A New Database on Financial Development and Structure

Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine

June 1999

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. This paper's findings, interpretations, and conclusions are entirely those of the authors and do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent.

I. Introduction

A recent and expanding literature establishes the importance of financial development for economic growth. 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. 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

-

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,

-

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). 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

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

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 intermedation, since it includes all three financial sectors. For the numerator we use either line 55l or, where not available, line 35l. Whereas line 35l includes monetary authorities and deposit money banks, line 55l also includes other banking institutions, as defined by the IMF. Line 35l 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.

$$\frac{0.5*|\frac{FD_{t}}{CPI_{e,t}} + \frac{FD_{t-1}}{CPI_{e,t-1}}|}{\frac{GDP_{t}}{CPI_{a,t}}}$$
(1)

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

E. Financial Intermediary Development across Income Groups and Time

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. 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

_

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

_

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 Clasessens, 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

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, takeovers 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. 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

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.

-

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.

 $^{^{18}}$ 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.

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

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

_

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. 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.

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.

REFERENCES

- Aylward, Anthony and Glen, Jack. "Emerging Primary Markets", World Bank mimeo, February 1998.
- Bank for International Settlement. Quarterly Review on International Banking and Financial Market Development.
- Beck, Thorsten, Levine, Ross and Loayza, Norman. "Finance and the Sources of Growth", World Bank Policy Research Working Paper 2057, February 1999.
- Claessens, Stijn, Demirgüç-Kunt, Asli and Huizinga, Harry. "How Does Foreign Entry Affect the Domestic Banking Market?, World Bank mimeo, June 1997.
- Demirgüç-Kunt, Asli and Huizinga, Harry. "Determinants of Commercial Bank Interest Margins and Profitability", World Bank Policy Research Working Paper 1900, March 1998.
- Demirgüç-Kunt, Asli and Levine,Ross. "The Financial System and Public Enterprise Reform: Concepts and Cases", in: Hermes, Niels and Lensink, Robert (eds.): Financial Development and Economic Growth, 1996.
- Demirgüç-Kunt, Asli and Levine, Ross. "Bank-based and Market-based Financial Systems: Cross-Country Comparisons", World Bank mimeo, March 1999.
- Demirgüç-Kunt, Asli, Levine, Ross, and Min, Hong G. "Opening to Foreign banks: Issues of Stability, Efficiency, and Growth", World Bank mimeo, July 1998.
- Demirgüç-Kunt, Asli and Maksimovic, Vojislav. "Law, Finance and Firm Growth," <u>Journal of</u> Finance, 1998, 53, pp.2107-2137.
- Gardener, Edward P.M. and Molyneux, Philip. "Changes in Western European Banking", London: Unwin Hyman, 1990.
- Goldman Sachs. "International Investment Research. Anatomy of the World's Equity Markets", September 1986.
- International Monetary Fund. "A Guide to Money and Banking Statistics in International Financial Statistics", December 1984.
- King, Robert G. and Levine, Ross. "Finance and Growth: Schumpeter Might Be Right," Quarterly Journal of Economics, August 1993a, 108(3), pp. 717-38.
- King, Robert G. and Levine, Ross. "Finance, Entrepreneurship, and Growth: Theory and Evidence," Journal of Monetary Economics, December 1993b, 32(3), pp. 513-42.
- Levine, Ross. "Financial Development and Economic Growth: Views and Agenda," Journal of

- Economic Literature, June 1997, 35(2), pp. 688-726.
- Levine, Ross, Loayza, Norman, and Beck, Thorsten. "Financial Intermediation and Growth: Causality and Causes", World Bank Policy Research Working Paper 2059, February 1999.
- Levine, Ross and Zervos, Sara. "Stock Markets, Banks, and Economic Growth," <u>American</u> Economic Review, June 1998, 88, pp. 537-558.
- Neusser, Klaus and Kugler, Maurice. "Manufacturing Growth and Financial Development: Evidence from OECD Countries," <u>Review of Economics and Statistics</u>, November 1998, 80, 636-46.
- OECD. Financial Statistics Monthly, various issues.
- Rajan, Raghuram G. and Zingales, Luigi. "Financial Dependence and Growth," <u>American Economic Review</u>, June 1998, 88, pp. 559-86.
- Rousseau, Peter L. and Wachtel, Paul. "Financial Intermediation and Economic Performance: Historical Evidence from Five Industrial Countries," <u>Journal of Money, Credit, and Banking</u>, 1998, 30, pp.657-678.

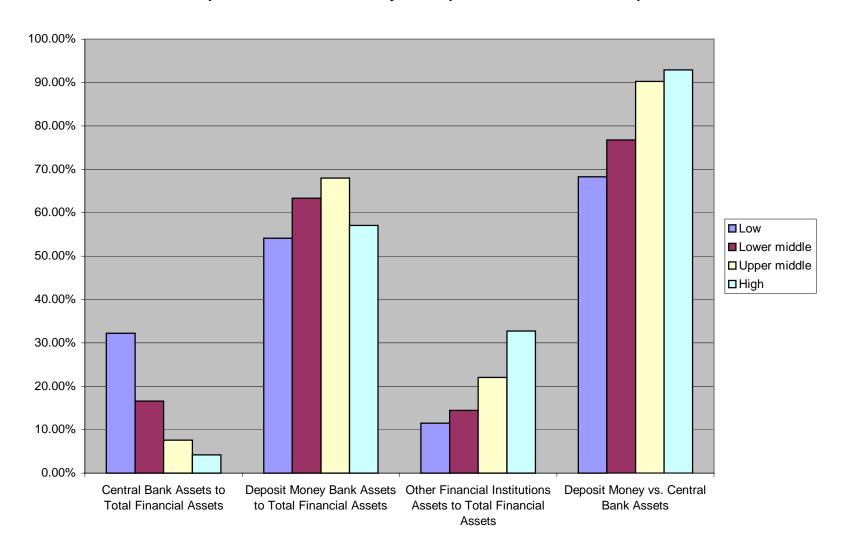
Swiss Re, SIGMA 4/1998.

World Bank. World Development Indicators 1997, Washington, D.C.

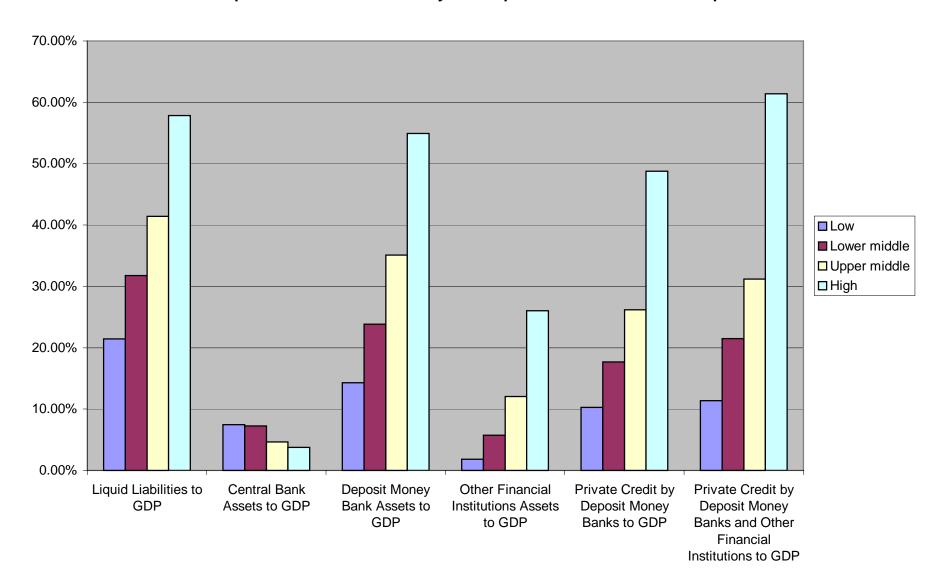
Table 1: Coverage of the Variables

	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 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 pentration	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

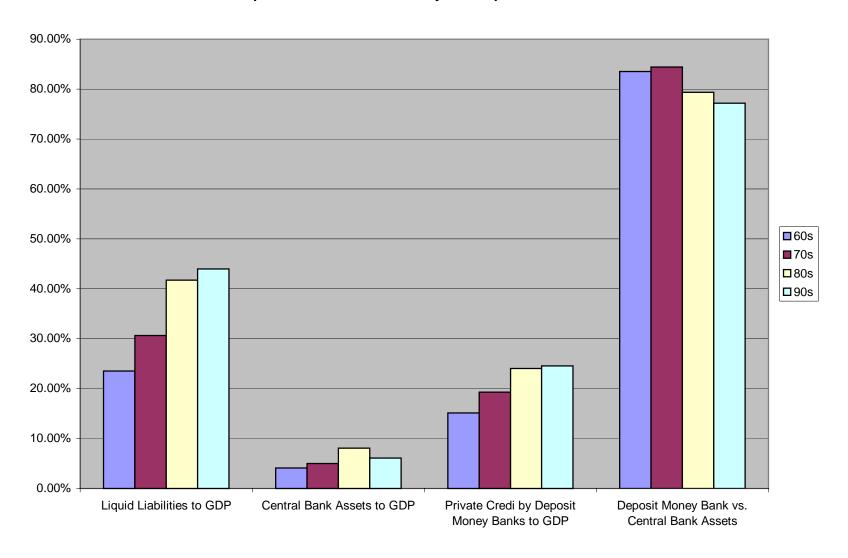
Graph 1: Financial Intermediary Development Across Income Groups



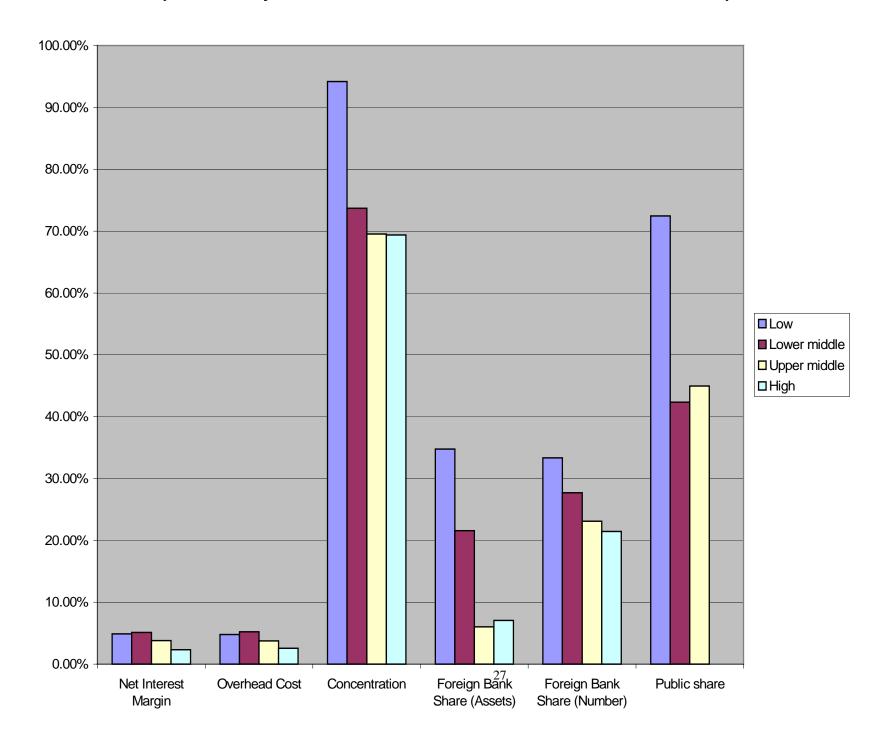
Graph 2: Financial Intermediary Development Across Income Groups



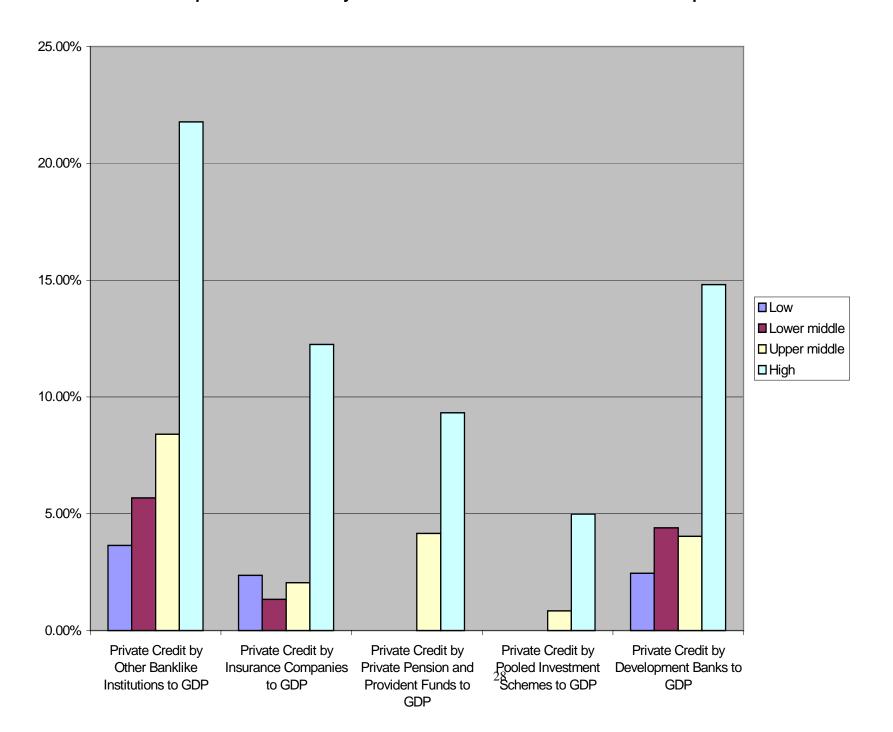
Graph 3: Financial Intermediary Development Over Time



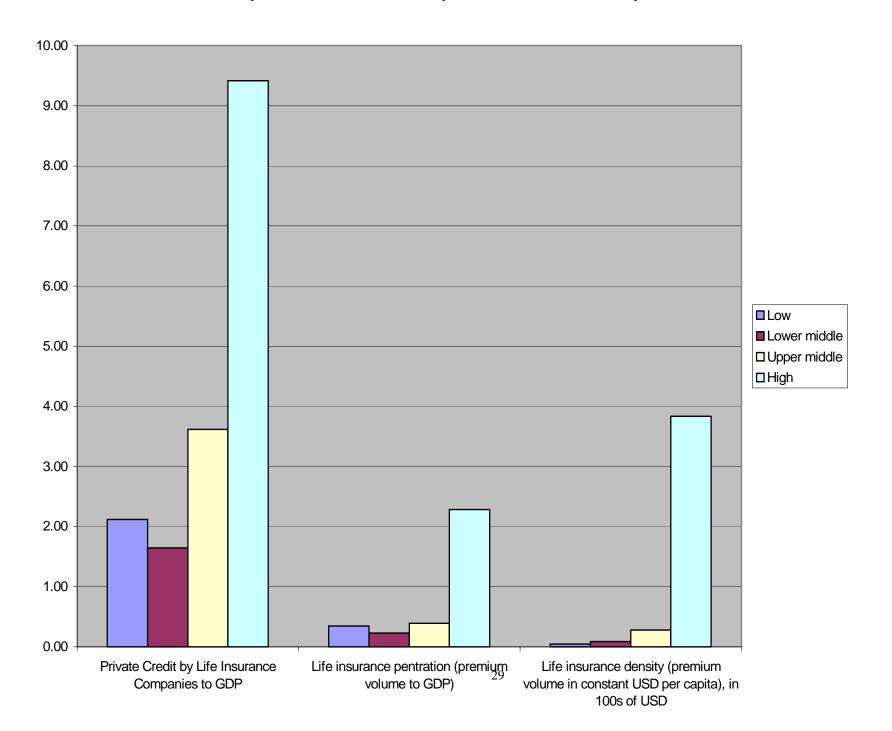
Graph 4: Efficiency and Market Structure of Commercial Banks Across Income Groups



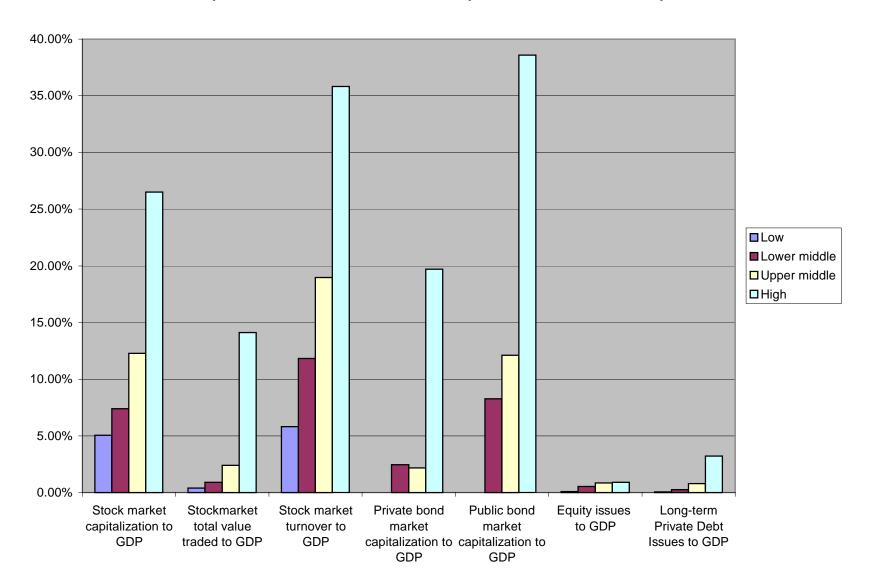
Graph 5: Private Credit by Other Financial Institutions Across Income Groups



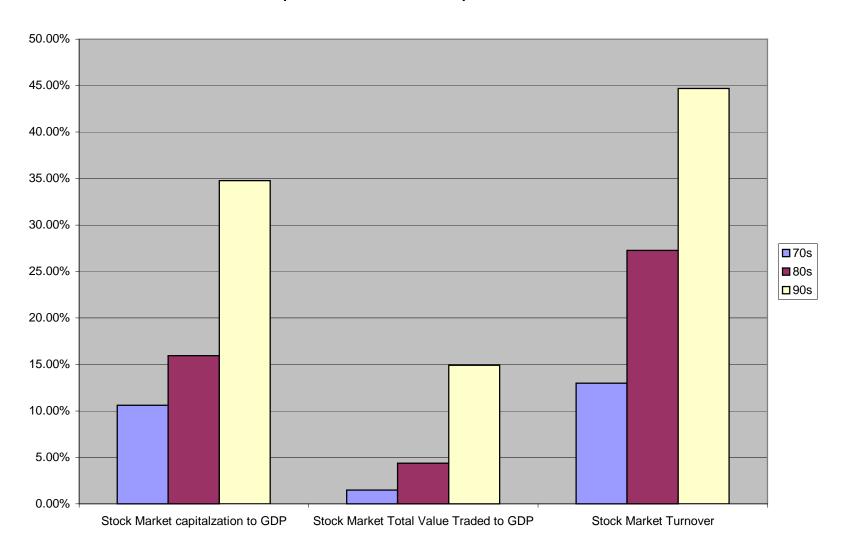
Graph 6: Life Insurance Development Across Income Groups



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 GOVERNMEN--
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 Insitutions 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, Boletin Annual de Estadisticas 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 raw numbers are for December, unless otherwise noted. If the raw numbers are for other months, the deflating process is adjusted correspondingly.

An asterisk denotes series for which datapoints had to be extrapolated.

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

Data on GDP in local currency and CPI are from the electronic version of the IFS, as described in the appendix for section II.

Argentina

Sources: (a) Banco Central de la Republica Argentina, Boletin Estadistico

(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

All raw 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 offices

General insurance offices

Friendly societies

Private Pension Funds Superannuation funds

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

Public unit trusts

Development Banks Other banks (Australian Resource Development Bank, Commonwealth Development Bank

and, prior to reclassification in 1988 to trading banks, the Primary Industry Bank of Australia.)

Private credit:

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

Banklike Institutions Permanent building societies

Credit cooperatives

Money market corporations Pastoral financial companies

Finance companies General financiers

Securisation vehicles (all assets except other assets)

Insurance Companies Life insurance offices (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

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

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 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

Private Pension Funds Private pension funds

Pooled Investment Schemes Mutual Funds

Investment institutions and investment funds

Development Banks National Bank of Economic and Social Development

State development banks

Credit Society of Finance and Investment

National Housing Bank

National Bank of Cooperative Credit Special Industrial Financing Agency

Private credit:

Line included: total credit to private nonfinancial sector

Banklike Institutions Investment

banks

Housing credit companies Leasing companies

Development Banks National Bank of Economic and Social Development

State development banks

Credit Society of Finance and Investment National Bank of Cooperative Credit

Canada

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

(b) IFS

Time span: 1980-97

Assets (Source a):

Banklike Institutions Quebec Savings Bank, since 87 classified as deposit money bank

Credit unions and caisses populaires

Sales finance and consumer loan companies

Other financial institutions (venture capital companies, finance leasing companies

and investment and holding

companies)

Trust companies and mortgage loan companies

Private Pension Funds Trusteed pension plans

Insurance Companies Life insurance business and segregated funds of life insurance companies

Property and casualty insurance companies and accident and sickness branches of

life insurance companies

Poled Investment Schemes Mutual funds

Development Banks Public financial institutions

Private credit:

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

Banklike Institutions (Source b) Quebec Savings Bank, since 87 classified as deposit money bank

Credit unions and caisses populaires

Sales finance and consumer loan companies Trust companies and mortgage loan companies

Private Pension Funds Trusteed pension plans (Source a)

Insurance Companies(Source a) Life insurance business and segregated funds of life insurance companies

Property and casualty insurance companies and accident and sickness branches of

life insurance companies

Poled Investment Schemes Mutual funds (Source a)

Development Banks (Source a) Public financial institutions

Chile

Sources: (a) Banco Central de Chile, Boletin 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 associations (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, Boletin anuario

(b) Banco Central de Ecuador, Memoria anual

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

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

Assets:

Development Banks Specialized banks (Source a)

Insurance Companies Investment by insurance companies (Source b)

Private credit

Development Banks Specialized banks (Source c)

Insurance Companies Insurance companies (Source b, included lines: securities and loans, other than of/to govt.)

El Salvador

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

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

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

(d) IFS

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)

Devopment 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 securitiy houses

Pooled investment funds Fonds comuns de creances

OPCVM (organismes de placement collectif en valeurs mobilieres)

Development

Banks

Specialized financial institutions

Private credit:

Line included: Creance sur l'economie

Banklike Institutions Finance companies and security houses

Pooled Investment Schemes Fonds comuns de creances

OPCVM (organismes de placement collectif en valeurs mobilieres)

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: Agricultural Bank, National Mortgage Bank,

Investment Bank, National Investment Bank for Industrial Development, Hellenic Indsutrial Development Bank, National Housing Bank, Deposits and Loan Fund

and Postal Savings Banks. (Source a)

Private credit (Source c):

Development Banks Specialized credit institutions

Guatemala

Source: Superintendencia de Bancos, Boletin annual de estadisticas del sistema financiero

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, Boletin de estadisticas de seguros

(b) Banco Central de Honduras, Boletin estadistico

Time span: 1980-97

Assets:

Banklike Institutions (Source b) Specialized finance companies

Insurance Companies Insurance companies (Source a)

Development Banks (Source b) Development banks

Private credit (Source b)

Line included: credito e inversiones, sector privado

Banklike Institutions (Source b) Specialized finance companies

Development Banks (Source b) Development banks

India

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

(b) Life Insurance Corporation of India, Annual Report

(c) IFS

Time span: 1980-95, missing data

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

Assets:

Insurance Companies Life Insurance Corporation of India (Source b)

Pooled Investment Schemes Private mutual funds

(Source a) Unit trust

Development Banks State Financial Coporation

(Source a) Industrial Financial Corporation of India Industrial Development Bank of India

Industrial Credit and Investment Corporation of India imited.

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

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

Pooled Investment Schemes Investment funds and securities investment funds (Source b)

Jamaica

Sources: (a) Bank of Jamaica, Statistical Digest

(b) Bank of Jamaica, Annual Report

(c) IFS

Time span: 1980-96

Assets:

Banklike Institutions Finance houses and trust companies

(Source a) Merchant banks

Building societies Credit unions Trust companies

Development Banks National Development Bank

(Source b) Agricultural Credit Bank

Trafalgar Development Bank

Private credit (Source c):

Banklike Institutions Merchant banks, finance houses and trust companies

Japan

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

(b) Research and Statistics Department, Bank of Japan, Economic Statistics Monthly

Time span: 1980-97

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

Assets:

Banklike Institutions Zenshinren banks

Credit cooperatives (Source a)

Shinkumi Federation Bank / Natl. Federation of Credit Cooperatives

Labor credit associations

Natl. Federation of Labor Credit Associations

Agricultural cooperatives

Credit Federation of Agricultural Cooperatives

Fishery cooperatives

Credit Federation of Fishery Cooperatives Postal Savings Bank- total deposits

Foreign banks

Securities finance companies Securities investment trusts

Life insurance companies.

Trust accounts of deposit money banks (includes city, regional and trust banks)

Postal Life Insurance and Postal Annuity

Insurance Companies

Non-life insurance companies. (Source b)

Mutual insurance federations of agricultural cooperatives

Development Banks

Government financial institutions: Japan Devt. Bank, Export-Import Bank, (Source b)

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 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 Zenshinren banks (Source a) Credit cooperatives

Shinkumi Federation Bank / Natl. Federation of Credit Cooperatives

Labor credit associations

Natl. Federation of Labor Credit Associations

Agricultural cooperatives

Credit Federation of Agricultural Cooperatives

Fishery cooperatives

Credit Federation of Fishery Cooperatives

Foreign banks

Securities finance companies Securities investment trusts

Life insurance companies.

Trust accounts of deposit money banks (includes city, regional and trust banks)

Insurance Companies

(Source b) Non-life insurance companies.

Mutual insurance 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 Other financial corporations, including: finance companies,

(Source a) investment companies, securities companies. However, institutions included

may change from time to time.

Insurance Companies Insurance companies (Source b)

Development Banks Specialized credit institutions, including Cities and Village Development Bank,

Industrial Development Banks, Housing and Development Corporation, Agricultural Credit Corporations and Jordan Co-operative Organization

Private credit:

Banklike Institutions Other financial corporations (loans and corporate bonds/shares)

(Source a)

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 source 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

Mutual credits

Investment institutions

Investment and finance institutions, since 93 included in merchant banks

Merchant banking companies Investment trust companies

Korea securities and finance companies

Trust accounts of banks

Insurance Companies Non-life insurance companies

Life insurance companies

Development Banks Korea Development Bank

Export-Import Bank of Korea Korea Long-Term Credit Bank

Private credit

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

Banklike Institutions Mutual savings and finance companies (Source a)

Credit unions (Source a)

Community credit cooperatives (Source a)

Mutual credits (Source a)

Trust accounts of banks (Source b)

Insurance Companies Life insurance companies (Source b)

Development Banks (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 (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 (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

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 Factoring companies (cartera de factoraje con recursos y deudores diversos)

(Source a) 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 Bank, National Agriculture Bank, Credit Immobilier et Hotelier

Caisse de Depots et de Gestion, Caisse des Marches

Netherlands

Sources: (a) Nederlandse Bank, Annual Bulletin There are varying definitions of the different groups and in different source

(b) OECD, Methodological Supplement The Statistical Yearbook presents significantly different numbers

Time span: 1980-96

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) (Source b) *

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

Private Pension Funds Private and municipal pension schemes

Pooled Investment Schemes Unit trust funds

Development Banks State lending institutions

Private credit:

Lines included in data collected from source b are: other bonds, other certificates,

loans to the public/nonfinancial enterprises and municipalities, shares, definitions vary over time and across categories

Banklike Institutions Private credit enterprises/mortgage institutions

(Source b) Private financial companies

Insurance Companies (Source b) Life insurance companies

Non-life insurance companies

Private Pension Funds(Source b) Private and municipal pension schemes

Pooled Investment Schemes Unit trust funds

Development Banks

(Source c)

State lending institutions

Pakistan

Sources: (a) State Bank of Pakistan, Banking Statistics

(b) The Pakistan Insurance Yearbook

Time span: 1980-95

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

Assets:

Insurance Companies (Source b) State Life Insurance Corporation

Non-life insurance companies

Development Banks Agricultural Development Bank of Pakistan

(Source a) 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, Boletin Estadistico

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 Five 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 Estatistica, Estatisticas monetarias e financeiras

Time span: 1980-1988,1991-96

Assets:

Central agricultural credit cooperative

Finance and credit companies

Other intermediaries

Insurance Companies Life insurance companies

Nonlife insurance companies

Private 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 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

Private Pension Funds Private self-administered pension and provident funds

Development Bank National Finance Corporation of South Africa

Land and Agricultural Bank of South Africa

Private credit:

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

Insurance Companies Long-term insurers (life)

Short-term insurers (nonlife)

Private Pension Funds Private self-administered pension and provident funds

Spain

Sources: (a) Banco de Espana, Boletin Estadistico

(b) Banco de Espana, Cuentas financieras de la economia espanola

Portfolio investment institutions

(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 Insurance companies (financial assets)

(Source b)

(Source a)

Pooled Investment Schemes

(Source a)

Development Banks

Official credit institutions (official credit institute and til 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

The raw numbers for the Development Finance Corporation are for March

Assets:

Banklike Institutions National Savings Bank (Source b) *

Development Banks Development Finance Corporation, total loans and equities outstanding (Source d)

State Mortgage and Investment Bank, total loans outstanding (Source a)

National Development Bank (Source c)

Private credit:

Included line 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 (three banks, one owned by agricultural cooperatives, 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 companies

Thrift institutions

Insurance Companies Life insurance companies

Development Banks 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 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:

> 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.), 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.), federally related mortgage pools (GNMA, FNMA, FHLMC) and Farmers Home Administration pools

Uruguay

Source: Banco Central del Uruguay, Boletin Estadistico

Time span: 1980-1996

Private credit

Line included: credito al sector privado

Banklike Institutions Banco Hipotecario

S&L associations

Venezuela

Sources: (a) Banco Central de Venezuela, Boletin Mensual

(b) Oficina Central de Estadistica e Informatica, Anuario Estadistico 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

Mutual funds

(Source a)

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

(e) Reports of the Registrar of Pension and Provident Funds

(f) IFS

Time span: 1980-96

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

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 Building societies (Source f) 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 the World Development Indicators.

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

The deflators in 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 the World Development Indicators.

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

The deflators in local currency and in 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 a 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 Commision

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 Mobiliároios

Singapore Monetary Authority of Singapore

Sri Lanka Colombo Stock Exchange, Securites 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
Japan
OECD Financial Statistics Monthly
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+q 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 Shares: A.1 a+b+c Bonds: B.1.1 c+d+e France Greece Shares: A.1 b+c Bonds: B.1.1 c+d+e Shares: A.1 Bonds: B.1.1. c+d+e Italy 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

Spain Snares: A.1 Bonds: B.1.1 c+d+e Switzerland Shares: A.1 a+b+c Bonds: B.1.1 c+d+e

Shares: A.1.1 a+b+c Bonds: B.1.1 c+d+e + B.1.2 c+d+e

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

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

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