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2.1 Introduction

A recent and expanding literature establishes the importance of financial development for economic growth.¹ Measures of the size of the banking sector and the size and liquidity of the stock market are highly correlated with subsequent gross domestic product (GDP) per capita growth. Moreover, emerging evidence suggests that both the level of banking-sector development and stock market development exert a causal impact on economic growth.² Recent financial crises in South East Asia and Latin America further underscore the importance of a well-functioning financial sector for the whole economy.

This chapter introduces a new database that for the first time provides financial analysts and researchers with a comprehensive assessment of the development, structure, and performance of the financial sector. This database, which is available with the book, includes statistics on the size, activity, and efficiency of various financial intermediaries and markets across a broad spectrum of countries and over time. The database will thus enable financial analysts and researchers to compare the level of financial development and the structure of the financial sector of a specific country with that of other countries in the region or countries with a similar GDP per capita level. It allows comparisons of financial systems for a given year and over time.

Previously, financial analysts and researchers have relied on a few indicators of the banking sector and the stock market, using data from the International Monetary Fund's (IMF's) International Financial Statistics (IFS) and the International Finance Corporation's (IFC's) Emerging Market Database. This new database draws on a wider array of sources and constructs indicators of the size, activity,

and efficiency of a much broader set of financial institutions and markets. Specifically, this database uses bank-specific data to construct indicators of the market structure and efficiency of commercial banks. Furthermore, this is the first systematic compilation of data on the split of public versus private ownership in the banking sector. This database is the first attempt to define and construct indicators of the size and activity of nonbank financial intermediaries, such as insurance companies, pension funds, and nondeposit money banks. Finally, this database is the first to include indicators of the size of primary equity markets and primary and secondary bond markets. This results in a unique set of indicators that capture the development and structure of the financial sector across countries and over time along many different dimensions.

The remainder of this chapter is organized as follows. Section 2.2 discusses indicators of the size and activity of financial intermediaries. Section 2.3 introduces indicators of the efficiency and market structure of commercial banks. In section 2.4 we define indicators of the size and activity of other financial institutions. Stock and bond market indicators are introduced in section 2.5. Each section presents the indicators, the sources and the sample, and the variance of the indicators across income groups of countries. Section 2.6 offers concluding remarks. Table 2.1 provides an overview of all indicators with cross-country and time-series coverage. The appendix presents the sources and construction of the measures.

2.2 The Size and Activity of Financial Intermediaries

A first set of measures compares the size and activity of central banks, deposit money banks, and other financial institutions relative to each other and relative to GDP. We use data from the IMF's International Financial Statistics to construct these indicators. The data cover the period from 1960 to 1997 and 175 countries.

2.2.1 Groups of Financial Institutions

The indicators in this section distinguish among three groups of financial institutions: central banks, deposit money banks, and other financial institutions.³ The three groups are defined as in the IFS. The first group comprises the central bank and other institutions that perform functions of the monetary authorities.⁴ The second group,

Table 2.1
Coverage of the Variables

	Time span	Number of countries	Number of observations
Central bank assets to total financial assets	1960–1997	79	2,177
Deposit money banks assets to total financial assets	1960–1997	79	2,177
Other financial institutions assets to total financial assets	1960–1997	79	2,177
Deposit money versus central bank assets	1960–1997	169	4,651
Liquid liabilities to GDP	1960–1997	159	3,873
Central bank assets to GDP	1960–1997	153	3,671
Deposit money bank assets to GDP	1960–1997	160	3,912
Other financial institution assets to GDP	1960–1997	80	2,008
Private credit by deposit money banks to GDP	1960–1997	160	3,901
Private credit by deposit money banks and other financial institutions to GDP	1960–1997	161	3,923
Net interest margin	1990–1997	129	721
Overhead costs	1990–1997	129	719
Concentration	1990–1997	137	822
Foreign bank share (assets)	1990–1997	111	673
Foreign bank share (number)	1990–1997	111	673
Public share	1980–1997	41	213
Total assets of other banklike institutions to GDP	1980–1997	54	766
Total assets of life insurance companies to GDP	1980–1997	24	333
Total assets of insurance companies to GDP	1980–1997	40	547
Total assets of private pension and provident funds to GDP	1980–1997	16	185
Total assets of pooled investment schemes to GDP	1980–1997	27	295
Total assets of development banks to GDP	1980–1997	46	634
Private credit by other banklike institutions to GDP	1980–1997	43	652
Private credit by life insurance companies to GDP	1980–1997	17	258
Private credit by insurance companies to GDP	1980–1997	19	275

Table 2.1
(continued)

	Time span	Number of countries	Number of observations
Private credit by private pension and provident funds to GDP	1980–1997	11	126
Private credit by pooled investment schemes to GDP	1980–1997	10	106
Private credit by development banks to GDP	1980–1997	38	555
Life insurance penetration	1987–1996	85	682
Life insurance density	1987–1996	85	682
Stock market capitalization to GDP	1976–1997	93	1,171
Stock market total value traded to GDP	1975–1997	93	1,264
Stock market turnover to GDP	1976–1997	93	1,154
Private bond market capitalization to GDP	1990–1997	37	287
Public bond market capitalization to GDP	1990–1997	37	287
Equity issues to GDP	1980–1995	42	586
Long-term private debt issues to GDP	1980–1995	40	508

deposit money banks, consists of all financial institutions that have liabilities in the form of deposits transferable by check or otherwise usable in making payments (IMF 1984, 29). The third group—other financial institutions—is made up of other banklike institutions and nonbank financial institutions. These are institutions that serve as financial intermediaries, while not incurring liabilities usable as means of payment. Other banklike institutions include (1) institutions that accept deposits, but do not provide transferable deposit facilities, (2) intermediaries that finance themselves mainly through issuance of negotiable bonds, (3) development banks, and (4) off-shore units. Nonbank financial institutions include insurance companies, provident and pension funds, trust and custody accounts, real investment schemes, other pooled investment schemes, and compulsory savings schemes. Whereas data on other banklike institutions are usually current and complete, only fragmentary data are available for nonbank financial institutions.

We distinguish between two different balance-sheet items: total claims on domestic nonfinancial sectors (lines a through d) and claims on the private sector (line d).⁵ In what follows, we denote the

first with assets and the second with private credit. Whereas assets refers to total domestic financial intermediation that the respective intermediary performs, private credit captures the financial intermediation with the private nonfinancial sector. For both measures, we exclude claims on central banks, deposit money banks, and other financial institutions (lines e through g) and therefore any cross-claims of one financial sector on another.

2.2.2 Measures of Size of Financial Intermediaries

We present two groups of size indicators. The relative size indicators measure the importance of the three financial sectors relative to each other; the absolute size indicators measure their size relative to GDP.

Relative Size Measures

The first three indicators are only presented if data are available on all three financial sectors. These indicators are:

- Central Bank Assets to Total Financial Assets
- Deposit Money Banks Assets to Total Financial Assets
- Other Financial Institutions Assets to Total Financial Assets

where Total Financial Assets are the sum of central bank, deposit money banks, and other financial institutions assets.

Since these measures are calculated only if data are available for all three categories, we construct an alternative indicator that measures the relative importance of deposit money banks relative to central banks: Deposit Money versus Central Bank Assets. This measure has been used as a measure of financial development by, among others, King and Levine (1993a, b) and Levine, Loayza, and Beck (2000) and equals the ratio of deposit money bank assets and the sum of deposit money and central bank assets.

Absolute Size Measures

The following three indicators measure the size of the three financial sectors relative to GDP:

- Central Bank Assets to GDP
- Deposit Money Banks Assets to GDP
- Other Financial Institutions Assets to GDP

These measures give evidence of the importance of the financial services performed by the three financial sectors relative to the size of the economy. The assets include claims on the whole nonfinancial real sector, including government, public enterprises, and the private sector.

Since many researchers have focused on the liability side of the balance sheet, we include a measure of absolute size based on liabilities. Liquid Liabilities to GDP equals currency plus demand and interest-bearing liabilities of banks and other financial intermediaries divided by GDP. This is the broadest available indicator of financial intermediation, since it includes all three financial sectors. For the numerator we use either line 551 or, where not available, line 351. Whereas line 351 includes monetary authorities and deposit money banks, line 551 also includes other banking institutions, as defined by the IMF. Line 351 is often also referred to as M2. Liquid Liabilities is a typical measure of financial depth and thus of the overall size of the financial sector, without distinguishing among the financial sectors or among the use of liabilities.

2.2.3 Measures of Activity of Financial Intermediaries

While the size measures do not distinguish whether the claims of financial intermediaries are on the public or the private sector, the following two indicators concentrate on claims on the private sector:

- Private Credit by Deposit Money Banks to GDP
- Private Credit by Deposit Money Banks and Other Financial Institutions to GDP

Whereas the first equals claims on the private sector by deposit money banks divided by GDP, the second includes claims by both deposit money banks and other financial institutions. Both measures isolate credit issued to the private sector as opposed to credit issued to governments and public enterprises. Furthermore, they concentrate on credit issued by intermediaries other than the central bank. They are the measures of the activity of financial intermediaries in one of its main functions: channeling savings to investors. Both indicators have been used by researchers, the first by Levine and Zervos (1998), and the second by Levine, Loayza, and Beck (1999) and Beck, Levine, and Loayza (1999).

2.2.4 A Note on Deflating

We can distinguish between two groups of measures depending on the denominator. The first group consists of ratios of two stock variables, whereas the measures in the second group are ratios of a stock variable and a flow variable, specifically GDP. Whereas stock variables are measured at the end of a period, flow variables are defined relative to a period. This presents problems in the second group of indicators, both in terms of correct timing and in terms of deflating correctly. To address these problems, we deflate the end-of-year financial balance-sheet items (FD) by end-of-year consumer price indices (CPI) and deflate the GDP series by the annual CPI.⁶ Then, we compute the average of the real financial balance sheet item in year t and $t - 1$ and divide this average by real GDP measured in year t . The end-of-year CPI is either the value for December or, where not available, the value for the last quarter. The formula is the following:

$$\frac{0.5 * \left(\frac{FD_t}{CPI_{e,t}} + \frac{FD_{t-1}}{CPI_{e,t-1}} \right)}{\frac{GDP_t}{CPI_{a,t}}}, \quad (2.1)$$

where e indicates end of period and a average for the period.

2.2.5 Financial Intermediary Development across Income Groups and over Time

As exhibited by figures 2.1–2.3, our indicators of financial intermediary development show considerable variation across countries and over time.⁷ Figure 2.1 shows that central banks lose relative importance as we move from low- to high-income countries, whereas other financial institutions gain relative importance. Deposit money banks gain importance versus Central Banks with a higher income level.⁸ As can be seen in figure 2.2, financial depth, as measured by Liquid Liabilities to GDP, increases with the income level. Deposit money banks and other financial institutions are bigger and more active in richer countries, whereas central banks are smaller. Figure 2.3 shows that Liquid Liabilities to GDP and Private Credit by Deposit Money Banks to GDP have increased constantly since the

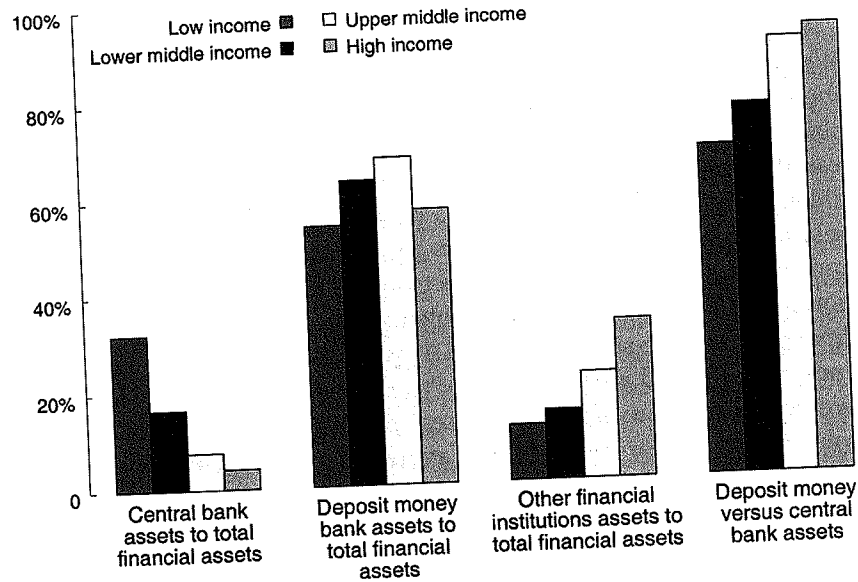


Figure 2.1
Financial intermediary development across income groups.

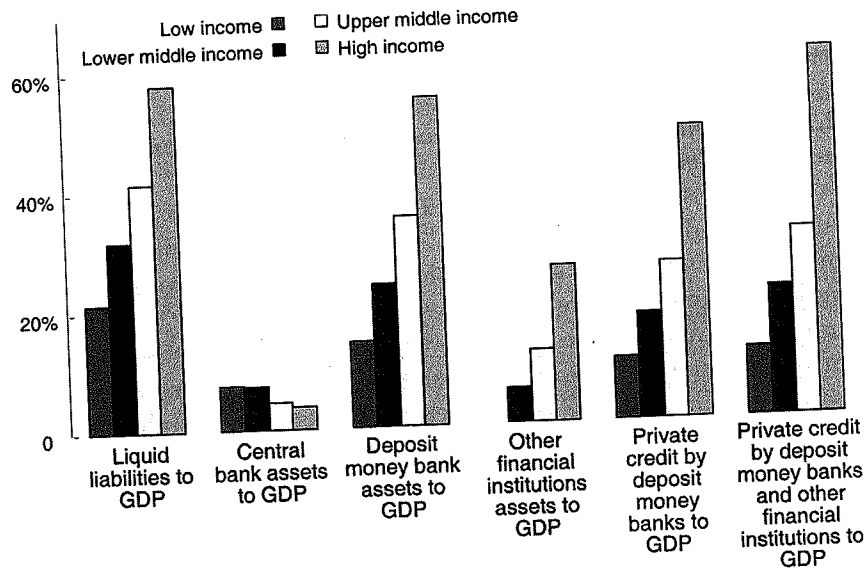


Figure 2.2
Financial intermediary development across income groups.

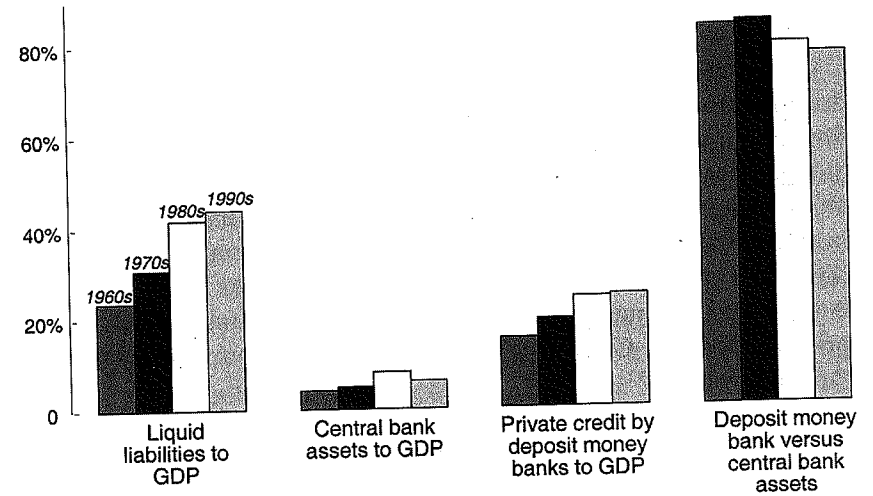


Figure 2.3
Financial intermediary development over time.

1960s. Central Bank Assets to GDP first increased from the 1960s to the 1980s and then decreased again in the 1990s. Deposit Money Banks versus Central Bank Assets first increased and then decreased over time, a pattern mainly driven by low-income countries.

2.3 Efficiency and Market Structure of Commercial Banks

This section provides indicators of the efficiency and market structure of commercial banks.⁹ The data were collected from individual banks' balance sheets provided by IBCA's Bankscope database and from individual country sources such as central bank and supervisory body publications.¹⁰

2.3.1 Measures of Efficiency

One of the main functions of financial intermediaries is to channel funds from savers to investors. We construct two potential measures of the efficiency with which commercial banks perform this function. The net interest margin equals the accounting value of a bank's net interest revenue as a share of its total assets.¹¹ Overhead cost equals

the accounting value of a bank's overhead costs as share of its total assets.

Unlike in the previous section, we do not deflate numerator and denominator of these two measures, although they are ratios of a flow and a stock variable and therefore measured at different points of time, for several reasons. First, unlike for macroeconomic variables, there is no obvious deflator for individual banks' assets and income flows. Second, unlike macroeconomic variables and financial-sector assets, bank-individual flows and stocks are directly related. Third, financial assets and flows do not equal quantity times price, as does the GDP. Finally, we would lose around 25 percent of the observations.¹²

2.3.2 Measures of Market Structure

Here we collect and present data on the concentration of commercial banks, foreign bank penetration, and public versus private ownership of commercial banks.

We use a concentration measure that is defined as the ratio of the three largest banks' assets to total banking-sector assets. A highly concentrated commercial banking sector might result in lack of competitive pressure to attract savings and channel them efficiently to investors. A highly fragmented market might be evidence of under-capitalized banks.

We present two measures of foreign bank penetration: the foreign bank share (number), which equals the number of foreign banks in total banks, and the foreign bank share (assets), which equals the share of foreign bank assets in total banking-sector assets.¹³ Claessens, Demirgüç-Kunt, and Huizinga (1997) show that an increase in foreign bank penetration leads to lower profitability and overhead expenses for banks. Demirgüç-Kunt, Levine, and Min (1998) show that higher foreign bank penetration enhances economic growth by boosting domestic banking efficiency. A bank is defined as "foreign" if at least 50 percent of the equity is owned by foreigners.

Public versus private ownership has become an increasingly important issue not only for researchers and policymakers in the banking sector, but also for the whole economy.¹⁴ This database includes the first compilation of panel data on the public ownership of commercial banks. Public Share equals the share of publicly owned commercial bank assets in total commercial bank assets. A bank is defined as

"public" if at least 50 percent of the equity is held by the government or a public institution.

2.3.3 Sources and Coverage

Data on the net interest margin, overhead costs, concentration, and foreign bank penetration use income statements and balance sheet data of commercial banks from the Bank Scope Database provided by IBCA. Data are available for 137 countries and for the years since 1990. To ensure a reasonable coverage, only countries with at least three banks in a given year are included. Although on average around 90 percent of the banking sector assets in a given country and year are covered in IBCA, sampling error and bias are possible. Net interest margin and overhead costs are calculated as averages for a country in a given year. Whereas for the two efficiency measures we use only unconsolidated balance sheets, we use both unconsolidated and consolidated balance sheets for the concentration index and the foreign bank penetration measures.¹⁵

Data on public versus private ownership are from Bankscope, Gardener and Molyneux (1990), and individual country sources, such as central bank or supervisory body publications.¹⁶ Data are available for forty-one developed and developing countries and for selected years in the 1980s and 1990s. Numbers from Bankscope were double-checked with estimates from other sources.

2.3.4 The Efficiency and Market Structure of Commercial Banks across Income Groups

As can be seen in figure 2.4, commercial banks are more efficient in high- and upper-middle-income countries. A negative correlation exists between the income level and the concentration of the commercial banking sector. There is a higher degree of foreign bank penetration in low- and lower-middle-income countries, both in terms of number and assets of foreign banks.

The most striking variance can be observed for public versus private ownership of commercial banks. Whereas public bank assets constitute over 70 percent of commercial bank assets in low-income countries, their share is around 40 percent in middle-income and 0 percent in high-income countries.¹⁷

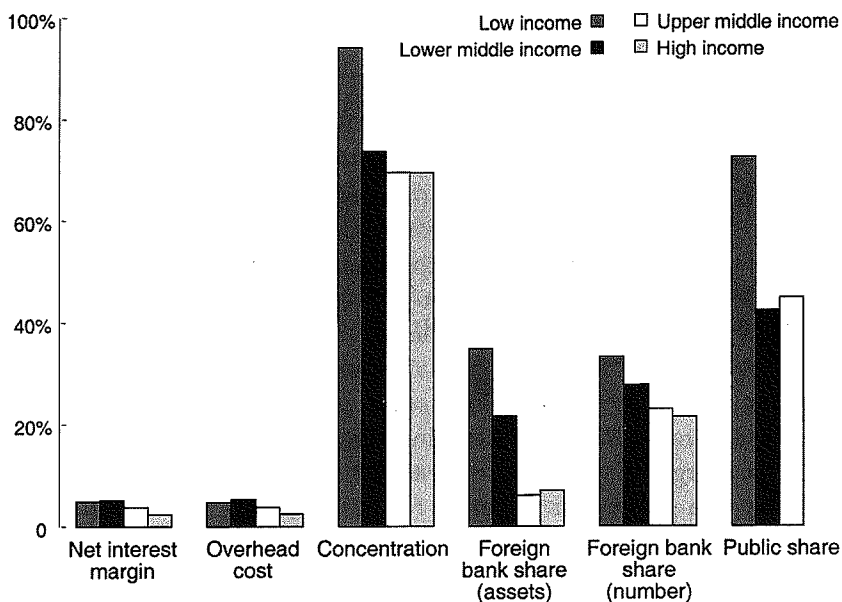


Figure 2.4
Efficiency and market structure of commercial banks across income groups.

2.4 Other Financial Institutions

This section of the database presents the first systematic effort to collect data on financial intermediaries other than central and deposit money banks.

2.4.1 Categories of Other Financial Institutions

In section 2.2 we included all financial intermediaries other than central and deposit money banks in one group, called "other financial institutions." In this section we try to get a better picture by breaking this sector into five subgroups.

1. **Banklike Institutions:** This category comprises two groups of institutions: (a) intermediaries that accept deposits without providing transferable deposit facilities, and (b) intermediaries that raise funds on the financial market mainly in the form of negotiable bonds. Examples of the first group are savings banks, cooperative banks, mortgage banks, and building societies. Examples of the

second group include finance companies. Often these institutions have specialized in specific activities, for historic, legal, or tax reasons.¹⁸

2. **Insurance Companies:** Within the category of insurance companies, we can distinguish between life insurance companies and other insurance companies. We do not include insurance funds that are part of a government social security system.

3. **Private Pension and Provident Funds:** Like life insurance companies, pension and provident funds serve the purpose of risk pooling and wealth accumulation. We do not include pension funds that are part of a government social security system.

4. **Pooled Investment Schemes:** These financial institutions invest on behalf of their shareholders in a certain type of asset, such as real estate investment schemes or mutual funds.

5. **Development Banks:** These financial institutions derive their funds mainly from the government, other financial institutions, and supranational organizations. On the asset side, they are often concentrated on specific groups of borrowers. Most of these institutions were set up after World War II or after independence in an effort to foster economic development.

2.4.2 Measures of the Size and Activity of Other Financial Institutions

Here we present size and activity indicators similar to the ones in section 2.2, plus some additional measures of insurance development.

For all five other financial institution groups, we construct measures of their size relative to GDP by calculating the ratio of total assets to GDP. Unlike in section 2.2, total assets refer to total assets from balance sheet.¹⁹ We also construct activity indicators by measuring the claims on the private sector relative to GDP.

For the insurance sector, we include an additional size and two additional activity measures: We present assets and private credit of the life insurance sector where disaggregated data are available. We also present life insurance penetration, measured by premiums/GDP and life insurance density, measured by premiums/population. The first indicator provides evidence on the importance of the life insurance sector relative to the total economy, and the second evidence on the expenditure per capita on life insurance provision.²⁰

2.4.3 Sources

Data on the size and activity of other financial institutions were collected mostly from the IFS and individual country sources, such as central banks, bank and insurance supervisory bodies, and statistical yearbooks.²¹ These data are available for sixty-five countries and for the years since 1980.

Data on life insurance penetration and life insurance density come from SIGMA, a monthly publication by Swiss Re. Their data are based on direct premium volume of commercially active insurers, regardless of whether they are in state or private ownership (SIGMA 1998, 4:4). Only domestic insurance business, regardless whether conducted by domestic or foreign insurers, is included. Data are available for eighty-eight developing and developed countries, and for years since 1987.²²

2.4.4 Development of Other Financial Institutions across Income Groups

Figure 2.5 shows that the private credit by all five categories of other financial institutions increases as we move from low- to high-income countries.²³ Figure 2.6 shows that the private credit by life insurance companies, the life insurance penetration, and the life insurance density increase with GDP per capita. Interestingly, for the first two measures, the lower-middle-income group exhibits the lowest medians. Also note that the high-income countries exhibit a life insurance penetration ten times as high as lower-middle-income countries and a life insurance density nearly one hundred times higher than that of low-income countries.

2.5 Stock and Bond Market Development

This part of the database defines measures of the size, the activity, and the efficiency of primary and secondary stock and bond markets. By including bond markets and primary equity markets, this database improves significantly on previous work. Sources and coverage are presented, as well as the variance of these indicators over time and across income groups.

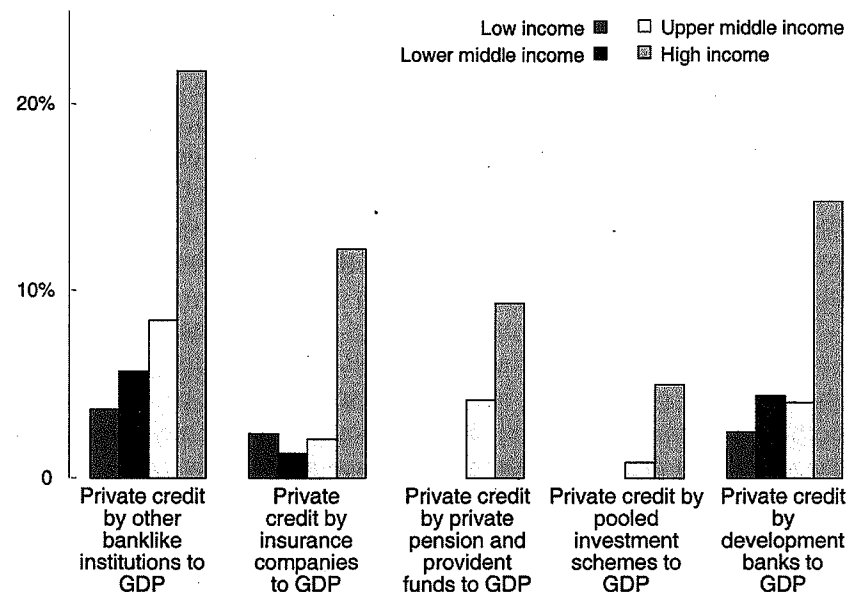


Figure 2.5
Private credit by other financial institutions across income groups.

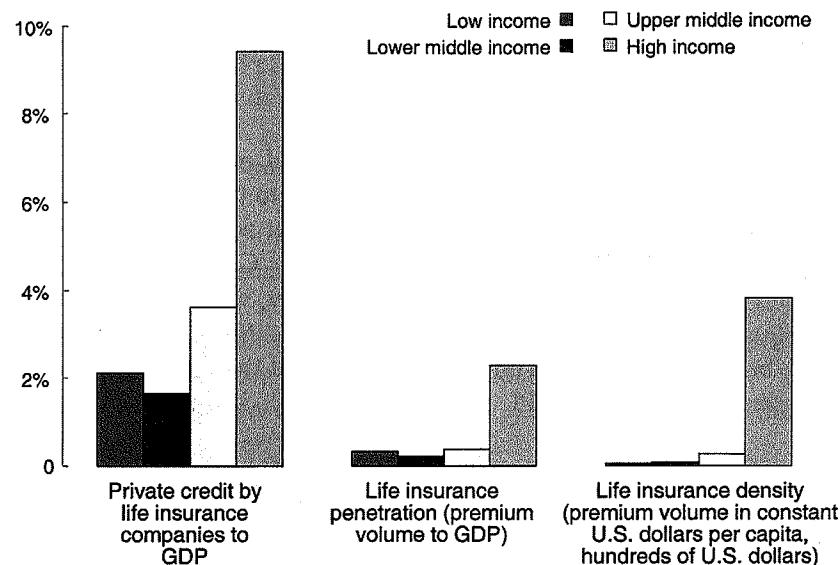


Figure 2.6
Life insurance development across income groups.

2.5.1 Indicators of Stock Market Size, Activity, and Efficiency

As an indicator of the size of the stock market, we use the stock market capitalization to GDP ratio, which equals the value of listed shares divided by GDP. Both numerator and denominator are deflated appropriately, with the numerator equaling the average of the end-of-year value for year t and year $t - 1$, both deflated by the respective end-of-year CPI, and the GDP deflated by the annual value of the CPI.

To measure the activity or liquidity of the stock markets, we use stock market total value traded to GDP, which is defined as total shares traded on the stock market exchange divided by GDP. Since both numerator and denominator are flow variables measured over the same time period, deflating is not necessary in this case.

We use the stock market turnover ratio as efficiency indicator of stock markets. It is defined as the ratio of the value of total shares traded to market capitalization. It measures the activity or liquidity of a stock market relative to its size. A small but active stock market will have a high turnover ratio whereas a large, less liquid stock market will have a low turnover ratio. Since this indicator is the ratio of a stock to a flow variable, we apply a deflating procedure similar to that of the market capitalization indicator.

2.5.2 Indicators of Bond Market Size

As indicators of the size of the domestic bond market, we use the private and public bond market capitalization to GDP, which equals the total amount of outstanding domestic debt securities issued by private or public domestic entities divided by GDP. Both numerator and denominator are deflated appropriately, with the numerator equaling the average of the end-of-year value for year t and year $t - 1$, both deflated by the end-of-year CPI, and the GDP deflated by the annual value of the CPI.

2.5.3 Indicators of Primary Stock and Bond Market Size

As an indicator of the size of primary equity and debt markets, we use Equity Issues to GDP (Long-term Private Debt Issues to GDP), which equals equity issues (long-term private debt issues) divided

by GDP. Both numerator and denominator are in nominal terms, since both are flow variables.

2.5.4 Sources

Most of the secondary stock market data come from the IFC's Emerging Market Database. Additional data come from Goldman Sachs' International Investment Research (1986). Some of the data are in local currency, some in U.S. dollars. To deflate in a consistent way, we use the local CPI and the U.S. CPI respectively.²⁴ Data on the secondary bond market come from the Bank for International Settlement (BIS) *Quarterly Review on International Banking and Financial Market Development* and are in U.S. dollars. Data on the primary equity and debt market come from country-specific sources and were collected by Aylward and Glen (1999) and from the OECD Financial Statistics Monthly.²⁵ They are partly in local currency, partly in U.S. dollars. GDP numbers in local currency and the CPI numbers are from the International Financial Statistics, while GDP numbers in U.S. dollars are from the World Bank.

Secondary stock market data are available for ninety-three countries starting in 1975. Secondary bond market data are available for thirty-seven countries, mostly industrialized, and for the years since 1990. Primary market data are available for forty-two countries, both industrialized and developing, for the years 1980–1995.

2.5.5 Stock and Bond Market Development across Income Groups

There is a significant variation in size, activity, and efficiency of stock markets across income groups, as evident in figure 2.7. Countries with a higher level of GDP per capita have bigger, more active, more efficient stock markets. Richer countries also have larger bond markets and issue more equity—in particular, private bonds.²⁶ Stock markets have increased in size, activity, and efficiency over the last three decades, as can be seen in figure 2.8.

2.6 Concluding Remarks

This chapter introduced a new and unique compilation of indicators of the size, activity, and efficiency of financial intermediaries and markets across countries and over time. It enables financial analysts

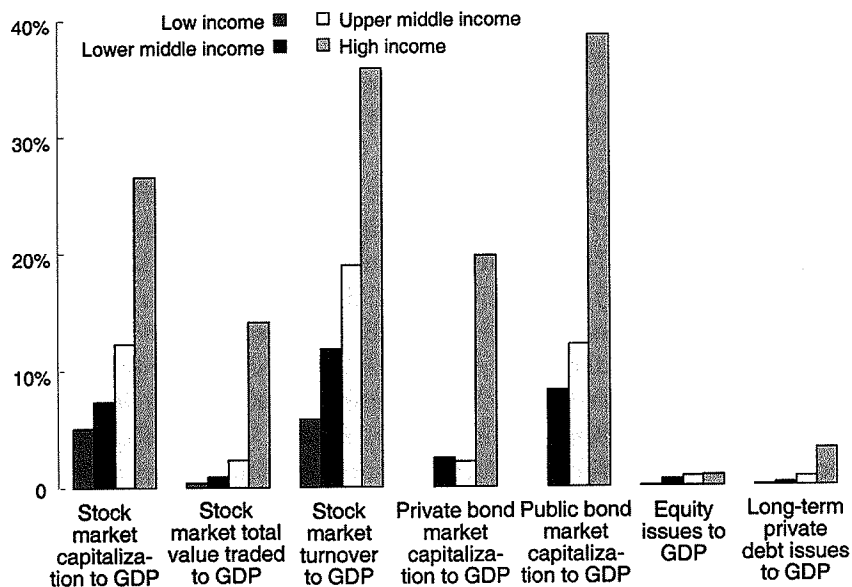


Figure 2.7
Stock and bond market development across income groups.

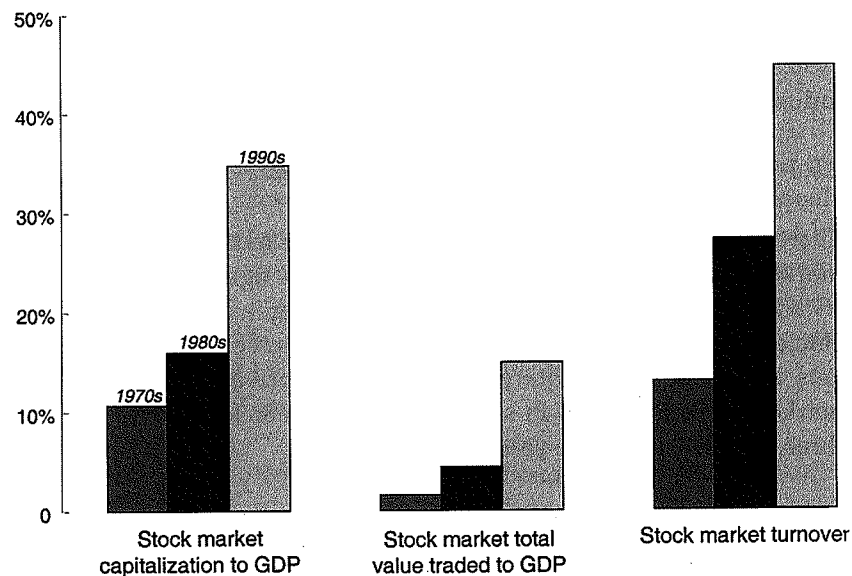


Figure 2.8
Stock market development over time.

to make a comprehensive assessment of the development and structure of the financial sector of countries compared to other countries and over time. It allows researchers to address a rich set of questions and issues in financial economics.

The database is part of a broader research project that tries to understand the determinants of financial structure and its importance for economic development. Specifically, the compiled data permit the construction of financial structure indicators that measure the relative size, activity, and efficiency of banks compared to stock markets. These indicators can then be used to investigate the empirical link between the legal, regulatory, and policy environment and the financial structure indicators (chapter 3) as well as the implications of financial structure for economic growth.

Appendix 2.1: Sources

Section 2.2

All raw data are from the electronic version of the IMF's International Financial Statistics.

The following lines are included in Central Bank Assets, if available:

- 12AN.ZF Claims on government (net)
- 12A.ZF MONAETH: claims on central government (local currency)
- 12BX.ZF MONAETH: claims on off entities (local currency)
- 12B.ZF MONAETH: claims on state and local governments (local currency)
- 12CD.ZF Claims on nonfinancial enterprises
- 12C.ZF MONAETH: claims on nonfinancial public enterprises (local currency)
- 12D.ZF MONAETH: claims on private sector (local currency)

The following lines are included in Deposit Money Bank Assets, if available:

- 22ANHZF Claims on central government (net)
- 22A.HZF Claims on central government
- 22A.MZF Claims on central government
- 22A.TZF Claims on central government
- 22A.GZF Claims on government
- 22AN.ZF Claims on government (net)
- 22AE.ZF Claims on national property fund
- 22A.ZF DEPMONBKS: claims on central government (local currency)

22B.MZF	Claims on local government
22B.GZF	Claims on official entities
22B.TZF	Claims on state and local governments
22BX.ZF	DEPMONBKS: claims on official entities (local currency)
22B.ZF	DEPMONBKS: claims on state and local governments (local currency)
22CB.ZF	Claims on cooperatives
22C.HZF	Claims on nonfinancial public enterprises
22CA.ZF	Claims on public corporations
22C.ZF	DEPMONBKS: claims on nonfinancial public enterprises (local currency)
22D.GZF	Claims on private sector
22D.HZF	Claims on private sector
22D.MZF	Claims on private sector
22D.TZF	Claims on private sector
22DA.ZF	Claims on socialist sector
22D.ZF	DEPMONBKS: claims on private sector (local currency)
22D.IZF	Treasury: claims on private sector

The following lines are included in Other Financial Institutions Assets, if available:

42BXLZF	Local and semi-government securities
42BXKZF	Claims on official entities
42B.SZF	Claims on local governments
42B.GZF	Claims on local governments
42B.BZF	Claims on official entities
42B.FZF	Claims on official entities
42B.KZF	Claims on official entities
42B.NZF	Claims on state and local governments
42B.LZF	Claims on state and local governments
42BX.ZF	OTHFININST: claims on official entities (local currency)
42B.ZF	OTHFININST: claims on state and local governments (local currency)
42A.LZF	Claims on central government
42A.NZF	Claims on central government
42A.PZF	Claims on central government
42A.BZF	Claims on government
42A.FZF	Claims on government
42A.GZF	Claims on government

42A.HZF	Claims on government
42A.IZF	Claims on government
42A.KZF	Claims on government
42A.MZF	Claims on government
42A.SZF	Claims on government
42AN.ZF	Claims on government (net)
42A.ZF	OTHFININST: claims on central government (local currency)
42C.SZF	Claims on nonfinancial public enterprise
42C.NZF	Claims on nonfinancial public enterprise
42C.LZF	Claims on nonfinancial public enterprise
42C.MZF	Claims on nonfinancial public enterprise
42C.GZF	Claims on public enterprises
42C.FZF	Claims on public enterprises
42C.ZF	OTHFININST: claims on nonfinancial public enterprises (local currency)
42D.BZF	Claims on private sector
42D.FZF	Claims on private sector
42D.GZF	Claims on private sector
42D.HZF	Claims on private sector
42D.IZF	Claims on private sector
42D.KZF	Claims on private sector
42D.LZF	Claims on private sector
42D.MZF	Claims on private sector
42D.NZF	Claims on private sector
42D.PZF	Claims on private sector
42D.SZF	Claims on private sector
42D.ZF	OTHFININST: claims on private sector (local currency)
42H.SZF	Fixed asset/real estate
42H.LZF	Real estate

The following line is included in Liquid Liabilities:

55L.ZF	FINSURVEY: liquid liabilities (local currency)
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if not available: 35L.ZF—MONSURVEY: money plus quasi-money (M2) (local currency)

The following lines are included in Private Credit by Deposit Money Banks, if available:

22D.GZF	Claims on private sector
22D.HZF	Claims on private sector

22D.MZF	Claims on private sector
22D.TZF	Claims on private sector
22DA.ZF	Claims on private sector
22D.ZF	DEPMONBKS: claims on private sector (local currency)
22D.IZF	TREAS: claims on private sector

The following lines are included in Private Credit by Deposit Money Banks and Other Financial Institutions, if available:

22D.GZF	Claims on private sector
22D.HZF	Claims on private sector
22D.MZF	Claims on private sector
22D.TZF	Claims on private sector
22DA.ZF	Claims on socialist sector
22D.ZF	DEPMONBKS: claims on private sector (local currency)
22D.IZF	TREAS: claims on private sector
42D.BZF	Claims on private sector
42D.FZF	Claims on private sector
42D.GZF	Claims on private sector
42D.HZF	Claims on private sector
42D.IZF	Claims on private sector
42D.KZF	Claims on private sector
42D.LZF	Claims on private sector
42D.MZF	Claims on private sector
42D.NZF	Claims on private sector
42D.PZF	Claims on private sector
42D.SZF	Claims on private sector
42D.ZF	OTHFININST: claims on private sector (local currency)

For GDP in local currency, the following line is used 99B.ZF—NA: gross domestic product (local currency) if not available: 99B.CZF—Gross domestic product. For the annual deflator the Consumer Price index, line 64.ZF is used. For the end-of-period deflator the December value of the Consumer Price index, line 64M.ZF or, if not available, the fourth quarter value of line 64Q.ZF is used.

Section 2.3

Data on all variables, except Public Share are from IBCA's Bankscope database. The data for Public Share were collected from the following sources. If the public banks are not clearly marked in the publication, the classification is also added.

Argentina

Source:	Banco Central de la Republica Argentina, Informacion de Entidades Financieras
Dates available:	1995–1997

Austria

Source:	Gardener and Molyneux
Dates available:	1983, 1988

Bangladesh

Source:	Bangladesh Bank, Bangladesh Bank Bulletin
Dates available:	1980–1997

Belgium

Source:	Gardener and Molyneux
Dates available:	1982, 1988

Bolivia

Source:	Banco Central de Bolivia, Boletin Estadistico
Dates available:	1980–1997

Brazil

Source:	Banco Central do Brazil, Boletim Mensal
Dates available:	1980–1997

Canada

Source:	Bankscope
Dates available:	1997

Colombia

Source:	Banco de la Republica, Informe Annual del Gerente a la Junta Directiva
Dates available:	1986–1991

Costa Rica

Source:	Bankscope
Dates available:	1992–1997

Denmark

Source:	Gardener and Molyneux
Dates available:	1983, 1988

Ecuador

Source:	Bankscope
Dates available:	1997

Egypt

Source: Bankscope
 Dates available: 1990–1997

Finland

Source: Statistical Yearbook of Finland (share of Postpankki assets in total commercial bank assets)
 Dates available: 1980–1988

France

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Germany

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Ghana

Source: Internal World Bank information
 Dates available: 1988

Greece

Source: Gardener and Molyneux (credit instead of assets)
 Dates available: 1988

Guatemala

Source: Superintendencia de Bancos, Boletín Anual de Estadísticas del Sistema Financiero
 Dates available: 1980–1997

India

Source: Reserve Bank of India, Statistical Tables Relating to Banks in India
 Dates available: 1980–1996

Indonesia

Source: Bank Indonesia, Indonesia Financial Statistics (commercial banks other than private exchange and foreign and joint exchange banks)
 Dates available: 1986–1997

Ireland

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Italy

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Japan

Source: Bankscope
 Dates available: 1997

Mexico

Source: Bankscope
 Dates available: 1993–1994

Netherlands

Source: Gardener and Molyneux
 Dates available: 1983, 1988

New Zealand

Source: Bankscope
 Dates available: 1997

Norway

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Pakistan

Source: Bankscope
 Dates available: 1990–1996

Philippines

Source: The World Bank, Philippine Financial Sector Study, 7177-PH.
 Dates available: 1980, 1986

Portugal

Source: Banco de Portugal, Annual Report 1997 (credit instead of assets)
 Dates available: 1984, 1989, 1997

Spain

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Sri Lanka

Source: Bankscope
 Dates available: 1992–1996

Sweden

Source: Gardener and Molyneux
 Dates available: 1983, 1988

Switzerland

Source: Banque Nationale Suisse, Les Banques Suisses en 19 (share of cantonal bank assets in total commercial bank assets)
 Dates available: 1980-1997

Thailand

Source: The World Bank's report: FSS, 8043-TH
 Dates available: 1980, 1985-1988

Tunisia

Source: Information from the country economist
 Dates available: 1987, 1992

Turkey

Source: Banks Association of Turkey, Banks in Turkey
 Dates available: 1985, 1990, 1992

United Kingdom

Source: Gardener and Molyneux
 Dates available: 1988

United States

Source: Bankscope
 Dates available: 1997

Uruguay

Source: Bankscope
 Dates available: 1990-1996

Zambia

Source: The World Bank's Financial Sector Report No. 12387-ZA
 Dates available: 1992

Section 2.4

The following information lists the sources, the time span, and the definition of the categories for each country. All numbers are total assets or total financial assets, unless otherwise stated. The raw numbers are for December, unless otherwise noted. If the raw numbers are for other months, the deflating process is adjusted correspondingly. An asterisk denotes series for which data points had to be extrapolated. The sources for life penetration and

density are listed at the end. Data on GDP in local currency and CPI are from the electronic version of the IFS, as described in the appendix for section 2.2.

Argentina

Sources: (a) Banco Central de la Republica Argentina, *Boletin Estadistico*
 (b) IFS
 Dates available: 1980-1987, 1992-1997

Assets (Source a)

Banklike Institutions: Finance companies
 Credit companies
 Building societies

Private credit (Source b)

Banklike Institutions: Investment finance companies
 Credit cooperatives
 Savings and loan associations

Australia

Source: Reserve Bank of Australia, *Bulletin*
 Dates available: 1980-1996
 All raw numbers are for June.

Assets

Banklike Institutions: Permanent building societies
 Credit cooperatives
 Money market corporations
 Pastoral financial companies
 Finance companies
 General financiers
 Intragroup financiers
 Other financial corporations
 Cooperative housing societies
 Securitization vehicles

Insurance Companies: Life insurance offices
 General insurance offices
 Friendly societies

Private Pension Funds: Superannuation funds

Pooled Investment Schemes: Other managed funds (cash management trusts, common funds)
 Public unit trusts

Development Banks: Other banks (Australian Resource Development Bank, Commonwealth Development Bank, and, prior to reclassification in 1988 to

trading banks, the Primary Industry Bank of Australia)

Private credit

Lines included total loans excluding loans to related companies, unless otherwise noted.

Banklike Institutions:	Permanent building societies Credit cooperatives Money market corporations Pastoral financial companies Finance companies General financiers Securization vehicles (all assets except other assets)
Insurance Companies:	Life insurance offices (debentures and notes, shares, other investments, and loans)
Private Pension Funds:	Superannuation funds (bills of exchange, debentures and notes, domestic shares, and loans)
Pooled Investment Schemes:	Cash management trusts (bills of exchange and other promissory notes) Public unit trusts (bills of exchange, debentures and notes, domestic shares and loans)
Development Banks:	Other banks (Australian Resource Development Bank, Commonwealth Development Bank, and, prior to reclassification in 1988 to trading banks, the Primary Industry Bank of Australia)

Austria

Source: Oesterreichische Nationalbank, *Mitteilungen*

Dates available: 1980–1997

Assets

Banklike Institutions:	Building societies
Insurance Companies:	All insurance companies
Private Pension Funds:	Pension funds
Pooled Investment Schemes:	Investment funds

Private credit

Lines included other domestic bonds, other domestic obligations, shares, other domestic loans.

Banklike Institutions:	Building societies
Insurance Companies:	All insurance companies
Private Pension Funds:	Pension funds
Pooled Investment Schemes:	Investment funds

Bahamas

Sources: (a) Central Bank of the Bahamas, *Statistical Digest*
(b) IFS

Dates available: 1980–1997

Assets (Source a)

Banklike Institutions:	Other local financial institutions P.O. Savings Bank
Development Banks:	Bahamas Development Bank

Private credit

Banklike Institutions (Source b): Licensed banks and trust companies other than commercial banks corresponds to other local financial institutions)

Development Banks (Source a): Bahamas Development Bank (total loans)

Barbados

Sources: (a) through 1995: Central Bank of Barbados, *Annual Statistical Digest*, and after 1995: Central Bank of Barbados, *Economic and Financial Statistics*
(b) IFS

Dates available: 1980–1997

Assets (Source a)

Banklike Institutions:	Mortgage and finance companies Finance companies and merchant banks
Insurance Companies:	National Insurance Fund
Development Banks:	Barbados Development Bank

Private credit (Source b)

Banklike Institutions: Trust companies

Belgium

Sources: (a) *Bulletin of Banque Nationale de Belgique*
(b) *Annuaire Statistique de la Belgique*
(c) *OECD Methodological Supplement*

Dates available: 1980–1993, incomplete data

Assets

Banklike Institutions:	Savings banks (Source a) Caisse generale d'épargne et de retraite (Source a) Mortgage companies and capital redemption companies (Source c)
Insurance Companies:	Insurance companies (includes life insurance, Source b) Life insurance companies (Source a)

Private Pension Funds: Pension funds (Source c)
 Pooled Investment Schemes: Institutions pour placement collectif (Source b)
 Development Banks: Public financial credit intermediaries (Source c)

Belize

Sources: (a) Central Bank of Belize, *Quarterly Review*
 (b) IFS

Dates available: 1980-1997

Assets (Source a)

Development Banks: Development Finance Corporation

Private credit (Source b)

Development Banks: Development Finance Corporation

Bolivia

Sources: (a) Banco Central de Bolivia, *Boletín estadístico*
 (b) IFS

Dates available: 1980-1997

Assets (Source a)

Development Banks: Specialized banks

Private credit (Source b)

Development Banks: Specialized banks (Mining Bank, Agricultural Bank, Industrial Bank, Industrial Financing Bank)

Brazil

Source: Banco do Brazil, *Boletim Mensal*

Dates available: 1980-1997

Assets

Banklike Institutions: Investment banks
 Housing credit companies
 S&L associations
 Leasing companies

Insurance Companies: Insurance companies

Private Pension Funds: Private pension funds

Pooled Investment Schemes: Mutual Funds

Investment institutions and investment funds

Development Banks: National Bank of Economic and Social Development

State development banks

Credit Society of Finance and Investment

National Housing Bank
 National Bank of Cooperative Credit
 Special Industrial Financing Agency

Private credit

Line included total credit to private nonfinancial sector.

Banklike Institutions: Investment banks
 Housing credit companies
 Leasing companies

Development Banks: National Bank of Economic and Social Development
 State development banks
 Credit Society of Finance and Investment
 National Bank of Cooperative Credit

Canada

Sources: (a) National Balance Sheet Accounts, *Statistics Canada*
 (b) IFS

Dates available: 1980-1997

Assets (Source a)

Banklike Institutions: Quebec Savings Bank, since 1987 classified as deposit money bank
 Credit unions and caisses populaires
 Sales finance and consumer loan companies
 Other financial institutions (venture capital companies, finance leasing companies, and investment and holding companies)
 Trust companies and mortgage loan companies

Private Pension Funds: Trusteed pension plans

Insurance Companies: Life insurance business and segregated funds of life insurance companies
 Property and casualty insurance companies and accident and sickness branches of life insurance companies

Pooled Investment Schemes: Mutual funds

Development Banks: Public financial institutions

Private credit

The following lines are included in data collected from Source a: trade receivables, consumer credit, other loans, mortgages, other bonds, and shares.

Banklike Institutions (Source b): Quebec Savings Bank, since 1987 classified as deposit money bank
 Credit unions and caisses populaires

	Sales finance and consumer loan companies
	Trust companies and mortgage loan companies
Private Pension Funds:	Trusteed pension plans (Source a)
Insurance Companies (Source a):	Life insurance business and segregated funds of life insurance companies
	Property and casualty insurance companies and accident and sickness branches of life insurance companies
Pooled Investment Schemes:	Mutual funds (Source a)
Development Banks (Source a):	Public financial institutions

Chile

Sources:	(a) Banco Central de Chile, <i>Boletín Mensual</i>
	(b) Chile finanzas, Web page
	(c) IFS

Dates available: 1980–1997

Assets

Banklike Institutions:	Financial companies (Source a)
Insurance Companies:	Life and nonlife insurance companies (Source b)
Private Pension Funds:	Private pension funds (Source b)
Pooled Investment Schemes:	Foreign capital investment funds (Source b)
	Investment funds (Source b)
	Mutual funds (Source b)

Private credit

Lines included in data collected from Source b: stocks, mortgage backed securities, corporate bonds.

Banklike Institutions:	Financial companies (Source c)
Insurance Companies:	Life and nonlife insurance companies (Source b)
Private Pension Funds:	Private pension funds (Source b)
Pooled Investment Schemes:	Foreign capital investment funds (Source b)
	Investment funds (Source b)
	Mutual funds (Source b)

Colombia

Source:	Banco de la Republica, <i>Revista del Banco de la Republica</i>
Dates available:	1980–1996

Assets

Banklike Institutions:	Savings and housing corporations
	Private finance companies
	Trade finance companies

	Financial coporations
	Banco Central Hipotecario
	Caja Social de Ahorros
Development Banks:	Caja de Credito Agrario, Industrial y Minero
	Financiera Energetica Nacional
	Instituto de Fomento Industrial

Private credit

Line included credito al sector privado.

Banklike Institutions:	Savings and housing corporations
	Private finance companies
	Trade finance companies
	Financial coporations
	Banco Central Hipotecario
	Caja Social de Ahorros
Development Banks:	Caja de Credito Agrario, Industrial y Minero
	Financiera Energetica Nacional
	Instituto de Fomento Industrial

Denmark

Sources:	(a) <i>Statistical Yearbook of Denmark</i>
	(b) Reports and Accounts for the Year..., Danmarks Nationalbank

Dates available: 1980–1995

Assets

Banklike Institutions:	Mortgage credit associations and local governments' credit associations (Source a)
	Financing companies (Source b)
	Denmarks Skibskreditfond (Source a)
	Manufacturing and Manual Industries' Finance Corporation (Source a)
Banklike Institutions:	Private nonfinancial intermediaries (development banks, mortgage banks, and S&L associations)
Development Banks:	Public nonfinancial intermediaries

Dominican Republic

Source:	Banco Central de la Republica Dominicana, <i>Boletín Mensual</i>
Dates available:	1980–1997

Assets

Banklike Institutions:	Private nonfinancial intermediaries (development banks, mortgage banks, and S&L associations)
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Development Banks: Public nonfinancial intermediaries

Private credit

Line included credito interno al sector privado.

Development Banks: National Development Bank
National Housing Bank
National Financial Corporation

Ecuador

Sources: (a) Banco Central de Ecuador, *Boletin anuario*
(b) Banco Central de Ecuador, *Memoria anual*

Dates available: 1980-1994

Assets

Banklike Institutions: S&L associations
Private finance companies

Insurance Companies: Insurance companies
Reinsurance companies
Life insurance companies

Development Banks: National Development Bank
National Housing Bank
National Financial Corporation

Private credit (Source b)

Line included credito al sector privado.

Banklike Institutions: S&L associations
Private finance companies
The Mortgage Bank of the Kingdom of Denmark (Source a)
The Fisheries Bank of the Kingdom of Denmark (Source a)

Insurance Companies (Source a): Life insurance companies
Non-life insurance companies

Private Pension Funds: Private pension funds (Source a)
Pooled Investment Schemes: Investment associations (Source b)

Private credit (Source b)

Banklike Institutions: Financing companies (leasing assets and loans)
Mortgage credit associations (total lending)

Egypt

Sources: (a) Central Bank of Egypt, *Economic Review*
(b) Central Bank of Egypt, *Annual Report*
(c) IFS

Dates available: 1980-1997

All raw numbers except the ones from Source c are for June.

Assets

Development Banks: Specialized banks (Source a)
Insurance Companies: Investment by insurance companies (Source b)

Private credit

Development Banks: Specialized banks (Source c)
Insurance Companies: Insurance companies (Source b, *included lines: securities and loans, other than of/to government*)

El Salvador

Sources: (a) Banco Central de Reserva de El Salvador, *Boletin trimestral*
(b) Superintendencia del Sistema Financiero, *Estados e indicadores financieros*
(c) Superintendencia de Bancos y Otras Instituciones, *Estadisticas: Seguros, Fianzas, Bancos*
(d) IFS

Dates available: 1980-1997

Assets

Banklike Institutions: Finance companies (Source a), earlier called S&L associations

Insurance Companies: General warehouses (Source b)
Insurance companies (Source c)
Development Banks: Official credit institutions (Source b)

Private credit (Source d)

Banklike Institutions: Finance companies

Fiji

Sources: (a) Bureau of Statistics, *Current Economic Statistics*
(b) IFS

Dates available: 1980-1997

Assets (Source a)

Insurance Companies: Non-life insurance companies
Life insurance companies

Private credit (Source b)

Insurance Companies: Life insurance companies

Finland

Sources: (a) Statistical yearbook of Finland
(b) OECD Methodological Supplement

Dates available: 1980-1994

Assets

- Banklike Institutions: Mortgage banks (Source b)
Finance companies (Source b)
Others (development and investment companies, banking houses, holding companies, and pawnshops) (Source b)
- Insurance Companies: Insurance companies and associations (Source b)
- Pooled Investment Schemes: Mutual funds (Source a)
Unit trusts (Source a)
- Development Banks: Development credit institutions (Source b)

France

- Source: Banque de France, Statistiques monetaires et financieres annuelles
- Dates available: 1980-1996

Assets

- Banklike Institutions: Finance companies and security houses
- Pooled Investment Funds: Fonds comuns de creances
OPCVM (organismes de placement collectif en valeurs mobilières)
- Development Banks: Specialized financial institutions

Private credit

Line included creance sur l'economie.

- Banklike Institutions: Finance companies and security houses
- Pooled Investment Schemes: Fonds comuns de creances
OPCVM (organismes de placement collectif en valeurs mobilières)
- Development Banks: Specialized financial institutions

Germany

- Sources: (a) Bundesbank, *Monthly Bulletin*
(b) Bundesbank, *Capital Market Statistics*
(c) IFS
- Dates available: 1980-1997

Assets

- Banklike Institutions: Building societies (Source a)
- Pooled Investment Schemes: Investment and securities-based investment funds (Source b)

Private credit (Source c)

- Banklike Institutions: Building societies

Greece

- Sources: (a) Bank of Greece, *Monthly Statistical Bulletin*
(b) Bank of Greece, *Annual Report*
(c) IFS
- Dates available: 1980-1997

Assets

- Pooled Investment Schemes: Mutual funds (Source b)
- Development Banks: Specialized credit institutions including Agricultural Bank, National Mortgage Bank, Investment Bank, National Investment Bank for Industrial Development, Hellenic Industrial Development Bank, National Housing Bank, Deposits and Loan Fund and Postal Savings Banks (Source a)

Private credit (Source c)

- Development Banks: Specialized credit institutions

Guatemala

- Source: Superintendencia de Bancos, *Boletin annual de estadisticas del sistema financiero*
- Dates available: 1980-1997

Assets

- Banklike Institutions: Private finance companies
General warehouses
Trust accounts
- Insurance Companies: Insurance companies
- Development Banks: National Financial Corporation

Guyana

- Source: Bank of Guyana, *Statistical Bulletin*
- Dates available: 1980-1992

Assets

- Banklike Institutions: New Building Society
Trust companies
Guyana Co-operative Mortgage Finance Bank
- Insurance Companies: Life insurance companies
Non-life insurance companies
- Private Pension Funds: Pension schemes

Private credit

Line included private sector.

- Banklike Institutions: New Building Society
Trust companies
Guyana Co-operative Mortgage Finance Bank

Insurance Companies: Life insurance companies
Non-life insurance companies
Private Pension Funds: Pension schemes

Honduras

Sources: (a) Banco Central de Honduras, *Boletín de estadísticas de seguros*

(b) Banco Central de Honduras, *Boletín estadístico*

Dates available: 1980–1997

Assets

Banklike Institutions Specialized finance companies

(Source b):

Insurance Companies: Insurance companies (Source a)

Development Banks Development banks

(Source b):

Private credit (Source b)

Line included crédito e inversiones, sector privado.

Banklike Institutions Specialized finance companies

(Source b):

Development Banks Development banks

(Source b):

India

Sources: (a) Reserve Bank of India, *Report on Currency and Finance*

(b) Life Insurance Corporation of India, *Annual Report*

(c) IFS

Dates available: 1980–1995, missing data

The raw numbers from sources b and c are for March or June.

Assets

Insurance Companies: Life Insurance Corporation of India (Source b)

Pooled Investment Schemes Private mutual funds

(Source a):

Unit trust

Development Banks

State Financial Corporation

(Source a):

Industrial Financial Corporation of India

Industrial Development Bank of India

Industrial Credit and Investment Corporation of India Limited

Export-Import Bank of India

National Housing Bank

Small Industries Development Bank of India

Industrial Investment Bank of India

Discount and Finance House

National Bank for Agricultural and Rural

Development

Private credit (Source c)

Development Banks: Development banks

Indonesia

Source: Bank Indonesia, *Indonesia Financial Statistics*

Dates available: 1980–1994

Assets

Banklike Institutions: State and private savings banks (since 1989 included in deposit money banks)

Financial companies

Development Banks: Development banks

Private credit

Line included claims on private enterprises and individuals.

Development Banks: Development banks

Ireland

Sources: (a) Central Bank of Ireland, *Annual Report*

(b) IFS

Dates available: 1980–1996

Assets (Source a)

Banklike Institutions: Nonassociated banks

Other credit institutions; TSB Bank, ACC Bank, ICC Bank, and ICC Investment Bank

Building societies

Hire-purchase finance companies

Pooled Investment Schemes: Collective investment schemes, authorized by the CB—total net asset values

Private credit (Source b)

Banklike Institutions: Definition varies over time

Israel

Sources: (a) Central Bureau of Statistics, *Statistical Abstract of Israel*

(b) Central Bureau of Statistics, *Monthly Bulletin of Statistics*

Dates available: 1980–1995

Assets

Banklike Institutions: Industrial investment finance banks

(Source a): Mortgage banks

Insurance Companies: Insurance companies (Source a)

Pooled Investment Schemes: Mutual funds (Source b)

Private credit

Lines included loans, shares, nontradeable bonds, private bonds, credit to the public.

Banklike Institutions Industrial investment finance banks
(Source a): Mortgage banks
Pooled Investment Schemes: Mutual funds (Source b)

Italy

Sources: (a) *Annuario Statistico*
(b) Banca d'Italia, *Economic Bulletin*

Dates available: 1980–1996

Assets

Banklike Institutions: Specialized credit institutions (Source a)
Insurance Companies Life insurance companies
(Source a): Other insurance companies
Pooled Investment Schemes: Investment funds and securities investment funds (Source b)

Jamaica

Sources: (a) Bank of Jamaica, Statistical Digest
(b) Bank of Jamaica, Annual Report
(c) IFS

Dates available: 1980–1996

Assets

Banklike Institutions Finance houses and trust companies
(Source a): Merchant banks
Building societies
Credit unions
Trust companies
Development Banks National Development Bank
(Source b): Agricultural Credit Bank
Trafalgar Development Bank

Private credit (Source c)

Banklike Institutions: Merchant banks, finance houses, and trust companies

Japan

Sources: (a) Research and Statistics Department, Bank of Japan, *Economic Statistics Annual*
(b) Research and Statistics Department, Bank of Japan, *Economic Statistics Monthly*

Dates available: 1980–1997

For most categories total assets, for some categories sum of principal assets.

Assets

Banklike Institutions Zenshinren banks
(Source a): Credit cooperatives

Shinkumi Federation Bank/National Federation of Credit Cooperatives Labor credit associations

National Federation of Labor Credit Associations Agricultural cooperatives
Credit Federation of Agricultural Cooperatives

Fishery cooperatives
Credit Federation of Fishery Cooperatives
Postal Savings Bank—total deposits
Foreign banks

Securities finance companies
Securities investment trusts

Trust accounts of deposit money banks (includes city, regional, and trust banks)
Postal Life Insurance and Postal Annuity

Insurance Companies
(Source b):

Life insurance companies
Non-life insurance companies
Mutual insurance federations of agricultural cooperatives

Development Banks
(Source b):

Government financial institutions: Japan Development Bank, Export-Import Bank, Hokkaido and Tohoku Development Corp., People's Finance Corp., Housing Loan Corp., Agriculture, Forestry and Fisheries Finance Corp., Small Business Corp., Japan Finance Corp. for Municipal Enterprises, Small Business Credit Insurance Corp., Environmental Sanitation Business Finance Corp., Okinawa Development Finance and Medical Care Facilities Finance Corp.
Trust Fund Bureau

Private credit

Lines included loans, corporate bonds, stocks.

Banklike Institutions
(Source a):

Zenshinren banks
Credit cooperatives
Shinkumi Federation Bank/National Federation of Credit Cooperatives Labor credit associations

National Federation of Labor Credit Associations

Agricultural cooperatives
Credit Federation of Agricultural Cooperatives

	Fishery cooperatives
	Credit Federation of Fishery Cooperatives
	Foreign banks
	Securities finance companies
	Securities investment trusts
	Trust accounts of deposit money banks (includes city, regional, and trust banks)
Insurance Companies (Source b):	Life insurance companies
	Non-life insurance companies
	Mutual insurance federations of agricultural cooperatives
Development Banks (Source b):	Government financial institutions

Jordan

Sources:	(a) <i>Monthly Statistical Bulletin</i>
	(b) Central Bank of Jordan, <i>Annual Report</i>
	(c) IFS

Dates available: 1980–1996 with missing data

Assets

Banklike Institutions (Source a):	Other financial corporations including finance companies, investment companies, securities companies. However, institutions included may change from time to time.
Insurance Companies:	Insurance companies (Source b)
Development Banks:	Specialized credit institutions including Cities and Village Development Bank, Industrial Development Banks, Housing and Development Corporation, Agricultural Credit Corporations and Jordan Co-operative Organization

Private credit

Banklike Institutions (Source a):	Other financial corporations (loans and corporate bonds/shares)
Insurance Companies (Source b):	Insurance companies (investment in shares)
Development Banks (Source c):	Specialized credit institutions (included institutions vary over time)

Kenya

Sources:	(a) Central Bank of Kenya, <i>Quarterly Economic Review</i>
	(b) Central Bank of Kenya, <i>Statistical Bulletin</i>
	(c) IFS

Dates available: 1980–1997

Assets

Banklike Institutions:	Kenya Post Office Savings Bank (data since 1984 from Source b, before 1984 from Source a)
	Nonbank financial institutions (Source b)

Private credit (Source c)

Banklike Institutions:	Banklike financial institutions
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Korea

Sources:	(a) Bank of Korea, <i>Monthly Statistical Bulletin</i>
	(b) IFS

Dates available: 1980–1997

Assets (Source a)

Banklike Institutions:	Mutual savings and finance companies
	Credit unions
	Community credit cooperatives
	Postal Savings and Postal Life Insurance
	Mutual credits
	Investment institutions
	Investment and finance institutions, since 1993 included in merchant banks
	Merchant banking companies
	Investment trust companies
	Korea securities and finance companies
	Trust accounts of banks
Insurance Companies:	Non-life insurance companies
	Life insurance companies
Development Banks:	Korea Development Bank
	Export-Import Bank of Korea
	Korea Long-Term Credit Bank

Private credit

Lines included in data collected from Source a: loans, stocks, debentures.

Banklike Institutions:	Mutual savings and finance companies (Source a)
	Credit unions (Source a)
	Community credit cooperatives (Source a)
	Mutual credits (Source a)
	Trust accounts of banks (Source b)
Insurance Companies:	Life insurance companies (Source b)
Development Banks:	Development banks (Source b)

Malawi

Source: Reserve Bank of Malawi, *Financial and Economic Review*

Dates available: 1981–1997

Assets

Banklike institutions: New Building Society
P.O. Savings Bank
National Finance Company
Leasing and Finance Company

Insurance Companies: Insurance companies and assurance companies

Development Banks: Investment and Development Bank

Private credit

Lines included private sector.

Banklike institutions: New Building Society
National Finance Company

Insurance Companies: Insurance companies and assurance companies

Development Banks: Investment and Development Bank

Malaysia

Sources: (a) Bank Negara Malaysia, *Quarterly Bulletin*
(b) Bank Negara Malaysia, *Money and Banking in Malaysia*
(c) Annual Report of the Director General of Insurance Companies

Dates available: 1980–1997

Assets

Banklike Institutions: National Savings Bank (Source b)
Cooperative societies (Source b)
Merchant banks (Source a)
Discount houses (Source b)
Finance companies (Source a)
Building societies, Pilgrims Management and Fund Board, Cagamas Berhard, Credit Guarantee Corporation, leasing, factoring, and venture capital companies (Source b)

Insurance Companies (Source c): Life insurance funds
General insurance funds

Pooled Investment Schemes: Unit trust (Source b)

Development Banks: Development institutions (Malaysia Industrial Development Finance, Agricultural Bank, Borneo, Development Corporation, Sabah Credit Corporation, Development

Bank of Malaysia, Industrial Bank of Malaysia, Sabah Development Bank) (Source b)

Private credit

Lines included loans and corporate bonds/stocks.

Banklike Institutions: National Savings Bank (Source b)
Cooperative societies (Source b)
Merchant banks (Source a)
Discount houses (Source b)
Finance companies (Source a)
Building societies, Pilgrims Management and Fund Board, Cagamas Berhard, Credit Guarantee Corporation, leasing, factoring, and venture capital companies (Source b)
Life insurance funds
General insurance funds

Development Banks: Development institutions (Malaysia Industrial Development Finance, Agricultural Bank, Borneo, Development Corporation, Sabah Credit Corporation, Development Bank of Malaysia, Industrial Bank of Malaysia, Sabah Development Bank) (Source b)

Insurance Companies (Source c):

Development Banks:

Malta

Source: IFS

Dates available: 1980–1997

Private credit

Banklike Institutions: Banks that grant long-term loans and do not offer deposits

Mexico

Sources: (a) Banco de Mexico, *Indicadores Economicos*
(b) IFS

Dates available: 1980–1997

All numbers are recursos totales.

Assets (Source a)

Banklike Institutions: Factoring companies
Leasing companies
Warehouse companies

Insurance Companies: Insurance companies

Development Banks: Development banks
Development funds

Private credit

Banklike Institutions (Source a): Factoring companies (cartera de factoraje con recursos y deudores diversos)

	Leasing companies (cartera vigente)
	Warehouse companies (otras inversiones, creditos, deudores diversos)
Insurance Companies (Source a):	Insurance companies (inversiones, pre-stamos/creditos al sector privado, deudores)
Development Banks (Source b):	Development banks
	Development funds

Morocco

Source: IFS
 Dates available: 1980-1996

Private credit

Development Banks: National Development Bank, National Agriculture Bank, Credit Immobilier et Hotelier Caisse de Depots et de Gestion, Caisse des Marches

Netherlands

Sources: (a) Nederlandse Bank, *Annual Bulletin*
 There are varying definitions of the different groups and in different sources.
 (b) OECD, *Methodological Supplement*
 The *Statistical Yearbook* presents significantly different numbers
 Dates available: 1980-1996

Assets

Banklike Institutions: Mortgage banks and building societies (Source b)
 Private-sector financial institutions (lombard banks/finance companies, special institutions for financing export and industry, bill brokers, municipal credit banks) (Source b)
 Savings banks until 1982 (classification according to OECD) (Source b)

Insurance Companies: Life and non-life insurance companies (Source a)

Private Pension Funds: Private pension funds (Source a)

Pooled Investment Schemes: Open-end investment companies (Source b) until 1990

Development Banks: Investment institutions (Source a) since 1991
 Local government banks (Source b)

Private credit (Source a)

Lines included: are short-term claims on persons/businesses, domestic securities by private sector, loans to the private-sector shares, mortgage loans.

Insurance Companies: Life and nonlife insurance companies
 Private Pension Funds: Private pension funds

New Zealand

Sources: (a) Reserve Bank of New Zealand, *Bulletin*
 (b) IFS

Dates available: 1980-1996

Assets (Source a)

Insurance Companies: Life insurance companies

Private credit

Insurance Companies: Life insurance companies

Nigeria

Source: Central Bank of Nigeria, *Annual Report*

Dates available: 1980-1995 with missing data

Assets

Banklike Institutions: Community banks, privately owned micro-finance institutions
 Discount houses
 Primary mortgage institutions
 Finance companies
 Insurance Companies: Insurance companies
 Development Banks: Nigerian Bank for Commerce and Industry
 People's Bank of Nigeria
 Nigerian Agricultural and Co-operative Bank
 Federal Mortgage Bank of Nigeria
 Nigerian Industrial Development Bank

Private credit

Lines included: loans and private securities.

Banklike Institutions: Community banks, privately owned micro-finance institutions
 Primary mortgage institutions
 Finance companies

Insurance Companies: Insurance companies

Development Banks: Nigerian Bank for Commerce and Industry
 People's Bank of Nigeria

Norway

Sources: (a) Central Bureau of Statistics of Norway, *Statistical Yearbook*
 (b) Bank of Norway, *Economic Bulletin*
 (c) IFS

Dates available: 1980–1995

Assets (Source a)

Banklike Institutions:	Private credit enterprises/mortgage institutions Private financial companies
Insurance Companies:	Life insurance companies Non-life insurance companies
Private Pension Funds:	Private and municipal pension schemes
Pooled Investment Schemes:	Unit trust funds
Development Banks:	State lending institutions

Private credit

Lines included in data collected from Source b: other bonds, other certificates, loans to the public/nonfinancial enterprises and municipalities, shares. Definitions vary over time and across categories.

Banklike Institutions (Source b):	Private credit enterprises/mortgage institutions Private financial companies
Insurance Companies (Source b):	Life insurance companies Non-life insurance companies
Private Pension Funds (Source b):	Private and municipal pension schemes
Pooled Investment Schemes:	Unit trust funds
Development Banks (Source c):	State lending institutions

Pakistan

Sources: (a) State Bank of Pakistan, *Banking Statistics*
(b) *The Pakistan Insurance Yearbook*

Dates available: 1980–1995

The raw numbers for Development Banks are for either June or December.

Assets

Insurance Companies (Source b):	State Life Insurance Corporation Non-life insurance companies
Development Banks (Source a):	Agricultural Development Bank of Pakistan Industrial Development Bank of Pakistan Pakistan Industrial Credit and Investment Corporation National Development Finance Corporation House Building Finance Corporations Pakistan-Kuwait Investment Company Ltd. Pak-Libya Holding Company Ltd. Saudi-Pak Industrial and Agricultural Investment Company Ltd. Bankers Equity Ltd.

Paraguay

Source: Banco Central de Paraguay, *Boletín Estadístico*

Assets

Banklike Institutions:	S&L associations for housing Finance companies
Development Banks:	National Development Bank Cattle Fund

Peru

Source: IFS
Dates available: 1980–1997

Private credit

Development Banks: Five development banks

Philippines

Source: National Census and Statistics Office, *Philippine Yearbook*
Dates available: 1980–1990
All numbers are total resources.

Assets

Banklike Institutions:	Thriftbanks (Savings banks, private development banks, stock S&L associations) Rural nondeposit banks Financing companies Venture capital corporations Pawnshops Lending investors Nonstock savings and loan associations Mutual building and loan associations
Insurance Companies:	Life insurance companies Non-life insurance companies
Private Pension Funds:	Funds manager
Pooled Investment Schemes:	Investment companies
Development Banks:	Specialized government banks (Development Bank of the Philippines, Land Bank of the Philippines, Philippine Amanah Bank)

Portugal

Source: Instituto Nacional de Estatística, *Estatísticas monetárias e financeiras*
Dates available: 1980–1988, 1991–1996

Assets

Banklike Institutions:	Agricultural credit cooperatives Central agricultural credit cooperative
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Insurance Companies: Finance and credit companies
Other intermediaries
Life insurance companies
Non-life insurance companies

Private Pension Funds: Private pension funds

Pooled Investment Schemes: Investment funds

Development Banks: National Development Bank

Rwanda

Source: IFS
Dates available: 1980-1996

Private credit

Development Banks: Development Bank

Saudi Arabia

Source: IFS
Dates available: 1980-1996

Private credit

Development Banks: Saudi Agricultural Bank, Saudi Industrial Development Fund, Public Investment Fund, Real Estate Development Fund, Saudi Credit Bank

Singapore

Sources: (a) Monetary Authority of Singapore, *Monthly Statistical Bulletin*
(b) Monetary Authority of Singapore, *Annual Report*
(c) Development Bank of Singapore, *Annual Report*
(d) IFS

Dates available: 1980-1996

Assets

Banklike Institutions: Finance companies (Source a)
Merchant banks (Source a)
Total amount lent by pawnbrokers (Source a)

Insurance Companies: Insurance companies (Source b)

Development Bank: Development Bank of Singapore (Source c)

Private credit

Banklike Institutions: Finance companies (Source d)

Insurance Companies: Life insurance offices (Source d)

Development Bank: Development Bank of Singapore (Source c, lines included: loans, investments, equity and corporate bonds)

Solomon Islands

Source: Central Bank of Solomon Islands, *Annual Report*
Dates available: 1985-1993

Assets

Banklike institutions: Other local financial institutions

Development Banks: Development Bank of Solomon Islands

South Africa

Source: South African Reserve Bank, *Quarterly Bulletin*
Dates available: 1980-1997

Assets

Banklike Institutions: Participation mortgage bond schemes excluding hire-purchase finance companies, factoring and other similar finance companies not registered as financial institutions—total funds received and invested
Finance companies

Insurance Companies: Long-term insurers (life)
Short-term insurers (nonlife)

Pooled Investment Schemes: Unit trusts

Private Pension Funds: Private self-administered pension and provident funds

Development Bank: National Finance Corporation of South Africa
Land and Agricultural Bank of South Africa

Private credit

Lines included are loans other than to public sector and other securities.

Insurance Companies: Long-term insurers (life)
Short-term insurers (nonlife)

Private Pension Funds: Private self-administered pension and provident funds

Spain

Sources: (a) Banco de Espana, *Boletin Estadistico*
(b) Banco de Espana, *Cuentas financieras de la economia espanola*
(c) IFS

Dates available: 1980-1997

Assets

Banklike Institutions (Source a): Specialized credit institutions (money market intermediary companies, mortgage loan companies, financial leasing companies, finance and factoring companies, and other specialized credit institutions)

Insurance Companies (Source b):	Insurance companies (financial assets)
Pooled Investment Schemes (Source a)	Portfolio investment institutions
Development Banks (Source a):	Official credit institutions (official credit institute and until 1993 official credit banks)
<i>Private credit</i>	
Banklike Institutions (Source c):	Specialized credit institutions (money market intermediary companies, mortgage loan companies, financial leasing companies, finance and factoring companies, and other specialized credit institutions)
Insurance Companies (Source b):	Insurance companies (short-term securities, bonds, shares, and loans, all of these to non-financial enterprises and households)

Sri Lanka

Sources:	(a) Central Bank of Sri Lanka, <i>Bulletin</i> (b) <i>Annual Report of National Savings Bank</i> (c) <i>Annual Report of National Development Bank</i> (d) <i>Annual Report of Development Finance Corporation</i>
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Dates available: 1980–1996

The raw numbers for the Development Finance Corporation are for March.

Assets

Banklike Institutions:	National Savings Bank (Source b)
Development Banks:	Development Finance Corporation, total loans and equities outstanding (Source d) State Mortgage and Investment Bank, total loans outstanding (Source a) National Development Bank (Source c)

Private credit

Included line: total loans.

Banklike Institutions:	National Savings Bank (Source b)
Development Banks:	Development Finance Corporation (Source d) National Development Bank (Source c)

Sweden

Sources:	(a) Sveriges Riksbank, <i>Statistical Yearbook</i> (b) IFS
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Dates available: 1980–1997

Assets (Source a)

Banklike Institutions:	Finance companies Mortgage companies (local government
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	credit institutions and business credit institutions) Housing credit institutions
Insurance Companies:	Life insurance companies Non-life insurance companies
Pooled Investment Schemes:	Mutual funds
<i>Private credit</i> (Source b)	
Banklike Institutions:	Finance companies Mortgage companies (local government credit institutions and business credit institutions) Housing credit institutions
Insurance Companies:	Life insurance companies Non-life insurance companies

Switzerland

Source:	(a) Banque Nationale Suisse, <i>Les banques suisses en ...</i> (b) Swiss National Bank, <i>Monthly Bulletin</i> (c) IFS
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Dates available: 1980–1997

Assets

Banklike Institutions (Source a):	Private banks (trust accounts, security companies) Mortgage banks Clearing banks (three banks, one owned by agricultural cooperatives, one by regional banks, and the third an international clearing bank)
Pooled Investment Schemes:	Investment funds (Source b)

Private credit

Insurance Companies:	Life insurance offices
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Taiwan

Source:	Central Bank of China, <i>Financial Statistics Monthly</i>
Dates available:	1980–1997

Assets

Banklike Institutions:	Credit cooperative associations Credit departments of farmers' and fishermen's associations Postal Savings System Bills finance companies Fuh-Hua securities finance companies Investment and trust companies
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Insurance Companies: Life insurance companies
Property and casualty insurance companies

Private credit

Lines included: loans, securities private sector, corporate bonds, and commercial papers.

Banklike Institutions: Credit cooperative associations
Credit departments of farmers' and fishermen's associations
Postal Savings System
Bills finance companies
Fuh-Hua securities finance companies
Investment and trust companies

Insurance Companies: Life insurance companies
Property and casualty insurance companies

Thailand

Sources: (a) Bank of Thailand, *Quarterly Bulletin*
(b) IFS

Dates available: 1980-1997

Assets (Source a)

Banklike Institutions: Government Savings Bank
Finance and securities companies

Development Banks: Bank for Agriculture and Agricultural Cooperatives
Government Housing Bank
Industrial Finance Corporation of Thailand
Export-Import Bank

Private credit (Source b)

Banklike Institutions: Government Savings Bank
Finance and securities companies

Development Banks: Bank for Agriculture and Agricultural Cooperatives
Government Housing Bank
Industrial Finance Corporation of Thailand
Export-Import Bank

Tonga

Source: IFS
Dates available: 1980-1997

Private credit

Development Banks: Tonga Development Bank

Trinidad and Tobago

Sources: (a) Central Bank of Trinidad and Tobago, *Quarterly Statistical Digest*
(b) IFS

Dates available: 1980-1996

Assets (Source a)

Banklike Institutions: Finance companies and merchant banks
Trust and mortgage finance companies
Thrift institutions

Insurance Companies: Life insurance companies

Development Banks: Development banks

Private credit

Banklike Institutions: Finance companies and merchant banks
Trust and mortgage finance companies
Thrift institutions

Insurance Companies: Life insurance companies
Development Banks: Development banks

Tunisia

Source: Banque centrale de Tunisie, *Statistiques financieres*
Dates available: 1990-1997

Assets

Banklike Institutions: Leasing companies
Off-shore banks

Development Banks: Development banks

Private credit

Line included creance/credit a l'economie.

Banklike Institutions: Leasing companies
Offshore banks

Development Banks: Development banks

Turkey

Sources: (a) Central Bank of Republic of Turkey, *Quarterly Bulletin of Statistics*
(b) IFS

Dates available: 1987-1997

Assets (Source a)

Banklike Institutions: Special finance houses

Development Banks: Investment and development banks

Private credit (Source b)

Development Banks: Investment and development banks

United Kingdom

Sources: (a) Central Statistical Office, *Annual Abstract of Statistics*
(b) Office for National Statistics, *Financial Statistics*

Dates available: 1980–1997

Assets (Source a)

Banklike Institutions: Discount houses
Finance houses and other specialized credit-granting institutions (data after 1989 from Source b)
Investment trusts

Insurance Companies: Insurance companies—long-term
Friendly societies (included with life insurance)
Insurance companies—other than long-term

Private Pension Funds: Self-administered pension funds
Industrial and provident societies

Pooled Investment Schemes: Unit trusts

Private credit (Source a)

Included lines are company securities, loans, and mortgages.

Banklike Institutions: Finance houses and other specialized credit-granting institutions (data after 1989 from Source b)
Investment trusts

Insurance Companies: Insurance companies—long-term
Insurance companies—other than long-term

Private Pension Funds: Self-administered pension funds

Pooled Investment Schemes: Unit trusts

United States

Source: Federal Reserve System, *Flow of Funds Accounts*

Dates available: 1980–1997

All asset numbers are total financial assets.

Assets

Banklike Institutions: Issuers of asset-backed securities
Finance companies
Mortgage companies
Funding corporations (funding subsidiaries, nonbank financial holding companies, and custodial accounts for reinvested collateral of securities lending operations)
Bank personal trusts and estates

Insurance Companies: Life insurance companies
Other insurance companies

Private Pension Funds: Private pension funds (includes Federal Employees' Retirement System Thrift Savings Plan)

Pooled Investment Schemes: Mutual funds and closed-end funds
Real estate investment trusts

Development Banks: Government-sponsored enterprises (Federal Home Loan Banks, National Mortgage Association, Federal Home Loan Mortgage Corp., Farm Credit System, the Financing Corp., the Resolution Funding Corp., and the Student Loan Marketing Association), federally related mortgage pools (GNMA, FNMA, FHLMC), and Farmers Home Administration pools

Private credit

Lines included are corporate and foreign bonds, corporate equities, other loan and advances, consumer credit, and mortgages.

Banklike Institutions: Issuers of asset-backed securities
Finance companies
Mortgage companies
Funding corporations (funding subsidiaries, nonbank financial holding companies, and custodial accounts for reinvested collateral of securities lending operations)
Bank personal trusts and estates

Insurance Companies: Life insurance companies
Other insurance companies

Private Pension Funds: Private pension funds (includes Federal Employees' Retirement System Thrift Savings Plan)

Pooled Investment Schemes: Mutual funds and closed-end funds
Real Estate Investment Trusts

Development Banks: Government-sponsored enterprises (Federal Home Loan Banks, National Mortgage Association, Federal Home Loan Mortgage Corp., Farm Credit System, the Financing Corp., the Resolution Funding Corp., and the Student Loan Marketing Association), federally related mortgage pools (GNMA, FNMA, FHLMC) and Farmers Home Administration pools

Uruguay

Source: Banco Central del Uruguay, *Boletín Estadístico*

Dates available: 1980–1996

Private credit

Line included credito al sector privado.

Banklike Institutions: Banco Hipotecario
S&L associations

Venezuela

Sources: (a) Banco Central de Venezuela, *Boletín Mensual*
(b) Oficina Central de Estadística e Informática, *Anuario Estadístico de Venezuela*

Dates available: 1980–1992, 1994–1995

Assets

Banklike Institutions Mortgage banks
(Source a): Venezuela Workers Bank
National S&L System
Finance companies
Investment banks
Leasing companies

Insurance Companies: Insurance companies (Source b)

Pooled Investment Schemes Mutual funds
(Source a): Money market funds

Development Banks Agricultural Development Bank
(Source a):

Private credit (Source a)

Lines included sector privado en conceptos monetarios.

Banklike Institutions: Mortgage banks
Venezuela Workers Bank
National S&L System
Finance companies (prestamos e inversiones al sector privado)
Investment banks

Pooled Investment Schemes: Mutual funds

Development Banks: Agricultural Development Bank

Zimbabwe

Sources: (a) Reserve Bank of Zimbabwe, *Quarterly Economic and Statistical Review*
(b) Central Statistical Office, *Monthly Digest of Statistics*
(c) Annual Report of Zimbabwe Development Bank
(d) Report of the Registrar of Insurance
(e) Reports of the Registrar of Pension and Provident Funds
(f) IFS

Dates available: 1980–1996

The raw numbers for building societies and the Zimbabwe Development Bank are for June.

Assets

Banklike Institutions Building societies
(Source a): P.O. Savings Bank
Finance houses

Insurance Companies Life insurance companies
(Source d): Nonlife insurance companies

Private Pension Funds: Pension and provident funds (Source e)

Development Banks: Agricultural Finance Corporation (Source b)
Zimbabwe Development Bank (Source c)

Private credit

Except for data from Source f, lines included loans, debentures, and stocks/shares.

Banklike Institutions Building societies
(Source f): P.O. Savings Bank
Finance houses

Insurance Companies Life insurance companies
(Source d): Non-life insurance companies

Development Banks: Agricultural Finance Corporation (Source b)
Zimbabwe Development Bank (Source c)

Life Insurance Penetration and Density

Data on life insurance premium volume are from various issues of *Sigma*.

Data on total population and the purchasing power parity conversion factor (local currency unit per international dollar) are from the electronic version of the World Development Indicators.

Data on GDP in local currency are from the electronic version of the IFS, either line 99B.ZF or, if not available, line 99B.CZF.

The deflators in U.S. dollars are from the IFS, as described in the appendix for section 2.2.

Section 2.5**Stock Market Data**

Data on market capitalization and total value traded are mostly from the IFC's Emerging Market Database, with additional data from Goldman Sachs (1986).

Data on GDP in U.S. dollars are from the electronic version of the World Development Indicators.

Data on GDP in local currency are from the electronic version of the IFS, either line 99B.ZF or, if not available, line 99B.CZF.

The deflators in local currency and in U.S. dollars are from the IFS, as described in the appendix for section 2.2.

Bond Market Data

Data on private and public market capitalization are from the Bank for International Settlement Quarterly Review on International Banking and Financial Market Development. They were downloaded from the BIS Web page and are from Table 15: Domestic Debt Securities, by sector and country of issuer.

Data on GDP in U.S. dollars are from the electronic version of the World Development Indicators.

The deflators in U.S. dollars are from the IFS, as described in the appendix for section 2.2.

Primary Market Data

Data for the following countries were obtained from Aylward and Glen (1998).

They were obtained from national sources. Contributing organizations are:

Argentina	Bolsa de Comercio de Buenos Aires
Brazil	Comissão de Valores Mobiliários, Bolsa de Valores do Rio de Janeiro
Chile	Banco Central de Chile, Superintendencia de Valores y Seguros
China, P.R.	China Securities Regulatory Commission
Columbia	Superintendencia de Valores, Banco de la República
Hong Kong	Hong Kong Monetary Authority
Hungary	Hungarian State Treasury, Government Debt Management Agency
India	Reserve Bank of India
Malaysia	Kuala Lumpur Stock Exchange, Bank Negara Malaysia
Indonesia	Capital Market Supervisory Agency
Jamaica	The Jamaica Stock Exchange
Jordan	Amman Financial Market
Kenya	Capital Markets Authority
Korea	The Bank of Korea
Mauritius	Bank of Mauritius, Stock Exchange Commission
Mexico	Bolsa Mexicana de Valores, Comisión Nacional Bancaria y de Valores, Banco de México
Morocco	Bank Al-Maghrib, Moroccan Securities Commission
Pakistan	Corporate Law Authority, Karachi Stock Exchange (Guarantee) Ltd.
Peru	Comisión Nacional Supervisora de Empresas y Valores

Philippines	Bangko Sentral Pilipinas
Portugal	Comissão do Mercado de Valores Mobiliários
Singapore	Monetary Authority of Singapore
Sri Lanka	Colombo Stock Exchange, Securities and Exchange Commission of Sri Lanka
Taiwan, R.C.	Central Bank of China
Thailand	Bank of Thailand, Securities and Exchange Commission, The Stock Exchange of Thailand
Tunisia	Conseil du Marché Financier
Turkey	Capital Market Board of Turkey
Venezuela	Comisión Nacional de Valores
Germany	OECD Financial Statistics Monthly
Japan	OECD Financial Statistics Monthly
United States	OECD Financial Statistics Monthly
Great Britain	OECD Financial Statistics Monthly

The following country data were taken from OECD Financial Statistics Monthly. Listed will be the country and line numbers for equity and debt issues.

Austria	Shares: A.1	Bonds: B.1.1 + B.1.2 c + d + e
Canada	Shares: A.1	Bonds: B.1.1 + B.1.2 d + e + f + g
Denmark	Shares: A.1	Bonds: B.1.1 c + d + e
Finland	Shares: N/A	Bonds: B.1.1 c + d + e + B.1.2 c + d + e
France	Shares: A.1 a + b + c	Bonds: B.1.1 c + d + e
Greece	Shares: A.1 b + c	Bonds: B.1.1 c + d + e
Italy	Shares: A.1	Bonds: B.1.1 c + d + e
Luxembourg	Shares: A.1	Bonds: B.1.1 c + d + e B.1.2 e
Netherlands	Shares: A.1 b + c	Bonds: B.1.1 c + d + e1 + e2 + B.1.2 e
Norway	Shares: N/A	Bonds: B.1.1 + B.1.2 c + d + e
Portugal	Shares: A.1	Bonds: B.1.1 + B.1.2 c + d + e
Spain	Shares: A.1	Bonds: B.1.1 c + d + e
Sweden	Shares: A.1 a + b + c	Bonds: B.1.1 c + d + e
Switzerland	Shares: A.1.1 a + b + c	Bonds: B.1.1 c + d + e + B.1.2 c + d + e

Data on GDP in U.S. dollars are from the electronic version of the World Development Indicators.

Data on GDP in local currency are from the electronic version of the IFS, either line 99B.ZF or, if not available, line 99B.CZF.

The deflators in local currency and in U.S. dollars are from the IFS, as described in the appendix for section 2.2.

Notes

1. For an overview of this literature, see Levine 1997.
2. See King and Levine 1993a, b and Levine and Zervos 1998 for correlation. See Levine, Loayza, and Beck 2000; Beck, Levine, and Loayza 2000; Neusser and Kugler 1998; and Rousseau and Wachtel 1998 for evidence on causality. In addition, Demirgüç-Kunt and Maksimovic (1998) show that firms in countries with an active stock market and large banking sector grow faster than predicted by individual firm characteristics. Rajan and Zingales (1998) show that industries that rely more heavily on external finance grow faster in countries with better-developed financial systems.
3. For a detailed description of the three financial sectors, see IMF 1984. The three groups correspond to lines 12, 22, and 42 of the IFS.
4. Exchange stabilization funds are the most typical case of monetary authority functions that are performed separately from the central bank's balance sheets. Furthermore, the central bank might perform commercial banking tasks. Where possible, these are excluded from the central bank balance sheets when reported in the IFS.
5. In the case of other financial institutions, we also include line 42h, claims on real estate in total claims on domestic nonfinancial sectors and in private credit.
6. For the CPI numbers, we use line 64 and for GDP line 99b from the IFS.
7. To assess the size and activity of financial intermediaries across countries, we use the World Bank classification of countries according to their income levels (World Bank 1997). We can distinguish between four country groups: high-income countries with a GNP per capita in 1997 higher than \$9,656, upper-middle-income countries with a GNP per capita between \$3,126 and \$9,655, lower-middle-income countries with a GNP per capita between \$786 and \$3,125, and low-income countries with a GNP per capita of less than \$786.
8. We use medians for the four income groups to avoid the impact of outliers.
9. The classification's commercial and deposit money banks are close, but not exactly the same. Whereas IFS defines deposit money banks consistently across countries, Bankscope uses country-specific definitions of commercial banks.
10. Unfortunately, the coverage of Bankscope is less than 100 percent of most countries' banking sector. This poses relatively few problems in the case of the efficiency measures, but more so in the case of the measures of market structure.
11. Ex post spreads are preferable to ex ante spreads, since the latter reflect the perceived loan risk, so that different levels of risk faced by bankers distort these spreads. Ex post spreads also pose some problems though. So might interest income and loan loss reserving associated with a particular loan that incur in different periods. See Demirgüç-Kunt and Huizinga (1998).
12. We also calculated numbers deflated by the CPI. The correlation between the deflated numbers and the nominal numbers is 91 percent in the panel and 96 percent in the cross-section.
13. Both foreign bank indicator and the concentration measure might be biased upward for developing countries, if foreign and large banks are more likely to report than are domestic and smaller banks. There is an additional caveat concerning the two for-

- eign penetration measures: Since a bank is defined as foreign if it was foreign in 1998, takeovers of domestic banks by foreign banks are not taken into account.
14. See Demirgüç-Kunt and Levine 1996.
 15. We use unconsolidated balance sheets for the efficiency measures to insure consistency. In the case of the concentration index and the measures of foreign bank penetration, we want to maximize the number of banks.
 16. See appendix 2.1 for the listing of sources.
 17. Note that these numbers, like in all graphs, are medians. The means for the income groups are 64 percent for low-income groups, 38 and 39 percent for lower- and upper-middle-income groups and 23 percent for high-income countries.
 18. Note that this definition is more restrictive than the IFS's definition of other banklike institutions.
 19. Using balance sheets' total assets is problematic since they might include cross-claims within a category of other financial institutions and claims on other groups of financial intermediaries. A size measure that includes only claims on the nonfinancial sector, such as that described in section 2.2, is therefore preferable but not available for most countries.
 20. Life insurance density is constructed as premiums in local currency divided by the purchasing power parity conversion factor, obtained from the World Development Indicators, and the population. To obtain the real density, we adjust these numbers by the annual CPI of the United States.
 21. A complete list of sources is available in appendix 2.1.
 22. We are grateful to Ian Webb for technical assistance in obtaining these data.
 23. Using total assets instead of private credit yields a very similar picture. The graph might give a distorted picture, especially in the case of development banks, since values of zeros are treated as nonavailable.
 24. Using this method assumes a flexible exchange rate with respect to the U.S. dollar, so that inflation differentials are reflected by changes in the exchange rates. Although this method is far from perfect, it is relatively accurate.
 25. We are grateful to Joe Attia for collecting the data from the OECD *Financial Statistics Monthly*.
 26. We combine the low- and lower-middle-income groups for the bond measures, since India is the only low-income country for which data are available.

References

- Aylward, Anthony, and Jack Glen. 1999. Primary securities markets: Cross-country findings. Discussion Paper 39, Emerging Primary Markets. Washington, DC: International Finance Corporation.
- Bank for International Settlement. Various dates. *Quarterly Review on International Banking and Financial Market Development*.
- Beck, Thorsten, Ross Levine, and Norman Loayza. 2000. Finance and the sources of growth. *Journal of Financial Economics* 58(1):261-300.

Claessens, Stijn, Asli Demirgüç-Kunt, and Harry Huizinga. 1997. How does foreign entry affect the domestic banking market? Mimeo, Policy Research Department, World Bank (June).

Demirgüç-Kunt, Asli, and Harry Huizinga. 1998. Determinants of commercial bank interest margins and profitability. Policy Research Working Paper 1900, World Bank (March).

Demirgüç-Kunt, Asli, and Ross Levine. 1996. The financial system and public enterprise reform: Concepts and cases. In *Financial development and economic growth*, ed. Neil Hermes and Robert Lensink, 247–286. London: Routledge.

Demirgüç-Kunt, Asli, and Vojislav Maksimovic. 1998. Law, finance, and firm growth. *Journal of Finance* 53:2107–2137.

Demirgüç-Kunt, Asli, Ross Levine, and Hong G. Min. 1998. Opening to foreign banks: Issues of stability, efficiency, and growth. Mimeo, Policy Research Department, World Bank (July).

Gardener, Edward P. M., and Philip Molyneux. 1990. *Changes in Western European banking*. London: Unwin Hyman.

Goldman Sachs. 1986. Anatomy of the world's equity markets. *International Investment Research* (September).

IMF (International Monetary Fund). 1984. A guide to money and banking statistics, *International Financial Statistics* (December).

King, Robert G., and Ross Levine. 1993a. Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics* 108(3):717–738 (August).

King, Robert G., and Ross Levine. 1993b. Finance, entrepreneurship, and growth: Theory and evidence. *Journal of Monetary Economics* 32(3):513–542 (December).

Levine, Ross. 1997. Financial development and economic growth: Views and agenda. *Journal of Economic Literature* 35(2):688–726 (June).

Levine, Ross, and Sara Zervos. 1998. Stock markets, banks, and economic growth. *American Economic Review* 88:537–558 (June).

Levine, Ross, Norman Loayza, and Thorsten Beck. 2000. Financial intermediation and growth: Causality and causes. *Journal of Monetary Economics* 46(1):31–77.

Neusser, Klaus, and Maurice Kugler. 1998. Manufacturing growth and financial development: Evidence from OECD countries. *Review of Economics and Statistics* 80:636–646 (November).

OECD. Various dates. *Financial Statistics Monthly*.

Rajan, Raghuram G., and Luigi Zingales. 1998. Financial dependence and growth. *American Economic Review* 88:559–586 (June).

Rousseau, Peter L., and Paul Wachtel. 1998. Financial intermediation and economic performance: Historical evidence from five industrial countries. *Journal of Money, Credit, and Banking* 30:657–678.

SIGMA (monthly). 1998. Zurich, Switzerland: Swiss Re.

World Bank. 1997. *World Development Indicators 1997*.

3

Bank-Based and Market-Based Financial Systems: Cross-Country Comparisons

Asli Demirgüç-Kunt and Ross Levine

3.1 Introduction

Economists have long debated the advantages and disadvantages of bank-based financial systems vis-à-vis market-based systems.¹ This debate has primarily focused on four countries. In bank-based financial systems such as Germany and Japan, banks play a leading role in mobilizing savings, allocating capital, overseeing the investment decisions of corporate managers, and providing risk management vehicles. In market-based financial systems such as England and the United States, securities markets share center stage with banks in terms of getting society's savings to firms, exerting corporate control, and easing risk management. Some analysts suggest that markets are more effective at providing financial services. Others tout the advantages of intermediaries. The debate is unresolved and hampers the formation of sound policy advice.

There is a major shortcoming with existing comparisons of market-based versus bank-based financial systems; they focus on a narrow set of countries with similar levels of GDP per capita, so that the countries have very similar long-run growth rates. Thus, if one accepts that Germany and Japan are bank-based and that England and the United States are market-based, and if one recognizes that these countries all have very similar long-run growth rates, then this implies that financial structure did not matter much.² To provide greater information on both the economic importance and determinants of financial structure, economists need to broaden the debate to include a wider array of national experiences.

To expand the debate to a broader cross-section of countries, we need new data. Based on a newly constructed data set, this chapter examines financial structure for a cross-section of up to 150