CHAPTER 7: THE STRUCTURE OF THE FINANCIAL SECTOR

MONEY & BANKING

YEGANEH FOROUHESHFAR

2ND SEMESTER 2019-2020

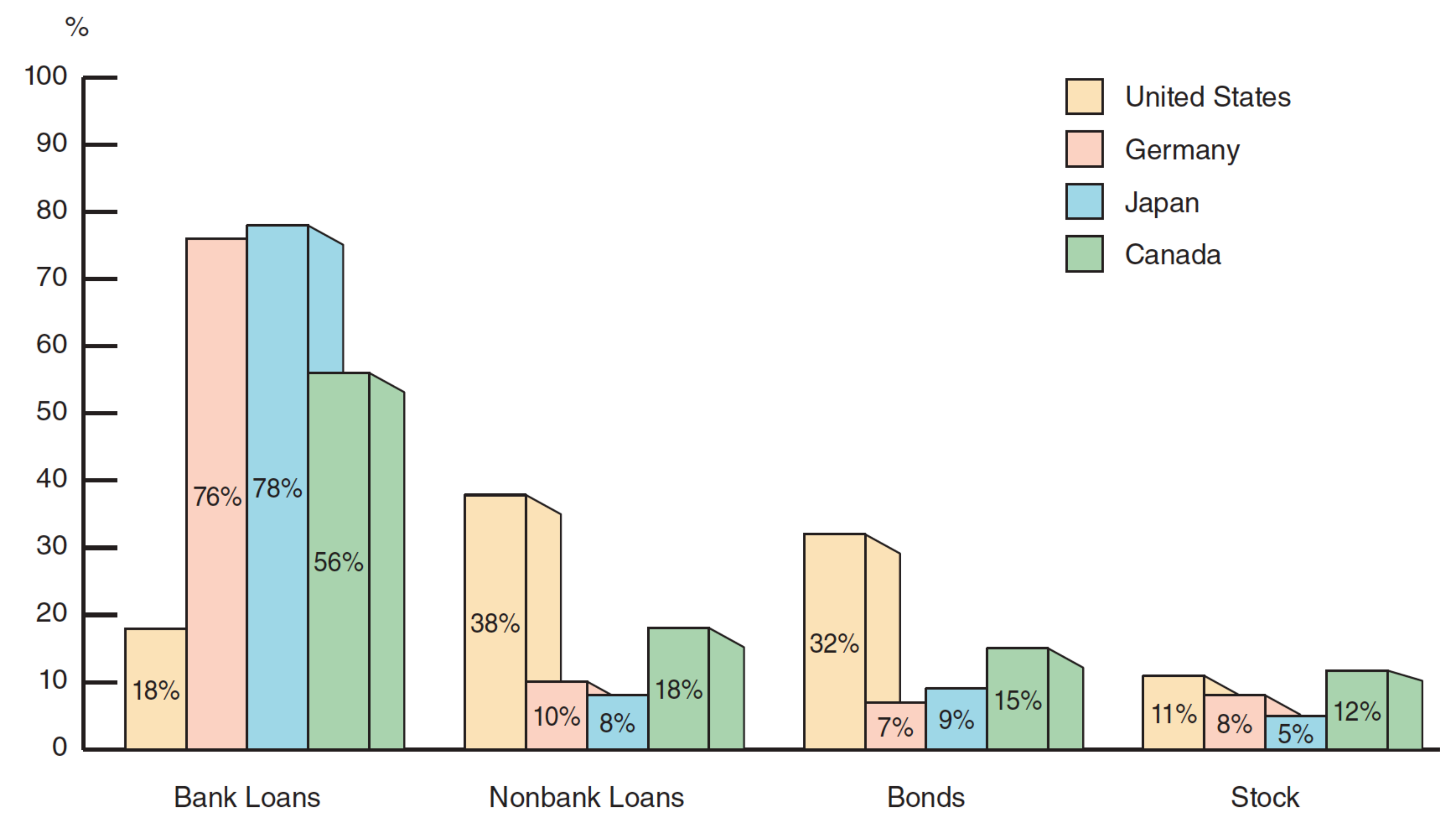
OUTLINE

1. Basic Facts about Financial Structure Throughout the World
2. Bank-based versus market-based
3. The formal and the informal sector
4. Key factors influencing the structure of the financial sector
5. Banks, stock markets and bond markets
6. The role of the government in domestic economy and the financial sector
7. Macroeconomic policy and stability

INTRODUCTION

- A healthy and vibrant economy requires a financial system that moves funds from people who save to people who have productive investment opportunities.

SOURCES OF EXTERNAL FUNDS FOR NONFINANCIAL BUSINESSES: A COMPARISON OF THE UNITED STATES WITH GERMANY, JAPAN, AND CANADA



Source: Andreas Hackethal and Reinhard H. Schmidt, "Financing Patterns: Measurement Concepts and Empirical Results," Johann Wolfgang Goethe-Universitat Working Paper No. 125, January 2004. The data are from 1970–2000 and are gross flows as percentage of the total, not including trade and other credit data, which are not available.

BASIC FACTS ABOUT FINANCIAL STRUCTURE THROUGHOUT THE WORLD

1. Stocks are not the most important sources of external financing for businesses.
2. Issuing marketable debt and equity securities is not the primary way in which businesses finance their operations.
3. Indirect finance is many times more important than direct finance
4. Financial intermediaries, particularly banks, are the most important source of external funds used to finance businesses.

BASIC FACTS ABOUT FINANCIAL STRUCTURE THROUGHOUT THE WORLD

5. The financial system is among the most heavily regulated sectors of the economy.
6. Only large, well-established corporations have easy access to securities markets to finance their activities.
7. Collateral is a prevalent feature of debt contracts for both households and businesses.
8. Debt contracts are extremely complicated legal documents that place substantial restrictive covenants on borrowers.

DIFFERENT TYPES OF THE FINANCIAL SYSTEM

- **Bank-based**: banks play the key role (in mobilizing savings, allocating capital, etc.)

a bank-based financial system finds the economy dependent on how well or poorly the banking industry is doing. Banks in these systems focus their attention on loans and hold the power largely through this area. The stock market in these areas has little or no power over economic trends.
in a bank-based financial system, the economy's wealth is more evenly spread. Often only a few are given the opportunity to realize great gain.

- **Market-based**: capital markets share these functions with banking sector in a more balanced manner

The majority of financial power is held by the stock market

BANK-BASED VS. MARKET-BASED

Country	Bank deposits/GDP	Stock market capitalization/GDP
Japan	1.21	0.75
Germany	0.97	0.43
USA	0.59	1.35

Source:World Bank Financial Structure Dataset, 2006

Which country is bank-based ?

NATURE OF THE RELATIONSHIP

- A key difference : **the nature of financial relationship**

  - In Japan and Germany: banks mostly form long-term relationships with corporate borrowers, and long term prospects of the company are likely to influence banks decisions.
  - In US: the relationship between lenders and borrowers is more *arm's-length* in nature (greater importance of impersonal capital markets)

Arm's-length: A transaction in which the buyers and sellers of a product act independently and have no relationship to each other. To ensure that both parties in the deal are acting in their own self interest and are not subject to any pressure from the other party

PROS AND CONS FOR EACH APPROACH

- Relationship banking: (Japan or Germany)
  - **Pros:**
    - Prevent short term liquidity crisis to become solvency crisis
    - Reduce problems of asymmetric information for lenders
    - A long-term financial relationship enables trust between parties → reduce the need for expensive ex-post monitoring of loans
  - **Cons**: these close relationships can increase the likelihood of corruption and rent-seeking

- **Rent-seeking**: When a company, organization or individual uses their resources to obtain an economic gain from others without reciprocating any benefits back to society through wealth creation, it is also spending wealth on political lobbying to increase one's share of existing wealth without creating wealth.

- Effects:
  - reduced economic efficiency through poor allocation of resources,
  - reduced wealth creation,
  - lost government revenue,
  - increased income inequality

PROS AND CONS FOR EACH APPROACH (CONT.)

- Arm's-length system:
  - **Pros:**
    - Corruption is much less of a problem on average
  - **Cons:**
    - Projects that take long time to accomplishment may not be undertaken despite the fact that they might be highly productive over the long term
    - The problem of asymmetric information is more highlighted compared to relationship-banking (the banking systems provides information)

AVERAGE FINANCIAL STRUCTURE OF HIGH-INCOME VS. LOW-INCOME COUNTRIES 2005

Variables	Low income	High income
Central bank assets/GDP	0.10	0.03
Bank assets/GDP	0.19	1.14
Other financial institutions assets/GDP	0.08	0.54
Private credit by banks/GDP	0.15	1.08
Bank deposits/GDP	0.22	0.95
Bank overhead costs/total assets	0.07	0.03
Net interest margin	0.08	0.02
Bank concentration	0.83	0.76
Stock market capitalization/GDP	0.12	0.99
Stock market turnover ratio	0.64	0.80
Private bond market capitalization/GDP	0.01	0.45
Public bond market capitalization/GDP	0.33	0.47

KEY TERMS

- **Overhead cost**: refers to an ongoing expense of operating a business (Accounting value of a bank's overhead costs as a share of its total assets)

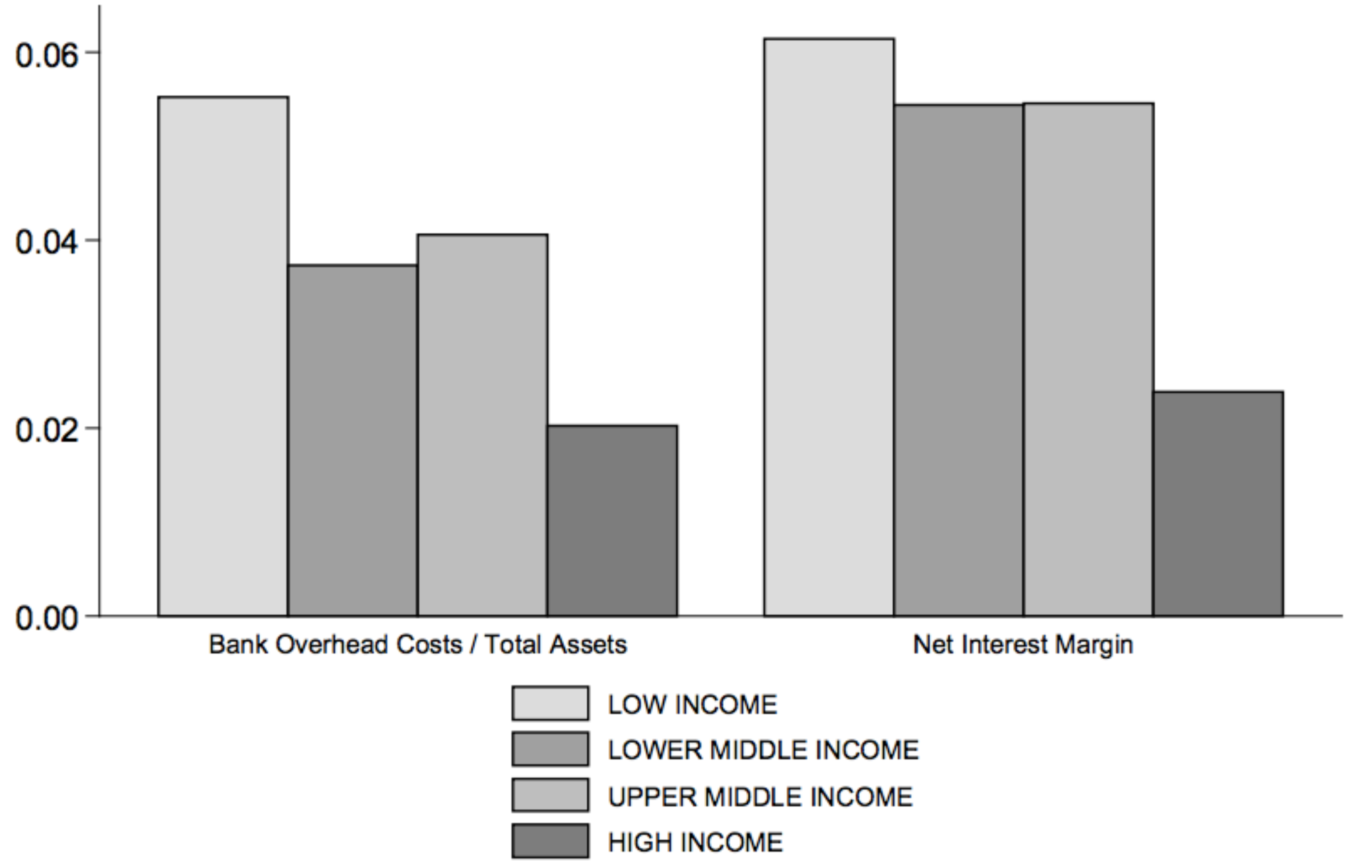
- **Net interest margin**: Bank's net interest revenue as a share of interest-bearing assets

Higher levels of net interest margins and overhead costs indicate lower levels of banking efficiency, as banks incur higher costs and there is a higher wedge between lending and deposit interest rates.

- **Bank concentration**: Assets of three largest banks as a share of assets of all commercial banks

- **Turnover ratio**: Ratio of the value of total shares traded to average real market capitalization

EFFICIENCY OF THE MARKET



Source: Beck et al. (2009)

THE FORMAL AND THE INFORMAL SECTOR

- A key distinction between economic systems and the financial sector : relative size of the formal and informal sectors

- It is estimated that in developing countries the informal firms account for around 30% of total production and between 50 to 75% of jobs in non-agricultural labor force.

- Comparative estimates of the total size of the informal sector in developed countries compared to 3 developing regions:

region	Informal sector as a percentage of GNP
Developed countries	12%
Africa	44%
Latin America	39%
Asia	35%

- No national development strategy can afford to ignore a sector which is equivalent to a third or a half of total GNP!

LACK OF ACCESS TO FORMAL FINANCE

Country	Proportion of the population with bank accounts
Botswana	47%
Brazil (urban)	43%
South Africa	31.7%
Tanzania	6.4%
Djibouti	24.8%
Mexico City	21.3%
Colombia (Bogota)	39%

In US it is 91%

High cost for installing banks + high monitoring costs → financial institutions have not attempted to access these markets → financial exclusion

THE FORMAL AND THE INFORMAL SECTOR (CONT.)

- Solution: microfinance
  Microfinance institutions provide small loans to the poor, with minimal bureaucracy and often little or no *collateral*. (very high repayment rates→ focus on 'group lending', borrowers themselves screen their fellow borrowers → low cost of monitoring) → viability of such loans increases

- The microfinance revolution: potential to eliminate poverty in developing countries (formal financial sector targeting poor)

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR

- **Macroeconomic stability**: notably high inflation rates → underdeveloped financial sector

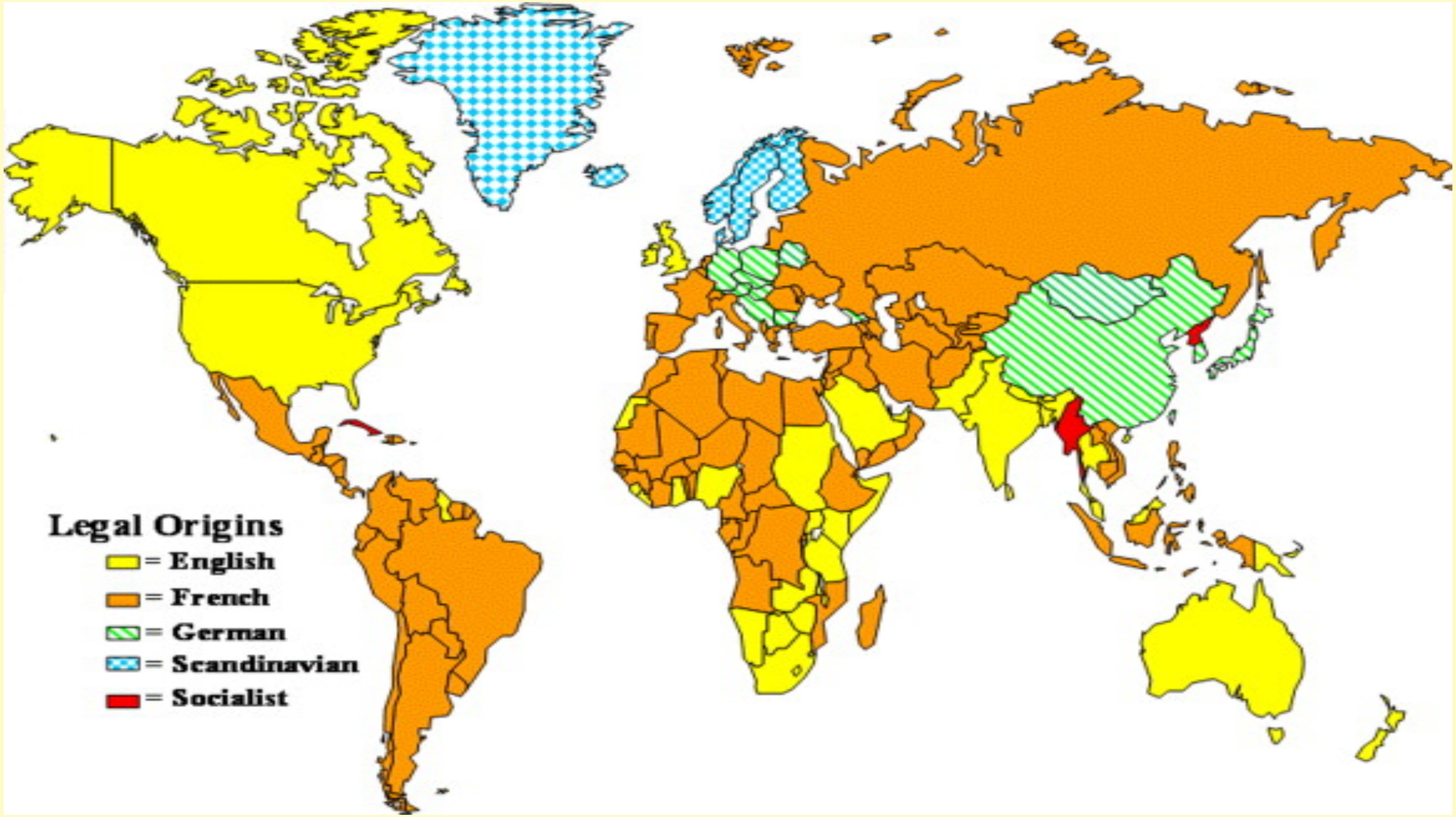
- High inflation → undermines confidence in money itself → discourage the development of financial intermediation → encourage acquisition of real rather than financial assets

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR (CONT.)

- **Nature of country's legal framework**:
  in most developing countries it is a product of colonial legacy (***legal origins*** theory)

- Robert Mundell (1970): Anglophone countries in sub-Saharan Africa are likely to have better developed financial sectors compared to their Francophone counterparts in the region.

  Anglophone (common law)→ Market-based:
  importance of protecting share holders
  Francophone (civil law)→ Based on French civil laws : less secure investor rights, stricter regulation, and more inefficient governments



Source: La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer. "Law and finance after a decade of research." *Handbook of the Economics of Finance*. Vol. 2. Elsevier, 2013. 425-491.

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR (CONT.)

- **Regulation**: A robust system of financial regulation is a pre-requisite for the financial liberation.

  Impact of regulation through different channels:
  - Countries with strong accounting standards: more developed financial sector, market based
  - Bank's restriction to engage in non-banking financial services→ underdeveloped financial systems
  - Deposit insurance systems → less likely to have market based financial systems

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR (CONT.)

Regulatory system can be seen as a subset of legal framework

Deposit insurance is a measure implemented in many countries to protect bank depositors, in full or in part, from losses caused by a bank's inability to pay its debts when due.

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR (CONT.)

- **Contractual savings institutions:**
  Such as pension funds, insurance companies etc.
  (84% of the shares of the London Stock Exchange are held by institutions of this type)
- Role of these institutions:
  - The nature of their liabilities (long term) → strong demand for shares and long-term bonds (source of longer term investment funds)→ positive impact on growth
- Relatively small in developing countries

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR (CONT.)

- **Private ownership**:
  Growth of contractual savings institutions→ growing demand for equities in developing countries →need for a sufficient supply to meet the demand→ privatization of previously state-owned enterprises boost this supply
- Privatization rises major regulatory issues: private industries are in natural monopoly position and they must be regulated in the public interest

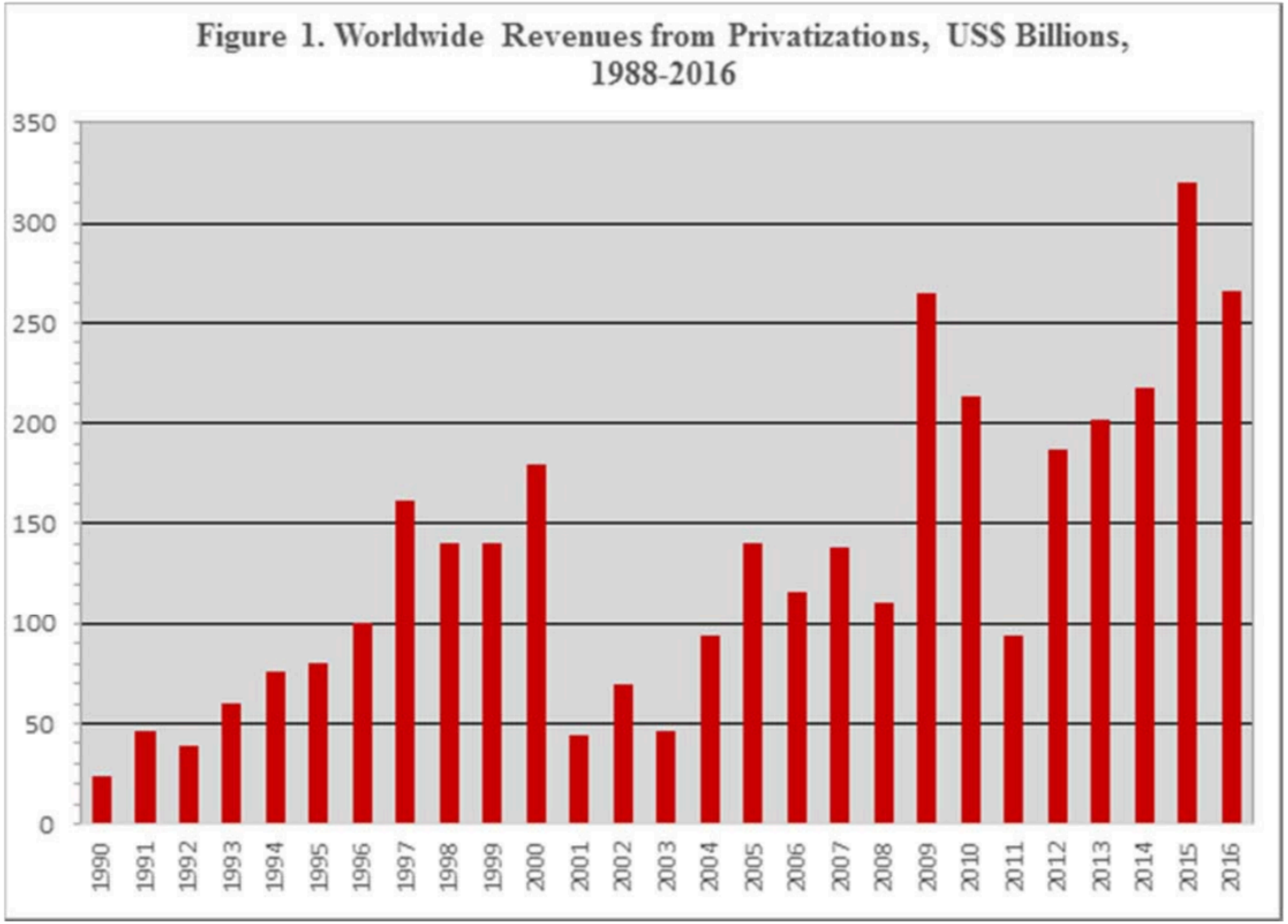


Figure 1. Worldwide Revenues from Privatizations, US$ Billions, 1988-2016

Worldwide, governments raised a record $319.9 billion (€289.5 billion) through privatization sales during 2015 and $266.4 billion (€241.4 billion) during 2016. This two-year total exceeds the six-year total value of privatizations between 2001 and 2006, while the five-year dollar total for 2012-2016 ($1,189 billion) easily exceeds the amount ($1,077 billion) raised during the entire decade 1999-2008[1]. Both the 2016 and, especially, the 2015 totals were substantially higher

KEY FACTORS INFLUENCING THE STRUCTURE OF THE FINANCIAL SECTOR (CONT.)

- **Private ownership**:

Regional privatization as percentage of GDP, 1988-2003

Region	% of GDP
Sub-Saharan Africa	0,2190
Middle East & North Africa	0,3351
South Asia	0,1914
Eastern & Central Europe	0,6186
East Asia	0,3076
Latin America & Caribbean	0,7773
Total	**0,5016**

Source: World Bank Privatization Database

SUMMARY OF KEY POINTS SO FAR

- Macroeconomic stability is a key pre-requisite for financial sector development
- Countries with an English common law tradition : strong protection for shareholders, low levels of corruption, no explicit deposit insurance and tend to be more market-based
- Countries with a French civil law tradition: underdeveloped financial systems and more banked-based
- Effective regulatory regimes are crucial for financial sector development
- Contractual saving institutions are important for key aspects of the financial system, notably stock & bond market
- Private ownership: sufficient supply of local equities to meet the demand but it raises serious political and regulatory issues

CONCLUSION

- The structure of the financial sector can be whether bank-based or market-based

- This structure depends on: macroeconomic stability, Country's legal framework, regulation, contractual savings institutions and private ownership

REFERENCES

- The Economics of Money, Banking and Financial Markets (8th edition, 2015) Frederic S. Mishkin (Chapter 8)
- "Development Finance debates dogmas and new directions"- Stephen Spratt (2009)
- "Financial Institutions and Markets across Countries and over Time Data and Analysis"- Thorsten Beck, Asli Demirgüç-Kunt, Ross Levine (2009) http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2009/06/16/000158349_20090616091230/Rendered/PDF/WPS4943.pdf