A New Database on Financial Development and Structure

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This new database of indicators of financial development and structure across countries and over time unites a range of indicators that measure the size, activity, and efficiency of financial intermediaries and markets.

Summary findings

Beck, Demirgüç-Kunt, and Levine introduce a new database of indicators of financial development and structure across countries and over time.

This database is unique in that it unites a variety of indicators that measure the size, activity, and efficiency of financial intermediaries and markets.

It improves on previous efforts by presenting data on the public share of commercial banks, by introducing indicators of the size and activity of nonbank financial institutions, and by presenting measures of the size of bond and primary equity markets.

The compiled data permit the construction of financial structure indicators to measure whether, for example, a country's banks are larger, more active, and more efficient than its stock markets. These indicators can then be used to investigate the empirical link between the legal, regulatory, and policy environment and indicators of financial structure. They can also be used to analyze the implications of financial structure for economic growth.

Beck, Demirgüç-Kunt, and Levine describe the sources and construction of, and the intuition behind, different indicators and present descriptive statistics.

This paper — a product of Finance, Development Research Group — is part of a broader effort in the group to understand the determinants of financial structure and its importance to economic development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Kari Labrie, room MC3-456, telephone 202-473-1001, fax 202-522-1155, Internet address klabrie@worldbank.org. Policy Research Working Papers are also posted on the Web at <http://www.worldbank.org/html/dec/Publications/Workpapers/home.html>. The authors may be contacted at tbeck@worldbank.org, ademirguckunt@worldbank.org, or rlevine@csom.umn.edu. July 1999 (63 pages).

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A New Database on Financial Development and Structure

Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine

Abstract: This paper introduces a new database of indicators of financial development and structure across countries and over time. This database is unique in that it unites a wide variety of indicators that measure the size, activity and efficiency of financial intermediaries and markets. It improves on previous efforts by presenting data on the public share of commercial banks, by introducing indicators of the size and activity of nonbank financial institutions and by presenting measures of the size of bond and primary equity markets. This paper describes the sources, the construction and the intuition for the different indicators and presents descriptive statistics.

Beck: The World Bank; Demirgüç-Kunt: The World Bank; Levine: Carlson School of Management, University of Minnesota. We are grateful to Joe Attia and Ian Webb for technical assistance and to Gerard Caprio for comments.

I. 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 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 underline the importance of a well-functioning financial sector for the whole economy.

This paper introduces a new database that for the first time allows financial analysts and researchers a comprehensive assessment of the development, structure and performance of the financial sector. This database provides statistics on the size, activity and efficiency of various financial intermediaries and markets across a broad spectrum of countries and through 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 IMF's International Financial Statistics and the IFC's Emerging Market Database. This new database draws on a wider array of sources

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¹ For an overview over this literature see Levine (1997).

² See King and Levine (1993a,b) and Levine and Zervos (1998) for correlation and Levine, Loayza and Beck (1999), Beck, Levine and Loayza (1999), Neusser and Kugler (1998) and Rousseau and Wachtel (1998) for evidence on causality. Also, 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.

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 vs. 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 non-deposit 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 the paper is organized as follows. Section II presents and discusses indicators of the size and activity of financial intermediaries. Section III introduces indicators of the efficiency and market structure of commercial banks. In section IV we define indicators of the size and activity of other financial institutions. Stock and bond market indicators are introduced in section V. Each section presents the indicators, the sources and the sample, and the variance of the indicators across income groups of countries. Section VI offers concluding remarks. Table 1 provides an overview of all indicators with cross-country and time-series coverage. The appendix presents the sources and construction of the measures.

II. 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 (IFS) to construct these indicators. The data cover the period from 1960 to 1997 and 175 countries. This section (1) describes the three different groups of financial intermediaries, (2) presents the different measures, (3) defines the deflating procedure, and (4) presents some regularities of financial development over time and across countries.

A. Groups of Financial Institutions

The indicators in this section distinguish between three groups of financial institutions: central banks, deposit money banks and other financial institutions.³ The three groups are defined as in the International Financial Statistics (IFS). The first group comprises the central bank and other institutions that perform functions of the monetary authorities.⁴ The second group, deposit money banks, comprises 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 - comprises 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 comprise (i) institutions that accept deposits, but do not provide transferable deposit facilities, (ii) intermediaries that finance themselves mainly through issuance of negotiable bonds, (iii) development banks, and (iv) offshore units. Nonbank financial institutions include insurance companies, provident and pension funds, trust and custody accounts, real investment schemes,

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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.

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 the following we will 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.

B. 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.

1. Relative size measures

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

- Central Bank Assets to Total Financial Assets

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⁴ Exchange stabilization funds are the most typical case of monetary authority functions that are performed separately from the central banks' 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.

- **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 there are data 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 vs. 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 (1998) and equals the ratio of deposit money banks assets and the sum of deposit money and central bank assets.

2. 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

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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.

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 between the financial sectors or between the use of liabilities.

C. 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 function: 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).

D. 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.

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

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

E. Financial Intermediary Development across Income Groups and Time

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⁶ For the CPI numbers we use line 64 and for GDP line 99b from the IFS.

As exhibited by graphs 1 –3, our indicators of financial intermediary development show considerable variation across countries and time.⁷ Graph 1 shows that central banks loose 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 graph 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. Graph 3 shows that Liquid Liabilities to GDP and Private Credit by Deposit Money Banks to GDP have increased constantly since the 60s. Central Bank Assets to GDP first increased from the 60s to the 80s and then decreased again in the 90s. Deposit Money Banks vs. Central Bank Assets first increased and then decreased over time, a result mainly driven by low-income countries.

III. 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

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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 Development Indicators 1998). 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 classifications "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.

body publications.¹⁰ We first present two efficiency measures of commercial banks. Then we define several indicators of market structure, in terms of concentration, foreign bank penetration and public vs. private ownership. Finally, sources and coverage are presented and some evidence on the efficiency and market structure across countries.

A. 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 are not the product of quantity times price, as is the GDP. Finally, we would lose around 25% of the observations.¹²

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¹⁰ Unfortunately the coverage of Bankscope is less than 100% 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, as discussed below.

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 spread. Ex-post spreads also pose some problems though. So might interest income and loan loss reserving associated with a particular loan 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% in the panel and 96% in the cross-section.

B. Measures of Market Structure

Here we collect and present data on the concentration of commercial banks, foreign bank penetration and public vs. 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 for undercapitalized 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 Clasesens, 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% of the equity is owned by foreigners.

Public vs. private ownership has become an increasingly important issue for both researchers and policy makers, not only 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

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¹³ Both foreign bank indicator and the concentration measure might be biased upwards for developing countries, if foreign and large banks are more likely to report than domestic and smaller banks. There is an additional caveat concerning the two foreign penetration measures: since a bank is defined as foreign if it was foreign in 1998, take-overs of domestic banks by foreign banks are not taken into account.

¹⁴ See Demirgüç-Kunt and Levine (1996).

commercial bank assets. A bank is defined as public if at least 50% of the equity is held by the government or a public institution.

C. 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% of the banking sector assets in a given country and year are covered in IBCA, the possibility of sampling error and bias should not be underestimated. 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 vs. 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 41 developed and developing countries and for selected years in the 80s and 90s. Numbers from Bankscope were double-checked with estimates from other sources.

D. The Efficiency and Market Structure of Commercial Banks across Income Groups

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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 the appendix for the listing of sources.

As can be seen in graph 4, commercial banks are more efficient in high and upper-middle income countries. There is also a negative correlation 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 vs. private ownership of commercial banks. Whereas public bank assets constitute over 70% of commercial bank assets in low-income countries, their share is around 40% in middle income and 0% in high-income countries.¹⁷

IV. 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. We first define five different groups of other financial institutions before presenting indicators of their size and activity. Finally, sources and coverage are presented and some evidence on the size and activity of other financial institutions across countries.

A. Categories of other financial institutions

In section II 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 up into five subgroups.

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¹⁷ Note that these numbers, like in all graphs are medians. The means for the income groups are 64% for low-income groups, 38 and 39% for lower and upper middle income groups and 23% for high-income countries.

1. **Banklike Institutions:** This category comprises two groups of institutions; (i) intermediaries that accept deposits without providing transferable deposit facilities, and (ii) intermediaries that raise funds on the financial market mainly in 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. These institutions often have specialized in very 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 for risk pooling and wealth accumulation. We do not include pension funds that are part of a government social security system.

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

5. **Development Banks** are financial institutions that 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.

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¹⁸ Note that this definition is more restricted than the IFS' definition of other banklike institutions.

B. Measures of the Size and Activity of Other Financial Institutions

In this subsection we present size and activity indicators similar to the ones in section 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 II, total assets refer to balance sheet's total assets.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, the second evidence on the expenditure per capita on life insurance provision.²⁰

C. 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 65 countries and for the years since 1980.

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¹⁹ Using balance sheet's 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 like in section II that includes only claims on the nonfinancial sector 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 U.S.

²¹ A complete list of sources is available in the appendix.

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 4/1998, 4] Only domestic insurance business, regardless whether conducted by domestic or foreign insurers, is included. Data are available for 88 developing and developed countries, and for years since 1987.²²

D. Development of Other Financial Institutions across Income Groups

Graph 5 shows that the private credit by all 5 categories of other financial institutions increases as we move from low- to high-income countries.²³ Graph 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 low-income countries.

V. 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

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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 “non-available”.

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.

A. Indicators of Stock Market Size, Activity and Efficiency

As 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 and 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, while a less liquid stock market will have a low turnover ratio. Since this indicator is the ratio of a stock and a flow variable, we apply a similar deflating procedure as for the market capitalization indicator.

B. 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.

C. 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.

D. 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. Some of the data are in local currency, some in US 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 (1998) and

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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.

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, GDP numbers in U.S. dollars are from the World Bank.

Secondary stock market data are available for 93 countries starting in 1975. Secondary bond market data are available for 37 countries, mostly industrialized, and for the years since 1990. Primary market data are available for 42 countries, both industrialized and developing, for the years 1980-95.

E. 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 graph 7. Countries with a higher level of GDP per capita have bigger, more active and more efficient stock markets. Richer countries also have larger bond markets and issue more equity and especially private bonds.²⁶ Stock markets have increased in size, activity and efficiency over the last three decades, as can be seen in graph 8.

VI. Concluding Remarks

This paper 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 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.

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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.

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 financial structure indicators [Demirgüç-Kunt and Levine 1999] as well as the implications of financial structure for economic growth.

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Table 1: Coverage of the Variables

	Time span	Number of countries	Number of observations
Central Bank Assets to Total Financial Assets	1960-1997	79	2177
Deposit Money Banks Assets to Total Financial Assets	1960-1997	79	2177
Other Financial Institutions Assets to Total Financial Assets	1960-1997	79	2177
Deposit Money vs. Central Bank Assets	1960-1997	169	4651
Liquid Liabilities to GDP	1960-1997	159	3873
Central Bank Assets to GDP	1960-1997	153	3671
Deposit Money Bank Assets to GDP	1960-1997	160	3912
Other Financial Institution Assets to GDP	1960-1997	80	2008
Private Credit by Deposit Money Banks to GDP	1960-1997	160	3901
Private Credit by Deposit Money Banks and Other Financial Institutions to GDP	1960-1997	161	3923
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
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	1171
Stockmarket total value traded to GDP	1975-1997	93	1264
Stock market turnover to GDP	1976-1997	93	1154
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

Graph 1: Financial Intermediary Development Across Income Groups

Graph 2: Financial Intermediary Development Across Income Groups

Graph 3: Financial Intermediary Development Over Time

Graph 4: Efficiency and Market Structure of Commercial Banks Across Income Groups

Graph 5: Private Credit by Other Financial Institutions Across Income Groups

Graph 6: Life Insurance Development Across Income Groups

Graph 7: Stock and Bond Market Development Across Income Groups

Graph 8: Stock Market Development Over Time

Appendix: Sources

Section II

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---MONAUTH:CLAIMS ON CENTRAL GOVT (LOC CURR)--
12BX.ZF---MONAUTH:CLAIMS ON OFF ENTITIES (LOC CURR)--
12B.ZF---MONAUTH:CLAIMS ON STATE & LOC GOVTS (LOC CURR)--
12CD.ZF---CLAIMS ON NONFINANCIAL ENTERP.--
12C.ZF---MONAUTH:CLAIMS ON NONFIN PUB ENTERPRISES (LOC CURR)--
12D.ZF---MONAUTH:CLAIMS ON PRIV SECTOR (LOC CURR)--

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

22ANHZF---CLAIMS ON CENT. GOVT (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 NAT.PROPERTY FUND--
22A.ZF---DEPMONBKS:CLAIMS ON CENTRAL GOVT (LOC CURR)--
22B.MZF---CLAIMS ON LOCAL GOVERNMENT--
22B.GZF---CLAIMS ON OFFICIAL ENTITIES--
22B.TZF---CLAIMS ON STATE & LOCAL GOVT.--
22BX.ZF---DEPMONBKS:CLAIMS ON OFF ENTITIES (LOC CURR)--
22B.ZF---DEPMONBKS:CLAIMS ON STATE & LOC GOVTS (LOC CURR)--
22CB.ZF---CLAIMS ON COOPERATIVES--
22C.HZF---CLAIMS ON NONFIN.PUB.ENT.--
22CA.ZF---CLAIMS ON PUBLIC CORPORATIONS--
22C.ZF---DEPMONBKS:CLAIMS ON NONFIN PUB ENTERPRISES (LOC CURR)--
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 PRIV SECTOR (LOC CURR)--
22D.IZF---TREAS: CLAIMS ON PRIVATE SECT--

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

42BXLZF---LOCAL & SEMI-GOVT SECURITIES--
42BXKZF---CLAIMS ON OFFICIAL ENTITIES--
42B.SZF---CLAIMS ON LOCAL GOVERNMENT--
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 & LOCAL GOVT.--
42B.LZF---CLAIMS ON STATE AND LOCAL GOVTS.--
42BX.ZF---OTHFININST:CLAIMS ON OFF ENTITIES (LOC CURR)--
42B.ZF---OTHFININST:CLAIMS ON STATE & LOC GOVTS (LOC CURR)--
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 GOVT (LOC CURR)--
 42C.SZF---CLAIMS ON NON FIN. PUB. ENTERPRISES--
 42C.NZF---CLAIMS ON NONFIN.PUB.ENTERP.--
 42C.LZF---CLAIMS ON NONFIN.PUB.ENTERPRISE--
 42C.MZF---CLAIMS ON NONFIN.PUB.ENTERPRISES--
 42C.GZF---CLAIMS ON PUBLIC ENT.--
 42C.FZF---CLAIMS ON PUBLIC ENTERPRISES--
 42C..ZF---OTHFININST:CLAIMS ON NONFIN PUB ENTERPRISES (LOC CURR)--
 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 PRIV SECTOR (LOC CURR)--
 42H.SZF---FIXED ASSETS/REAL ESTATE--
 42H.LZF---REAL ESTATE--

The following line is included in Liquid Liabilities

55L..ZF---FINSURVEY:LIQUID LIABS (LOC CURR)--
 if not available: 35L..ZF---MONSURVEY:MONEY PLUS QUASIMONEY (M2) (LOC CURR)--

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 SOCIALIST SECTOR--
 22D..ZF---DEPMONBKS:CLAIMS ON PRIV SECTOR (LOC CURR)--
 22D.IZF---TREAS: CLAIMS ON PRIVATE SECT--

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 PRIV SECTOR (LOC CURR)--
 22D.IZF---TREAS: CLAIMS ON PRIVATE SECT--
 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 PRIV SECTOR (LOC CURR)--

For GDP in local currency, the following line is used

99B.ZF---NA:GROSS DOM PRODUCT (LOC CURR)--

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 4th quarter value of line 64Q.ZF is used

Section III

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

Time span: 1995-97

Austria

Source: Gardener and Molyneux

Time span: 1983, 88

Bangladesh

Source: Bangladesh Bank, Bangladesh Bank Bulletin

Time span: 1980-97

Belgium

Source: Gardener and Molyneux

Time span: 1982, 88

Bolivia

Source: Banco Central de Bolivia, Boletin Estadistico

Time span: 1980-97

Brazil

Source: Banco Central do Brazil, Boletim Mensal

Time span: 1980-97

Canada

Source: Bankscope

Time span: 1997

Colombia

Source: Banco de la Republica, Informe Annual del Gerente a la Junta Directiva

Time span: 1986-91

Costa Rica

Source: Bankscope

Time span: 1992-97

Denmark

Source: Gardener and Molyneux
Time span: 1983, 88

Ecuador

Source: Bankscope
Time span: 1997

Egypt

Source: Bankscope
Time span: 1990-97

Finland

Source: Statistical Yearbook of Finland (share of Postpankki assets in total commercial bank assets)
Time span: 1980-88

France

Source: Gardener and Molyneux
Time span: 1983, 88

Germany

Source: Gardener and Molyneux
Time span: 1983, 88

Ghana

Source: Internal World Bank information
Time span: 1988

Greece

Source: Gardener and Molyneux (credit instead of assets)
Time span: 1988

Guatemala

Source: Superintendencia de Bancos, Boletín Annual de Estadísticas del Sistema Financiero
Time span: 1980-97

India

Source: Reserve Bank of India, Statistical Tables Relating to Banks in India
Time span: 1980-96

Indonesia

Source: Bank Indonesia, Indonesia Financial Statistics (commercial banks other than private exchange and foreign & joint exchange banks)
Time span: 1986-97

Ireland

Source: Gardener and Molyneux
Time span: 1983, 88

Italy

Source: Gardener and Molyneux
Time span: 1983, 88

Japan

Source: Bankscope
Time span: 1997

Mexico

Source: Bankscope
Time span: 1993-94

Netherlands

Source: Gardener and Molyneux
Time span: 1983, 88

New Zealand

Source: Bankscope
Time span: 1997

Norway

Source: Gardener and Molyneux
Time span: 1983, 88

Pakistan

Source: Bankscope
Time span: 1990-96

Philippines

Source: The World Bank, Philippine Financial Sector Study, 7177-PH.
Time span: 1980,86

Portugal

Source: Banco de Portugal, Annual Report 1997 (credit instead of assets)
Time span: 1984,89,97

Spain

Source: Gardener and Molyneux
Time span: 1983, 88

Sri Lanka

Source: Bankscope
Time span: 1992-96

Sweden

Source: Gardener and Molyneux
Time span: 1983, 88

Switzerland

Source: Banque Nationale Suisse, Les Banques Suisses en 19.. (share of cantonal bank assets in total commercial bank assets)
Time span: 1980-97

Thailand

Source: The World Bank's report: FSS, 8043-TH
Time span: 1980,85-88

Tunisia

Source: Information from the country economist
Time span: 1987, 92

Turkey

Source: Banks Association of Turkey, Banks in Turkey
Time span: 1985, 90, 92

United Kingdom

Source: Gardener and Molyneux
Time span: 1988

United States

Source: Bankscope
Time span: 1997

Uruguay

Source: Bankscope
Time span: 1990-96

Zambia

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

Section IV

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 sources for life penetration and density are listed at the end.

Argentina

Sources: (a) Banco Central de la Republica Argentina, Boletín Estadístico
(b) IFS
Time span: 1980-87, 1992-97

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
Time Span: 1980-96 (Numbers are for June)

Assets:

Banklike institutions	Permanent building societies
	Credit cooperatives
	Money market corporations

	Pastoral financial companies Finance companies General financiers Intra-group financiers Other financial corporations Co-operative housing societies Securisation vehicles
Insurance Companies	Life insurance 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 Securisation vehicles (all assets except other assets)
Insurance Companies:	Life insurance (debentures & notes, shares, other investments and loans)
Private Pension Funds	Superannuation funds (bills of exchange, debentures & 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 & notes, domestic shares & 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

Time span: 1980-97

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

Time Span: 1980-97

Assets (Source a):

Banklike Institutions   Other local financial institutions
PO 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

Time span: 1980-97

Assets (Sources a):

Banklike Institutions   Mortgage and finance companies
Finance companies and merchant banks

Insurance Companies   National Insurance companies 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

Time span: 1980-1993, incomplete data

Assets:

Banklike Institutions   Savings banks (Source a)
Caisse generale d'epargne 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

Time span: 1980-97

Assets (Source a):
Development Banks   Development Finance Corporation

Private credit (Source b):
Development Banks   Development Finance Corporation

Bolivia

Sources: (a) Banco Central de Bolivia, Boletin estadistico
                  (b) IFS
Time span: 1980-97

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
Time span: 1980-97

Assets:

Banklike Institutions	Investment banks Housing credit companies S&L associations Leasing companies
Insurance Companies	Insurance companies
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
Time span: 1980-97

Assets (Source a):

Banklike Institutions	Quebec Savings Bank, since 87 included in chartered banks 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 87 included in chartered banks 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
Development Banks (Source a)	Public financial institutions

Chile

Sources: (a) Banco Central de Chile, Boletín Mensual
(b) Chile finanzas, webpage
(c) IFS

Time span: 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 are: 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, Revista del Banco de la Republica
Time span: 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 is: *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) Statistical Yearbook of Denmark
(b) Reports and Accounts for the Year ..., Danmarks Nationalbank
Time span: 1980-95

Assets:

Banklike Institutions	Mortgage credit associations and local governments' credit association (Source a) Financing companies (Source b) Denmarks Skibskreditfond (Source a) Manufacturing & Manual Industries' Finance Corporation (Source a) 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)

Dominican Republic

Source: Banco Central de la Republica Dominicana, Boletin Mensual
Time span: 1980-97

Assets:

Banklike Institutions	Private non-financial intermediaries (devt. banks, mortgage banks and S&L associations)

Development Banks   Public non-financial intermediaries

Private credit:

Line included: Credito interno al sector privado

Banklike Institutions   Private non-financial intermediaries (devt. banks, mortgage banks and S&L associations)

Development Banks   Public non-financial intermediaries

Ecuador

Sources: (a) Banco Central de Ecuador, Boletín anuario

(b) Banco Central de Ecuador, Memoria annual

Time span: 1980-94

Assets (Source a):

Banklike Institutions   S&L associations
Private finance companies

Insurance Companies   Insurance companies
Re-insurance 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

Development Banks   National Development Bank
National Housing Bank
National Financial Corporation

Egypt

Sources: (a) Economic Review, Central Bank of Egypt.

(b) Annual Report, Central Bank of Egypt

(c) IFS

Time span: 1980-97

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 govt.)

El Salvador

Sources: (a) Banco Central de Reserva de El Salvador, Boletín trimestral

(b) Superintendencia del Sistema Financiero, Estados e indicadores financieros and

(c) Superintendencia de Bancos y Otras Instituciones, Estadísticas: Seguros, Fianzas, Bancos

(d) IFS

Time span: 1980-97

Assets

Banklike Institutions	Finance companies (Source a), earlier called S&L associations General warehouses (Source b)
Insurance Companies	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

Time span: 1980-97

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

Time span: 1980-94

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

Time span: 1980-96

Assets:

Banklike Institutions	Finance companies and security houses
Pooled investment funds	Fonds communs 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 communs de creances OPCVM (organismes de placement collectif en valeurs mobilières)

Development Banks

Specialized financial institutions

Germany

Sources: (a) Monthly Bulletin, Bundesbank
(b) Capital Market Statistics, Bundesbank
(c) IFS

Time span: 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) Monthly Statistical Bulletin, Bank of Greece.
(b) Annual Report, Bank of Greece
(c) IFS

Time span: 1980-97

Assets:

Pooled Investment Schemes Mutual funds (Source b)

Development Banks Specialized credit institutions, include: the Agricultural Bank, the National Mortgage Bank, the Investment Bank, the National Investment Bank for Industrial Development, the Hellenic Industrial Development Bank, The National Housing Bank, the Deposits and Loan Fund and Postal Savings Banks. (Source a)

Private credit (Source c)

Development Banks Specialized credit institutions

Guatemala

Source: Superintendencia de Bancos, Boletín anual de estadísticas del sistema financiero
Time span: 1980-97

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
Time span: 1980-92

Assets

Banklike Institutions New Building Society
Trust companies
Guyana co-operative mortgage finance bank

Insurance Companies Life insurance companies
Nonlife 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
Nonlife 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

Time span: 1980-97

Assets:

Banklike Institutions (Source b)   Specialized finance companies

Insurance Companies   Insurance companies (Source a)

Development Banks (Source b)

Private credit (Source b)

Line included: crédito e inversiones, sector privado

Banklike Institutions (Source b)   Specialized finance companies

Development Banks (Source b)

India

Sources: (a) Reserve Bank of India, Report on Currency and Finance
(b) Life Insurance companies Corporation of India, Annual Report
(c) IFS

Time span: 1980-95, missing data

Assets:

Insurance Companies   Life Insurance companies 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

Time span: 1980-94

Assets:

Banklike Institutions	State and private savings banks (since 89 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

Time span: 1980-96

Assets (Source a):

Banklike Institutions	Non-associated 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

Time span: 1980-95

Assets:

Banklike Institutions (Source a)	Industrial investment finance banks Mortgage banks

Insurance Companies	Insurance companies (Source a)

Pooled Investment Schemes	Mutual funds (Source b)

Private credit:

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

Banklike Institutions (Source a)	Industrial investment finance banks Mortgage banks

Pooled Investment Schemes	Mutual funds (Source b)

Italy

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

Time span: 1980-96

Assets:

Banklike Institutions	Specialized credit institutions (Source a)

Insurance Companies (Source a)	Life insurance companies Other insurance companies

Jamaica

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

Time span: 1980-96

Assets:

Banklike Institutions (Source a)	Finance houses and trust companies Merchant banks Building societies Credit unions Trust companies

Development Banks (Source b)	National Development Bank 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

Time span: 1980-97

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

Assets:

Banklike Institutions (Source a)	Zenshinren banks Credit cooperatives Shinkumi Federation Bank / Natl Federation of Credit Cooperatives Labor credit associations Natl. Federation of Labor Credit Associations Agricultural cooperatives Credit Federation of Agric. 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 companies and Postal Annuity.

Insurance Companies (Source b)	Life insurance companies. Non-life insurance companies. Mutual Insurance companies Federations of Agricultural Cooperatives

Development Banks (Source b)	Government financial institutions: Japan Devt. Bank, Export-Import Bank, Hokkaido and Tohoku Devt. Corp., People's Finance Corp., Housing Loan Corp., Agr., Forestry & Fisheries Finance Corp., Small Buiness Corp., Japan Finance Corp. for Municipal Enterprises, Small Business Credit Insurance companies Corp., Environmental Sanitation Business Finance Corp., Okinawa Devt. Finance and Medical Care Facilities Finance Corp. Trust Fund Bureau

Private credit

Lines included are: loans, corporate bonds, stocks

Banklike Institutions (Source a)	Zenshinren banks Credit cooperatives Shinkumi Federation Bank / Natl Federation of Credit Cooperatives Labor credit associations Natl. Federation of Labor Credit Associations Agricultural cooperatives Credit Federation of Agric. 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 companies Federations of Agricultural Cooperatives

Development Banks (Source b)	Government financial institutions

Jordan

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

Time span: 1980-96 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 coompanies. (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, Quarterly Economic Review
(b) Central Bank of Kenya, Statistical Bulletin
(c) IFS

Time span: 1980-97

Assets:

Banklike Institutions	Kenya Post Office Savings Bank.(data since 84 from Source b, before 84 from a) Nonbank financial institutions.(Source b)

Private credit (Source c):

Banklike Institutions	Banklike financial institutions

Korea

Sources: (a) Bank of Korea, Monthly Statistical Bulletin
(b) IFS
Time span: 1980-97

Assets (Source a):

Banklike Institutions	- Mutual savings and finance companies - Credit unions - Community credit cooperatives - Postal Savings and Postal Life Insurance companies - Mutual credits - Investment institutions - Investment and finance institutions, since 93 incl. 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
Insurance Companies	Life insurance companies (Source b)
Development Banks	Development Banks (Source b)

Malawi

Source: Reserve Bank of Malawi, Financial and Economic Review
Time span: 1981-97

Assets:

Banklike institutions	- New Building Society - P.O.Savings Bank - Natl. 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.
 Time span: 1980-97

Assets:

Banklike Institutions	National Savings Bank (used to be Post Savings bank before 1974, Source b). Co-operative 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 are: Loans and corporate bonds/stocks

Banklike Institutions	National Savings Bank (used to be Post Savings bank before 1974, Source b). Co-operative societies (savings institutions, 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
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)

Malta

Source: IFS
 Time span: 1980-97

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
 Time span: 1980-97
 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 (

Insurance companies (inversiones, prestamos/creditos al sector privado, deudores)

Development Banks
(Source b)

Development Banks
Development funds

Morocco

Source: IFS
Time span: 1980-96

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
(b) OECD, Methodological Supplement
Time span: 1980-96

There are varying definitions of the different groups and in different source
The Statistical Yearbook presents significantly different numbers

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 til 82 (classification according to OECD), for Private credit til' 85

Insurance Companies

Life and nonlife insurance companies (source a)

Private Pension Funds

Private pension funds (Source a)

Pooled Investment Schemes

Open-end investment companies (Source b) til 1990
Investment institutions (Source a) since 1991

Development Banks

Local government banks (Source b)

Private credit (Source a):

Included lines 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
Time span: 1980-1996

Assets (Source a):

Insurance Companies

Life insurance companies

Private credit (Source b):

Insurance Companies

Life insurance companies

Nigeria

Source: Central Bank of Nigeria, Annual report
Time span: 1980-95 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:

Included lines are: 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

Time span: 1980-95

Assets (Source a):

Banklike Institutions	Private credit enterprises/mortgage institutions Private financial companies
Insurance Companies	Life insurance companies Non-life insurance companies
Pension Schemes	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 are: 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
Pension Schemes (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 companies Yearbook
Time span: 1980-95

Assets:

Insurance Companies (Source b)	State Life Insurance companies 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
Time span: 1980-97

Private credit

Development Banks	5 Development Banks

Philippines

Source: National Census and Statistics Office, Philippine Yearbook
Time span: 1980-90

All numbers are total resources

Assets:

Banklike Institutions	Thriftbanks (Savings banks, private development banks, stock S&L associations) Rural non-deposit banks Financing companies Venture capital corporations Pawnshops Lending investors Nonstock savings and loan associations Mutual building and loan associations
Insurance Companies	Life insurance companies Nonlife 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
Time span: 1980-1988, 1991-96

Assets:

Banklike Institutions	Agricultural credit cooperatives Central agricultural credit cooperatives Finance and credit companies Other intermediaries
Insurance Companies	Life insurance companies Nonlife insurance companies
Pension Funds	Private Pension funds
Pooled Investment Schemes	Investment funds
Development Banks	National Development Bank

Rwanda

Source: IFS
Time span: 1980-96

Private credit

Development Banks	Development Bank

Saudi Arabia

Source: IFS
Time span: 1980-96

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

Time span: 1980-96

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
Time span: 1985-93

Assets

Banklike institutions	Other local financial institutions
Development Banks	Development Bank of Solomon Islands

South Africa

Source: South African Reserve Bank, Quarterly Bulletin
Time span: 1980-97

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
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)
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
Time span: 1980-97

Assets:

Banklike Institutions (Source a)	Specialized credit institutions (money market intermediary companies, mortgage loan companies, financial leasing companies, finance and factoring companies and other specialised 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 till 93 official credit banks)

Private credit:

Banklike Institutions (Source c)	Specialized credit institutions (money market intermediary companies, mortgage loan companies, financial

leasing companies, finance and factoring companies and other specialised 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, Bulletin
(b) Annual report of National Savings Bank
(c) Annual report of National Development Bank
(d) Annual report of Development Finance Corporation

Time span: 1980-96

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 is: 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, Statistical Yearbook
(b) IFS

Time span: 1980-97

Assets (Source a):

Banklike Institutions

Finance companies
Mortgage companies (local govt. credit instit. and business credit instit.)
Housing credit institutions

Insurance Companies:

Life insurance companies
Nonlife insurance companies

Pooled Investment Schemes

Mutual funds

Private credit (Source b):

Banklike Institutions

Finance companies
Mortgage companies (local govt. credit instit. and business credit instit.)
Housing credit institutions

Insurance Companies:

Life insurance companies
Nonlife insurance companies

Switzerland

Source: (a) Banque Nationale Suisse, Les banques suisses en ...
(b) Swiss National Bank, Monthly Bulletin
(c) IFS

Time span: 1980-97

Assets:

Banklike Institutions (Source a)

Private banks (trust accounts, security companies)
Mortgage banks
Clearing banks (3 banks, one owned by agricultural coop, one by regional banks, the third is an intl. clearing bank)

Pooled Investment Schemes   Investment funds (Source b)

Private credit (Source c):

Insurance Companies   Life insurance offices

Taiwan

Source: Central Bank of China, Financial Statistics Monthly

Time span: 1980-97

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

Insurance Companies   Life insurance companies
Property and casualty insurance companies

Private credit:

Lines included are: 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

Time span: 1980-97

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

Time span: 1980-97

Private credit:

Development Banks

Tonga Development Bank

Trinidad and Tobago

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

Time span: 1980-96

Assets (Source a):

Banklike Institutions

Finance companies & merchant banks
Trust and mortgage finance comp
Thrift institutions

Insurance Companies

Life insurance companies

Development Banks

Private credit (Source b):

Banklike Institutions

Finance companies and merchant banks
Trust and mortgage finance companies
Thrift institutions

Insurance Companies

Life insurance companies

Development Banks

Tunisia

Source: Banque centrale de Tunisie, Statistiques financieres
Time span: 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
Off-shore banks

Development Banks

Development Banks

Turkey

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

Time span: 1987-97

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

Time span: 1980-97

Assets (Source a):

Banklike Institutions	Discount houses Finance houses and other specialized credit-granting institutions (data after 89 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 89 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

USA

Source: Federal Reserve System, Flow of Funds Accounts

Time span: 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 Ass., Federal Home Loan Mortgage Corp., Farm Credit System, the Financing Corp., the Resolution Funding Corp., and the Student Loan Marketing Ass.) and 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 Ass., Federal Home Loan Mortgage Corp., Farm Credit System, the Financing Corp., the Resolution Funding Corp., and the Student Loan Marketing Ass.) and federally related mortgage pools (GNMA, FNMA, FHLMC) and Farmers Home Administration pools.

Uruguay

Source: Banco Central del Uruguay, Boletín Estadístico
Time span: 1980-1996

Private credit

Line included: credit 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
Time span: 1980-92, 94/95

Assets:

Banklike Institutions (Source a)	Mortgage banks Venezuela Workers Bank National S&L System Finance companies Investment banks Leasing companies
Insurance Companies	Insurance companies (Source b)
Pooled Investment Schemes (Source a)	Mutual funds Money market funds
Development Banks (Source a)	Agricultural Development Bank

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 companies
- (e) Reports of the Registrar of Pension and Provident Funds
- (f) IFS

Time span: 1980-96

Assets:

Banklike Institutions (Source a)	Building societies PO Savings Bank. Finance houses.
Insurance Companies(Source d)	Life insurance companies 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, included lines are: loans, debentures and stocks/shares

Banklike Institutions (Source f)	Building Societies PO Savings Bank. Finance houses.
Insurance Companies(Source d)	Life insurance companies Nonlife 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 \$) are from the electronic version of theWorld 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 in US dollars are from the IFS, as described in the appendix for section II.

Section V

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 US dollars are from the electronic version of theWorld 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 US dollars are from the IFS, as described in the appendix for section II.

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' webpage and are from Table 15: Domestic Debt Securities, by sector and country of issuer.

Data on GDP in US dollars are from the electronic version of the World Development Indicators

The deflators in US dollars are from the IFS, as described in the appendix for section II.

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

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