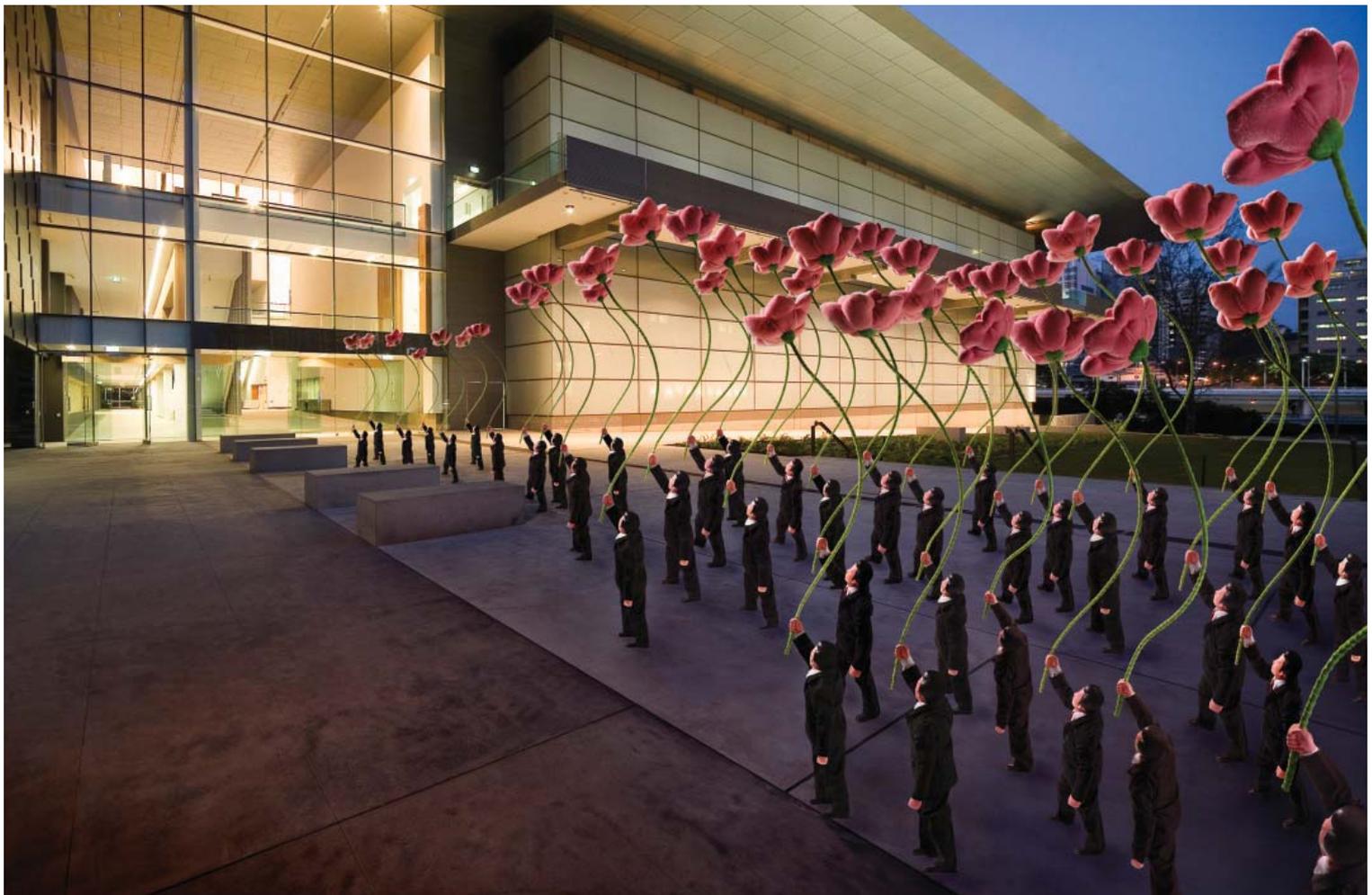


PricewaterhouseCoopers Melbourne Institute Asialink Index

ANZ Services Report





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Cover Image:

Zhu Weibing - China b.1971

Ji Wenyu - China b.1959

People holding flowers 200

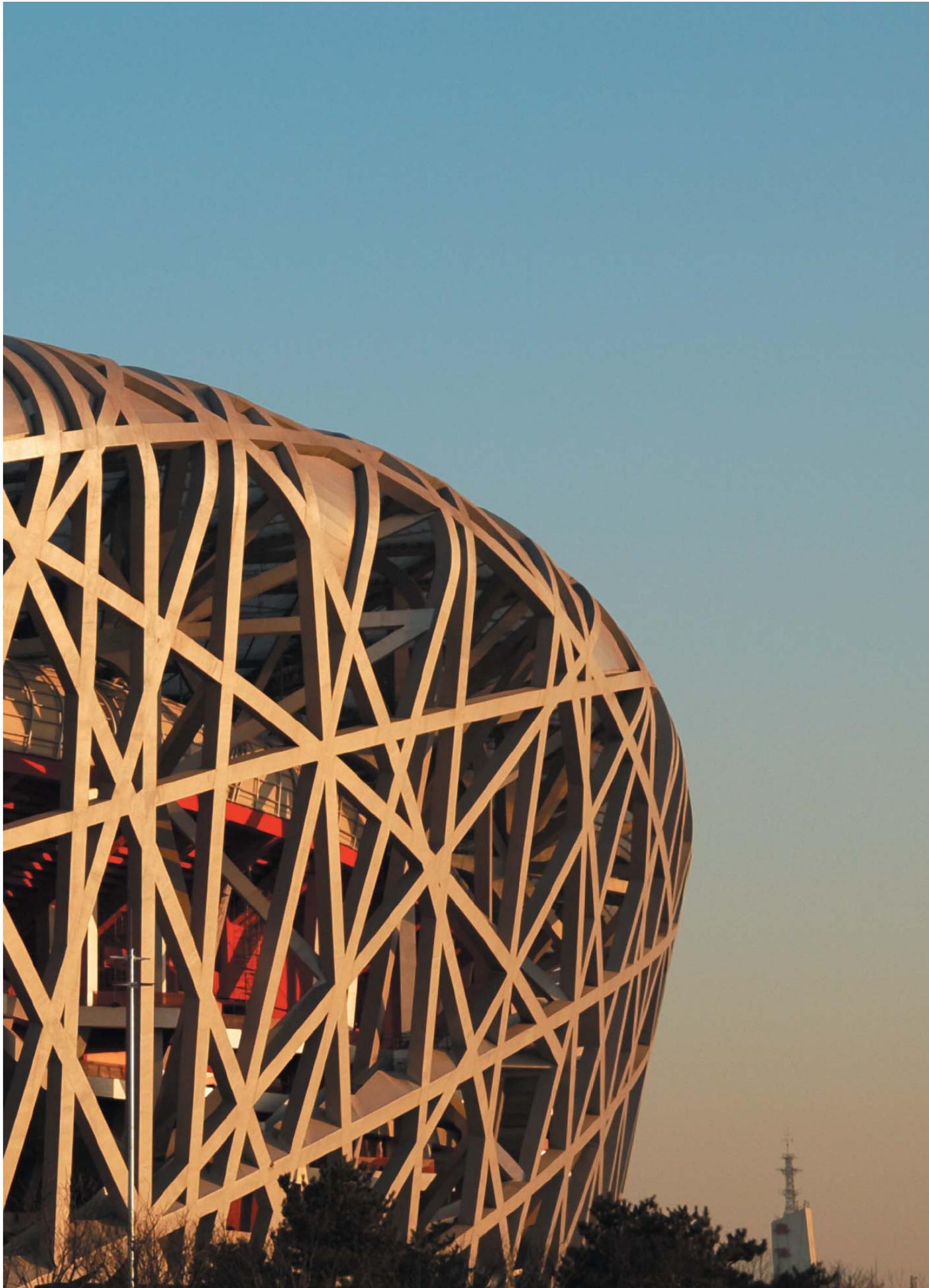
Synthetic polymer paint on resin; velour, steel wire, dacron, lodestone and cotton
400 pieces: 100 x 18 x 8cm (each) (installed dimensions variable)

The Kenneth and Yasuko Myer Collection of Contemporary Asian Art.

Purchased 2008 with funds from Michael Simcha Baevski through the Queensland Art Gallery Foundation

Collection: Queensland Art Gallery

Photograph: Ray Fulton, QAG



We are proud to bring you the first edition of the ANZ Services Index. This edition will help Australians understand services in our region – an important and rapidly growing dimension to our Asia engagement.

The report compares trade in goods and trade in services, describes four of the most important services, and maps the trade in services with our major Asian partners.

Services are an integral part of the Australian economy. Services make up roughly 80 per cent of our GDP and employ four out of every five people. What most people don't know is that services are a rapidly growing part of international trade. India, for example, may soon export more services than goods.

Services are important in themselves, think of education services provided by colleges and universities, but they also assist and augment trade in goods. Australian banks overseas help secure finance for Australian manufacturing headquarters in Indonesia; Australian professional service firms help develop partnerships for mining companies in Australia and in the region; Indian software specialists help investors develop products for the Australian market.

From the following study you will see that the growth in trade in services is more rapid between Australia-Asia than the rest of the world. This is where our mutual opportunities lie.

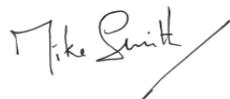
In the latest World Economic Outlook, the IMF notes that global recovery is off to a stronger start than earlier anticipated. Following the deepest global downturn in recent history, economic growth solidified and broadened. In 2010 world output is expected to rise by four per cent. In projections to 2013, growth by Asia is forecast to be on a higher trajectory than that of the rest of the world.

These projections reinforce the growing importance of Asia to Australia's economic growth. It also reinforces the views expressed in this Index that Australia's economic policies should be aimed at strengthening and deepening the country's services trade with and in the Asian region.

By ABS estimates, only 50 per cent of trade in services are captured in our balance of payments. We need more data to fully understand services. What we currently see is part of the picture. We need, as a trading nation, to understand this newly emerging international trade sector better.

This index is a contribution to improving our knowledge of services.

We congratulate and thank the expert contributors to the Services Report.



Mr Michael Smith
Chief Executive Officer
ANZ Bank



Mr Mark Johnson
Chief Executive Officer
PricewaterhouseCoopers



Mr Sid Myer
Chairman
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Executive Summary: Services at a glance



The ANZ Services Index seeks to better understand a critical part of our international engagement. Services trade grew by five per cent in the last financial year to a record \$53.3 billion.¹

The ANZ Services Index expands on the Pricewaterhouse Coopers Melbourne Institute Asialink Index, a multi-indicator measure of engagement between Australia and Asia, now in its second year of publication. That Index tracks Australia-Asia engagement along seven dimensions and profiles the importance of Asia to Australia.

Services remains the component of trade hardest to quantify and evaluate. Our official statistics serve us well in goods trade. We tend to be familiar with iron ore and coal exports to China, with minerals, beef and dairy exports to Japan. We have data on the value of our car imports, the household appliances, computers and mobile phones we buy from Korea, China and Japan.

But the nature of services makes measurement more complex. Preliminary findings of a recent study document that services' share of Australia's international business sales is potentially around 46 per cent, more than double what our current statistics show.²

Services are often simultaneously supplied and consumed – think of transportation, hospitality, legal advice, or university tuition. Because of the face to face requirements of services, companies often establish offices in their trading partner's countries. ABS trade data, on which the Index is based, measures cross-border transactions, but not the services provided by Australian companies and affiliates resident in overseas markets. As a consequence, the real value of the services provided by Australian firms overseas is likely to be vastly understated. The most recent ABS study of the income of foreign affiliates, or overseas-based Australian companies, in 2002-03, showed that:

- Australian enterprise groups had 4,012 foreign affiliates employing 321,924 staff
- Foreign affiliates of Australian resident enterprise groups generated \$142.3 billion in sales revenue for goods and services
- Foreign affiliates of foreign-owned Australian resident enterprise groups had a much greater focus in Asia-Pacific compared to Europe or the Americas
- On an industry basis, foreign affiliates were most prevalent in the following sectors: manufacturing; finance and insurance; wholesale trade; and property and business services

The ANZ Services Index, the first in what will become a biennial series, shows that Australia's services trade with Asia is growing twice as fast as our trade with the rest of the world. This involves the interaction of hundreds of thousands of Australians with clients, customers and service providers from across the region and, looking forward, will likely involve many more. The ANZ Services Index attempts to shed some light on this high level engagement, on the depth and strength of this important aspect of Australia-Asia relations.

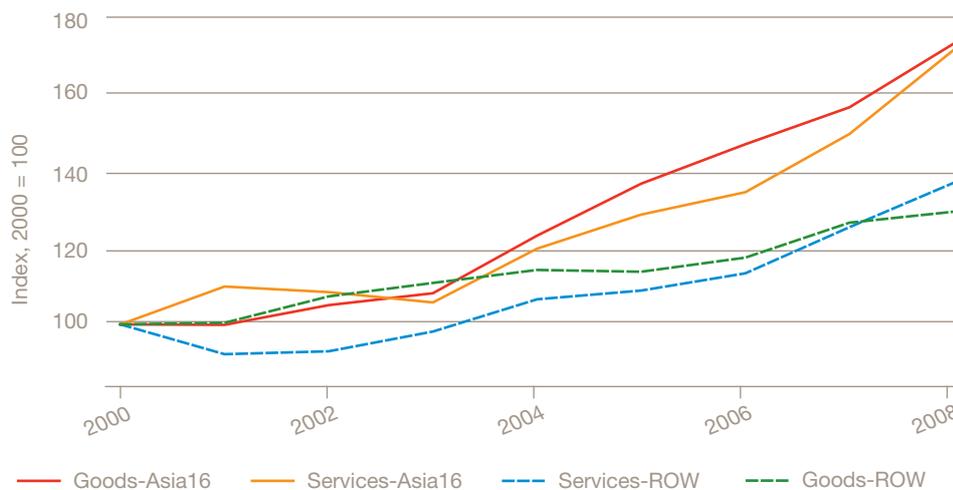
¹ DFAT trade analysis publication "Trade in Services, Australia 2008-09" www.dfat.gov.au/publications/statistics.html.

² Australian Services Roundtable Roadmap, preliminary findings released at the Services Summit, 17 March 2010.

Overview of the ANZ Services Index

The ANZ Services Index examines four important sectors in Australia's international trade in services – education, transport, finance and business services. The Index looks at the level and spread of the trade between Australia and 16 countries of Asia in the period 2000 to 2008.³ It compares the relative growth in those sectors in the context of both Australia's goods trade and services trade with Asia, and with the rest of the world.

Figure 1: Index of Trade in Goods and Services Australia-Asia16 and Australia-ROW



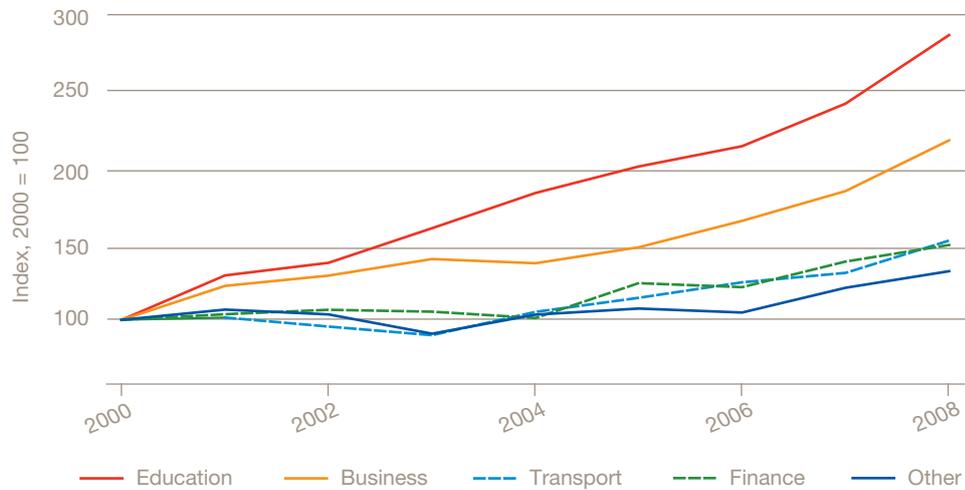
Overall Trends in Trade: Asia16⁴ and ROW⁵

- Looking at export data only, services to Asia grew more than four times faster – though from a lower base – than services to the rest of the world.
- Figure 1 illustrates trade in services with Asia16 grew 70 per cent in the period, compared to a rise of 38 per cent with the rest of the world. In terms of services exports to Asia, these increased by around 55 per cent, compared to services export growth to the ROW of around 12 per cent.

³ The year 2000 is used as base year due to data quality across Asia16. See Appendix 1 for information on definitions and data sources.

⁴ "Asia16" refers to: Brunei Darussalam, Cambodia, China, Hong Kong (SAR of China), India, Indonesia, Japan, Korea (Republic of), Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Taiwan, Thailand, and Vietnam. Our analysis is of these 16 because of the availability of reliable data in the period under review. These 16 also account for more than 90 per cent of Australia's services trade with Asia.

⁵ "ROW" refers to the rest of the world, excluding Asia '16'.

Figure 2: Services Trade by Industry – Asia16

Highlights by Sector

- Education⁷ was by far our biggest services export, increasing by 23 per cent in the past 12 months and almost tripling in value over the eight year period. Our education exports to China multiplied eight times in the period, and exports to India increased five and a half times. Imports play a comparatively minor role in this sector. In 2008, 94.4 per cent of Australian educational trade consisted of exports. Total value of education exports in 2008 was \$10.6 billion⁸, more than 70 per cent of education services trade is with Asia.
- At a total value of \$12 billion in 2008, transport services trade between Australia and Asia is the highest value of the four components under review. This was driven by a 100 per cent increase in imports over the period. The transport services share of Asia16 countries compared with the rest of the world increased from 40 per cent in 2000 to 45.5 per cent in 2008.
- Adjusted on a constant price index, total Asia-Australia trade in financial services has increased by 50 per cent since 2000 to a total value of \$640 million in 2008. But the data on income of foreign affiliates of the financial services area is particularly lacking. ABS acknowledges this data gap and is undertaking a survey of Finance and Insurance offshore affiliates in 2011 for DFAT.
- Business services includes the growing area of trade which supports other business, for example legal services, market research, architecture and engineering services, as well as charges for the use of intellectual property and payments for licenses to reproduce work such as books and manuscripts, computer software, cinematographic works, and sound recordings. Total trade in Business services with Asia16 was valued at around \$3.6 billion in 2008, a rise of 120 per cent from 2000.

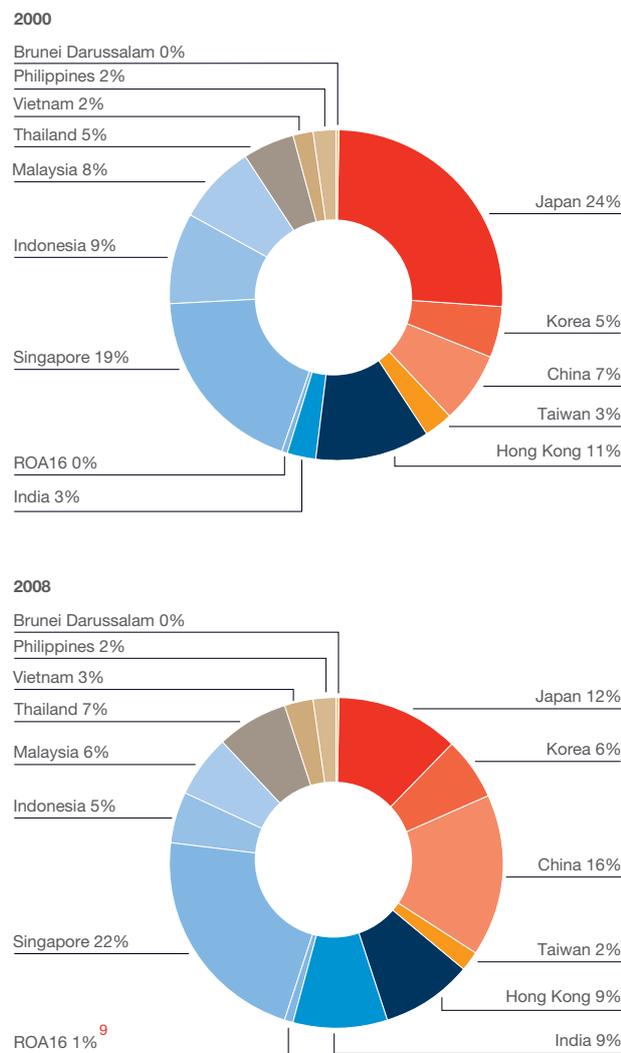
⁷ See Appendix 1 for sector definitions.

⁸ Values are in constant 2007-08 prices.

Highlights by Country

- Japan was Australia's biggest single Asian trading partner in services (in value terms) in 2000, accounting for 24.4 per cent of total trade in services. By 2008 Japan's share in Australia's services trade halved to 12 per cent and Singapore had become the most important trading partner in services (21.4 per cent). This may be a reflection of the trend towards hubbing (transshipping sea and air freight through central hubs), in particular in transport services.
- The other significant shifts in the distribution of Australia's trade in services with Asia16 countries during the period was a more than doubling in China's share of Australia's services trade (to 15.6 per cent of total) and an almost tripling in India's share (to nine per cent). See Figure 3 below.

Figure 3: Distribution of Australia's trade in services (in value terms) with Asia16 countries



⁹ ROA 16 refers to the other Asia16 countries not singled out in this pie chart.

- In terms of exports, the biggest shift in the period was a sharp increase in the significance of China and India as destinations for Australia's services. China's share increased from 6.7 per cent in 2000 to 21.2 per cent in 2008, while India's share increased from 3.9 per cent to 13.3 per cent.
- Japan, Singapore and Hong Kong were dominant as source countries for Australia's imports of services in 2000, and this pattern was not dramatically altered by 2008.

The nature and distribution of services trade between Australia and Asia16 is shown in Figure 4 below.

Figure 4: Industry share of total value of Australia's services trade (exports + imports) with each of the major Asian trading partners.



¹⁰ Other refers to all other services not specified, including outsourced portions of a manufacturing process, maintenance and repair services, tourism services not including international transport, construction, telecommunications, computer and information services, personal, cultural and recreational services, and government services not included elsewhere.

Components: Education



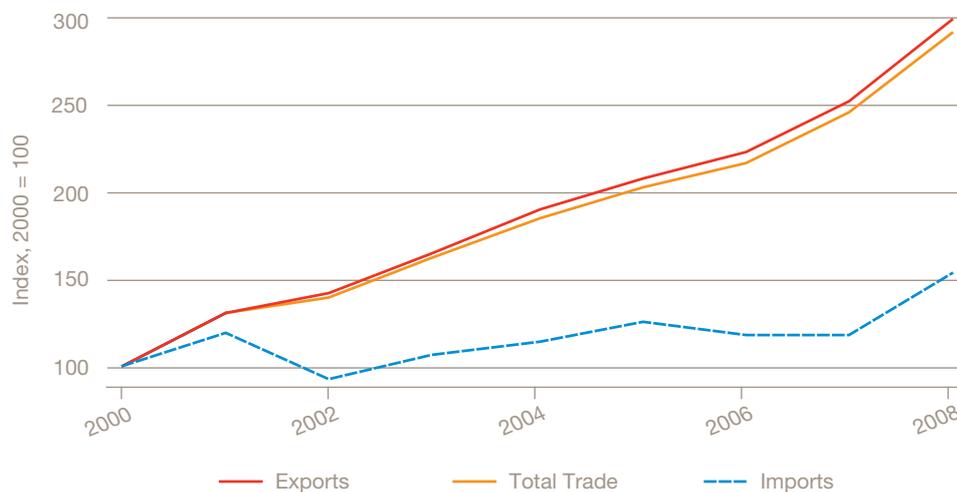
Education analysis: Professor Simon Marginson

Education¹¹ is Australia's largest services export and one of the largest exports overall – when goods and services are combined.

Of that trade, more than 70 per cent comes from Asia.

The Education Index shown in Figure 5 shows that growth in education exports to both Asia¹⁶ and the Rest of the World continues to be highly robust. In 2000, at the beginning of the period measured by the Index, education constituted just 12 per cent of all services exports. In 2008, the sector's share was 28.5 per cent, and its value to the Australian economy had increased more than three times.

Figure 5: Education Index



As Table 1 on the following page shows, imports play a comparatively minor role. In 2008, 94.4 per cent of Australian educational trade consisted of exports.¹²

Extensive media coverage in India and Australia in 2009 and early 2010 of issues concerning international students underline the sensitivities around trade in education.

But, the positive effects of the trade traverse into other sectors. Last year's PricewaterhouseCoopers Melbourne Institute Asialink Index¹³ noted a correlation at the country level between education and tourism and migration in the short-term, and investment and trade in the long-term.

¹¹ See Appendix 1 for full definition of education services.

¹² The number of Australian students who study offshore is low, although foreign study absences of one year or less during Australian degrees has increased at ten per cent per year over the last five years. See Australian Education Data on outward student mobility: http://aei.gov.au/AEI/PublicationsAndResearch/Snapshots/2009070310_pdf.pdf

¹³ PricewaterhouseCoopers Melbourne Institute Asialink Index 2009, <http://www.asialink.unimelb.edu.au>

There are also spillovers in the growing economic, diplomatic, political, social and cultural engagement between Australia and the Asia16 countries. Many students enrol in two or more education sectors, further extending their Australian stay.

Table 1: Value of trade in education between Australia and Asia16 countries and the rest of the world, \$bn, 2007-08 prices.

Education	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Asia16										
Imports	0.20	0.24	0.19	0.22	0.23	0.25	0.24	0.24	0.31	29.28
Exports	3.57	4.65	5.02	5.86	6.73	7.37	7.89	8.96	10.62	18.46
Total	3.78	4.89	5.21	6.08	6.96	7.62	8.13	9.20	10.93	18.74
ROW										
Imports	0.36	0.37	0.36	0.44	0.46	0.45	0.50	0.53	0.54	1.48
Exports	1.31	1.84	1.97	2.17	2.37	2.53	2.89	3.41	4.18	22.37
Total	1.67	2.21	2.33	2.61	2.83	2.98	3.39	3.95	4.72	19.54

Educational exports on this scale are cultivating a cohort of Australia-friendly business and professional people in national and regional capitals throughout Northeast, Southeast and South Asia. In addition, a significant proportion of Asia16 students become migrants to Australia after graduating, again facilitating future economic and other ties.

There has been continued growth in education services through the global downturn in 2008-10, principally driven by the emerging middle classes in the Asia16. The size and growth of this group far exceeds the carrying capacity of Australian education.

This means that at the top end of Australian education in terms of perceived quality - higher education - growth is readily maintained. The recent concerns in relation to India are mostly in the vocational education and training (VET) colleges, where 2010 data are likely to show a fall in enrolments.

Proportionally, Australia has the highest ratio of international students recorded for any OECD country. International students constitute 20.2 per cent of all degree-level enrolments in Australia. This compares with 15.9 per cent of students in the UK and just 3.1 per cent in the USA.

In total, Australia educates a seven per cent share of the global market in cross-border students – ranking it fifth in the world after the USA, UK, Germany and France.¹⁴

¹⁴ Vaughese, NV (2007) *Globilisation of Higher Education and cross-border student mobility*, UNESCO.

What kind of growth?

The core of the sector is higher education, which enrolled the largest number of students in 2008.

Students typically enrol in higher education for three years or more, although some enter Australian higher education institutions onshore (after completing part of their education in a partner institution or Australian campus offshore in the importing country). In the importing countries, demand for student visas and places in Australian higher education institutions are substantially in excess of supply. Fluctuations in demand in the Asia16 therefore largely affect the quality of international students rather than the absolute number enrolled.

The higher education intake, in other words, is essentially supply-driven, meaning it is determined by Federal Government visa policy and by the level of need among institutions for revenues to sustain their operations. In 2007, international student revenues constituted 15 per cent of the income of Australian higher education institutions.

The number of international students enrolled in Australian higher education has grown by an average annual rate of 14.7 per cent since 1990.¹⁵

In 2008, two elements of the education sector showed especially rapid growth. These were: vocational education and training (VET) – where students spend up to two years full-time in diploma programs; and intensive English language colleges (English Language Intensive Courses for Overseas Students, ELICOS). Demand factors impact these colleges from time to time.¹⁶

In 2008, growth was assisted by what were on the whole favourable exchange rates. Though the currency market was volatile, over the course of the year, the Australian dollar (AUD) depreciated by 26 per cent against the Chinese Yuan, 22 per cent against the Hong Kong dollar, 18 per cent against the Malaysia Ringgit and 15 per cent against the Vietnamese Dong. Movement against the Indian Rupee and the Korean Won was less favourable but by the end of the year, the AUD had depreciated slightly against the Indian Rupee.

Currency movements in 2009 saw the opposite pattern, with the appreciation of the AUD against the above currencies. Past experience suggests that the impact of exchange rate movement on education exports is marginal and shows mostly in the more demand elastic sectors, VET and (especially) ELICOS.

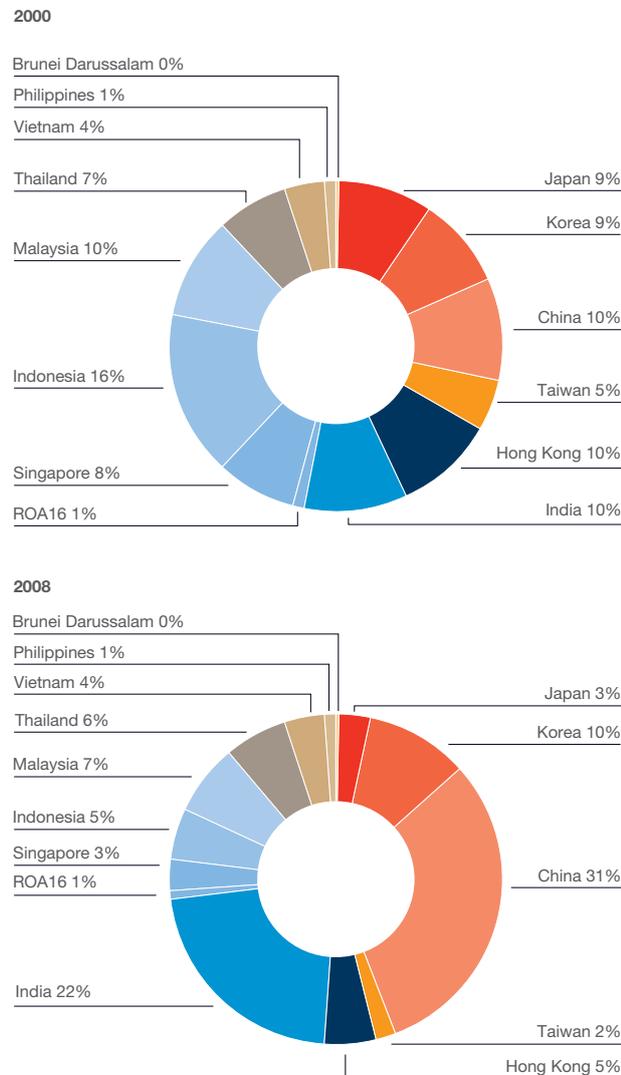
Though the overall picture in educational trade is one of rapid and continuous growth, the trend disguises marked changes in the country composition of trade.

¹⁵ Department of Education, Employment and Workplace Relations (DEEWR) data.
<http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Documents/2000TimeSeries.pdf>

¹⁶ Australian education institutions in offshore locations are not included in the trade data for exports.

Trading partners

Figure 6: Distribution of the value of trade in education services with Asia16 countries



As Figure 6 shows, China and India have come to dominate trade in education, together accounting for 53 per cent of the total value of Australia's educational trade with Asia16 countries in 2008, up from just 20 per cent in 2000. Meanwhile the shares of Australia's trade in educational travel with Indonesia, Singapore, Japan, Malaysia and Hong Kong all fell significantly between 2000 and 2008.

In 2008, Australia's largest partners in education services were China \$3.4 billion, India \$2.3 billion, Korea \$1 billion, Malaysia \$767 million, Thailand \$611 million, Hong Kong \$568 million, Indonesia \$535 million and Vietnam \$472 million.

The sector's trade with China multiplied almost eight times in the eight year period and grew 21.4 per cent between 2007 and 2008. China had the largest group of students in higher education in 2008: 51,600, 28.2 per cent of all international students. There were

also 25,381 Chinese students in VET. The largest number of international students in schools (13,638) is also from China. China had almost one quarter of all ELICOS students (31,494) in 2008.

Growth of trade with India was five and a half times over the eight-year period and 42.9 per cent between 2007 and 2008. Indian students were the second largest group in higher education (27,701 in 2008) and the number grew by seven per cent between 2007 and 2008. Indians were much the largest group in VET – 52,381 in 2008, a growth rate of 94 per cent since 2007, mostly in private colleges. In this one-year period there was also a 139 per cent growth in the number of students from Nepal enrolled in Australian VET programs (12,813 in 2008).

Over the eight-year period, trade with Korea rose almost two and a half times, and there was a doubling of trade with Vietnam. Both countries have a significant presence in Australian schools and ELICOS. Korea had 13,347 ELICOS students in 2008, the third largest nationality here, and the fourth largest component in VET.

A feature of the trade data for education is the doubling of exports to Vietnam between 2006 and 2008. Vietnam is active in all sectors of educational import, though the largest block of students is in ELICOS colleges.

Growth of trade in education with Thailand was 148 per cent between 2000 and 2008. Thai students have a stronger presence in VET and ELICOS than in higher education.

In contrast to the exponential growth of India and China, the period 2000 to 2008 saw slower growth of education trade with the traditional importers of Australian education such as Malaysia (up 91 per cent), Hong Kong (up 54.9 per cent), Taiwan (up 32.3 per cent), Japan (up 16.9 per cent) and Singapore (4.9 per cent). Between 2000 and 2008 there was a decline of 16.9 per cent in trade in education with Indonesia (See economies chapter for further analysis).

Implications for the future

The media coverage of safety issues affecting Indian students has not significantly impacted the overall pattern of growth in education travel and trade.

China remains the largest single importer of educational services, a market which is especially sensitive to Chinese government policy. This influences the pattern of applications for study in Australia, and has in fact facilitated growth in the last decade. Given the expected continuation of present conditions in the Australia-China relationship, the level of Chinese demand for Australian educational programs will likely be maintained.

In India, demand is subject to decentralised market forces. Education trade with India rose exceptionally rapidly during the period under review, 2000-2008. 2009 and 2010 are expected to show declines in applications from India to enter what has been the fastest growing sector, vocational education. In addition, changes to the skilled labour migration provisions announced in early 2010 will diminish the use of the popular migration pathway via VET programs in cooking and hairdressing.

However, current numbers entering higher education from India are likely to be maintained.

The Federal Government-sponsored review of international student programs by former parliamentarian Bruce Baird, together with a number of other important initiatives in 2010 will help strengthen the essential factors underpinning trade in education.¹⁷

¹⁷ In particular: a review of the Education Services for Overseas Students Act; and the development of a new International Student Strategy for the export industry, in conjunction with the States and Territories and the educational providers.

Components: Transport



Transport analysis: Professor Howard Dick

At a total value of \$12.04 billion in 2008, transport services trade between Australia and Asia was the most valuable of the four Index components under review here. As the Transport Index (below) shows, this was driven by a 100 per cent rise in imports over the period 2000 to 2008. The export trend was stagnant.

Australia has always been a large net importer of transport services in direct proportion to the quantum of trade.

In the case of sea transport services, Australia has minimal capacity to export because of the small size of the deep-sea shipping fleet under the Australian flag. For air transport services, the Australian flag carrier Qantas and its subsidiary Jetstar, together with the Virgin Group, are significant exporters. Australian firms are also raising their profile as exporters of logistics services.

The transport services share of Asia16 countries compared with the rest of the world increased from 40 per cent in 2000 to 45.5 per cent in 2008.

Figure 7: Transport Services Index

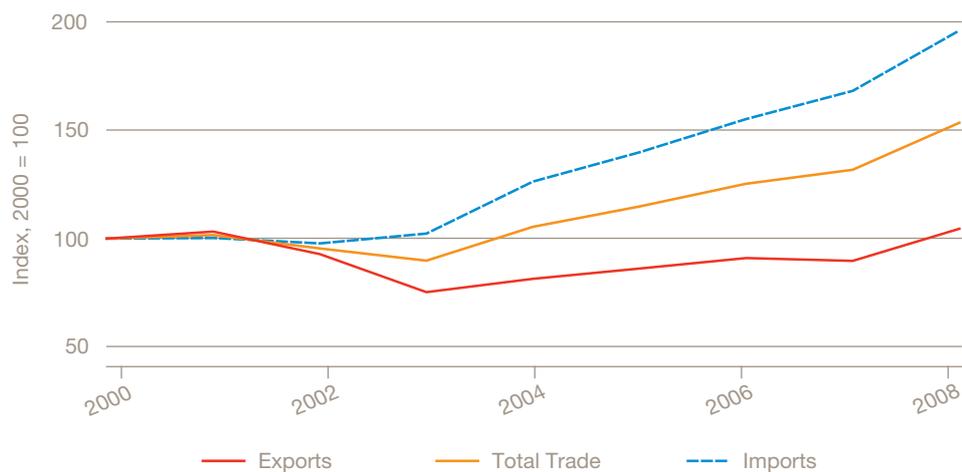
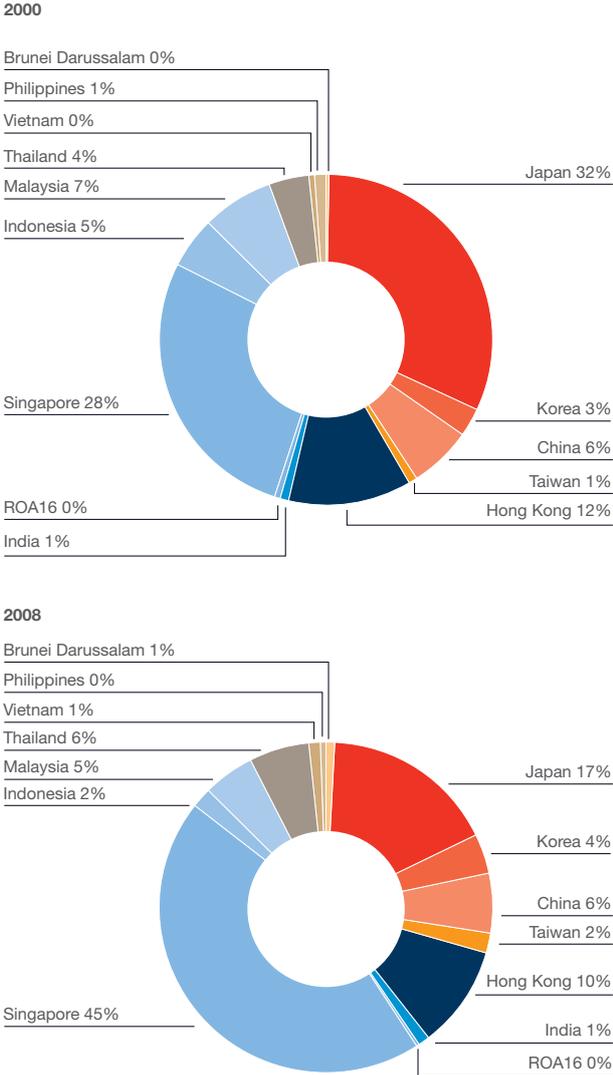


Table 2: Value of trade in transport services between Australia and Asia16 countries and the rest of the world, \$bn, 2007-08 prices.

Transport	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Asia16										
Imports	4.22	4.23	4.13	4.32	5.31	5.88	6.51	7.06	8.21	16.40
Exports	3.67	3.78	3.41	2.77	3.00	3.17	3.34	3.29	3.83	16.23
Total	7.88	8.01	7.54	7.09	8.31	9.04	9.85	10.35	12.04	16.34
ROW										
Imports	6.61	5.79	5.81	6.46	8.07	8.39	8.17	8.66	8.88	2.51
Exports	5.24	5.59	5.29	5.32	5.50	5.46	5.40	5.36	5.13	-4.26
Total	11.86	11.38	11.11	11.78	13.57	13.86	13.57	14.02	14.01	-0.08

Figure 8: Distribution of the value of trade in transport services with Asia16 countries



Trading Partners

The most apparent country trend illustrated in Table 2 and Figure 8 is the increasing importance of hubbing, especially in Singapore, whose share of transport service by value grew spectacularly from 29 per cent in 2000 to 45 per cent in 2008.

The two hubs of Singapore and Hong Kong accounted for 55 per cent of Australia's trade in services in 2008, masking much of our trade flows between individual countries.

Both international sea and air freight is transhipped through hubs, and as such, true origin/destination information is not available.

In terms of passenger transport, the four regional hubs of Singapore, Hong Kong, Bangkok and Kuala Lumpur not surprisingly accounted for 41 per cent of traffic. Some long-distance passengers also transfer through Hanoi, Taipei and Tokyo.

Air Transport

Freight

Although air freight accounts for less than 1/1000th in terms of weight of Australia's international goods trade, it is mostly very high value cargo. With increasing emphasis upon just-in-time inventory systems and the growing sophistication of courier services, air freight has become a vital part of Australia's international trade.

Most air freight is still shipped in small containers in the holds of scheduled passenger flights. Nevertheless, dedicated air freighters are playing an increasing role. In 2008-09 six dedicated freight carriers accounted for 25 per cent of inbound and 12 per cent of outbound air freight on scheduled flights.¹⁸

Refrigerated seafood has long been exported by air but even valuable minerals (diamonds, gold) and breeding cattle are now being shipped by air for reasons of speed, quality control and security.

Table 3: Inward, Outward and Total Air Freight by Origin/Destination, 2008-09 ('000 tonnes)

Region	Inward	Outwards	Total	%
Asia	247.0	194.0	441.0	62.0
South East Asia	148.0	127.0	275.0	39.0
North East Asia	97.0	66.0	163.0	23.0
South Asia	0.6	0.4	1.0	0.1
Rest of World	151.0	117.0	268.0	38.0

¹⁸ BITRE (2009b), Aviation Statistics: International Scheduled Air Transport, 2008-09, Canberra, October.

Passengers

In 2008-09 scheduled international passenger traffic through Australian airports totalled 24 million people, a marginal one per cent increase over the previous year.¹⁹

Unlike air freight, inward and outward passenger movements are more or less balanced.

By region, 38 per cent of non-stop traffic was to/from Southeast Asia, 19 per cent Northeast Asia and just 0.2 per cent South Asia; most of the balance was made up by 30 per cent to/from New Zealand and the Pacific Islands, seven per cent North America and 4 per cent Middle East.²⁰

Of 2.2 million short-term overseas arrivals from Asia in 2008, 74 per cent may be classified as personal (Visitor, Friends and Relatives, VFR), 17 per cent business (including conference, employment) and nine per cent education.²¹ The first category, the broad tourism component, is the most price sensitive.

In 2008-09 Qantas/Jetstar remained the leading carrier with 30 per cent of traffic, followed by foreign carriers Singapore Airlines (11 per cent) and Emirates (7.4 per cent).²²

The emergence of low cost or 'no frills' carriers has generated rapid growth in new tourist traffic. This new segment has increased in just two years from eight per cent of total traffic in 2006-07 to almost 14 per cent in 2008-09. Jetstar is the main carrier with 49 per cent of the market, followed by Pacific Blue, 36 per cent, and Air Asia, 10 per cent.²³

This highly competitive market segment is driven by rapid growth of middle-class incomes across the cities of Asia and a rising propensity to travel overseas, most notably in China where outbound tourism is a new phenomenon.

Between 2000 and 2008 the share of China and Hong Kong in short-term arrivals from Asia for personal reasons (family, holiday and other) increased from seven per cent to 20 per cent, while the share of the Republic of Korea increased from seven to ten per cent. There was, however, a decline in the Japanese share from 39 per cent to 23 per cent.

At the same time, the high Australian dollar and cheap air fares has encouraged Australians to switch from domestic to international tourism, not least to Asia.

A growing segment is health travel, both inbound from Asia for sophisticated health care and outbound to Asia for cosmetic and dental surgery.

A key issue in the expanding airline industry is the supply of trained pilots. Jetstar reports 44 Australian pilots working offshore, 35 in Asia for Singapore-based Jetstar Asia and the Vietnam affiliate Jetstar Pacific, with the balance in New Zealand.²⁴

¹⁹ BITRE 2009b: 8

²⁰ BITRE 2009b: 15

²¹ ABS (2009), Overseas Arrivals and Departures, Australian Bureau of Statistics, unpublished, ABS cat. 3401.0

²² BITRE 2009b: 8

²³ BITRE 2009b: 8

²⁴ Jetstar, pers. comm., 12/2/10. The Australian Federation of Air Pilots estimates around 150 members flying out of Australia for foreign airlines and another 150 members working offshore.

Sea Transport

Bulk cargo

As the world's leading dry commodity exporter, Australia's maritime trade data is skewed by massive tonnages of low-priced products. In 2004-05, the most recent year for which comprehensive tonnage data are published, exports accounted for 48.5 per cent of the total value of trade but 90 per cent of the tonnage.²⁵ Conversely, imports were 51.5 per cent of value but only ten per cent of tonnage.

This remarkable imbalance shows up most clearly in bulk shipping. In 2004-5, almost 80 per cent of Australia's exports consisted of 243 million tonnes (m.t.) of iron ore and 233 m.t. of coal.²⁶

Both commodities are sold almost entirely to Asian buyers and shipped in large bulk carriers that return in ballast to Australian shores.

As a consequence, the freight policy of Australian coal and iron ore producers and buyers is crucial to the pattern of trade in transport services.

Historically these commodities have been sold on a "free on board" (fob) basis, meaning that the buyer arranges shipment from the loading port to destination. When goods are exported by non-resident carriers then no freight transport service export is recorded in the Australian balance of payments.

The alternative method of sale is known as cif – "cash-insurance-freight" – which means that producers also provide delivery. Transportation services then constitute an additional export.

"Free on board" sale is usually the strong preference of the buyer, who may gain an extra margin on the contract as well as having greater control over the supply of tonnage.

From the revival of coal exports to Japan in the late 1950s and then the development of iron ore exports in the 1960s, Japanese buyers have sought to ship in Japanese controlled vessels: in the 1960s these ships sailed under the Japanese flag – most are now under a flag of convenience (predominantly Panama) but still controlled by Japanese principals. China, Korea and Taiwan now also operate large merchant fleets.

In the 1980s it became Australian government policy to encourage producers to also provide delivery - that is to ship "cif." BHP Billiton built up a substantial deepsea fleet to engage in the iron ore and coal trades.

Since the 1990s however the Australian-flag deepsea fleet has been sold off. The main ore producers, BHP Billiton and Rio Tinto, still deploy a significant fleet by chartering in foreign-flag tonnage for cif shipments but sell only a minority of their product that way. Reportedly about 40 per cent of Australian coal exports is now sold cif.

²⁵ BTRE (2007), Australian Maritime Trade, 2000-01 to 2004-05, Working Paper 69, Bureau of Transport and Regional Economics, Canberra. Teu stands for Twenty-foot equivalent units.

²⁶ BTRE: (2007): 6

Liner shipping (containers and vehicles)

The shipment of general cargo in containers accounts for only a small percentage of the total volume of Australian trade, but it is a large proportion of the total value. Aggregated Australian data by country are not available but the leading container port, Melbourne, gives some insight: Asian countries account for around 60 per cent of both import and export movement of loaded containers.

Table 4: Australian Ports Ranked by Container Throughput ('000 teu)²⁷

Port	Full	Empty	Total	%
Melbourne	1693	464	2157	35
Sydney	1319	465	1784	29
Brisbane	648	248	896	15
Fremantle	446	119	565	9
Adelaide	190	77	267	4
Other	445	179	624	10
TOTAL	4599	1504	6103	100

Since the sale of the Australian National Line (ANL) was sold in 1998 to the French GMA-CGM, Australian carriers now are minor players in international liner trades. Australia's Toll Group in June 2009 took over the Darwin-based family firm Perkins Shipping, which operates a feeder vessel via East Timor and Indonesian outports to Singapore.

An important non-containerised form of general cargo is vehicles. These are shipped by specialised roll-on/roll-off carriers, mainly from Europe and Asia (Japan, Korea, Southeast Asia and now also China).

Port competition

The main obstacle to improvements in both bulk and liner shipping services for Australia is ports and associated land-side infrastructure. While there have in recent years been marked productivity improvements, underinvestment is still a problem, exacerbated in the case of mineral exports by the unexpectedly high rate of growth because of soaring demand from China.²⁸

An ongoing concern is the lack of competition within ports. Longstanding duopolies in main Australian ports are now being challenged by state governments facilitating entry of third operators, though it may take time before they can achieve minimum efficient scale. Airports remain natural monopolies, only partly constrained by inter-port competition.

²⁷ BITRE (2009), Waterline 46, Canberra, Bureau of Infrastructure, Transport and Regional Economics, November. teu stands for twenty-foot equivalent units.

²⁸ Some of these problems were highlighted by Meyrick & Associates (2008) in their report, Meyrick and Associates (2008), Infrastructure Programs for Addressing Supply Chain Blockages, Australian Logistics Council, Final Draft Report, July. In May 2009 the Federal Government's Infrastructure Australia Committee identified "competitive international gateways" and "a national rail freight network" as two of the seven national infrastructure priorities.

Logistics

The logistics industry is a fast expanding one, driven by several factors: offshoring of manufacturing, the emergence of global supply chains, the practicality of door-to-door movement by container, the growing popularity of just-in-time stocking systems and e-commerce.

The industry is growing faster than its specific components as more and more elements are contracted out to specialist firms. The prime contractors may be carriers with ancillary services, like Maersk in shipping or Fedex in fast air freight, or specialist non-vessel/ aircraft operators such as Li & Fung.

Australia was an early entrant into the logistics industry in the form of the TNT group, which operated trucks, trains, ships and planes in a global network until a liquidity crisis led to takeover by the Dutch Post Office in 1996. Today Australia's leading domestic and international operators are Brambles, Toll Group and Linfox Logistics.

Brambles is best-known for its worldwide pallet business CHEP. It does only a small proportion of its business in Asia, however sales in China are increasing rapidly.²⁹

Toll and Linfox do most of their business as integrated freight forwarders in Australia and New Zealand but in recent years both groups have moved aggressively into Asia. In 2008-09 about 21 per cent of Toll group revenues of \$6.5 billion and 41 per cent of group assets of \$4.6 billion were attributable to Asia.³⁰

Linfox now have offshore locations in Shanghai, Hong Kong, Ho Chi Minh City, Bangkok, Kuala Lumpur, Jakarta and Mumbai, with the Asia Regional Office in Singapore. As well as 5,000 vehicles, Linfox operates 1.8 million square meters of warehousing space and the company's activities generate work for more than 15,000 people.

Issues for the future

Australia has no natural advantage to rival Singapore or Hong Kong as international logistics hubs. Nevertheless, there are opportunities for around-the-world sea and air freight services, as well as better balancing inward and outward regional flows by value, tonnage and volume.

The constraints relate to Australia's international gateways and infrastructure. To ensure closer integration with Asian markets, Australia needs to improve efficiency in its east-west and north-south landbridges, better integrate modes of transport and relieve congestion at city gateways. Other obstacles in Australia include the organisation of ports, poor security, and the only partial adaptation of hard paper systems to the needs of an e-world.³¹

Recovery from the global financial crisis and the continuing growth of cheap international travel will bring renewed pressure on the Australian Government to grant additional landing rights. Increasing congestion at Sydney airport in particular, which in 2008-09 handled 44 per cent of international traffic, (followed by Melbourne 20 per cent, Brisbane 17 per cent and Perth 11 per cent),³² may encourage low-cost carriers to look to regional airports such as Gold Coast and Cairns.

²⁹ Brambles (2009), Annual Report 2009, Brambles Ltd.

³⁰ Toll (2009), Annual Report 2009, Toll Group.

³¹ Infrastructure Australia (2009), National Infrastructure Priorities, May.

³² BITRE 2009b:13

Components: Finance



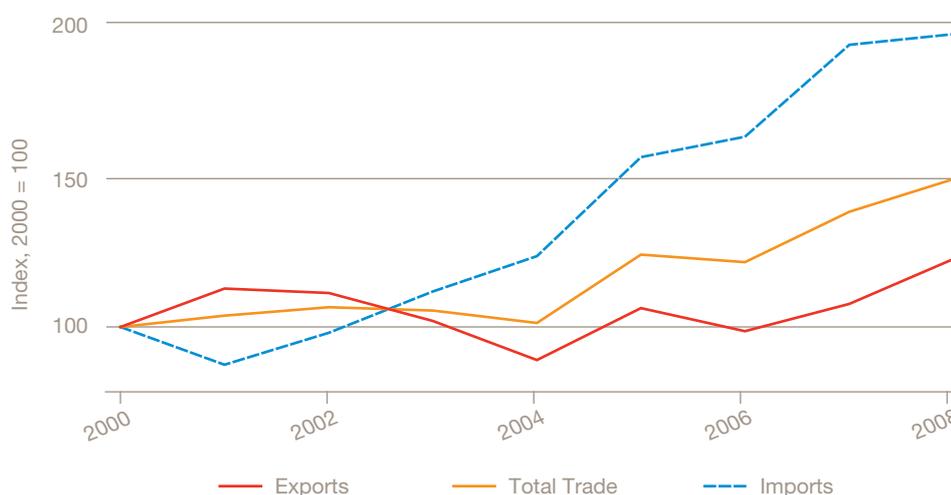
Finance analysis: Ken Waller

Two categories of services in the finance sector comprise international trade in finance, namely, “financial services” and “insurance and pensions”. Combined, they represent about three per cent of Australia’s total trade in services.

Financial services exports (banking and related services) were slightly in excess of \$1 billion in 2008, while exports of insurance and pension services amounted to about \$400 million. Imports of financial services were also just over \$1 billion. Imports of insurance and pensions were nearly \$950 million in 2008.

For the remainder of this analysis, we have combined financial services trade and insurance and pensions trade.

Figure 9: Financial and Insurance Services Index



Trends with the Asia16 region

Our Financial and Insurance Services Index above reflects the growing level of financial services imports from the Asia16. In the period, imports grew steadily by around 100 per cent while exports had fits and starts, and overall rose by 25 per cent.

Adjusted on a constant price index, total Asia-Australia trade in financial services has increased by 50 per cent since 2000.

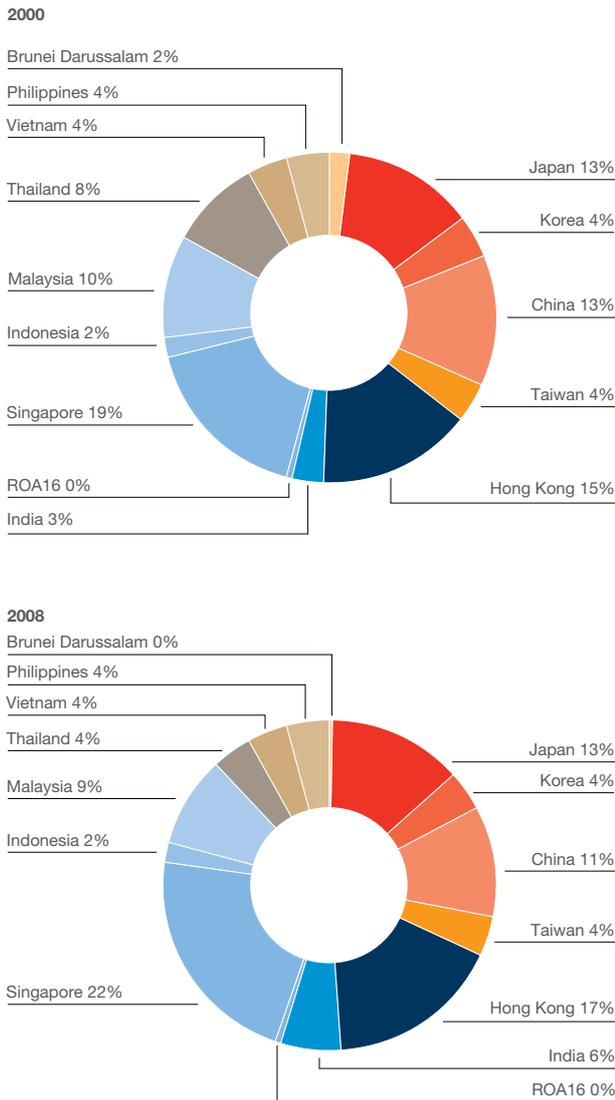
As Table 5 on the following page shows the value of Australia’s total trade in financial and insurance services with the Asia16 was \$600 million in 2008; there was a balance of exports and imports, each at \$300 million.

Table 5: Value of trade in financial and insurance services between Australia and Asia16 countries and the rest of the world, \$bn, 2007-08 prices.

Finance	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Asia16										
Imports	0.15	0.13	0.15	0.17	0.19	0.24	0.25	0.29	0.30	1.84
Exports	0.27	0.31	0.31	0.28	0.24	0.29	0.27	0.30	0.34	14.05
Total	0.43	0.44	0.45	0.45	0.43	0.53	0.52	0.59	0.64	7.95
ROW										
Imports	1.29	1.07	1.04	1.17	1.17	1.28	1.36	1.61	1.59	-1.09
Exports	1.47	1.39	1.40	1.33	1.31	1.14	1.26	1.19	1.17	-1.50
Total	2.76	2.47	2.44	2.49	2.47	2.42	2.62	2.80	2.76	-1.26

Trading Partners

Figure 10: Distribution of Australia’s trade in finance and insurance services (in value terms) with Asia16 countries



As Figure 10 shows, Australia's Asian trade in financial services is dominated by Singapore, Japan and Hong Kong. While the shares of Singapore and Hong Kong increased between 2000 and 2008 to 21 and 16 per cent respectively, the shares for Japan and China decreased slightly (to 13 and 12 per cent). These three economies account for 50 per cent of Australia's total trade in finance and insurance with Asia16.

Noteworthy also is the decline in the share of trade with Thailand which halved over the period. India's share increased in the period but is relatively low at around 6 per cent of total financial services trade.

Australia's trade with the rest of the world, in constant prices, has remained static over the period of the Index, although it substantially exceeds the value of trade with Asia16. In 2008, financial services trade with the rest of the world was more than four and a half times the value of trade with Asia16.

Exports to the rest of the world were four times higher than exports to Asia16, and imports were five times higher.

The current size of the total trade relationship in financial services with the rest of the world reflects the importance of the US, UK and Europe to Australia's financial system providers and consumers.

There are historical reasons for our strong linkages with western markets. But their significance also comes from the scope of services those markets have to offer to Australian providers and consumers, and the relative attractiveness of the Australian market for investors from those economies. The World Economic Forum in 2008 assessed Australia as the third-best regulated securities market and the fourth soundest banking system in the World.³² Mutual recognition agreements have been signed with US and New Zealand to simplify financial services regulations.

This is exemplified by the number of foreign banks and non-banks now operating successfully in the Australian market and the sophisticated nature of risk and derivative products available in Australia. The rapid growth in the pensions industry in Australia, and in wealth management, has resulted in significant rises in funds under management by Australian and foreign service providers in this market. These funds are primarily invested in global markets, including in Asia and Australia.

These are relatively recent major developments and mark the emergence of Australia as a provider of financial services globally and a recipient of global funds and services.

The scale of activities is relatively small compared with those of major markets. The integration with global markets, however, reflects the quality and confidence of overseas service providers and investment institutions in Australia's markets and its regulatory system. Importantly it reflects the relative ease of access both ways – to Australian service providers in Europe and the US, and the access suppliers from those countries have in Australia's market.

³² The Global Competative Report 2008-09.

Need to improve the data base

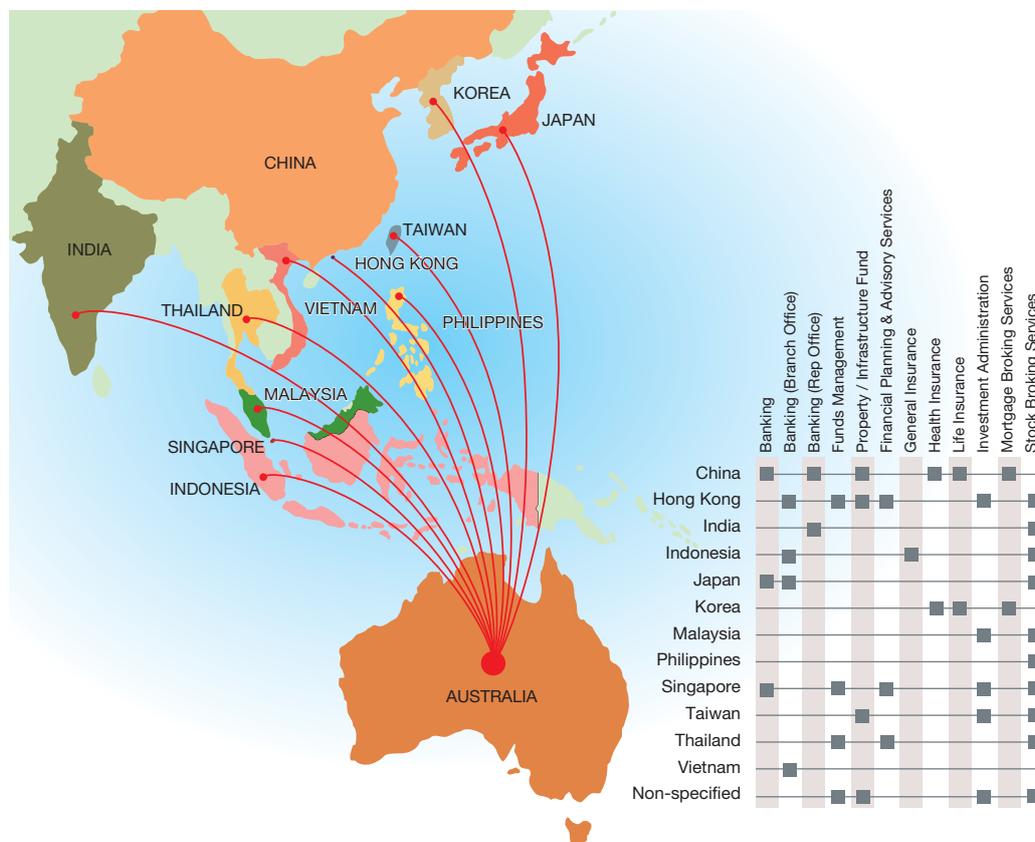
The disaggregation of financial services in the ABS sector classification would greatly improve our understanding of trends and changing patterns in the industry.

Moreover, foreign direct investment is not incorporated in official financial services data. For example the Insurance Australia Group has recently signed a joint venture agreement with the State Bank of India (SBI) which is India's largest bank, to establish a general insurance company in India. SBI has over 100 million customers and 11,000 branches across the country.

ANZ is a major Australian foreign investor in Asian financial services. It is Australia's largest foreign direct investor in China with more than \$1 billion in capital invested in partnerships in Shanghai and Tianjin, and in a network of branches and representative offices in Shanghai, Beijing and Guangzhou.

The gap in Australia's financial services data results in a serious understatement of the sector's growing activity.

Nor does data currently available from the ABS capture the full diversity and spread of Australia's financial services trade. A partial snapshot of Australia's trade in financial services with the region, and the various classes, based on a survey of members of the Investment and Financial Services Association in 2009, is shown in the chart below. The chart excludes the operations of some major Australian banking groups.



Market access – a prerequisite for financial services integration

Market access is relatively unencumbered for firms that meet the necessary prudential standards in Australia, and in Europe and the US, compared with varying degrees of impediments that apply to Australian providers in some of the Asia16 markets.

These impediments are likely to impact on the level of our financial services exports to Asia16. They include restrictions on products, geographic constraints on business development, limits on foreign ownership to operate businesses, as well as uncertainties relating to discretionary powers of authorities. Offers made by countries in the negotiating schedule to the General Agreement on Trade in Services, (GATS), continue to include these limitations. As a consequence of the stalling of the WTO's Doha Round, many economies are looking to expand trade in services (and in goods) through bilateral and regional agreements.

Access to financial services is encouraged through Australia's agreements with, for example, the US and New Zealand. Negotiations completed or in process with other economies, including with Japan, China, Malaysia, Korea and the ASEAN economies, and which include investment, open the prospect of an acceleration and deepening of services integration with the region. But until those are in place, growth in services trade with important economies in the region will be constrained.

There are also policy constraints of a home-grown nature. A seminal report by the Commonwealth Government's Australian Financial Centre Forum, "*Australia as a Financial Centre – Building on our strengths*", published in November 2009, observes that "the Australian financial sector has emerged from the global financial crisis strong, well regulated and highly regarded around the world. For the most part it is competitive, efficient and innovative in meeting the needs of Australian households and businesses".

"Somewhat surprisingly", the report continues, "given the solid domestic base and the enormous opportunities in offshore markets, [Australia's] engagement in cross-border activities with the Asia-Pacific region and beyond is much less developed. This is reflected in the low level of imports and exports of financial services".

The findings by the Forum confirm those shown in the statistical analysis of this Index. The Government has responded to the report, providing in-principle or direct support for nearly all of the Forum's 19 recommendations.

Greater engagement with the region in financial services will lead to important benefits. They include greater efficiencies, competitiveness, and the internationalisation of services that would reinforce regional economic and social integration. More efficient and competitive financial services would contribute to raising national productivity.

Components: Business Services



Business Services: Dr Susan Freeman

The trend towards knowledge industries, including the activities which fall into the wide category known as business services, is common across advanced economies, and is expected to continue to accelerate.

Cross border international trade in business services is also growing, as companies increasingly outsource specialist activities. The Business Services Index below shows sustained growth in Australia's trade with Asia in particular. Table 6 shows total Australia-Asia16 trade in business services was valued at around \$3.6 billion in 2008, a rise of 120 per cent from 2000 to 2008.

Exports and imports made similar contributions to trade in this sector. There was a small trade surplus for Australia in terms of our Asia business services trade in the period, but the gap appears to be narrowing. In 2008, imports of business services from Asia rose 27.9 per cent, compared to a 10.3 per cent increase in exports.

Figure 11: Business Services Index

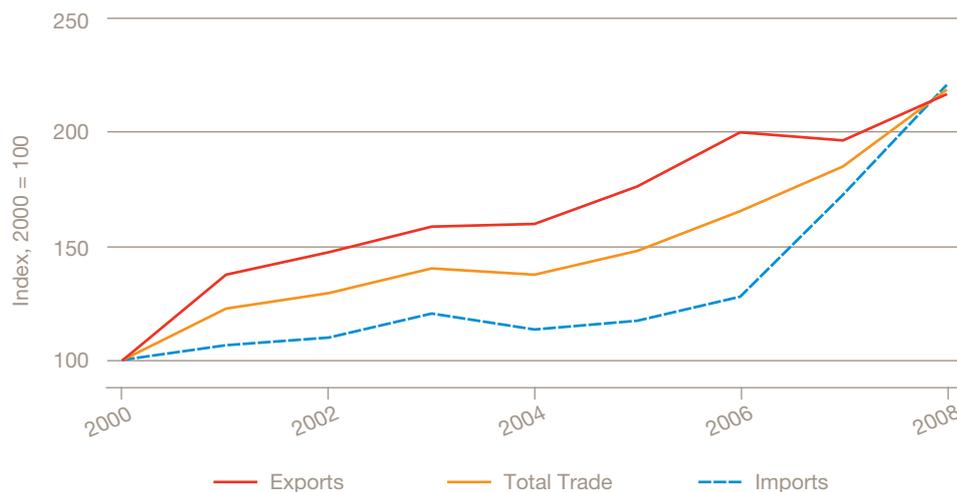


Table 6: Value of trade in business between Australia and Asia16 countries and the rest of the world, \$bn, 2007-08 prices.

Business Services	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Asia16										
Imports	0.78	0.83	0.86	0.94	0.88	0.91	1.00	1.35	1.72	27.92
Exports	0.85	1.16	1.25	1.34	1.35	1.49	1.70	1.67	1.84	10.32
Total	1.62	1.99	2.10	2.28	2.24	2.41	2.69	3.01	3.56	18.19
ROW										
Imports	4.07	4.28	4.48	4.90	4.86	5.21	5.50	7.30	9.11	24.84
Exports	4.09	3.98	4.11	4.10	4.25	4.43	5.17	6.17	6.73	9.01
Total	8.16	8.26	8.59	8.99	9.11	9.64	10.67	13.47	15.84	17.59

What are business services?

The category “business services” includes a broad range of activities generally acknowledged as facilitating or supporting other business. Many of these activities have been found to be causal elements across other sectors. At the same time, studies indicate that access to a wider variety of business services improves productivity.³³

The Business Services Index, clustering a number of business services data sources³⁴ together, measures our international trade in legal and accounting services, market research, architecture and engineering services, professional and management consulting (including design, project management, community consultation in infrastructure development, labor recruitment etc), scientific and other technical services, agriculture and mining services, as well as charges for the use of intellectual property and payments for licenses to reproduce such work as books and manuscripts, computer software, cinematographic works, and sound recordings.

Understanding the sector: significant trends

International trade in business services has witnessed a number of significant changes in recent years, all of which are important in gaining an understanding of the nature and value of business services.

Technology improvements have facilitated exchange for many knowledge-rich industries, including those centred on government agencies. CSIRO, for example, is increasingly exporting its technical expertise to partners and clients in Asia. Its current work with the Chinese Academy of Surveying and Mapping uses CSIRO capabilities in earth observation, satellite technology and mapping to assist counterparts in China identify areas that are vulnerable to landslides.

Other trends include changes in the size of the companies involved, shifts in the direction of the trade, and a trend towards greater foreign direct investment. This latter component significantly affects the quality of the data on which we base our future policy.

In terms of company size, the major shift has been the prevalence of internationalising small and medium-sized enterprises (SMEs) in Asia. This has followed the liberalisation of many emerging economies since the 1990s. An increasing number of market opportunities in Asia and the ability of SMEs to easily participate in foreign locations has encouraged many young firms, known as start-ups or born-globals, to expand overseas early in their organisational history, often at inception.

Many business service firms are SMEs, some following their clients and facilitating their entry by providing myriad services including market research, risk assessment, financial and insurance advice, legal advice, property leasing, IP and copyright protection, project management consulting, engineering consulting and media advertising.

These companies often face considerable constraints with regard to resources: time, money and people. Many lack experience in overseas markets, and the situation is made more complex by the fact that most markets nearest to Australia, namely Asian ones, are not familiar to managers in terms of business practices and cultural norms.

³³ See, for example, Leshner and Nordås, “Business Services, Trade and Costs”, OECD Trade Policy Working Paper No. 46, 13 December 2006.

³⁴ See Appendix 2 for a full explanation of Data Sources.

Greater readiness to trade with the unfamiliar

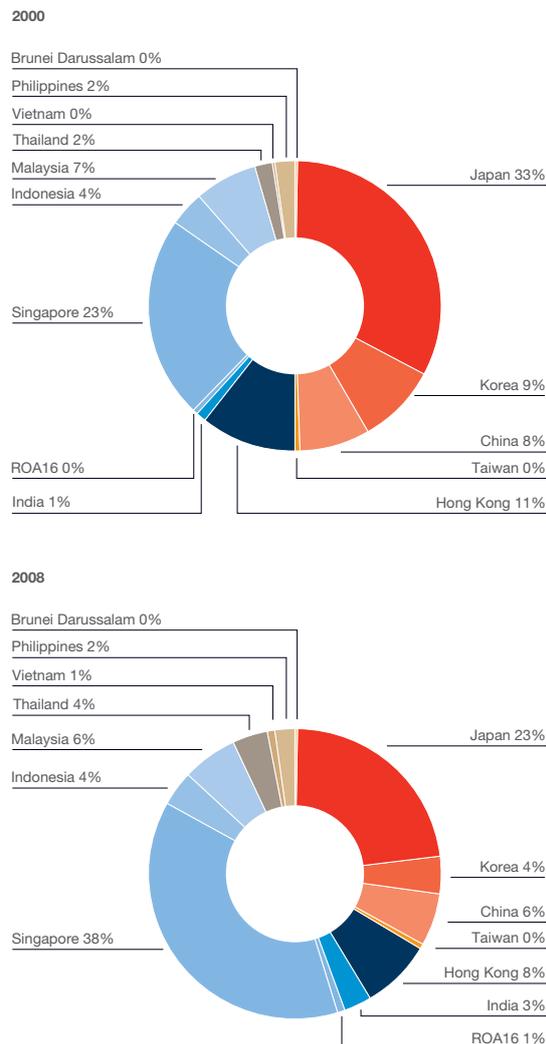
Yet despite these resource constraints, there has been a raised willingness among Australian companies to do business in unfamiliar markets.

Traditionally, companies would choose, as their first international destination, New Zealand, the United Kingdom or the United States, deeming the “psychic distance” - the level of business and cultural familiarity with the host market - to be manageable.

Increasingly, however, Australian companies are launching offshore activities into the less familiar territory of Asia - whether “pulled” abroad by the internationalisation of their clients, or actively following the growing opportunities. Figure 12 illustrates Australia’s trade with Asia16.

This form of internationalisation happens both ways. An example of an Asian business being ‘pulled’ to Australia is Shine Wing. It is the largest local accounting firm in China, the company ranks directly after the big four international accounting firms. Chinese companies investing in minerals, resources and energy in Australia have pulled the business service firm to set up a branch in Melbourne. Shine Wing accountants understand both cultures, both tax systems, both reward systems and provide familiar service to incoming Chinese investors.

Figure 12: Distribution of the value of trade in business services with Asia16 countries



One business services company to use Asia as its overseas launching pad is the Australian-owned engineering services company, GHD. GHD established its first independent foreign office in the late 1990s in Asia, in Manila. The company has since opened multiple offices across the region, as well as around the world.

In China, over the past six years, GHD has established its own foreign entity, merged four local businesses into GHD, and now has 350 staff working from four offices in-country. The local mergers enabled the company to gain a number of critical design licences which permit GHD to offer a fuller range of services in the local market, for both local and international clients. These services range from transport planning to major urban planning, green building design, water resource studies, hydropower and dam design and a range of related environmental, civil and architectural services.

The Australian law firm, Minter Ellison, is also a significant business services exporter to Asia. The company began operating in Asia in 1987 and now provides extensive legal and foreign investment advisory services to clients from its Hong Kong, Shanghai and Jakarta offices, with a new office planned for Beijing.

Supporting growth in business services exports

A further trend in this sector is the rising importance of foreign direct investment. We know from research by the World Trade Organization (WTO), from Australian studies into business services, and from anecdotal evidence, that Australian service firms are increasingly turning to direct investment in overseas activities. This is not surprising given the difficulty of managing the people to people issues often embedded in the delivery of business services in general, but more especially for the professional business services.

The knowledge-intensive nature of the sector means the role played by foreign offices is central. Many companies will initially attempt to manage the service by frequent visits to the overseas market to service customers, but this is expensive, exhausting and difficult over long periods.³⁵

Relationships have been shown to be more significant in an Asian context. The role of personal contacts and business connections, *guanxi*, and how they are developed, reciprocated, providing dependency and trust in Chinese society, is well documented. Intangible resources - networks, knowledge and experience - can reduce the cost of doing business among business service firms entering emerging and developing economies, especially in Asia where relationships through social ties are a major vehicle for building business networks. Thus, companies invariably establish foreign offices to ensure their ongoing success.

Australian Government agency support and advice will be critical to the future success of Australian business service exporters. Government funding opportunities, taxation information, advice on location choices for new market entrants and for expanding companies, and high-level contacts facilitated by our own Government to support government procurement opportunities, are all of immense value to business.

The ABS, however, does not yet regularly collect data on trade in services from Australian affiliates abroad and foreign affiliates located in Australia. We therefore operate under a disadvantage in the discussion of services trade. Indeed, the WTO estimates about 50 per cent of services are conducted under “Mode 3” or commercial presence conditions.³⁶ This paucity of comprehensive data impacts particularly in the finance and insurance sector and in the business services sector, and affects our ability as a nation to support the growth of the sector.

³⁵ Freeman, S., D. Cray, & Sandwell, M. (2007) ‘Networks and Australian Professional Services in Newly Emerging Markets.

³⁶ See Appendix 3 for a full explanation of the modes of service delivery.

Economies



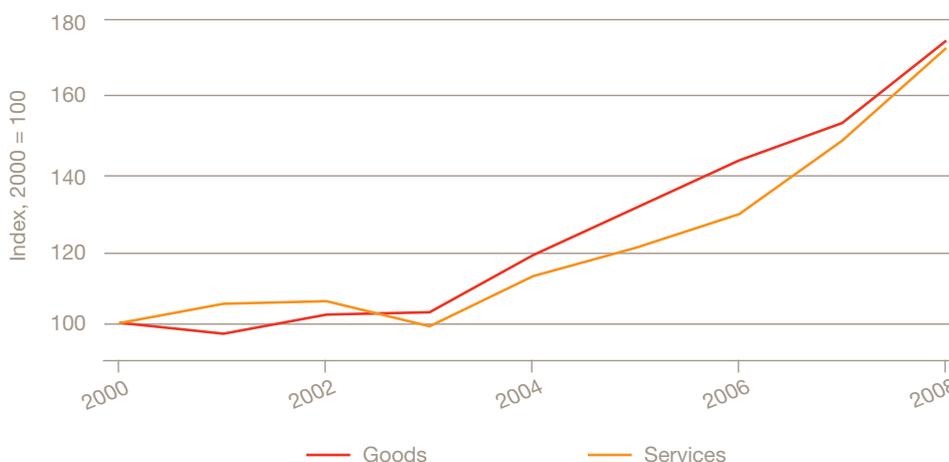
Economies

This chapter compares the strength in Australia's trade with a number of important trading partners. We look individually at trends with China, India, Indonesia, Japan, and South Korea, and we separate the ten countries of ASEAN into two groupings: "ASEAN6", consisting of Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand; and "CLMV", consisting of Cambodia, Lao PDR, Myanmar and Vietnam.

ASEAN: ASEAN6

Services exports to the grouping increased moderately by around 38 per cent from a low base, while services imports from ASEAN6 doubled in the eight years from 2000-08. In goods trade, Australian exports fell by around ten per cent during the period while the value of goods imports from ASEAN6 was up by more than 300 per cent, pushing up the trade index overall. Singapore accounts for about 50 per cent of services trade between Australia and ASEAN6, largely as a result of Singapore's entrepôt status. The nation-state is the world's biggest container port and a significant hub for airline traffic; in transport services alone, Singapore's share of Australia's trade grew spectacularly from 29 per cent in 2000 to 45 per cent in 2008. Malaysia's Tanjung Pelepas port is also fast gaining importance.

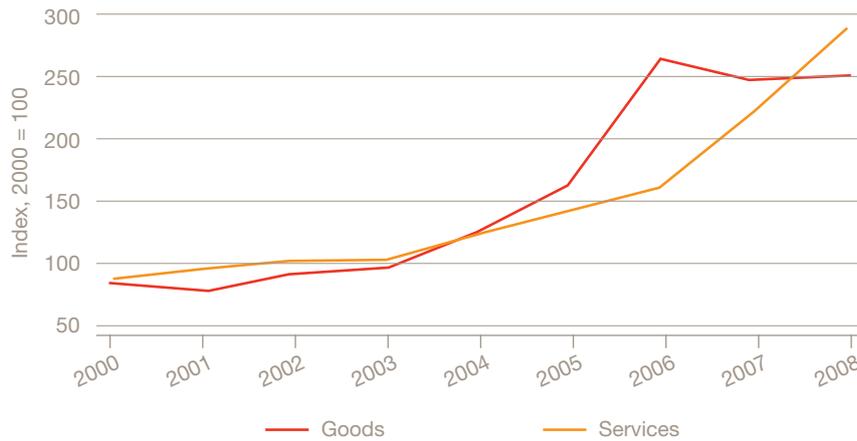
Figure 13: ASEAN6 Index



ASEAN: CLMV

Growth of trade with CLMV was rapid during the period 2000 to 2008. Australia's services exports to CLMV grew 150 per cent in the period and goods exports by 100 per cent. Imports grew slightly faster: services imports were up 175 per cent, and goods imports by 150 per cent. This was from a very low base, however: the CLMV countries account for less than two per cent of Australia's overall trade with Asia.

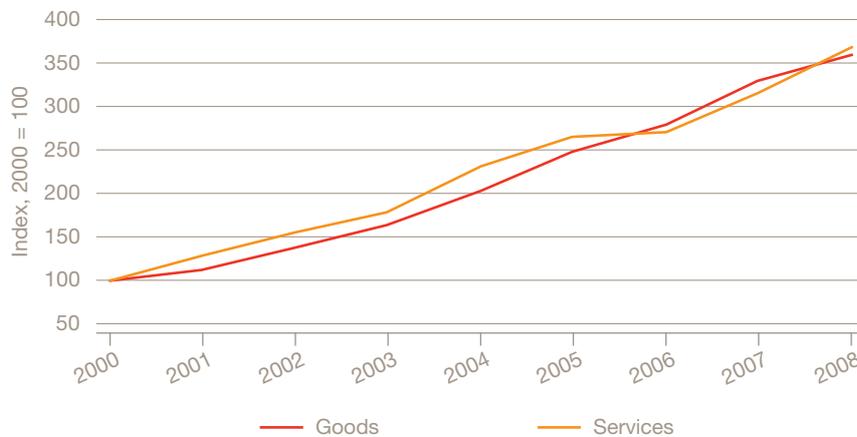
Figure 14: CLMV Index



China

Services exports to China were up by close to 400 per cent over the period, principally in education-related services. In 2008, the value of Australia's services trade with China was \$6 billion. Goods imports grew rapidly also – by about 400 per cent – double the rate of growth with Asia as a whole. By 2008, total services exports were \$4.7 billion and total services imports, mainly in personal travel and transportation services, were \$1.4 billion. China, like Japan and Korea, now operates a substantial shipping fleet.

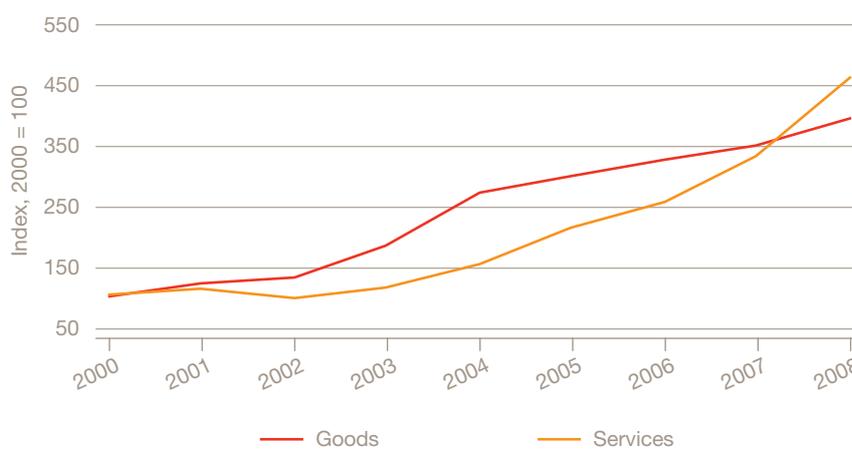
Figure 15: China Index



India

Services exports to India, mainly in education, multiplied five times in the period from \$600 million in 2000 to about \$3 billion in 2008. Goods trade also grew rapidly. Services trade with India tracks a similar path as Australia's services trade with China, though on a smaller scale: exports are principally in the education sector, while imports, which are substantially smaller, are in transportation and personal travel. In terms of goods trade, the value of Australia's trade with India in 2008 was less than a quarter of our trade with China.

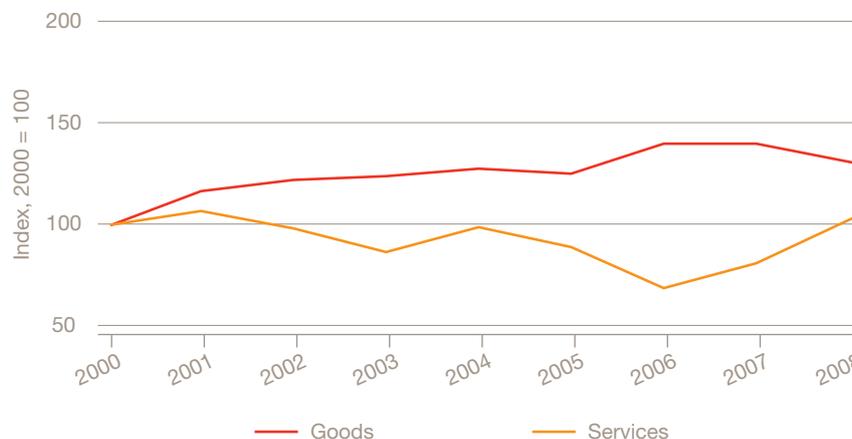
Figure 16: India Index



Indonesia

Compared with trends in Australia's trade with China and India, goods and services trade with Indonesia increased very modestly during the period 2000 to 2008 from a low base, but the trade relationship is showing sure signs of improvement. Goods and services trade increased by around 25 and 5 per cent respectively. Education was the major sector involved in Australia's services exports to Indonesia, while Australian tourism expenditure in Indonesia made up more than 70 per cent of services imports. The trade was comparatively balanced.

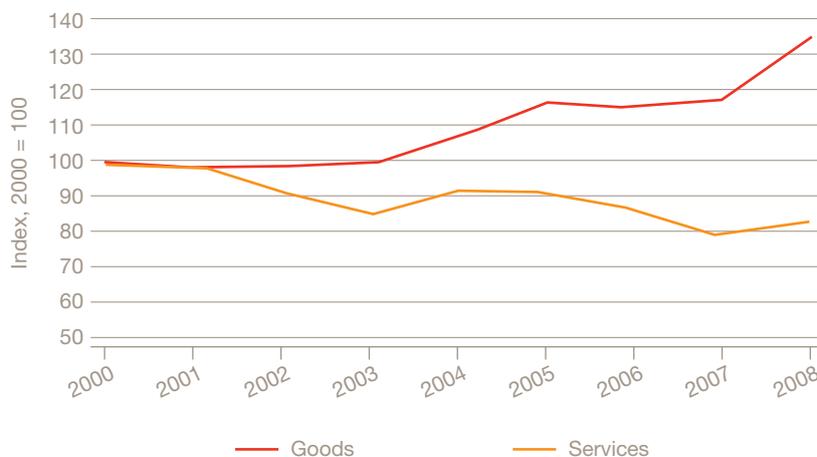
Figure 17: Indonesia Index



Japan

Japan-Australia services trade is comparatively balanced, with imports and exports about 50/50. Services imports from Japan include around 45 per cent transportation, particularly in shipping services, and 17 per cent business and professional services. Australian services exports to Japan are mostly in tourism (personal travel) services and transportation services. The balance has shifted gradually in favor of imports in the period. Japan was Australia's biggest single trading partner in services (in value terms) in 2000, accounting for 24.4 per cent of total trade in services. By 2008 Japan's share in Australia's services trade had fallen sharply to just 12 per cent.

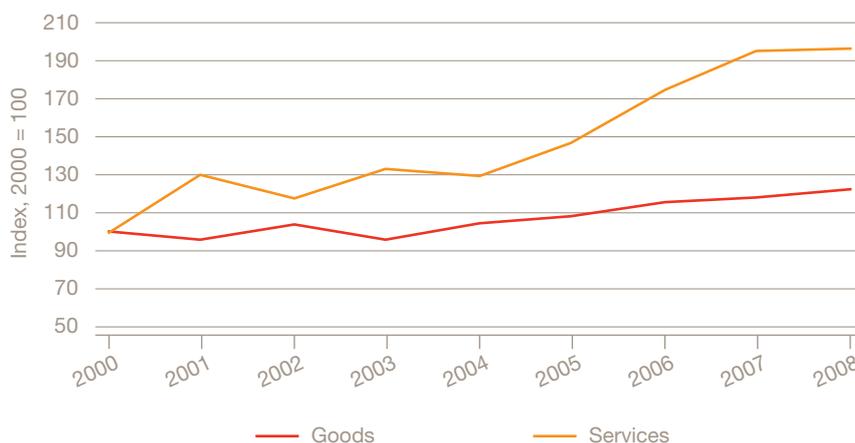
Figure 18: Japan Index



Korea

The Republic of Korea is Australia's fourth largest trading partner, after China, Japan and the United States, and our third largest export destination. Australia's goods trade with Korea is around three times our services trade. Nevertheless, the value (in constant \$ terms) of Australia's services trade with Korea roughly doubled between 2000 and 2008 with a significant surplus in Australia's favor. By 2008, total services exports were \$1.8 billion and total services imports were \$559 million. Growth in goods trade was more modest. The differences in growth is illustrated in the figure below. Education-related services exports to Korea comprised by far the most significant proportion of Australia's services trade with the country.

Figure 19: Korea Index





Appendices



Appendix 1: Definitions

Index

Each index is constructed using the corresponding value of trade at 2007-08 prices with 2000 as the base year and 100 as the base index value.

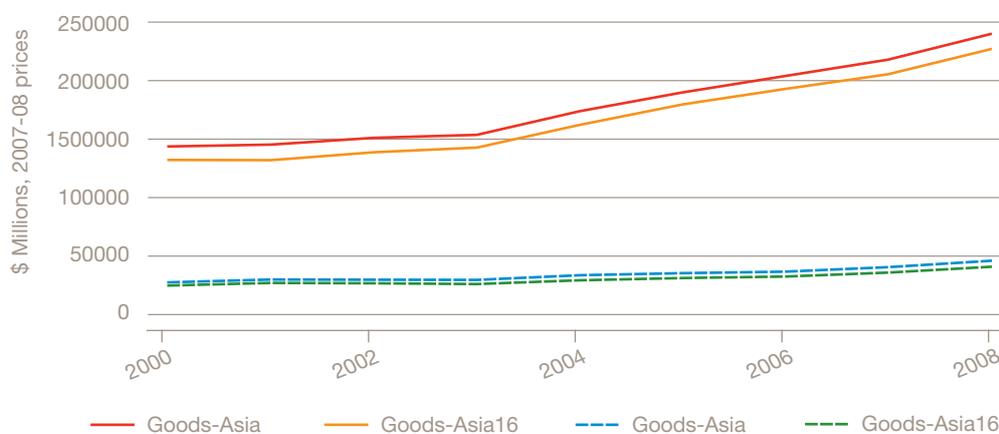
Asia16, ASEAN6, CLMV

Asia16 consists of Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea (Republic of), Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Taiwan, Thailand and Vietnam.

Asia consists of all Asian countries including Asia16 as defined in the Australian Bureau of Statistics (ABS)'s publication based on Balance of Payment Statistics: International Trade in Services by Country, by State and by Detailed Services Category, Calendar Year, 2008 BPM6 issue (Cat. No. 5368.0.55.004).

As shown in Appendix Figure 1 below, the bulk of Australia trade with Asia is accounted for by Asia16 countries.

Appendix Figure 1: Total Value of Trade with Asia and Asia16



ASEAN6 consists of Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, and Thailand.

CLMV consists of Cambodia, Lao PDR, Myanmar and Vietnam.

The Australian Bureau of Statistics (ABS) publishes official statistics on Australia's trade in international services, compiled using international standards set out by the International Monetary Fund and the United Nations. The following provides an explanation of the relevant definitions used in this Index.

Education

Education services covers purchases of education-related goods and services such as tuition, food, accommodation, local transport, and health services by nonresident students, including those of their accompanying dependents. Educational travel excludes international transport by the nonresident students (which is included in Transport).

Transport

Transport services covers freight transport, passenger transport, and auxiliary services (eg handling and storage/warehouse charges, cleaning charges of aircraft, air traffic control etc) via sea, air or other modes such as rail, road, pipeline and space transport (such as fees charged by NASA for launching a telecommunication satellite, or launch control or other services provided by Canberra's Deep Space Communication Complex). It also covers postal and courier services. Exports of passenger services consist of all services purchased by nonresidents from resident carriers for the international transportation of nonresident passengers. Imports of passenger services consist of all services purchased by residents from nonresident carriers for the international transportation of resident passengers. Freight services consist of the international transportation of objects other than people.

Business Services

The ABS classification defines Business Services as "Charges for the use of Intellectual Property and Other Business". Charges for IP covers royalties and/or licensing payments for the use of proprietary intellectual property rights such as patents, trademarks, copyrights, industrial processes and designs, and trade secrets and franchises. They also include payments for licenses to reproduce and/or distribute "embodied intellectual property" such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings such as broadcasting and live performances. "Other Business" includes research and development, such as market research, media and new media, professional and management consulting, and technical, trade, and professional services such as architecture engineering, waste treatment and depollution, agricultural, and mining services, and operating leasing services.

Finance

Finance services include:

- financial intermediary and auxiliary services provided by banks and other financial corporations, such as deposit taking and lending, letters of credit, credit card services, commissions and charges related to financial leasing, factoring, underwriting, and clearing of payments, as well as financial advisory services, custody of financial assets or bullion, financial asset management, monitoring services, liquidity provision services, risk assumption services other than insurance, merger and acquisition services, credit rating services, stock exchange services, and trust services.
- insurance and pension fund services including the provision of life insurance and annuities, nonlife insurance, reinsurance, freight insurance, pensions, standardised guarantees, and auxiliary services to insurance, pension schemes, and standardised guarantee schemes.

Other

Other refers to all other services not specified, including manufacturing services (eg outsourced portions of a manufacturing process or a complete outsourced manufacturing process. The value of the services in this division is based on the service fee paid, not the value of the goods manufactured), maintenance and repair services, tourism services not including international transport, construction, telecommunications, computer and information services, personal, cultural and recreational services, and government services not included elsewhere.

Reference:

The ABS bases its services definitions on the International Monetary Fund (IMF) (2009), Balance of payments and international investment position manual – Sixth Edition (BPM6), Washington, D.C.: International Monetary Fund, 2009.

Appendix 2: Data Sources

Trade in Goods

The calendar year value of exports and imports are obtained by aggregating up the corresponding monthly figures based on Balance of Payment statistics published by the ABS: International Trade in Goods and Services, Australia, Nov 2009 (Cat. No. 5368.0).

For exports, the source data table is Table 14a: MERCHANDISE EXPORTS, Country and Country Groups, FOB Value.

For imports, the source data table is Table 14b: MERCHANDISE IMPORTS, Country and Country Groups, Customs Value.

The corresponding constant price figures were derived by using the annual average of quarterly implicit price deflators for goods exports and import published in TABLE 112: GOODS AND SERVICES: IMPLICIT PRICE DEFLATORS - ORIGINAL (INDEX) – QUARTER, Balance of Payments and International Investment Position, Australia, Sep 2009 (ABS Cat. No. 5302.0).

Trade in Services

The value of exports and imports in services are obtained from ABS publication titled International Trade in Services by Country, by State and by Detailed Services Category, Calendar Year, 2008 BPM6 issue (Cat. No. 5368.0.55.004). A table at right shows the correspondence between the categories used in the Services Report and the BPM6.

For exports, the source data table is Table 6: International Trade in Services, Credits, Service by Calendar Year and by Country.

For imports, the source data table is Table 8: International Trade in Services, Debits, Service by Calendar Year and by Country.

These data sources provide separate industry level figures for Manufacturing Services on Physical Inputs owned by Others, Maintenance and Repair services nie, Transport, Travel, Construction, Insurance and Pension Services, Financial Services, Charges for the use of, Intellectual Property, Telecommunication, Computer and Information Services, Other Business Services, Personal, Cultural and Recreation services, and Government goods and services nie Services Credits.

For Education, the source data tables are Table 10: International Trade in Services, Credits, Calendar Year by Country & Travel Service, and Table 11: International Trade in Services, Debits, Calendar Year by Country & Travel Service.

The corresponding constant prices figures are derived using the implicit deflators obtained from the same table as in the case of trade in goods. Due to lack of industry level price indices for services trade, the industry level constant price figures are derived using the same total services trade implicit price deflators.

Comparison of ANZ Services Index Categories and ABS BPM6 Classification¹

Education	4. Travel Services² 4.2.2 Education related
Transport	3. Transport Services 3.1 Passenger 3.2 Freight 3.3 Other 3.4 Postal & courier services
Business	8. Charges for the use of intellectual property not included elsewhere (nie) 8.1 Licences to reproduce and/ or distribute computer services 8.1.2 Licences to reproduce and/ or distribute computer hardware & design services 8.2 Licences to reproduce and/ or distribute audiovisual & related services 8.3 Outcomes of research & development 8.4 Franchise & trademarks licensing fees 8.5 Other charges for the use of intellectual property 8.5.1 Royalties on education services 8.5.2 Royalties on telecommunication services 8.5.3 Music 8.5.4 Other <hr/> 10. Other business services 10.1 Research & development services 10.2 Professional & management consulting services 10.2.1 Legal 10.2.1.2 Accounting, auditing, bookkeeping & tax consulting services 10.2.1.3 Business & management consulting & public relations services 10.2.1.4 Other professional services 10.2.1.5 Management fees nie 10.2.2 Advertising, market research & public opinion polling 10.3 Technical, trade-related & other business services 10.3.1 Architectural, engineering, scientific & other technical services 10.3.1.1 Architectural services 10.3.1.2 Engineering services 10.3.1.3 Surveying 10.3.1.4 Scientific & other technical services 10.3.2 Waste treatment & de-pollution, agricultural & mining services 10.3.2.1 Waste treatment & de-pollution 10.3.2.2 Services incidental to agriculture, forestry & fishing 10.3.2.3 Services incidental to mining & oil & gas extraction 10.3.2.4 Other on-site processing services 10.3.3 Operational leasing services 10.3.3.1 Air operational leasing services 10.3.3.2 Sea operational leasing services 10.3.3.3 Other operational leasing services 10.3.4 Trade-related services 10.3.5 Other business services nie

¹ The International Monetary Fund's sixth edition of the Balance of Payments and International Investment Position Manual (BPM6, the Manual) serves as the standard framework for statistics on the transactions and positions between an economy and the rest of the world. The Australian Bureau of Statistics introduced the BPM6 in late 2009.

² As mentioned previously, this definition includes the purchases of education-related goods and services such as tuition, food, accommodation, local transport, and health services by nonresident students, including those of their accompanying dependents. The educational travel of international students is not included in this category, but in Transport.

Comparison of ANZ Services Index Categories and ABS BPM6 Classification

Finance	6. Insurance & pension services
	6.1 Direct insurance
	6.1.1 Freight insurance
	6.1.2 Life insurance
	6.1.3 Other insurance
	6.2 Reinsurance
	6.3 Auxiliary insurance
	6.4 Pension services
	6.5 Standardised guarantee services
	7. Financial Services
	7.1 Explicitly charged & other financial services
	7.2 FISIM (financial intermediation services charged indirectly measured)
	<hr/>
Other	1. Manufacturing services on physical inputs owned by others
	2. Maintenance & repair nie
	4. Travel services³
	4.1 Business travel
	4.2 Personal travel
	4.2.3.2 Other personal travel
	5. Construction services
	9. Telecommunication, computer & information services
	9.1 Telecommunication services
	9.1.1 Telephone services
	9.1.2 Other telecommunication services
	9.2.1 Computer services
	9.2.1.1 Hardware & software consultancy
	9.2.1.2 Data processing
	9.2.2 Information services
	9.2.2.1 Database services
	9.2.2.2 Newsagency subscription services
	9.2.3 Other computer & information services

³ About 85 per cent of 'Other' comprises Travel (excluding Educational Travel).

Comparison of ANZ Services Index Categories and ABS BPM6 Classification

Other	<p>11. Personal, cultural & recreation services</p> <p>11.1 Audiovisual & related services</p> <p>11.1.1 Royalties on film, television, home entertainment & other audiovisual</p> <p>11.1.1.1 Film royalties</p> <p>11.1.1.2 Television royalties</p> <p>11.1.1.3 Home entertainment royalties</p> <p>11.1.1.4 Other audiovisual royalties</p> <p>11.1.2 Audiovisual services nie</p> <p>11.2 Other personal, cultural & recreational services</p> <p>11.2.1 Health services</p> <p>11.2.2 Education services</p> <p>11.2.2.1 Education consultancy</p> <p>11.2.2.2 Correspondence courses</p> <p>11.2.2.3 Services through educational institutions</p> <p>11.2.2.4 Other educational services</p> <p>11.2.3 Other</p> <p>11.2.3.1 Sporting & entertainment services</p> <p>11.2.3.2 Off-shore gambling services</p> <p>11.2.3.3 Other nie BPM6 Classification</p> <p>12. Government goods & services nie</p> <p>12.1 Embassies & consulates</p> <p>12.1.1 Missions expenditure</p> <p>12.1.2 Employees expenditure</p> <p>12.2 Military units & agencies</p> <p>12.3 Other</p>
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Appendix 3: Mode Of Delivery And Data Coverage

The World Trade Organization's (WTO) General Agreement on Trade in Services (GATS) defined four modes of services delivery, namely:

- Cross-border trade (Mode 1). This is a mode of service supply where services are supplied from the location of one country into the location of the consumer. An example is architectural design services, supplied by an architect in one country by post or electronic mail to consumers in another country.
- Consumption abroad (Mode 2). A mode of service supply where services are supplied in the territory of the producer to the consumers of another country. This mode of supply requires that the consumer of services move abroad. An example is the travelling abroad to receive: medical treatment or to enrol in an education program.
- Commercial presence (Mode 3). A mode of service supply or trade where services are supplied through a business or professional establishment that has re-located to be near the consumer or opened a new business presence in another market, i.e. foreign direct investment, of one member of the agreement in the territory of another. An example is the establishment of a branch of a foreign bank or of a franchising outlet in a foreign location.
- Temporary movement of natural persons (Mode 4). A mode of service supply where services are supplied by nationals of one country moving to the consumers' country. This mode includes both independent service providers as well as employees of the services providers of another country. Examples include consultants, teachers and actors of one country supplying services through their physical presence in the consumers' country, or the managers of a multinational enterprise.

By definition, the ABS services trade statistics based on Balance of Payments used in this report do not cover transactions under Mode 3. This implies possible understatement of the roles of certain industries which involved more of Mode 3 transactions, such as Financial Services. Unfortunately, there is little information available to characterise such bias for the case of Australia. For the world as a whole, the share of each individual mode in the value of services trade has been roughly estimated at⁵:

- Mode 1 : ~ 35 per cent
- Mode 2 : ~ 10–15 per cent
- Mode 3 : ~ 50 per cent
- Mode 4 : ~ 1–2 per cent

⁵ Magdeleine, J. and Maurer, A. (2008), "Measuring GATS Mode 4 Trade Flows", Staff Working Paper ERSD-2008-05, World Trade Organization, Economic Research and Statistic Division.

Appendix 4: Data Tables

Appendix Table 1: Total value of trade in goods and services between Australia and Asia16 countries and the rest of the world, \$bn, 2007-08 prices.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Exports + Imports										
Asia16										
Goods	134.32	134.15	141.02	145.20	165.28	183.40	197.18	210.02	232.27	10.59
Services	23.21	25.49	25.16	24.53	27.78	29.83	31.17	34.69	39.75	14.58
Total	157.53	159.65	166.18	169.73	193.06	213.24	228.35	244.71	272.02	11.16
ROW										
Goods	125.14	125.65	134.20	138.63	142.81	142.25	146.84	158.23	161.80	2.25
Services	49.10	45.30	45.68	48.18	52.29	53.40	55.62	61.49	67.15	9.22
Total	174.24	170.95	179.88	186.80	195.09	195.65	202.47	219.72	228.95	4.20
Exports										
Asia16										
Goods	89.37	89.84	89.67	86.37	95.33	104.68	108.09	111.55	122.81	10.09
Services	14.46	16.31	16.25	15.69	16.75	17.95	18.63	20.02	22.19	10.85
Total	103.83	106.15	105.91	102.07	112.08	122.63	126.73	131.57	145.00	10.21
ROW										
Goods	67.24	71.43	72.84	71.79	68.74	63.40	65.11	66.48	60.59	-8.86
Services	26.13	24.68	24.65	24.84	25.38	25.27	26.91	28.54	29.68	4.01
Total	93.37	96.11	97.49	96.63	94.12	88.67	92.02	95.01	90.27	-4.99
Imports										
Asia16										
Goods	44.95	44.31	51.36	58.83	69.95	78.72	89.08	98.47	109.46	11.16
Services	8.75	9.18	8.91	8.84	11.03	11.89	12.54	14.67	17.56	19.68
Total	53.70	53.49	60.27	67.67	80.98	90.61	101.62	113.14	127.02	12.26
ROW										
Goods	57.90	54.21	61.36	66.84	74.07	78.84	81.73	91.75	101.21	10.31
Services	22.97	20.62	21.03	23.33	26.91	28.13	28.71	32.95	37.47	13.73
Total	80.87	74.84	82.39	90.17	100.98	106.98	110.44	124.70	138.68	11.21

Appendix Table 2: Total value of trade in services between Australia and select Asian16 countries and regions, \$bn, 2007-08 prices.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Exports + Imports										
China	1.68	2.15	2.62	3.00	3.90	4.48	4.55	5.32	6.23	17.09
India	0.78	0.87	0.76	0.87	1.18	1.65	1.99	2.59	3.61	39.47
Indonesia	2.04	2.18	2.00	1.75	2.01	1.81	1.40	1.65	2.10	27.36
Japan	5.78	5.73	5.26	4.94	5.31	5.25	4.99	4.62	4.77	3.14
Korea	1.21	1.58	1.43	1.62	1.57	1.78	2.12	2.37	2.39	0.68
ASEAN6	9.90	10.39	10.45	9.81	11.09	11.82	12.68	14.56	16.91	16.12
CLMV	0.52	0.58	0.61	0.61	0.71	0.79	0.87	1.14	1.46	27.44
ROW	52.44	49.52	49.72	51.87	56.30	57.46	59.59	65.57	71.54	9.11
Total	74.35	72.98	72.84	74.46	82.08	85.04	88.20	97.83	109.01	11.43
Export										
China	0.97	1.47	1.81	2.18	2.81	3.28	3.49	4.03	4.69	16.53
India	0.57	0.70	0.57	0.66	0.91	1.32	1.60	2.10	2.94	40.15
Indonesia	1.31	1.39	1.26	1.17	1.06	0.95	0.91	0.95	1.03	7.58
Japan	4.10	4.01	3.91	3.40	3.53	3.39	3.20	2.74	2.33	-14.98
Korea	0.94	1.27	1.15	1.21	1.26	1.46	1.73	1.89	1.83	-3.24
ASEAN6	5.60	6.08	6.08	5.69	5.67	5.95	6.06	6.60	7.61	15.25
CLMV	0.26	0.33	0.30	0.30	0.29	0.33	0.38	0.51	0.69	35.46
ROW	28.16	27.14	27.06	27.10	27.66	27.49	29.08	30.68	31.77	3.55
Total	41.91	42.38	42.15	41.70	43.18	44.17	46.45	49.51	52.90	6.84
Import										
China	0.71	0.68	0.81	0.82	1.10	1.20	1.07	1.29	1.53	18.82
India	0.21	0.17	0.19	0.21	0.27	0.33	0.38	0.49	0.67	36.57
Indonesia	0.73	0.79	0.74	0.59	0.96	0.86	0.49	0.70	1.08	54.44
Japan	1.68	1.72	1.36	1.54	1.78	1.87	1.79	1.88	2.44	29.44
Korea	0.27	0.31	0.27	0.40	0.31	0.33	0.39	0.48	0.56	16.16
ASEAN6	4.30	4.31	4.37	4.12	5.43	5.87	6.63	7.96	9.30	16.83
CLMV	0.26	0.25	0.30	0.31	0.43	0.46	0.49	0.63	0.76	20.94
ROW	24.28	22.37	22.65	24.77	28.64	29.97	30.51	34.88	39.77	14.00
Total	32.44	30.60	30.69	32.76	38.90	40.87	41.74	48.32	56.11	16.12

Appendix Table 3: Total value of trade in services between Australia and Asian16 countries and the rest of the world by industry, \$bn, 2007-08 prices.

Services Industry	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Exports + Imports										
Asia16										
Business Services	1.62	1.99	2.10	2.28	2.24	2.41	2.69	3.01	3.56	18.19
Education	3.78	4.89	5.21	6.08	6.96	7.62	8.13	9.20	10.93	18.74
Finance	0.43	0.44	0.45	0.45	0.43	0.53	0.52	0.59	0.64	7.95
Transport	7.88	8.01	7.54	7.09	8.31	9.04	9.85	10.35	12.04	16.34
Other	9.50	10.15	9.85	8.64	9.84	10.23	9.97	11.53	12.58	9.08
Total	23.21	25.49	25.16	24.53	27.78	29.83	31.17	34.69	39.75	14.58
ROW										
Business Services	8.16	8.26	8.59	8.99	9.11	9.64	10.67	13.47	15.84	17.59
Education	1.67	2.21	2.33	2.61	2.83	2.98	3.39	3.95	4.72	19.54
Finance	2.76	2.47	2.44	2.49	2.47	2.42	2.62	2.80	2.76	-1.26
Transport	11.86	11.38	11.11	11.78	13.57	13.86	13.57	14.02	14.01	-0.08
Other	24.65	20.99	21.21	22.30	24.31	24.50	25.37	27.25	29.83	9.44
Total	49.10	45.30	45.68	48.18	52.29	53.40	55.62	61.49	67.15	9.22

Appendix Table 4: Total value of trade in services broken down (by export and import) between Australia and Asian16 countries and the rest of the world by industry, \$bn, 2007-08 prices.

Services Industry	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change 2007-08
Exports										
Asia16										
Business Services	0.85	1.16	1.25	1.34	1.35	1.49	1.70	1.67	1.84	10.32
Education	3.57	4.65	5.02	5.86	6.73	7.37	7.89	8.96	10.62	18.46
Finance	0.27	0.31	0.31	0.28	0.24	0.29	0.27	0.30	0.34	14.05
Transport	3.67	3.78	3.41	2.77	3.00	3.17	3.34	3.29	3.83	16.23
Other	6.11	6.41	6.26	5.44	5.43	5.62	5.43	5.80	5.57	-3.99
Total	14.46	16.31	16.25	15.69	16.75	17.95	18.63	20.02	22.19	10.85
ROW										
Business Services	4.09	3.98	4.11	4.10	4.25	4.43	5.17	6.17	6.73	9.01
Education	1.31	1.84	1.97	2.17	2.37	2.53	2.89	3.41	4.18	22.37
Finance	1.47	1.39	1.40	1.33	1.31	1.14	1.26	1.19	1.17	-1.50
Transport	5.24	5.59	5.29	5.32	5.50	5.46	5.40	5.36	5.13	-4.26
Other	14.01	11.88	11.88	11.94	11.95	11.70	12.19	12.41	12.48	0.57
Total	26.13	24.68	24.65	24.84	25.38	25.27	26.91	28.54	29.68	4.01
Imports										
Asia16										
Business Services	0.78	0.83	0.86	0.94	0.88	0.91	1.00	1.35	1.72	27.92
Education	0.20	0.24	0.19	0.22	0.23	0.25	0.24	0.24	0.31	29.28
Finance	0.15	0.13	0.15	0.17	0.19	0.24	0.25	0.29	0.30	1.84
Transport	4.22	4.23	4.13	4.32	5.31	5.88	6.51	7.06	8.21	16.40
Other	3.40	3.75	3.59	3.20	4.42	4.61	4.54	5.73	7.01	22.31
Total	8.75	9.18	8.91	8.84	11.03	11.89	12.54	14.67	17.56	19.68
ROW										
Business Services	4.07	4.28	4.48	4.90	4.86	5.21	5.50	7.30	9.11	24.84
Education	0.36	0.37	0.36	0.44	0.46	0.45	0.50	0.53	0.54	1.48
Finance	1.29	1.07	1.04	1.17	1.17	1.28	1.36	1.61	1.59	-1.09
Transport	6.61	5.79	5.81	6.46	8.07	8.39	8.17	8.66	8.88	2.51
Other	10.64	9.11	9.34	10.37	12.36	12.80	13.18	14.85	17.35	16.86
Total	22.97	20.62	21.03	23.33	26.91	28.13	28.71	32.95	37.47	13.73

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