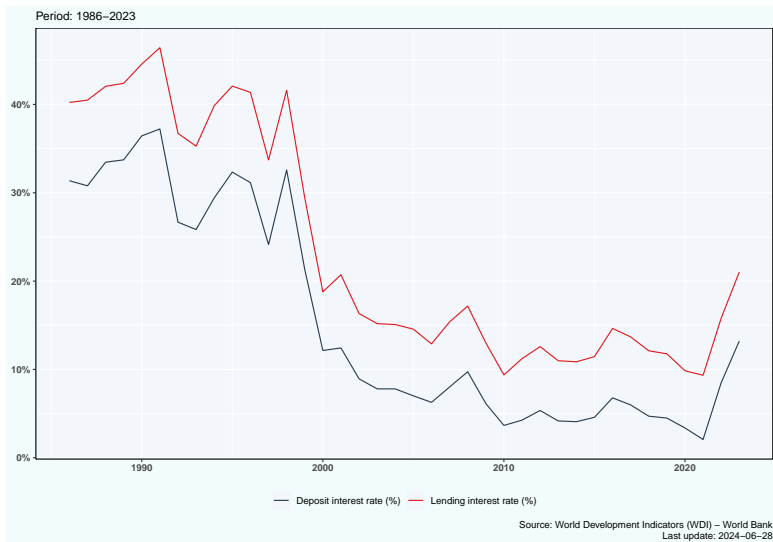


Figure 7: Deposit and lending interest rate in Colombia

Acknowledgments

- To my family that supports me
- To the taxpayers of Colombia and the **UMNG students** who pay my salary
- To the **Business Science** and **R4DS Online Learning** communities where I learn **R** and **π -thon**
- To the **R Core Team**, the creators of **RStudio IDE**, **Quarto** and the authors and maintainers of the packages **tidyverse**, **wbstats**, **tidyquant**, **ggrepel**, **lubridate**, **knitr**, **kableExtra**, **readxl**, and **tinytex** for allowing me to access these tools without paying for a license
- To the **Linux kernel community** for allowing me the possibility to use some **Linux distributions** as my main **OS** without paying for a license



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