
3 International trade and investment flows

This chapter examines international trade and investment flows to provide some context for the assessment of the impacts BRTAs have on trade, investment and economic performance.

It mainly draws on data from the systems of national accounts, balance of payments and related statistics. Under these frameworks, distinctions are made between merchandise trade, services trade, income and investment flows. Official data collections distinguish between trade and investment flows between countries. In addition to this distinction, the WTO General Agreement on Trade in Services (GATS) delineates categories which highlight the commercial relations between businesses in different countries (box 3.1).

Section 3.1 provides an overview of the global economy, the composition of the global balance of payments and trends in trade and investment. Section 3.2 then provides a similar overview of the Australian economy.

3.1 Global trends

Overview of the global economy

The level and distribution of economic activity has important implications for international trade and investment. Generally, as countries grow and per capita incomes rise, so do the number and complexity of international trade and investment linkages. With this, the importance of the rules that effectively govern those relationships and facilitate trade and investment between countries also increases.

Box 3.1 Trade and investment data collection

Official national balance of payments statistics are divided into the current account and the capital account. The current account records the value of exports and imports of goods and services, and the value of earnings and payments from investments and loans. The capital account records the value of all foreign direct investment, portfolio investment, other investment and central bank transactions. Depending on the direction of the flow, that is, into a country or out of a country, transactions are recorded as credits or debits.

Services are generally regarded as being intangible, typically requiring direct interaction between the producer and the consumer (Mattoo, Stern and Zanini 2008). The General Agreement on Trade in Services (GATS), however, adopts a somewhat different nomenclature for services from that used in balance of payments statistics. The GATS system classifies trade in services into four modes:

- cross-border supply, such as providing a service through email, phone or fax (mode 1);
- consumption abroad, such as when a consumer travels abroad for tourism, education or medical services (mode 2);
- commercial presence, for example when a company establishes an office in another country to provide services in that country (mode 3); and
- presence of natural persons abroad, for example when an employee travels abroad to provide a service directly (mode 4).

Broadly, trade in services covered by modes 1 and 2 is included in the balance of payments as imports or exports of services, while the presence of natural persons abroad (mode 4) is represented as remittances by individuals or as other service income payments.

Commercial presence is represented in the balance of payments though foreign direct investment (FDI). This concept is related to GATS mode 3 in that it covers the investment flows related to the establishment of a company office in another country. The scope of the balance of payments, however, does not extend to delineating the operations of foreign-owned businesses in a host country, which is relevant to an examination of restrictions on trade and investment and the application of national treatment — matters that are relevant to GATS. There are other differences between FDI and GATS mode 3; for example, in defining FDI, the International Monetary Fund's Balance of Payments Manual (IMF 1993) specifies that the foreign investor own a minimum of 10 per cent of the relevant foreign enterprise, whereas the GATS does not specify an ownership threshold in its definition of commercial presence; rather, as indicated above, it refers to the establishment of offices.

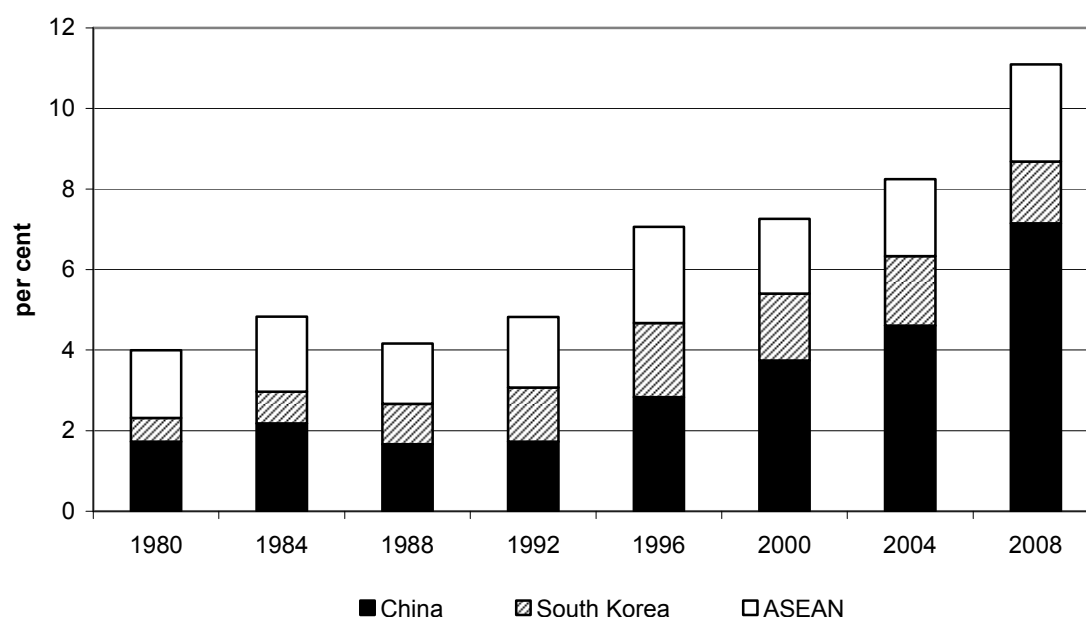
There are questions regarding the accuracy and reliability of some aspects of services trade data — a number of problems in the Australian context were catalogued in a report by ACIL Tasman (2010). While such concerns mean caution should be applied in interpreting such data in some contexts, the discussion in this chapter addresses broad trends in services trade and comparisons with merchandise trade at the aggregate level, where any such issues are less likely to be significant.

The rise of Asia in relative and absolute terms

The rapid economic development of East and South Asia over recent decades has seen measured output increase more than sevenfold since 1980 and the relative contribution of the economies in the region to the global economy grow substantially — from 16 per cent of global production in 1980 to around 22 per cent by 2008. Over the same period, while the level of production by the developed economies of Europe and North America increased fivefold, their share declined. The relatively slow growth of the Japanese economy over the last two decades has seen its share fall too, particularly after 1990.

The economic performance of some East Asian economies has been particularly pronounced. For example, the share of global production of China, South Korea and ASEAN combined has almost trebled since 1980, with most of the increase occurring since the early 1990s (figure 3.1).

Figure 3.1 Contribution to global production — China, South Korea and ASEAN, 1980 to 2008^a



^a Formed in 1967, ASEAN originally comprised Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei subsequently joined in 1984, Vietnam in 1995, Laos and Burma (Myanmar) in 1997 and Cambodia in 1999.

Source: World Bank (2010a).

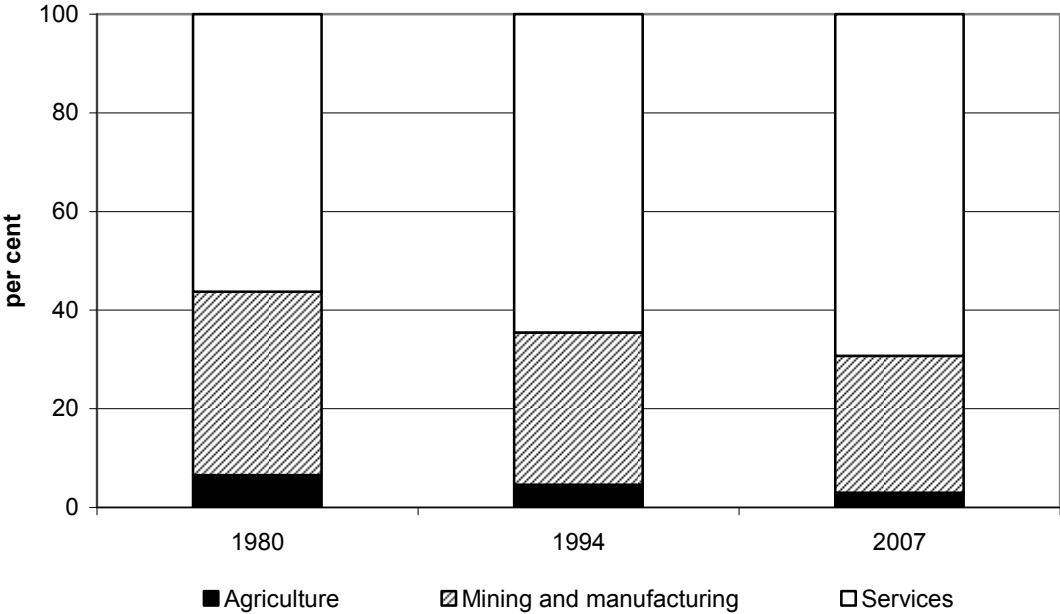
Accompanying this economic growth has been an increase in gross domestic product (GDP) per capita. Data from the World Bank show that per capita incomes

in the East Asia and Pacific region have increased more than sixfold in constant US dollar terms since 1980 (World Bank 2010a).

The growing importance of services

Along with the increased tendency for countries to trade as their economies grow and develop, the economic structure of countries also changes. The demand for services tends to increase faster than per capita incomes. Accordingly, the share of services in global production has increased over the last few decades, with a corresponding decline in the relative shares of agriculture and manufacturing (figure 3.2).

Figure 3.2 Value added by broad sector as a proportion of global production, 1980, 1994 and 2007



Source: World Bank (2010a).

The propensity for services to expand in relative importance has, nevertheless, varied across economies. For example, in ‘high income’ countries, the percentage of value added by the services sector grew from an average of 59 per cent in 1980 to 73 per cent in 2007. In the fast growing East Asia and Pacific region, the contribution of services to value added increased from an average of 27 per cent to 41 per cent over the same period.

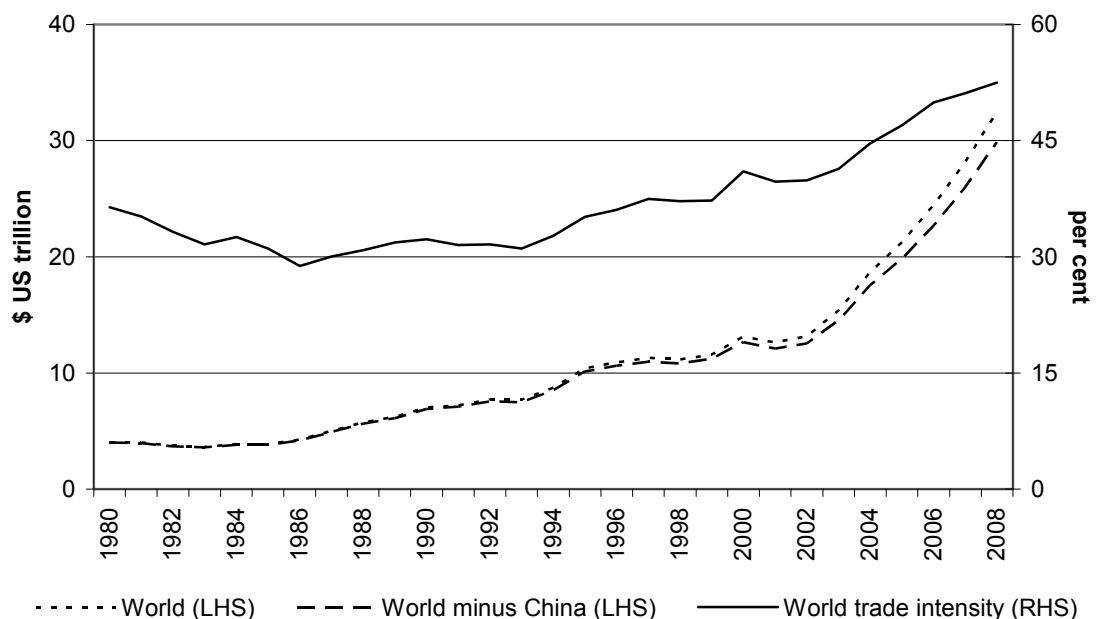
Trends in merchandise and services trade

With economic growth being accompanied by changes in the structure of economies, trade patterns have also changed in response to shifts in comparative advantage between countries.

Merchandise trade

Over the period from 1980 to 2008, the value of global merchandise trade increased eightfold from US\$4 trillion to over US\$32 trillion. More than two thirds of this growth occurred after the year 2000 with the emergence of China as a major trading nation (figure 3.3). As a result of global merchandise trade growing faster than global production, global merchandise trade intensity (measured as global merchandise exports plus imports as a proportion of global production) increased from around 36 per cent in 1980 to 52 per cent in 2008.

Figure 3.3 **Trends in global merchandise trade (exports plus imports), 1980 to 2008**

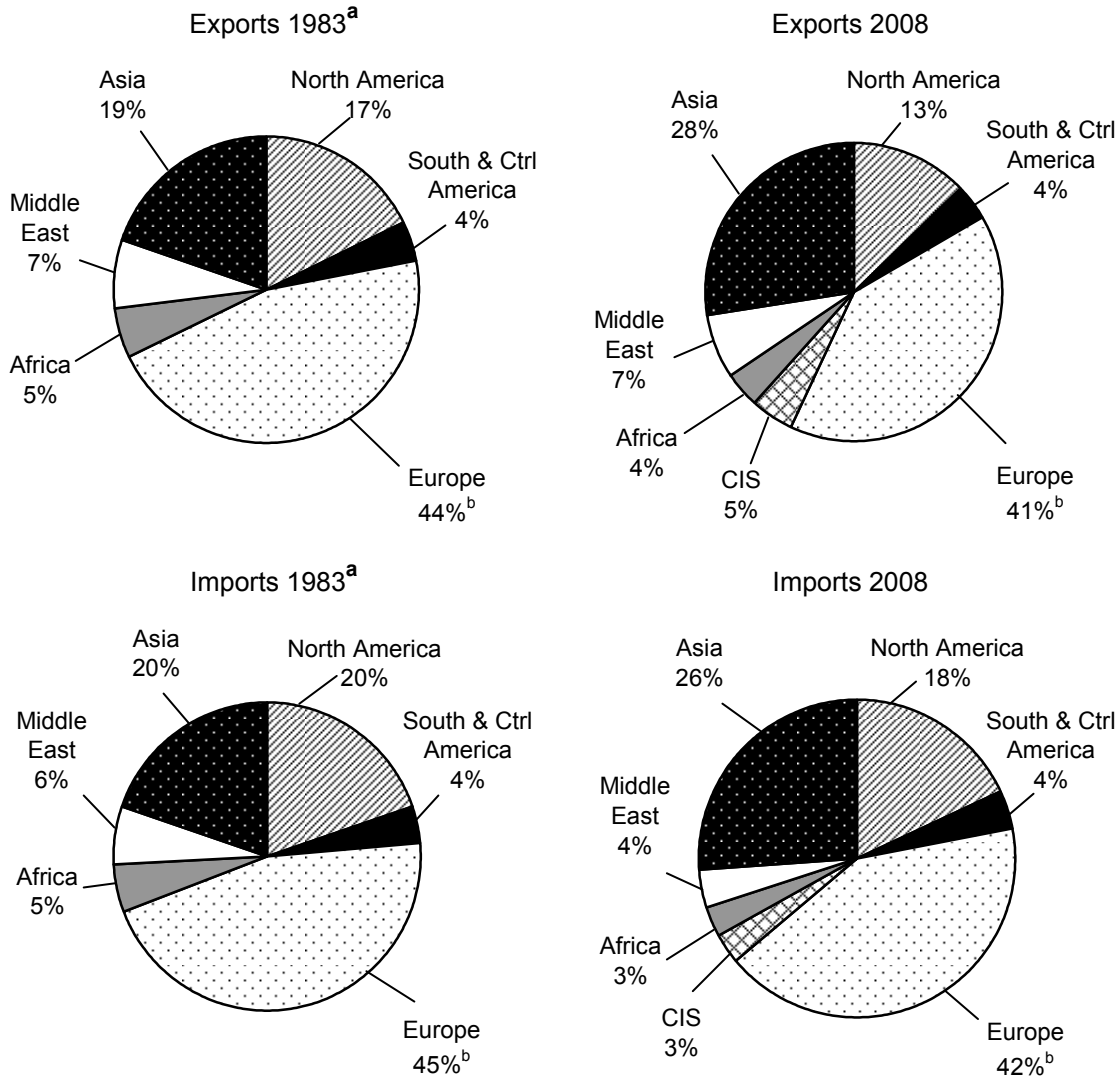


Source: World Bank (2010a).

Within the overall increase in global trade, there has been significant variation in regional contributions. While the nations of Europe account for the largest share of global trade, mainly comprising trade between the economies of the European Union, their relative share of global trade has steadily declined since the early 1980s, as has that of the North American economies (figure 3.4). With the rapid

growth of the Asian economies over the last three decades, the relative magnitude of trade by Asian nations has increased substantially.

Figure 3.4 Merchandise exports and imports by region as a proportion of global trade, 1983 and 2008



^a Data for Commonwealth of Independent States (CIS) are not available for 1980. Official membership of CIS comprises Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan and Uzbekistan, with Turkmenistan an unofficial associate member. ^b Data for Europe includes intra-European Union trade.

Source: WTO (2009).

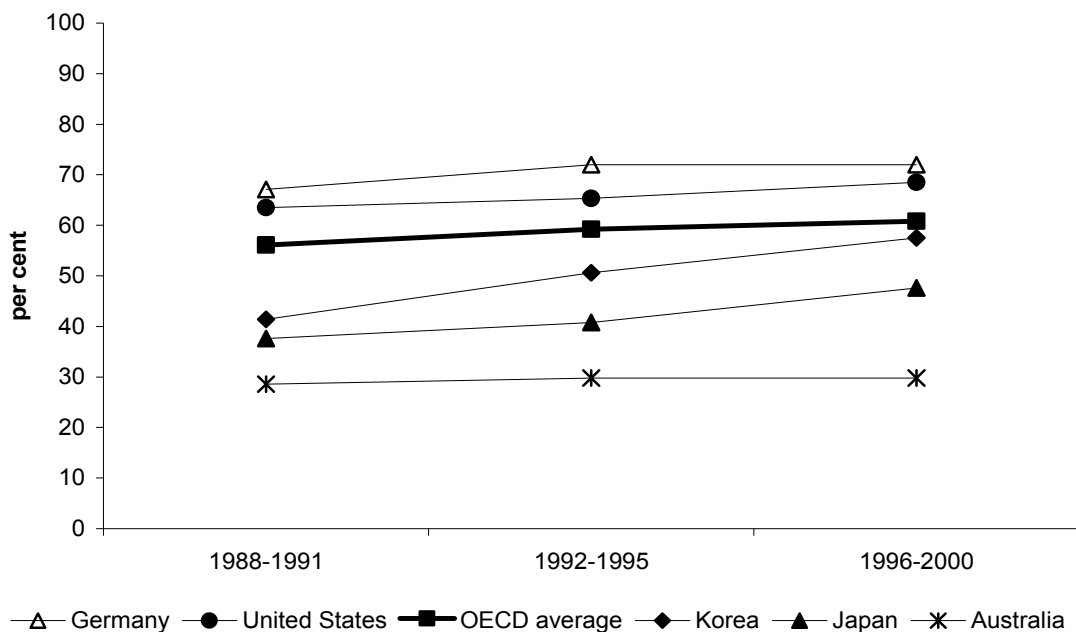
Intra-industry trade

Increased specialisation has resulted in production processes becoming more globally integrated, with final products often being comprised of inputs and

components sourced from a number of countries. As a result, components and partly-finished manufactures cross borders more often than in the past and world trade flows are now marked by greater vertical specialisation and more intra-industry trade.

The growing importance of intra-industry trade was examined by the OECD (2002). According to this study, manufacturing intra-industry trade between OECD economies, measured as the two-way exchange between countries of goods within standard industrial classifications, has risen from an average of 56 per cent of total manufacturing trade in the period 1988 to 1991 to around 61 per cent almost a decade later (figure 3.5), continuing a trend that has extended across OECD countries since at least 1970.

Figure 3.5 Manufacturing intra-industry trade as a percentage of total manufacturing trade, OECD and selected OECD countries, 1988-91 to 1996-2000^a



^a Estimated by the OECD using Grubel-Lloyd indexes based on commodity group transactions.

Source: OECD (2002).

With the growth in intra-industry trade of OECD economies, the share of manufacturing output made up of imported inputs increased from an average of 38 per cent in 1995 to 44 per cent in 2005 (OECD 2009). In this environment, attempts to protect domestic industries, or selected bilateral trade flows, through the imposition of border measures, are likely to impose higher domestic costs than before.

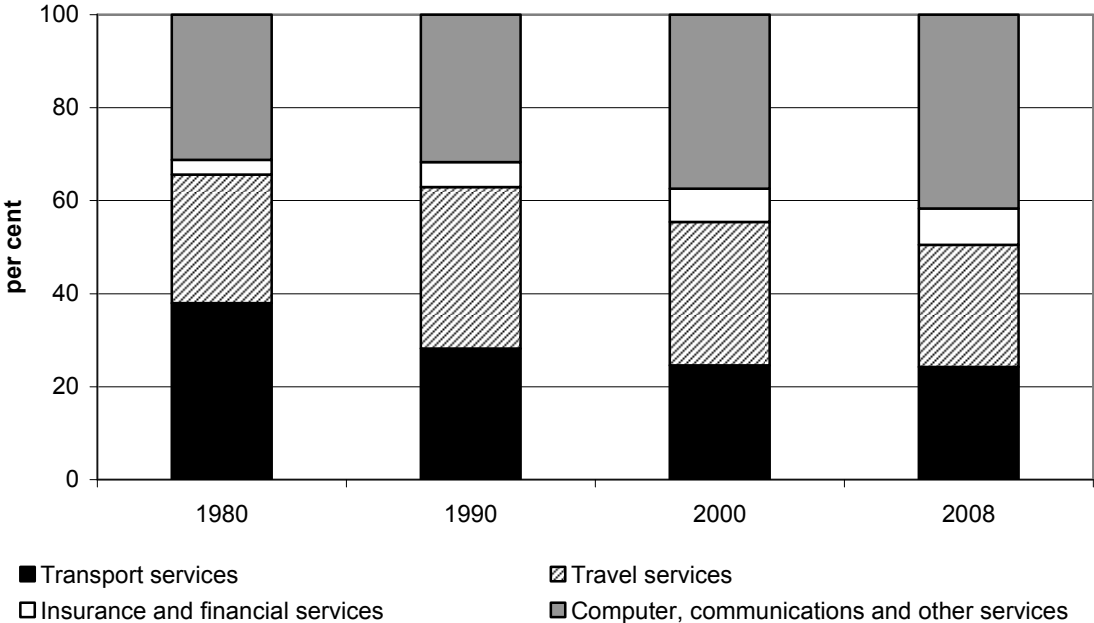
Reflecting the concentration of primary products in Australia’s merchandise exports, Australia’s intra-industry trade has been relatively low by international standards; at around 30 per cent over the period 1988 to 2000 (less than half the OECD average).

Services trade

As noted earlier, the share of services in global production has been increasing relative to manufacturing and primary production. However, despite this trend, and notwithstanding advances in information and telecommunication technologies that have led to an expansion in the range of services that can be traded across international borders, the share of services in global trade remains small compared to their share of global production. Nonetheless, the trade intensity of services (measured by the ratio of services imports plus exports to global production) has increased from around 7 per cent in 1980 to 12 per cent in 2008 (World Bank 2010a).

There have been changes in the composition of services trade, with communications and computer services and banking and insurance services increasing their share of total services trade, while the share of traditional transport services, associated with the movement of merchandise, has declined (figure 3.6).

Figure 3.6 The changing composition of services trade, 1980 to 2008^a



^a Percentage of commercial services exports (total services exports minus exports of government services).

Source: World Bank (2010a).

Trends in foreign investment

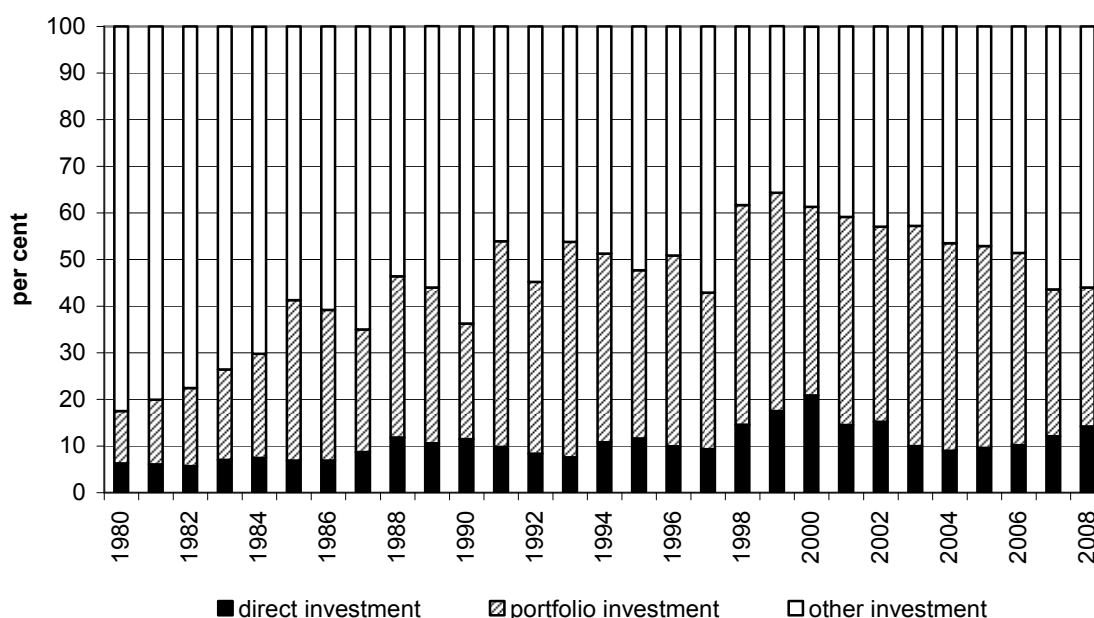
Investors have increasingly been looking beyond national borders for investment opportunities and, with economic growth tending to lift the aggregate level of savings and thus the availability of investment funds within economies, cross-border capital and investment flows have been rising. In such an environment, the rules governing such flows have become more important.

Global capital flows

With the increasing globalisation of businesses and financial markets, global capital flows increased more than 17-fold over the period 1980 to 2008, considerably faster than global production. By 2008, measured global financial flows (inflows plus outflows) were around 54 per cent of global production, up from 17 per cent in 1980.

There have also been marked changes in the relative prevalence of different forms of investment (figure 3.7). In particular, international portfolio investment abroad through bonds, equities, debt securities and derivatives increased 45-fold and

Figure 3.7 Composition of global capital flows, 1980 to 2008^a



^a Direct investment includes equity capital, reinvested earnings, other capital and financial derivatives between affiliated enterprises. Portfolio investment covers investment in equity and debt securities, excluding any such instruments that are classified as direct investment. Other investments include currency and deposits and trade credits.

Source: IMF (2010).

expanded its share of total investment abroad from 11 per cent in 1980 to 30 per cent in 2008. Foreign direct investment, which includes the establishment of branches and subsidiaries abroad as well as equity holdings that enable foreign investors to participate in or influence management, also increased significantly — more than 35-fold over the 28 year period to 2008. By 2008, foreign direct investment flows were 14 per cent of total investment flows, up from just 6 per cent in 1980.

Trends in foreign direct investment

Along with the substantial increase in foreign direct investment over recent decades, there has also been considerable change in the distribution of investment across regions (figure 3.8, on p. 25). In particular, the share of foreign direct investment flowing into Asia and, to a lesser extent, Africa and the Commonwealth of Independent States, has increased markedly, while the share flowing into Europe and North America has declined. This trend parallels the relative growth of international trade across these economies and reflects the growing integration of many developing and transition economies into the global economy.

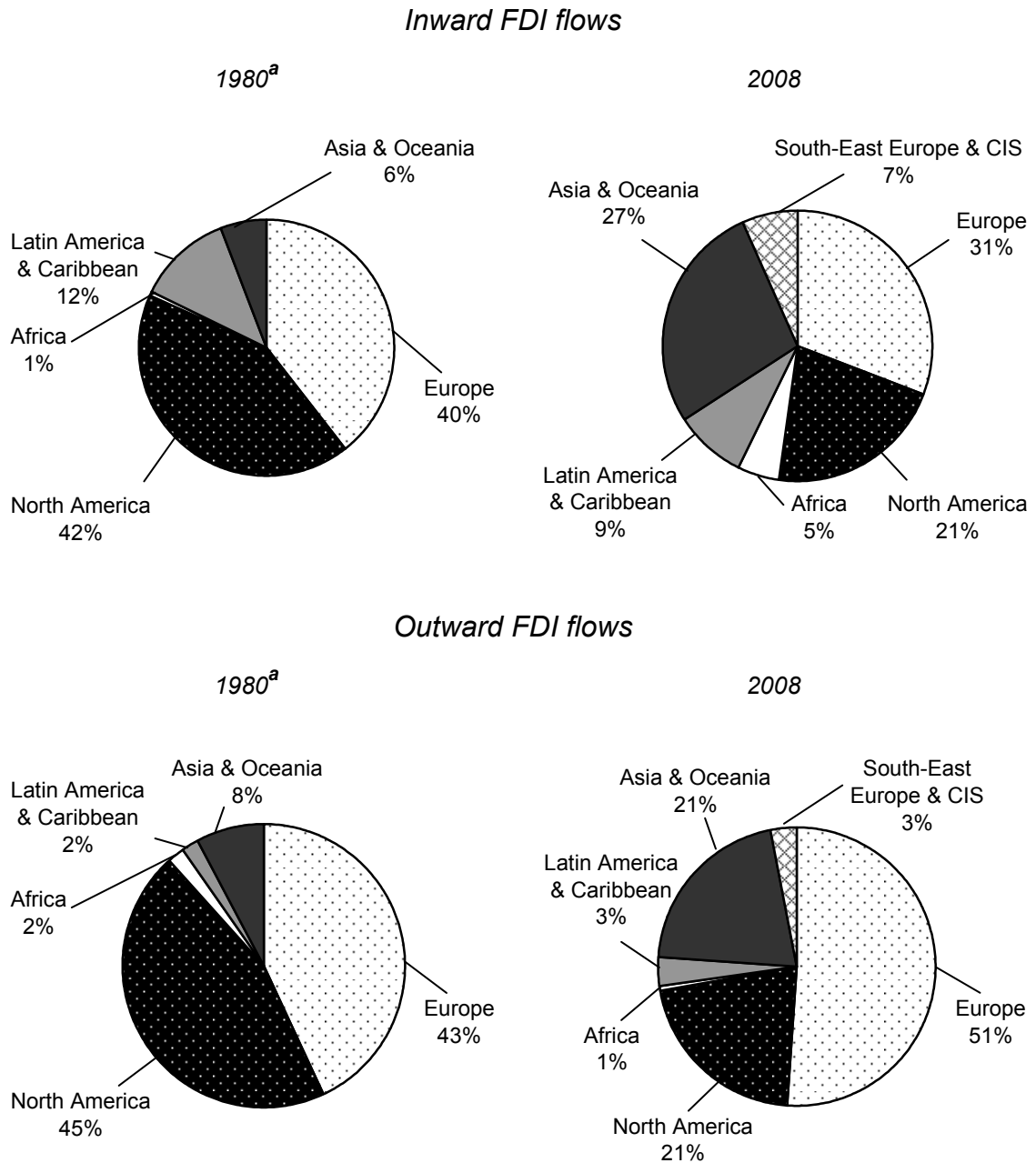
The source of foreign direct investment has also changed, with Asia providing a much larger proportion of direct investment outflows, while the share supplied by North America has declined.

Global balance of payments

Despite considerable growth in investment and, to a lesser extent, services, merchandise trade remains the single most important component of global payments (figure 3.9 on p. 26). Historically, merchandise trade and cross-border trade in services defined the economic relationships between countries. In recent years, however, these relationships have become increasingly dominated by investment and income transactions (including investment income and the remittances of natural persons), the growth of which has outstripped merchandise and services trade — even after allowance for some reversal of past trends in 2008 associated with the global financial crisis.

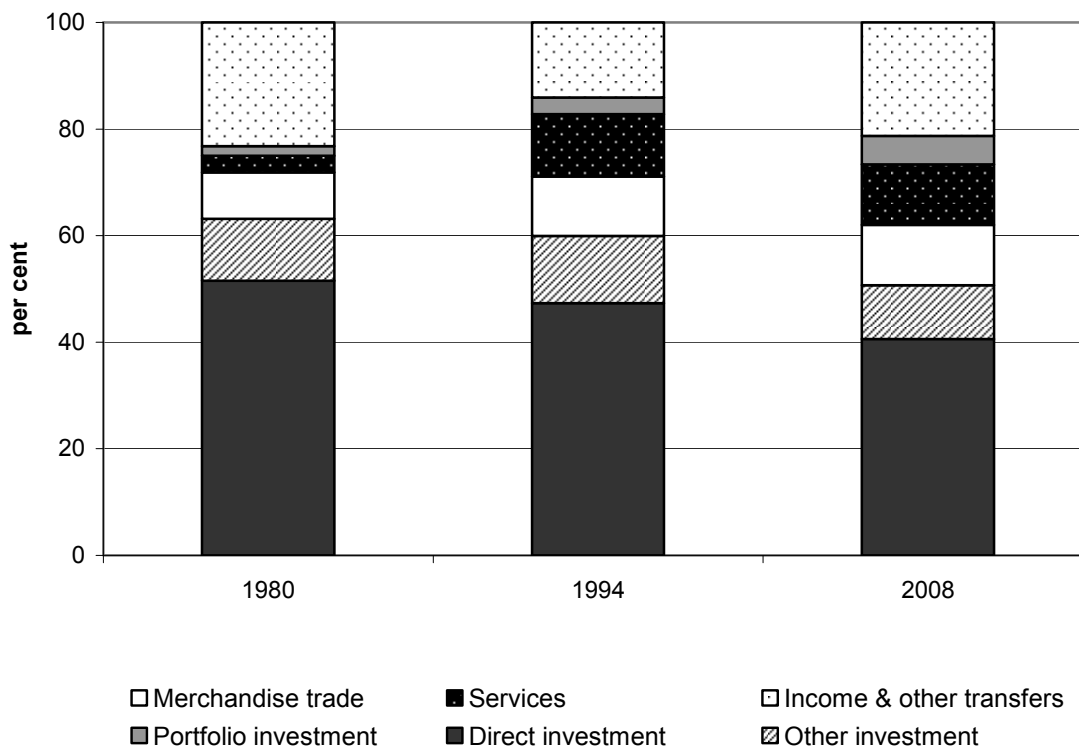
From a very small share in the early 1980s, foreign direct investment and portfolio investment now comprise a significant proportion of payments within global balance of payments accounts.

Figure 3.8 **Distribution of global foreign direct investment, 1980 and 2008**



^a Data for South-East Europe and the Commonwealth of Independent States (CIS) for 1980 are not available.
Source: UNCTAD (2010a).

Figure 3.9 Composition of payments within global balance of payments accounts, 1980, 1994 and 2008^a



^a Direct investment includes equity capital, reinvested earnings, other capital and financial derivatives between affiliated enterprises. Portfolio investment covers investment in equity and debt securities, excluding any such instruments that are classified as direct investment. Other investments include currency and deposits and trade credits.

Source: IMF (2010).

3.2 Australian trends

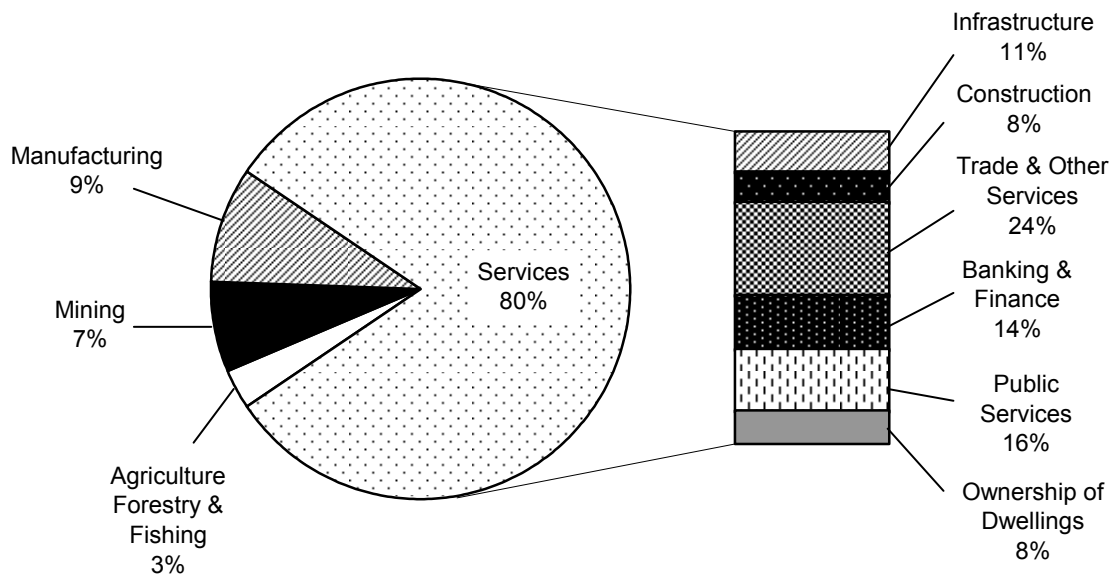
Shifts in the composition of Australia's economy and its patterns of trade with the rest of the world provide an important backdrop to any potential impacts that may arise from changes to Australian, world or partner country trading rules.

Overview of the Australian economy

In common with other developed economies, Australia's GDP is oriented towards the services sector, which accounts for around 80 per cent of GDP (figure 3.10). Of the goods-producing sectors, manufacturing accounts for around 9 per cent of GDP and the primary industries of mining, agriculture, forestry and fishing activities collectively account for around 10 per cent of GDP.

The services sector comprises a diverse range of activities including utilities and transport, construction, trade, business and personal services, banking and finance, and public services (including health and education), with each group contributing substantially to aggregate production.

Figure 3.10 Composition of the Australian economy, 2008-09^a



^a Percentages may not add to 100 due to rounding.

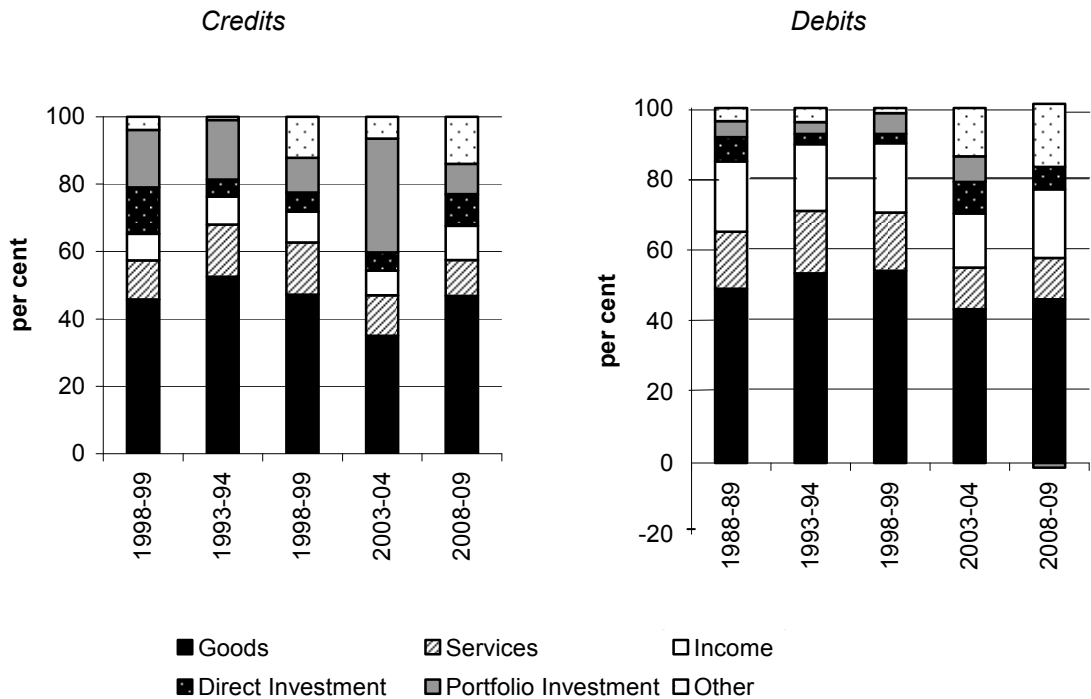
Source: ABS (*Australian National Accounts: National Income, Expenditure and Product, March 2010*, Cat. no. 5206.0).

While production activity is oriented towards services, the main focus of Australia's balance of payments transactions remains on merchandise imports and exports, which accounted for just under half of balance of payments transactions (both credits and debits) in 1988-89 and remained above 40 per cent in 2008-09 (figure 3.11). The share of services trade relating to 'direct services', such as transport, tourism, cross-border supply of business services and the provision of education services, has remained fairly steady over this period.

There has, however, been an increase in the relative importance of Australia's international capital flows abroad. The decision to invest offshore is driven by a number of factors, not least of which is the commercial incentive to gain access to global markets. In the 1980s, a range of reforms both domestically and overseas, including the deregulation of Australia's financial markets and the floating of the Australian dollar, helped create a more open and outward-looking environment for Australian businesses.

As a result, portfolio investment increased from around 5 per cent of balance of payments outflows in 1988-89 to an average of around 10 per cent of outflows over the last decade, notwithstanding a sharp turnaround in 2008-09 as a result of the global financial crisis. Australian direct investment abroad has also increased in importance, particularly since the mid 1980s, with the greater global integration of Australia's capital markets.

Figure 3.11 Australia's Balance of Payments, 1988-89 to 2008-09



Source: ABS (*Balance of Payments and International Investment Position, Australia, March 2010*, Cat. no. 5302.0).

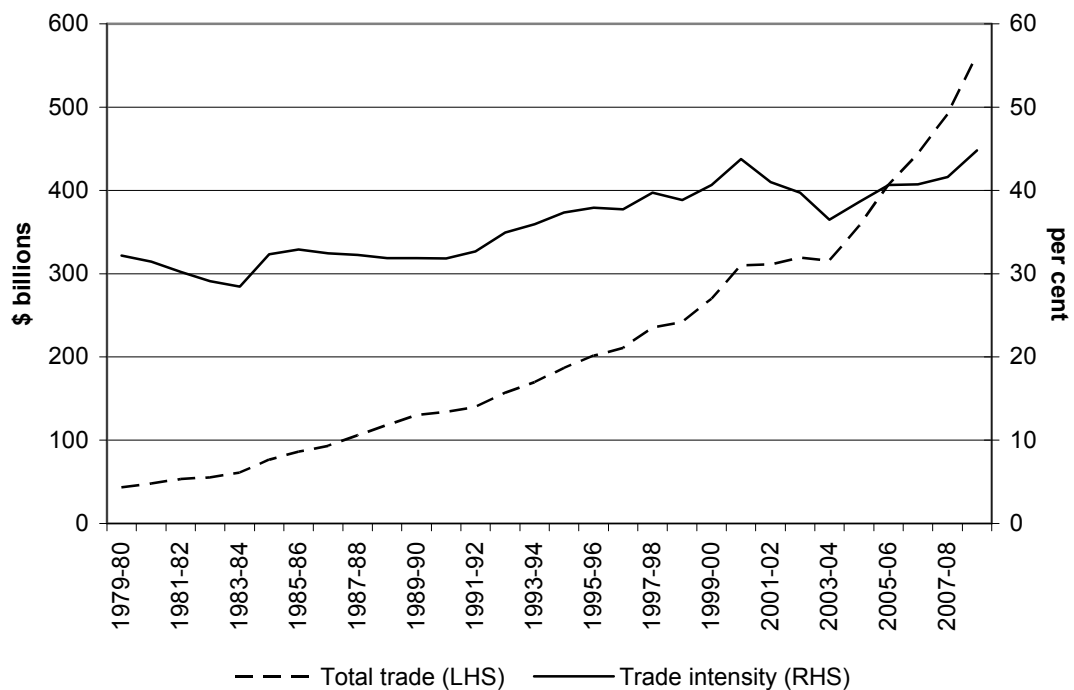
Reflecting Australia's traditional role as a net capital importer, income payments overseas (mainly dividends and interest, as well as reinvested earnings of direct investment enterprises) have been relatively more important than income receipts from abroad. Nevertheless, with the growth in Australian investment offshore, the value of income receipts is rising.

Trends in Australian trade

While the level of financial transactions has been increasing relative to merchandise and services trade, the trade intensity of the Australian economy, in line with global trends, has also been increasing. By 2008-09, the trade intensity (measured by the ratio of imports plus exports to GDP) is estimated to be around 45 per cent (figure 3.12).

This is 13 percentage points above the level prevailing in Australia in 1979-80 — before Australia’s general reductions in tariff protection, liberalisation of financial markets, floating of the Australian dollar, and economy-wide program of national economic reform. While trending upward, there have been substantial year-to-year variations in the estimated trade intensity due to changes in Australia’s terms of trade, that is, the price in Australian dollar terms of Australia’s exports relative to its imports.

Figure 3.12 Trends in Australian (merchandise and services) trade, 1979-80 to 2008-09

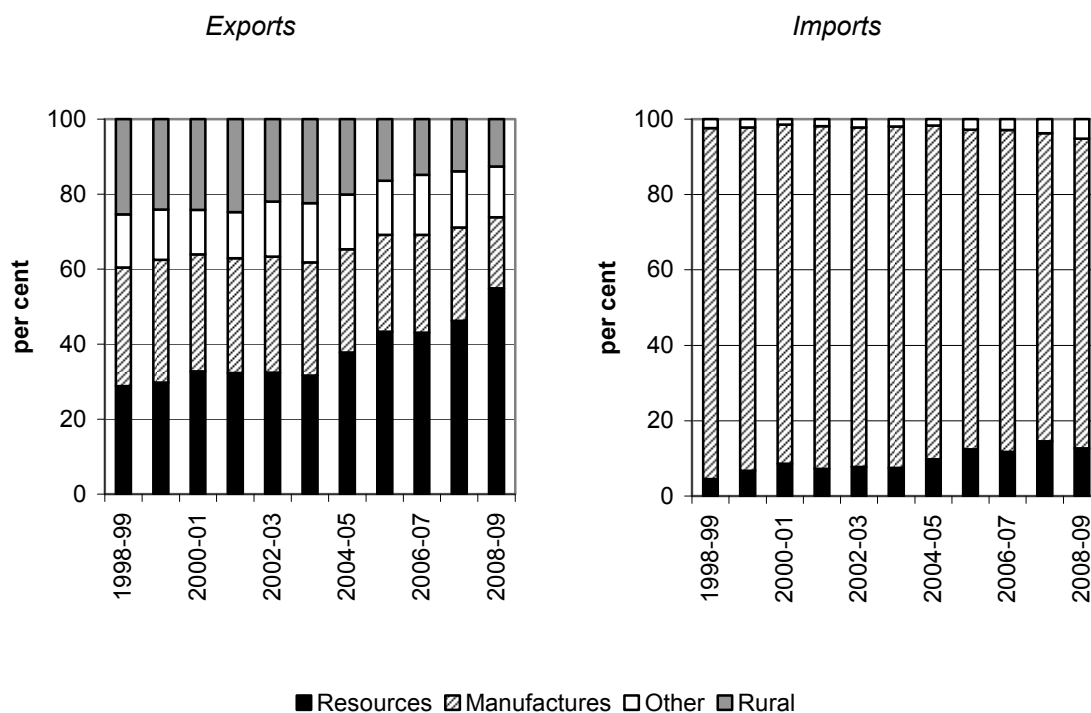


Source: ABS (*Australian National Accounts: National Income, Expenditure and Product, March 2010*, Cat. no. 5206.0).

Composition of Australia’s merchandise trade

Historically, Australia’s merchandise exports have been dominated by agricultural and resources products, while imports have largely comprised manufactured goods (figure 3.13). With higher prices for key mining products, particularly coal and iron ore, and the effects of drought on agriculture, the share of mineral resources exports in Australia’s total exports has increased substantially over the last decade.

Figure 3.13 Composition of Australia's merchandise trade, 1998-99 to 2008-09



Source: ABS (*Balance of Payments and International Investment Position, Australia, March 2010*, Cat. no. 5302.0).

The strong global demand for mineral and energy products has resulted in Australia's terms of trade climbing to the highest level since the 'wool boom' of the early 1950s (figure 3.14).

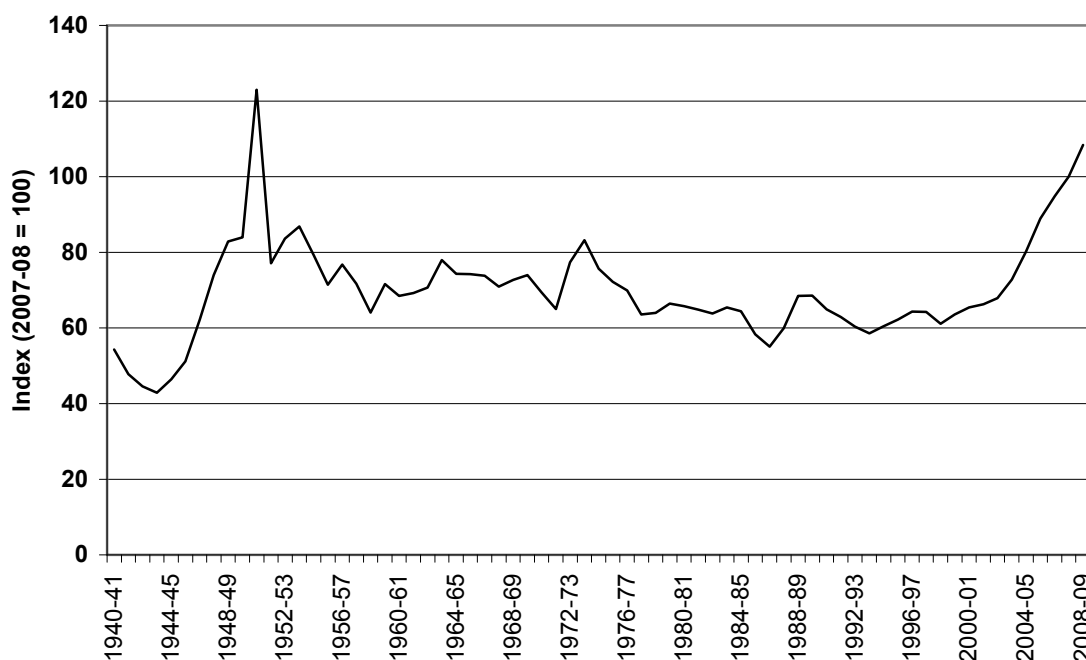
Composition of Australia's services trade

Within the services sector, Australia's main imports relate to personal travel by Australian residents travelling overseas. Imports of these services have grown to 32 per cent of services imports by 2008-09, up 9 percentage points from 1998-99.

From the early 1990s, exports of education and training related services have expanded significantly relative to other services exports. By 2008-09, exports of education services contributed 32 per cent of services exports, displacing other personal travel as the main services export.

In line with global trends, the relative importance of both imports and exports of transport services (including international air travel) has declined steadily since the early 1990s.

Figure 3.14 Australia's terms of trade, 1940-41 to 2008-09



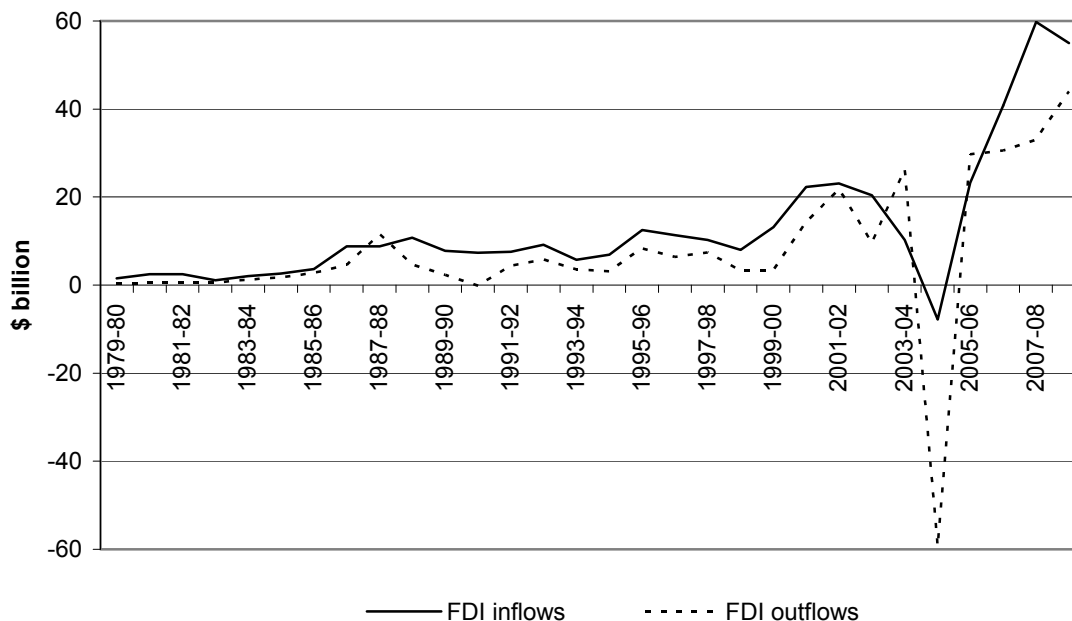
Source: ABS (*Australian National Accounts: National Income, Expenditure and Product, March 2010*, Cat. no. 5206.0) and Gillitzer and Kearns (2005).

Trends in Australia's direct investment

As noted, the economic reforms of the 1980s helped create a more open and outward-looking environment for Australian businesses. In the decade leading up to these reforms, direct investment inflows were typically some four to five times greater than outflows. Since that time, the value of direct investment abroad by Australian businesses has increased markedly. Direct investment inflows have continued to grow substantially, and inflows still exceed outflows in most years. There was a temporary reversal in both inflows and outflows in 2004-05, which coincided with the relocation of News Corporation from Australia to the United States (figure 3.15).

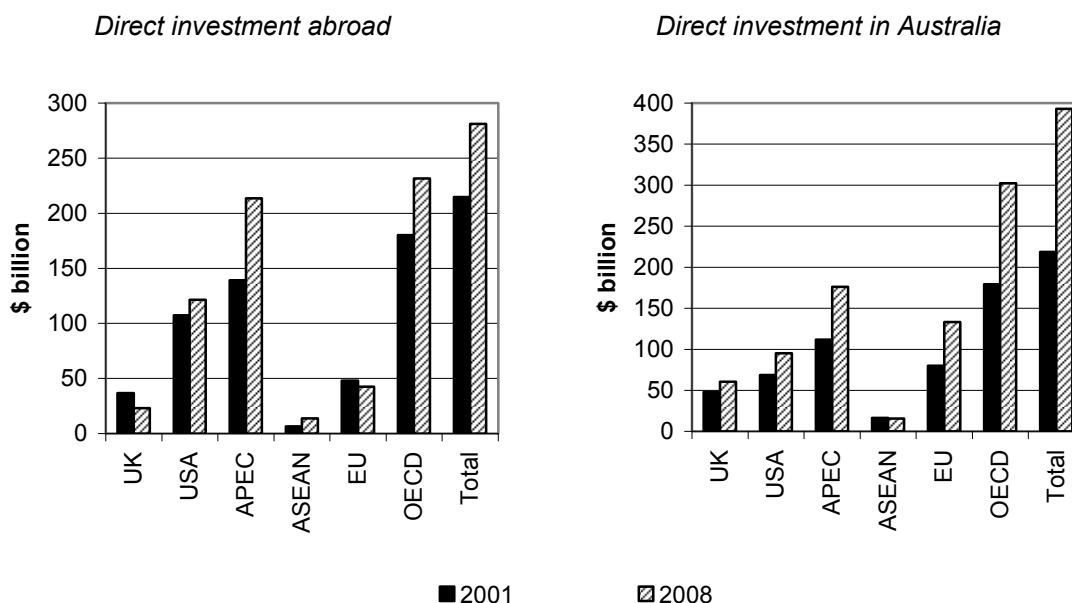
Historically, most overseas direct investment in Australia and Australian direct investment abroad has been with other developed countries, including New Zealand, the United States and countries within the European Union. Nevertheless, there has been an increasing tendency for direct investment links to be established with countries in other regions, particularly the Asia-Pacific region (figure 3.16).

Figure 3.15 Australia's foreign direct investment – inflows and outflows, 1979-80 to 2008-09



Source: ABS (*Balance of Payments and International Investment Position, Australia, March 2010, Cat. no. 5302.0*).

Figure 3.16 Regional composition of the stock of Australia's foreign direct investment, 2001 and 2008

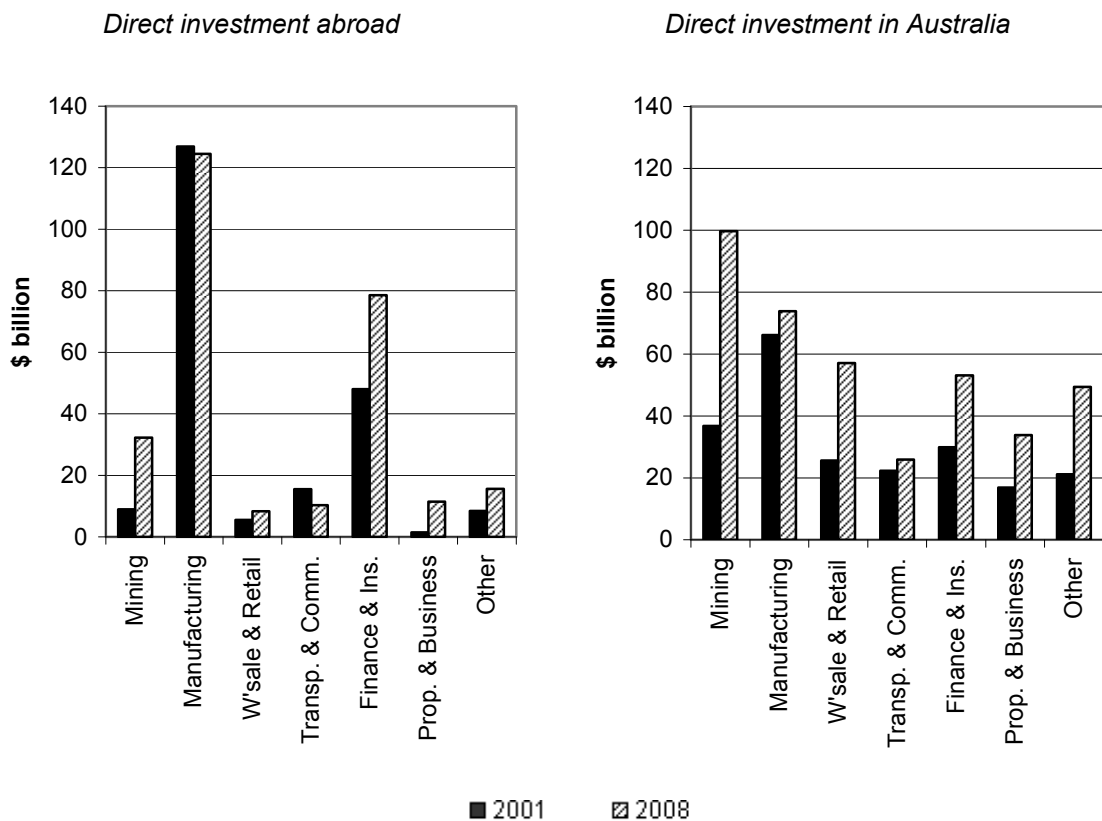


Source: ABS (*International Investment Position, Australia: Supplementary Statistics, 2008, Cat. no. 5352.0*).

Traditionally, direct investment in Australia and Australian direct investment abroad has been concentrated in the manufacturing sector (figure 3.17).¹ However, since the early 2000s, investment in other sectors has increased in importance. In particular, the level of inward investment in mining has more than doubled and now exceeds the estimated level of inward investment in manufacturing (figure 3.17, right hand panel). The level of inward investment in services activities, including wholesale and retail and finance, has also increased substantially.

With respect to Australian direct investment abroad, while manufacturing remained the sector with the largest level of outward investment, the importance of investment by the mining and finance sectors, in particular, has increased (figure 3.17, left hand panel).

Figure 3.17 Industry composition of the stock of Australia's foreign direct investment, 2001 and 2008



Source: ABS (*International Investment Position, Australia: Supplementary Statistics, 2008*, Cat. no. 5352.0).

¹ The 'stock' of FDI is a measure of all such investment at a point in time. It reflects the accumulated effects of all previous FDI activity and the effects of exchange rate changes and other revaluations on the value of FDI. Stock data abstract from the substantial year-to-year variation that occurs in annual 'flow' data.

3.3 Summing up

The last few decades have seen the relative contribution of economies in Asia to global economic production and international trade increase substantially. The increasing involvement of China in the global economy has provided a substantial impetus to this trend. By contrast, and although they still account for well over half of global output, the relative contribution of the European and North American economies to global production has declined.

Consistent with the rise in global per capita incomes, the world's production of services has expanded considerably more rapidly than industrial and agricultural production.

Economic links between countries have also been increasing. These developments are particularly evident in the increased trade intensity of the global economy — with global trade in goods and services growing considerably faster than global production. They are also evident in the expansion of global capital flows relative to production and trade and the increasing importance of cross-border trade in information and communication technology services.

While merchandise trade and cross-border trade in services have traditionally defined the economic relationships between countries, these relationships have become increasingly influenced by investment and income transactions, the growth of which has outstripped merchandise and services trade. Nonetheless, merchandise trade remains the single most important component of global payments.

Australian trends have largely mirrored these international developments. Consistent with other developed economies, the contribution of services in Australia's GDP has increased and is now around 80 per cent of national production. With respect to international payments, merchandise trade has fallen in relative importance while international investment flows have increased, particularly since the deregulation of Australian financial markets and unilateral reduction in border protection in the 1980s. While direct investment links remain mainly with other developed economies, there is an increasing tendency for outward and inward direct investment to be linked with developing economies, particularly in the Asia-Pacific region.