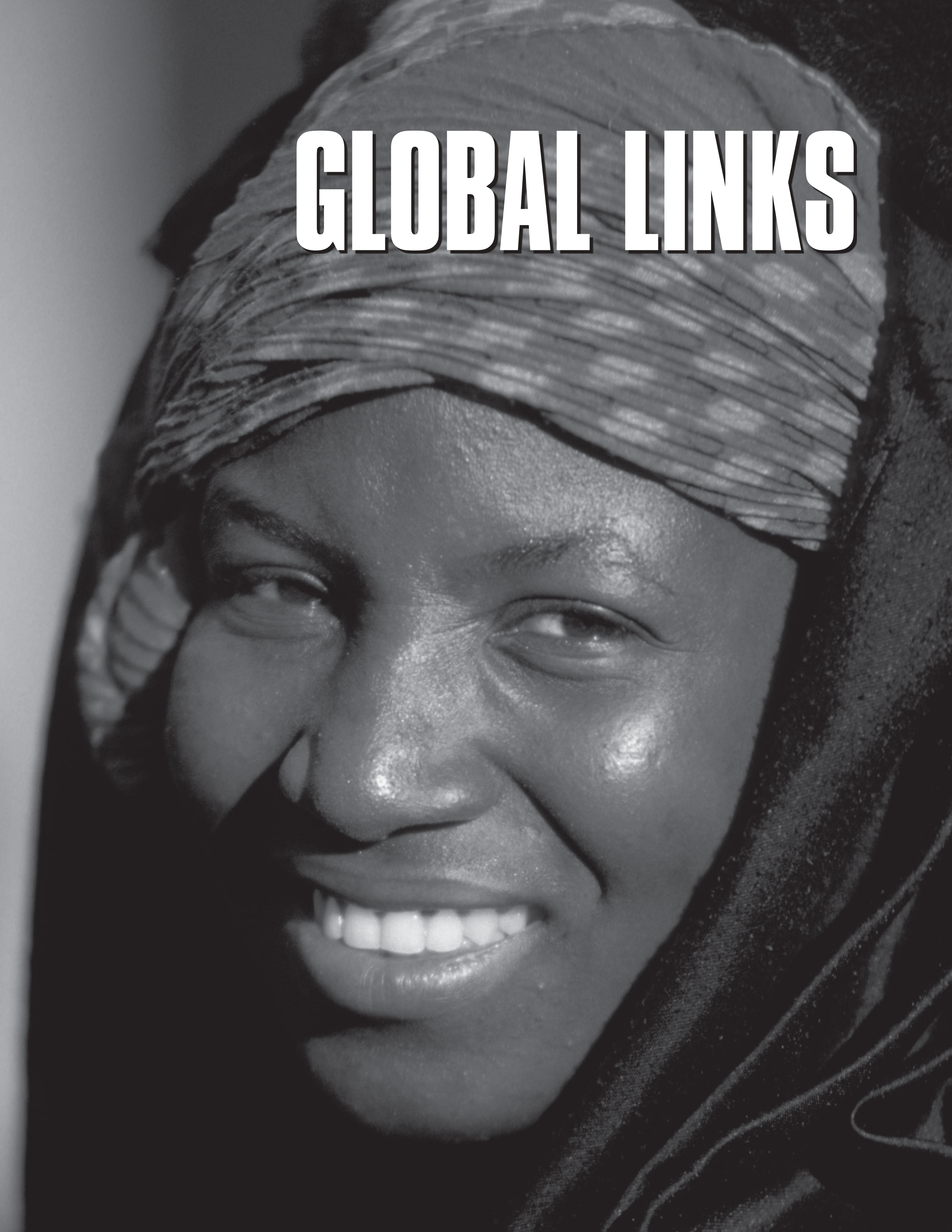

GLOBAL LINKS

6

The past three years show dramatically how events in one part of the world can affect people in the rest of the world, though sometimes with a lag. The financial crisis that struck high-income economies in 2008 reached low- and middle-income economies in 2009. World exports of goods and services fell 20 percent, from $19.6 trillion in 2008 to $15.6 trillion in 2009, more in high-income economies and somewhat less in low- and middle-income economies. Developing economies' share of world exports increased by 1 percentage point over 2008, continuing a rising trend from 19 percent in 2000 to 27 percent in 2009. Imports of goods and services by high-income economies fell 22 percent, from $14.0 trillion in 2008 to $10.9 trillion in 2009; imports by low and middle income economies fell 19 percent.

The financial crisis also reduced the external financing available to developing economies from private sources, which dropped to $521 billion in 2009 from the record high of $932 billion in 2007. Net inflows of foreign direct investment dropped to $359 billion in 2009 from a high of $597 billion in 2008. In contrast, net inflows of portfolio equity investments rose to $108 billion following net outflows of $53 billion in 2008. Bond issuances, which dropped from $88 billion in 2007 to $24 billion in 2008, recovered in 2009 to reach $51 billion. But commercial and trade-related lending, which declined from $195 billion in 2007 to $172 billion in 2008, dried up in 2009, dropping to $1.7 billion. Total debt flows from private creditors fell 70 percent in 2009, to $59 billion. But net flows from official creditors reached $171 billion in 2009, a 50 percent increase over 2008, driven by such multilateral institutions as the International Monetary Fund (IMF) and the World Bank.

Global food prices soared again in 2010 and 2011, with some commodities exceeding their record high in 2008. The World Bank food price index (table 6.6) averaged 311 in February 2011, exceeding the June 2008 record of 293. Food price inflation has accelerated in several low- and middle-income economies, where consumers often spend more than half their income on food. During the 12 months ending in August 2010, food prices rose 13.2 percent a year in Indonesia, 10.4 percent a year in India, and 9.6 percent a year in Bangladesh.

The financial crisis has also demonstrated the need for more data and more frequently updated data to monitor global transactions. The World Development Indicators database contains more than 400 indicators for monitoring exchanges between economies on an annual basis, and the topics covered have expanded each year. Many others are not included in the database because of their structure or limited country coverage, but they are necessary for understanding global links. Most high-income economies and some low- and middle-income economies now produce economic statistics on a quarterly or monthly basis. This introduction highlights some of these data.

Data sources for bilateral trade flows

World Development Indicators publishes data on merchandise trade values by commodity groups (tables 4.4 and 4.5), values of trade in services (tables 4.6 and 4.7), intra- and extra-regional trade (table 6.5), merchandise trade indices (table 6.2), tariff rates (table 6.8), and indicators for measuring trade facilitation (table 6.9). Demand is rising for more detailed data, such as trade flows by partner economies and by commodities and sectors. Table 6a summarizes the main sources of data on bilateral trade flows. Some of these databases are accessible through the World Integrated Trade Solutions platform (http://wits.worldbank.org).

Barriers to trade in services

Trade in services makes up 22 percent of world trade, up from 20 percent in 2000. In developing economies the nominal value of trade in services grew 16 percent a year over 2000–09, doubling the rate of growth over 1990–2000 and surpassing that of high-income economies, which grew at 11 percent a year over 2000–09. Despite this growing

Source of data for bilateral trade flows **6a**

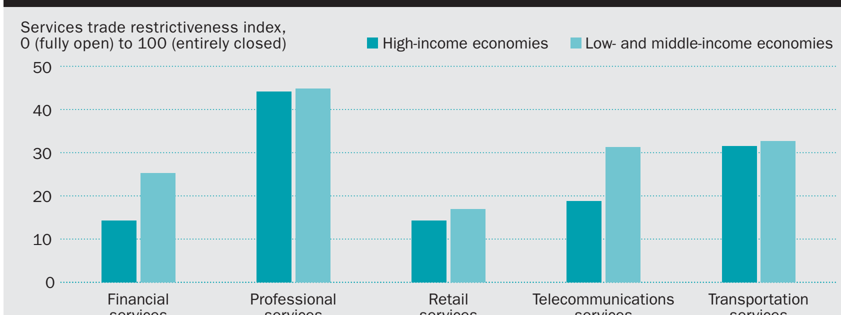
Compiling organization	Name of publication and database	Country coverage	Data coverage	Periodicity	Links
International Monetary Fund	Direction of Trade Statistics database	Most developing and developed economies	Merchandise trade data, no breakdowns of sectors and partners. Available through subscription	Quarterly and annual	http://www2.imfstatistics.org/DOT/ This is a link to a 5-day trial
United Nations Conference on Trade and Development	UNCTADstat Merchandise Trade Matrix	Most developing and developed economies	Merchandise trade by partner economies and by product groups	Annual	http://unctadstat.unctad.org/
United Nations Statistics Division	Commodity Trade Statistics (Comtrade)	Most developing and developed economies	Merchandise trade by partner economies and by commodity classifications	Annual	http://wits.worldbank.org/wits/
Organisation for Economic Co-operation and Development (OECD)	Monthly Statistics of International Trade	OECD member economies	Total merchandise trade by partners	Monthly	http://stats.oecd.org/ Extract databases are available under "International Trade and balance of Payments" theme Full databases are subscription based
	International Trade by Commodity Statistics	OECD member economies plus EU	Merchandise trade by partners and by products	Annual	
	Trade in services	OECD member economies plus EU and a few more economies	Trade in services by partners and by service category	Annual	
Eurostat	External Trade database	27 EU members	Merchandise trade by partners and by products	Monthly, quarterly, and annual	http://epp.eurostat.ec.europa.eu/portal/page/portal/external_trade/data/database

importance, little is known about policies affecting services trade, a major impediment to the analysis of trade policy and trade flows.

To address this gap, the World Bank has built the Services Policy Restrictiveness Database, with information on 102 countries for five major service sectors disaggregated by subsectors and relevant modes of supply in each subsector. So far, the information focuses mainly on discriminatory policy measures affecting foreign service providers. The full database will be released in the second quarter of 2011 at http://econ.worldbank.org/programs/trade/services.

Restrictiveness is assessed by the newly created Services Trade Restrictiveness Index score. The index reveals patterns of restrictiveness by major service sector and across low- and middle-income and high-income economies (figure 6b). In both high-income and low- and middle-income economies, professional services (including the movement of individuals) face the highest trade barriers, followed by transportation services. High-income economies exhibit more open financial, telecommunications, and retail distribution sectors than do low- and middle-income economies (Borchert, Gootiiz, and Mattoo forthcoming).

Trade in professional services faces the highest barriers **6b**



Note: Aggregate values are the simple average of individual country scores. Data are for 102 countries.
Source: World Bank Services Policy Restrictiveness Database.

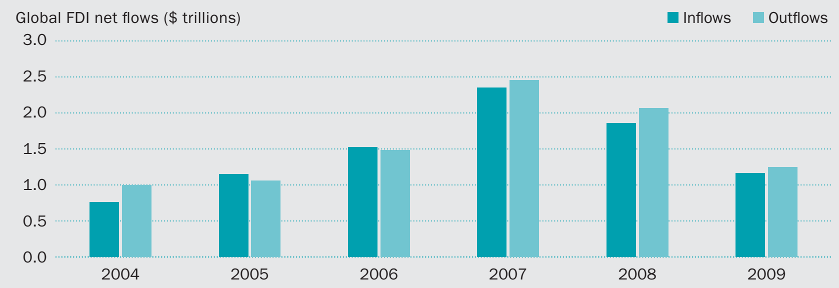
Foreign direct investment

Countries are increasingly compiling more data on foreign direct investment (FDI) transactions and stocks. Despite recent improvements, however, deficiencies in coverage remain. For example, if recording of FDI transactions were complete and comparable, the total outflows of FDI from investing economies would equal the total inflows recorded by the recipient economies. But in 2009 the divergence between outflows and inflows of FDI at the global level was about $82 billion (7 percent of global outflows; figure 6c). The discrepancies arise from differences in reporting practices. For example, some countries include reinvested earnings in their outflow statistics while others do not include them in their inflow statistics. Furthermore, corporate accounting practices and valuation methods may differ by reporters.

Discrepancies exist among FDI statistics published by various international agencies, even when the agencies adopt common methodological standards. Such discrepancies may reflect differences in comparability and timing of FDI data reported by different countries, discrepancies in sector coverage, and lags in reporting revisions. Recognizing these issues, the IMF is leading a worldwide statistical data collection effort to improve the quality of FDI data (the Coordinated Direct Investment Survey; http://cdis.imf.org). Preliminary results were released in December 2010.

Data on FDI are published in table 6.12. These data cover FDI net inflows received by the reporting economy from foreign residents, and FDI net outflows by the reporting economy residents. Breakdowns of FDI transactions and investment positions by sector and partner, increasingly sought by users, are not published in *World Development Indicators* but are available from other sources. Table 6d summarizes the availability of FDI statistics for some of the main data compilers.

Discrepancies persist in measures of FDI net flows **6c**



Source: World Development Indicators data files.

Bilateral remittance flows

World Development Indicators publishes data on total workers' remittances and compensation of employees received and sent by the reporting economies (table 6.18). Data coverage and quality have been improving, but inconsistencies and lack of reporting remain. For example, if all economies reported completely and consistently, the sum of remittances flows recorded by receiving economies would equal the sum of remittance flows recorded by sending economies. But as of 2009 there was a discrepancy of $127 billion (30 percent of total inflows; figure 6e). Large amounts of remittance flows are sent through private and informal channels that are not officially recorded.

No comprehensive dataset is available on the bilateral flow of remittances. Bilateral remittance flows estimated through approximation and allocation methods using the proportions of migrant stocks in destination and sending countries or the incomes of destination and sending countries are available at www.worldbank.org/prospects/migrationandremittances (Ratha and Shaw 2007). The data shed light on patterns of remittance flows, but the estimates are sensitive to the assumptions and allocation method chosen.

Bilateral migration stocks

Because migration data come mostly from destination countries, the quality of global migration data depends on how well the destination countries survey migrants within their borders. Systematic recording of migrants is difficult, especially for countries with weak statistical capacity and for those affected by civil disorder and natural disasters. Moreover, ensuring the comparability of migration data is a long-standing challenge, in part because destination countries classify migrants using various criteria. Many countries compile migration data based on immigrants' nationality, while others collect data based on the immigrants' place of birth.

World Development Indicators publishes aggregate data on international migrant stocks and net migration estimated by the United Nations Population Division based on population censuses supplemented by border statistics, administrative records, surveys, and refugee registrations (tables 6.1 and 6.18).

Efforts to produce complete data on bilateral migration have been rare. A 2008 database on immigrants in OECD countries contains data on bilateral migrant stock for OECD members (http://stats.oecd.org/). The dataset includes sociodemographic information such as age, gender, education, and occupation. A series of studies have published data on OECD immigrants by educational attainment (Docquier and Marfouk 2006), gender and educational attainment (Docquier, Lowell, and Marfouk 2009), and age of entry and educational attainment (Beine, Docquier, and Marfouk 2006). Global bilateral databases have been constructed for the 2000 census round (Parsons and others 2007) and for bilateral migration and remittance flows (Ratha and Shaw 2007).

The United Nations Population Division in cooperation with the World Bank, the United Nations Statistics Division, and the Universities of Nottingham and Sussex created the Global

Source of data on FDI — 6d

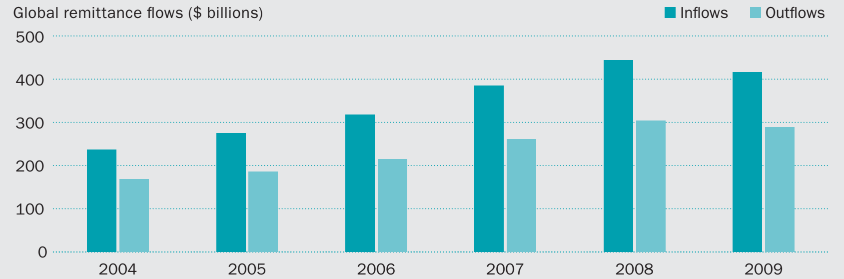
Compiling organization	Name of publication and database	Country coverage	Data coverage	Periodicity	Links
International Monetary Fund (IMF)	Balance of Payments Statistics Yearbook and database	Most developing and developed economies	Aggregate FDI flows and stock by reporting economy. By-partner, by-sector breakdowns are not available. Available through subscription	Quarterly and annual	http://www2.imfstatistics.org/BOP This is a link to 5-day trial
United Nations Conference on Trade and Development (UNCTAD)	World Investment Report and Foreign Direct Investment database	Most developing and developed economies	Aggregate FDI flows and stock by reporting economy	Annual	http://unctadstat.unctad.org
	Transnational Corporations Statistics database	Transnational Corporations Worldwide	Detailed data on transactions of transnational corporations and mergers and acquisitions, by partner and by sector; available through data extract service	Annual	www.unctad.org/Templates/Page.asp?intItemID=3159&lang=1
Organisation for Economic Co-operation and Development (OECD)	International Direct Investment database	32 OECD member economies	FDI stock (annual) and flows (annual and quarterly) by partner economies and by sectors. Full dataset is available to subscribers	Quarterly and annual	http://stats.oecd.org/ Extract databases are available under Globalisation theme
Eurostat	European Union Foreign Direct Investment Yearbook and database	27 EU members	Aggregate and bilateral FDI flows and stock, by partner and by sector	Annual	http://epp.eurostat.ec.europa.eu/portal/page/portal/balance_of_payments/data/database
Association of Southeast Asian Nations	Foreign Direct Investment Statistics	10 ASEAN member economies	Bilateral FDI inflows and outflows	Annual	www.aseansec.org/18144.htm
Centre d'Etudes Prospectives et d'Informations Internationales	Foreign Direct Investment database	96 countries of the GTAP 6.2 database for stocks and 70 countries for flows	Harmonized bilateral flows and stocks of FDI for 26 sectors. Data are gap filled using gravity-based regressions and raw data from IMF, UNCTAD, OECD, and Eurostat.	Annual for 2004 only	www.cepii.fr/anglaisgraph/bdd/fdi.htm
Financial Times	FDI database FDI Intelligence	All countries with greenfield FDI projects;	Greenfield FDI projects since 2003; subscription based. Methodology differs significantly from balance of payments and international investment position standards. The data are based on press reports.	Daily	www.fdimarkets.com
Dealogic	M&A Analytics	Mergers and acquisitions activity worldwide covering an array of transactions	Information for mergers and acquisitions activity, including information on target and acquiror, deal value, and financials.	Monthly	www.dealogic.com

Migration database (www.unmigration.org) in 2008. It contains all publicly available data from more than 230 destination countries and territories over the last five decades on international migrants, classified by age, gender, place of birth, and country of citizenship. However, it still does not include all raw data points needed for a global migration matrix.

These raw data were assembled to construct a global bilateral migration matrix using empirical methods to fill holes in the data (Özden and others forthcoming). The resulting database covers 226 origin and 226 destination countries (forthcoming at www.data.worldbank.org/data-catalog). Construction of such a matrix entails formidable challenges, including selecting the most relevant sources, allocating migrants who "originated" in aggregate geographic regions and migrants of unknown origins to specific countries, and accounting for varying survey dates and definitions. Of all cell-level values in the final matrix, about 12–14 percent are from raw census data, 40–60 percent are based primarily on raw data scaled to United Nations Population Division estimates of migrant stocks or augmented by the disaggregation of aggregate categories, and the remaining 26–48 percent are estimated through interpolation and extrapolation.

This new dataset reveals that the total stock of migrants increased from 92 million in 1960 to 165 million in 2000. The number of migrants from high-income economies remained stable, while the number from low- and middle-income economies rose from 14 million in 1960 to 60 million in 2000 (figure 6f). The increase was driven largely by an increase in migrants residing in the United States (up 24 million) and Western Europe (up 22 million).

At least 30 percent of remittance inflows go unrecorded by the sending economies **6e**



Note: Incudes workers' remittances and compensation of employees.
Source: World Development Indicators data files.

Public sector debt

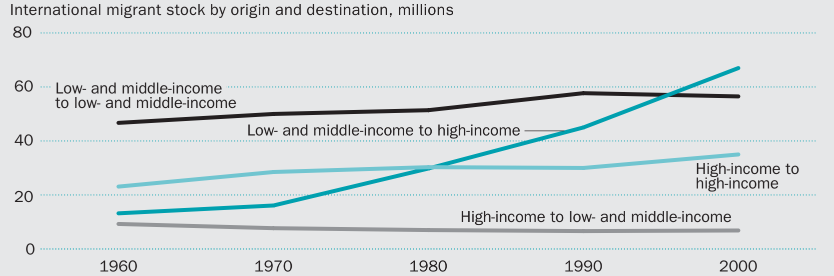
World Development Indicators publishes data on public and publicly guaranteed external debt (tables 6.10, 6.11, and 6.13). But these data present only a portion of total public sector debt, much of which is held by domestic creditors. Domestic debt data are important for economic policymaking because of the implications for local financial markets. To fill the gap, the World Bank and the IMF launched an online Quarterly Public Sector Debt database in 2009 (http://data.worldbank.org/data-catalog). The database provides data on clearly defined tiers of debt for central, state, and local government in developing or emerging market economies as well as on extrabudgetary agencies and funds. It also includes debt data by instruments, valuation methods, maturity types, and creditors.

The level and composition of public sector debt are affected by many external and domestic economic factors. The recent global financial crisis limited the private sector's ability to borrow. The public sector, usually more creditworthy, increased external borrowing to stimulate sluggish domestic economies. Most external financing for developing economies in 2009 was provided by official multilateral institutions such as the IMF and the World Bank. After the Asian financial crises in the late 1990s many governments switched from external to domestic borrowing to reduce their exposure to exchange rate fluctuations, dramatically increasing the size of domestic debt in emerging market economies. Today, domestic debt represents about 78 percent of the total general government debt in developing economies with data. Comparison with earlier period is not possible due to lack of data.

Emerging market economies have also issued local currency–denominated debt to correct currency and maturity mismatches. In September 2010 the estimated local currency debt among developing economies averaged 67 percent of total government debt (excluding Brazil and China, with upwards of 96 percent).

Financing needed to support fiscal deficits led to a significant increase in the ratio of sovereign debt to GDP. Among developing economies, central government debt for 2009 averaged 46 percent of GDP, up from 42 percent in 2009. Brazil, which undertook aggressive countercyclical spending and tax cuts to stimulate the economy, had the highest share of gross debt in gross domestic product (about 70 percent; figure 6g).

Migrants originating from low- and middle-income economies and residing in high-income economies rose fivefold over 1960–2000 **6f**



Source: Özden and others forthcoming.

The ratio of central government debt to GDP has increased for most economies, 2007–10 **6g**

a. Derived using 2009 GDP because 2010 GDP was not available.
Source: World Bank Quarterly Public Sector Debt database