

PROJECT PAPER 2



Export weakness, investment strength

The changing pattern
of Australia's integration
into the global economy

JOHN EDWARDS

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CEDA PROJECT PAPER 2 COMPETING FROM AUSTRALIA

About this paper

CEDA Competing from Australia Project Paper 2

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CEDA's activities: CEDA holds more than 250 events, seminars and chief executive roundtables each year, and publishes a range of research papers.

CEDA's mission: CEDA's research and forums identify and explore issues that influence the nation's long-term economic and social development.

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foreword

Export Weakness, Investment Strength is the second paper from CEDA's ambitious Competing From Australia research project. The project explores Australia's capacity to trade and attract investment. This paper, by long-time CEDA associate Dr John Edwards, seeks to describe our starting-point – where our trade and investment stands in 2007. From his description of our recent performance, Dr Edwards draws some important conclusions for government policy.

The paper shows there has been a downturn in export growth since 2000 with the deterioration in export performance disguised by the strength in commodity prices. Interestingly, the volume of manufacturing exports has increased faster than the volume of all goods exports since 2000. Somewhat unexpectedly, roughly half the decline in the rate of growth is attributable to a decline in the rate of growth of minerals, metals and energy exports. While the mining investment boom in the three years to 2006 will likely result in higher export production in coming years, most of the recent weakness is explained by supply constraints. Dr Edwards finds that a shift in policy to address factors that influence supply – infrastructure, education, training and retraining – is now required.

The decline in export growth contrasts sharply with the rapid increase in Australian direct investment abroad. The integration of Australian business into the global economy has accelerated with Australian direct investment abroad now rivalling foreign direct

investment in Australia. While Australia may not have a single international flagship company, plenty of successful Australian businesses are becoming global in outlook and emphasis.

CEDA has for some time now been stressing the importance of “hard” economic infrastructure such as ports, of investing in people and their skills, and of promoting innovation throughout the economy. As Dr Edwards' paper makes clear, these are the issues that will determine Australia's future economic development.

Dr Edwards has been a generous contributor to CEDA over many years. We are once again indebted to him for his work on this project, and to HSBC Australia for making him available to us. CEDA's Research and Publications Committee under Phil Ruthven has made valuable contributions to the development of this document. And we thank our sponsor, Invest Victoria, for their far-sighted commitment to analysing Australia's trade and investment future.



David Byers
Chief Executive Officer, CEDA

summary

Since 2000–01, Australia has seen slow growth in exports, but continued strength in outward foreign direct investment.

Export volumes grew by 56 per cent in the six years to 2000–01. In the next six years they grew by just 9 per cent. The principle sources of this growth slowdown were not manufacturing but rural exports, oil, metals, gold, and services, including higher education and overseas tourism. This slowdown in export volume growth has been disguised by rising prices for key commodities, notably iron ore and coal.

While export volume growth has flattened, Australia's outward foreign direct investment has risen sharply. On current trends, it will soon exceed inward foreign direct investment from other countries. The likely causes include Australia's high level of economic development, large services sector, strong competition laws and distance from other countries.

Overall, the export and foreign direct investment data show a nation with commodities industries needing to boost supply while a wide range of businesses, many of them services firms, rapidly globalise by investing offshore. Policy should respond by breaking down infrastructure bottlenecks, and by continuing to boost the supply of skilled labour and promote innovation.

export weakness

investment

strength

The changing pattern
of Australia's integration
into the global economy



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has worked in financial markets. Earlier in his career he was an economic and political reporter in Sydney, Canberra and Washington. He holds a PhD in economics from George Washington University and is the author of four books, including *Keating*, a best-selling biography of the former prime minister, and *Curtin's Gift*, a reinterpretation of the wartime prime minister.

The downturn in export growth

Though the global economy has experienced the strongest growth in human history and the prices of commodities produced by Australia have risen to stellar heights, the growth of Australian exports since the beginning of this decade has been persistently disappointing. At first assumed to be temporary, the downturn in export growth from 2000 has defied official forecasts and industry expectations. In the six years to the September quarter 2006, the volume of exports increased by only 9 per cent. In the previous six-year period, by contrast, it had increased 56 per cent. Because commodity prices rose by half as much again in the six



PHOTO: ISTOCK

years to the September quarter 2006, and were little changed in the previous six years, the value of exports increased much faster than the volume. Even so, the 42 per cent increase in the value of exports in the six years to the September quarter 2006 was less than the increase of 56 per cent in the six years to the September quarter 2000.

The decline in Australian export performance in the years since 2000 has been quite unexpected. For the financial year 2001–02 the Commonwealth Treasury forecast export volumes would increase 5 per cent. They fell by 1 per cent. The following year it forecast an increase of 6 per cent. They again fell, this time by 0.5 per cent. In 2003–04 it forecast an increase of 6 per cent. This turned out to be three times the actual rate of increase. Undaunted, Treasury forecast an 8 per cent increase in 2004–05. This was more than twice the actual increase of 3 per cent. In 2005–06 it forecast an increase of 7 per cent, which was again more than three times the actual increase of 2.2 per cent. If Treasury has been consistently correct, the volume of exports in 2005–06 would have been well over one-third higher than it had been in 2000–01. In fact, it was just one-sixteenth higher.

More recent data demonstrates only a marginal improvement in Australia's export performance. Through 2006 the volume of exports increased 4.1 per cent, better than the average of the past five years but well below the average of the two decades prior to 2000. The value of exports increased 11.3 per cent over 2006, a little better

than the average of the two decades to 2000. Nearly two thirds of the gain in value was due to higher prices rather than higher volumes of exports.

Treasury was certainly not alone in mispredicting Australian exports. Most private forecasts of export growth were similar to Treasury's. All these forecasts were consistent with expected global growth and past trends in Australian exports. Australian export growth since 2000 has been very much less than global growth and past trends led the forecasters to expect. It is a trend which invites examination.

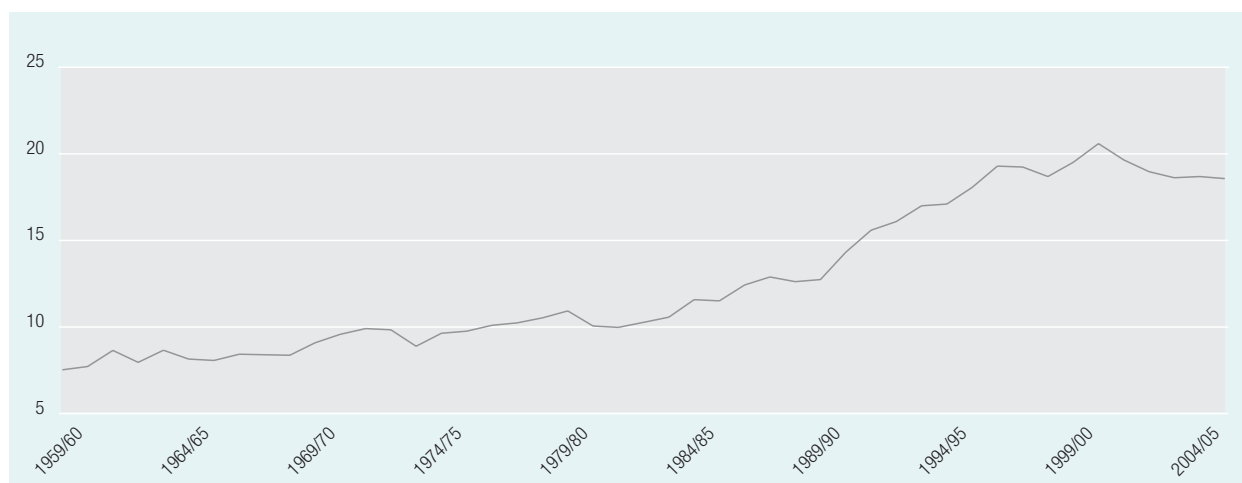
The downturn in export growth contrasts sharply with another measure of Australia's increasing integration into the global economy. The rapid increase in Australian direct investment abroad, which we examine later, demonstrates that in this dimension at least Australian industry has not lost the will or the ability to successfully compete in foreign markets.

This paper looks at the deterioration in Australia's export performance in the new decade, and the contrast between the slowdown in export growth and the acceleration in outward direct investment.

The successes of the past

The deterioration in export performance is all the more disturbing because one of the most prominent changes in the Australian economy in the 1980s and 1990s was a

FIGURE 1 EXPORTS, AS PERCENTAGE OF GDP, 1959–60 TO 2005–06



SOURCE: ABS, HSBC

remarkable acceleration in the growth of exports. It was the most widely cited symbol of Australia's economic renaissance after several decades of faltering growth and economic difficulty.

Though exports accounted for a large share of GDP in 19th-century Australia, two World Wars and the Great Depression in the first half of the 20th century, together with the growth of the services sector, construction, utilities and of a significant protected import substitution manufacturing sector after 1945, saw export growth slowing. At around 8 per cent, export volumes barely changed as a share of GDP in the 20 years from 1961 to 1981.

From the early 1980s, however, exports as a share of GDP began to rapidly increase. Mineral and energy discoveries, the resurgence of Japan and then the rapid development of Korea and other Asian tigers helped exports to grow faster than GDP. By 1991 exports were a little over 14 per cent of GDP. Export growth was checked by the Asian financial crisis in 1997 and 1998 but then resumed. By 2001 export volumes reached 19 per cent of GDP.

Not only had exports as a whole grown faster than GDP over those two decades, but the composition had dramatically changed. In 1980 manufactures¹ were 8 per cent of all exports. By 2000 they were just short of 20 per cent of all exports. The volume of manufactured exports over the 20 years had increased sevenfold. Though less spectacular service exports also rapidly increased from 16 per cent of all exports in 1980 to 22 per cent in 2000.

This prolonged export boom changed Australia. It brought thousands of domestic Australian businesses into competition in global markets. The sustained boom in exports stimulated and demanded changes in management and labour practices, efficiency, supply

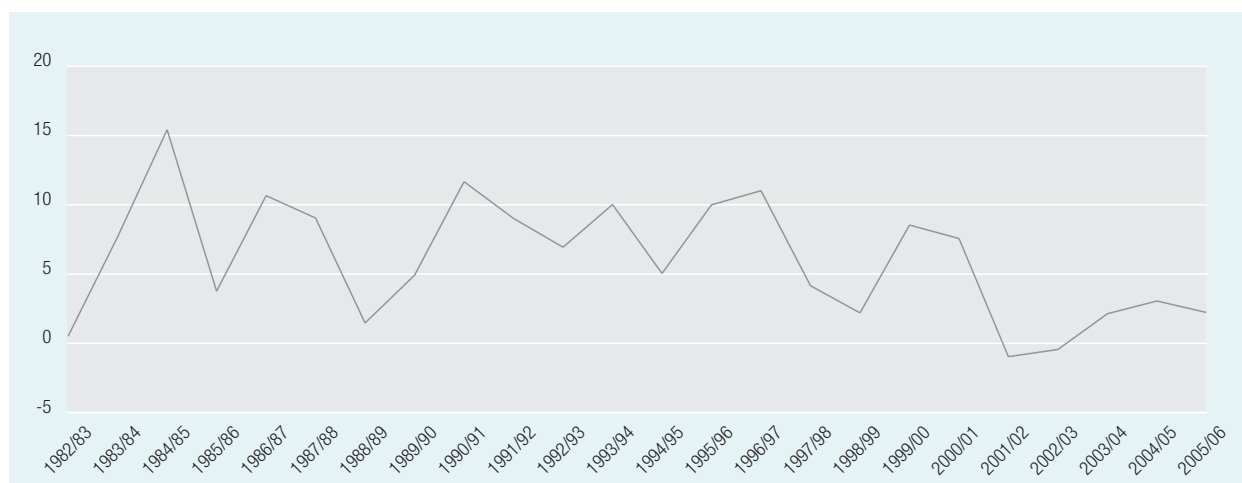
chain development and logistics, in transport and marketing, to meet the global standards to which businesses successfully aspired. It was accompanied by and depended upon a lower and more flexible exchange rate, lower import costs and lower labour costs, changed workplace regulations, and increased productivity.

Mining and farming have been export industries since the beginning of European settlement in Australia. In the 1980s and 1990s other sectors also began exporting an increasing share of their output. Australian services and manufacturing industries transformed themselves into major exporters. In 1981 exports were less than one-tenth of manufacturing sales. Twenty years later, the export share of sales had doubled, even while total sales of manufacturing output had increased by nearly half as much again. The motor vehicle industry, which had been highly protected and focused on the Australian market since inception, exported one-third of its output by the end of the 20th century. In manufactured products too numerous to catalogue, but including pharmaceuticals, precision instruments, metal fabrication and auto parts, Australian firms found and won export markets.

Inward-bound foreign travel grew so rapidly that by the end of the century tourism was one of Australia's major export industries. Education became an export industry, with Australian institutions attracting a disproportionately large share of foreign students compared to the traditional destinations of the United States and the United Kingdom. Wine became a \$1 billion export industry, and then a \$2 billion export industry.

What caused the export surge? On the demand side the continued rapid growth of East Asia was certainly one factor, with Australian exports to the region growing faster than those to Europe and North America. Over the 20 years to 2000, Japanese output nearly doubled, while the output of Korea, Taiwan and Singapore quadrupled.

FIGURE 2 EXPORT VOLUME GROWTH, PERCENTAGE CHANGE, 1982–83 TO 2005–06



SOURCE: ABS, HSBC

From well under half of all exports in 1980, exports to the major Asian markets accounted for well over half in 2000 – even though the share had dropped in the aftermath of the Asia financial crisis.

The growth of new export products, such as tourism and education, reflected the changing demand of foreign customers. It is significant too, that the most rapidly growing markets for Australia's elaborately transformed manufactures were the tiger economies of East Asia.

On the supply side, new supplies of minerals and energy added to Australia's export base over the period.

But while new products and new markets were important, so was the renovation of Australia's economic framework. Tariff cuts initiated in 1988 and again in 1991 reduced costs for Australian exporters, and forced manufacturers to either meet import competition or cease business. If they could meet the competition of foreign producers at home, they could meet it elsewhere. Australian manufacturing began exporting.

Export supply and demand were both encouraged by an important long-term result of the 1983 float of the Australian dollar. The result was that the average exchange rate after the float was much lower than the average exchange rate before the float. Between 1984 and 1986 the trade-weighted value of the currency fell 50 per cent. Over the 20 years from 1986 to 2006 the average trade-weighted value of the Australian dollar was 40 per cent less than its value in the 15 years from 1970 to 1986².

The slowdown

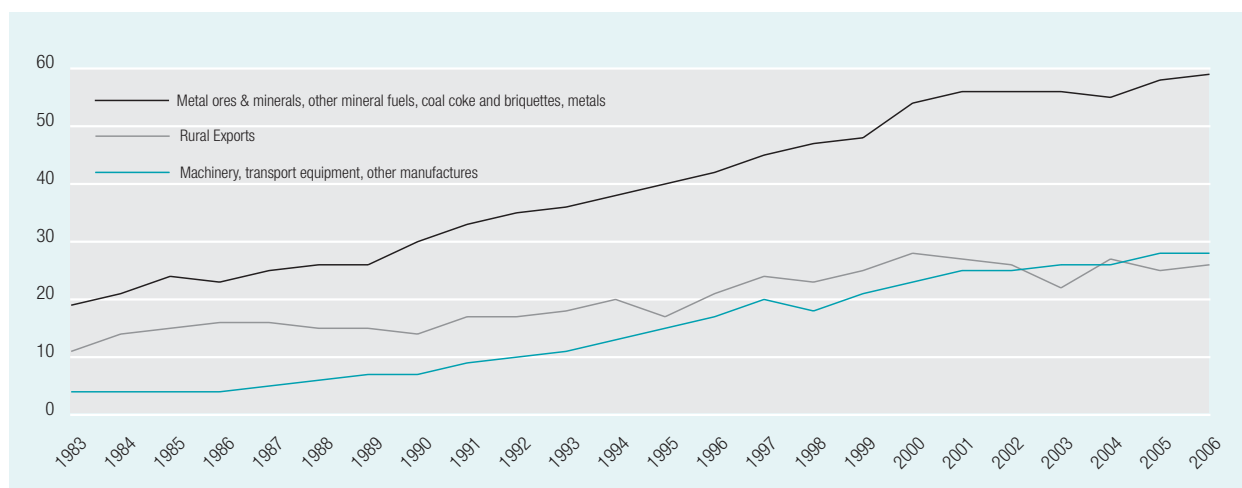
At the beginning of the new century, however, this solid growth abruptly slowed. The year 2001 proved to be the peak of the 20-year export boom. By 2005 export volumes had fallen to just over 17 per cent of GDP, from 19 per cent in 2001. It was the biggest and most sustained fall in export volumes as a share of GDP in 45 years of data.

Exports accounted for nearly one-third of the entire growth of output or GDP over the 20 years from 1980–81 to 2000–01. In the five financial years to 2005–06, they accounted for only a little more than one-sixteenth of output growth.

The value of exports has increased at roughly the same rate as nominal GDP, but three-quarters of that growth in export value in the new decade was accounted for by increases in prices – principally mining commodities, and especially iron ore and coal. This strength in commodity prices disguises the deterioration in Australia's underlying export performance. The cumulative trade deficit, or gap between exports and imports, has been markedly wider as a share of GDP in the five years to 2005–06 than in the previous five years. Without commodity price increases, however, it would have been very much worse. Had export prices remained the same in 2005–2006 as in 2000–2001, for example, and had nothing else changed, the trade deficit in 2005–06 would have been twice as high as it was. It would have been 3.6 per cent of GDP instead of 1.8 per cent of GDP³, or \$35 billion instead of \$17 billion.

There was considerable concern too, that the composition of export growth also appeared to change in the new decade. In terms of values (though as we shall see, the story is quite different for volumes), export composition began reverting towards an earlier pattern. Rather than growing faster than exports as a whole, the value of services and manufacturing exports increased much more slowly in the six years to 2005–06 than in the previous six years. The value of manufactured exports increased only 9 per cent over the six years, compared to over 60 per cent in the previous six years. The value of service exports increased only 21 per cent over the period, compared to an increase of nearly 60 per cent in the previous six years – even disregarding the spike in service exports due to the sale of TV rights in the 2000 Olympic Games.

FIGURE 3 THE MAKE-UP OF EXPORTS BY VALUE, SEASONALLY ADJUSTED \$ BILLION, 1983–2006



SOURCE: ABS, HSBC

Australia's poor export performance contributed to the size of trade deficits during the first half of this decade, and thus to the current account deficit and the addition to Australia's net foreign liabilities over the period. By 2006 net foreign liabilities had increased to 60 per cent of GDP. The ratio will continue to increase faster than GDP, and the servicing costs of foreign debt faster than national income, unless and until Australia can run a permanent trade surplus – a circumstance uncommon in its whole history. Improving exports is a necessary part of the adjustment Australia must eventually make if it is to retain control of its own economic destiny.

Before examining the downturn in more detail, we should note that most of the general supply and demand factors that encouraged the higher rate of growth of exports in the 20 years to 2000 continued into the new decade. East Asian growth was checked by the 1997 financial crisis, but has since picked up. China has become a much more important market to Australia. There has been no lack of demand for Australian commodity exports. The currency has been up and down, but on average has remained cheaper than it was in the years before 1983. So too, the change in Australia's economic framework and in the intensity of competition remain as they were a decade ago.

In examining the downturn in more detail, we will look first at export volumes and then at export values. In each case we will look at minerals and energy commodities, farm commodities, manufactured exports, and services. The results of this enquiry are unexpected.

Export volumes

Compared to the previous 20 years, the rate of growth of exports volumes has plummeted during this decade. Over the financial years 2000–2001 to 2005–2006 the increase in the volume of goods exports averaged 2.1 per cent, less than a third of the average growth of 7.3 per cent from 1982–1983 to 2000–2001.

It is no surprise that rural exports have fallen, given back-to-back droughts. The volume of rural exports fell by an average of 0.7 per cent a year in the new decade, compared to an increase of 4 per cent on average in the years of rapid export expansion from 1982–83 to 2000–01.

It is also no surprise that the volume of metal ores and minerals exports has been growing quite well in the new decade. This category includes iron ore. The average annual increase in the volume of metal ores and minerals exports from 2000–2001 to 2005–06 was 6 per cent, compared to a 4 per cent average annual increase from 1982–83 to 2000–2001. However, given the strength of global demand and the incentive of a sharp increase in prices, the volume increase on the previous decade is somewhat less than might have been expected.

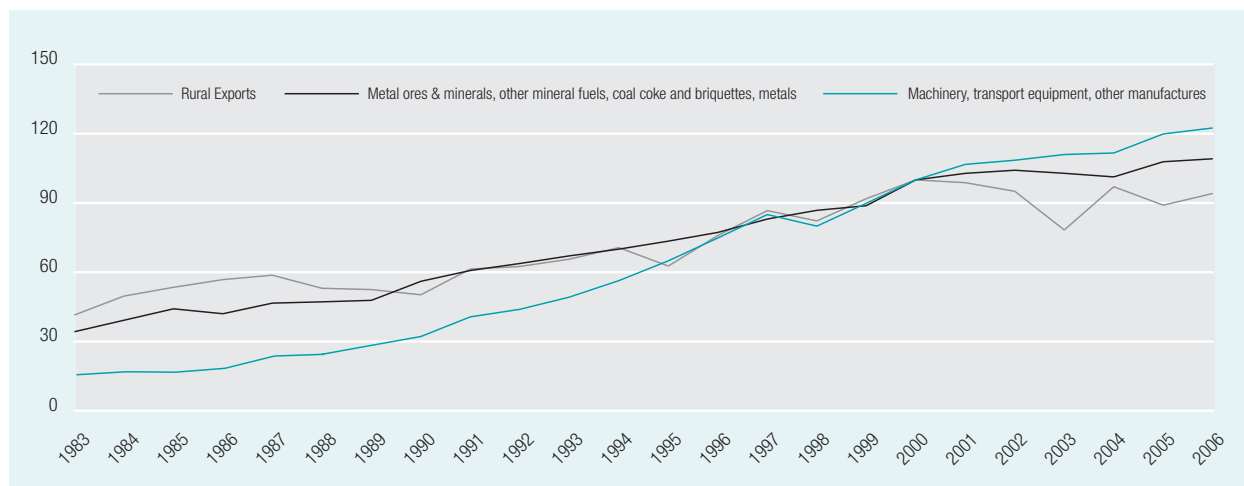
Rural exports are down and metals ores exports are up, but in many other respects the pattern of export growth is surprising.

Though widely thought to be a high growth performer, for example, the rate of growth of the volume of exports of coal, coke and briquettes fell to an average of 5 per cent from 2000–2001 to 2005–06, compared to a 7 per cent average in the years from 1982–83 to 2000–01. This reflects both constraints in mine and transport capacity, and also China's ability to increase its own production of coal.

Metals exports (excluding non-monetary gold) fell by an average of 1.6 per cent a year from 2000–01 to 2005–06, compared to an average increase of 6.4 per cent from 1982–83 to 2000–01. This is probably due not to falling global demand but to the closing down of some metals production in the late 1990s and early in the 2000s.

Reflecting declining oil production, the volume of exports of "other mineral fuels" have fallen on average 2.7 per cent a year this decade, compared to a gain of 12 per cent a year in the earlier period.

FIGURE 4 THE MAKE-UP OF EXPORTS BY VOLUME, INDEX, 1983–2006



SOURCE: ABS, HSBC

The volume of gold exports is well down. Gold exports rose an average of 26 per cent a year between 1982–83 and 2000–2001, and have on average fallen by 1.8 per cent a year since. Falling gold production is the main cause, though the earlier numbers were also inflated by large gold sales by the Reserve Bank of Australia.

Summing the major minerals, metals and energy exports categories (metal ores and minerals, coal coke and briquettes, other mineral fuels, and metals excluding gold) shows that the rate of growth of the total volume of these exports (measured in 2004–05 dollars) fell to 2 per cent in the years from 2000–01, less than one-third of the average growth rate of 6.6 per cent from 1982–83 to 2000–01.

After making up more than half of all goods exports through the 1970s and 1980s, exports of these metals minerals and energy as a share of all goods exports have declined to around 45 per cent in recent years. (Including non-monetary gold, the change in minerals, metals and energy is even more dramatic. Adding gold brings the total of these exports up to half of all goods exports. The average rate of growth from 1982–83 to 2000–01 climbs to 7 per cent, and falls to an average of 1 per cent in the new decade. The calculation is, however, influenced by 1997 gold sales by the Reserve Bank.)

Roughly half of the decline in the growth of Australian export volumes in the new decade is attributable to a decline in the rate of growth of minerals, metals and energy exports, widely believed to be growing exceptionally quickly.

This is remarkable enough. But what is equally remarkable is that even though growing much more slowly than in the earlier period, the volume of manufacturing exports has on average increased *faster* than the volume of all goods exports in the period

2000–01 to 2005–06. The volume of manufactured exports has been rising at roughly the same rate as the volume of coal exports. While exports of oil, metals excluding gold and gold itself have all declined in the 2000s, the volume of manufactured exports has increased.

The sum of the ABS categories of exports of machinery, transport equipment and “other manufactures” rose at an annual average rate of 4 per cent over the years from 2000–01 to 2005–06, compared to 11 per cent from the years 1982–83 to 2000–01. This group corresponds to elaborately transformed manufactures. Of its components, machinery exports slowed from an average of 14.4 per cent to 4.7 per cent, transport equipment from 13 per cent to 2 per cent, and other manufactures from 10 per cent to 4.5 per cent. These three categories of manufactured exports have doubled in importance in the last 20 years. In the mid-1980s they accounted for 10 per cent of goods exports. Today they account for 20 per cent.

Services export growth also slowed, from an annual average of 8 per cent – slightly above the average of goods exports in the earlier period – to an annual average of 2 per cent, or slightly below the average of goods exports in the later period. This calculation is distorted by the sale of media rights to the Sydney Olympics, which were booked in 2000. Even so, the level of services exports has been flat for most of this decade. Travel services increased a little, but there was a gentle decline in “other services”. There are measurement issues here that need to be borne in mind. The volume of overseas tourist services is not directly included, but it is separately estimated and shows steady growth over the last decade or more. It has also proved difficult to measure the value of education services exports. But as a share of export volumes overall, services accounted for around one-quarter, so the slowdown in services credits contributed to the slow growth of exports overall.

It is apparent that the slowdown in the growth of volumes of exports is quite widely based, but taking into account the change in growth and their relative importance in the export mix, *most of the slowdown is due to rural exports, oil, metals, gold, and services.*

The story is not much changed if we take a more recent period. It is again the case that the real weakness is in some commodity exports (see Appendix 2).

Export values

The story with export values is different, but not quite as different as one might expect.

The difference between values and volumes is the influence of price changes. These changes may be in the foreign currency or international prices of the goods and services. They may be changes in Australian dollar prices independent of currency changes, though it is unusual to have major exports priced in Australian dollars. The recorded value of the exports may also change because of changes in the value of the Australian dollar, independently of a change in foreign currency price.

The foreign exchange value of the Australian dollar is volatile, and over longer periods its influence may not be important. But from the end of 1996 to the first quarter of 2001 the Australian dollar depreciated, from peak of nearly \$US0.80 to a low of a little under \$US0.50. This huge move had the effect of increasing the Australian dollar value of exports priced (as most commodities are) in US dollars. The subsequent appreciation from under \$US0.50 to around \$US0.75 had the opposite effect.

"... most of the [export growth] slowdown is due to rural exports, oil, metals, gold, and services."

Quite apart from the effect it may or may not have had in increasing the competitiveness of Australian exports or encouraging capital and labour into producing exports, the currency depreciation thus had the mechanical effect of increasing export values in the second half of the 1990s, and diminishing them in the new decade. Since volume growth was also declining, the effect would have been to reinforce a slowdown in value growth. As we shall see, however, it was offset by increases in the US dollar prices of some commodities, especially metals, in the new decade.

Though less marked than with volumes, there is still a marked slowdown in export values growth in the past 5 years compared with the previous 18 years. The value of goods exports increased at an average rate of 10.2 per

cent in the earlier period, and 5.6 per cent in the most recent period.

The decline in rural exports is again an important part of the story, with an average increase of 7.8 per cent in the earlier period and an average fall of 2.6 per cent in the latter. The improvement in metal ores and minerals exports is more marked, with an 8.2 per cent average annual increase in the first period and 15 per cent in the second. In terms of volumes, the growth of coal exports slowed in the second period. In terms of values, it accelerated quite markedly, from an average 9 per cent in the first period to a 21 per cent increase in the second. The growth of oil exports slowed markedly from 20 per cent average growth in the first period to 1.3 per cent average growth in the second. Metals fared better in values than volumes, though the growth rate declined. It was 11 per cent in the first period and 3 per cent in the second.

Probably because of the exchange rate appreciation in the past five years, along with stiff global competition, the value of more elaborately transformed manufactured exports did not increase as fast as volumes in this period, whereas the reverse was true of the earlier 18-year period. Machinery exports fell 1.4 per cent on average in the second period after rising 5 per cent on average in the first period; transport equipment rose only 1.5 per cent after rising 13.4 per cent on average in the earlier period, and other manufactures rose only 2 per cent a year on average compared to 13.4 per cent on average in the earlier period.

The growth of gold exports was well down, but values were better than volumes.

Corresponding to the change in volumes the annual average growth in the value of services exports slowed to 3 per cent this decade, compared to a 12 per cent average in the previous 18 years.

It is evident from these results that the main contributions to the marked decline in the rate of growth of export values came from rural exports, services, elaborately transformed manufactures and oil. These were only partly offset by sharp increases in the values of exports of metals ores and coal.

In the two major periods we have been looking at, export growth slowed in the second period compared to the first, but it slowed more for volumes than values. It was also true that commodity exports were by and large responsible for the decline in volumes growth, while the decline in value growth was more broadly based and the performance of manufactures and services in particular showed more deterioration.

Volumes versus values

Movement in volumes and values are both important, for different reasons. It is the change in values of exports and

imports which is recorded in the trade balance, which is part of the current account balance. Even with no change in the volume of exports, a change in the value of exports will change the trade balance and therefore the current account balance. Since a current account deficit must be matched by an equal addition of liabilities to foreigners (whether as additional investment inflow, or additional foreign borrowing), the size of the current account balance is important.

The value of exports is also important in changing dollar incomes of Australians. Even without higher volumes, a higher value of exports will increase profits for exporters and see labour and capital attracted towards that industry.

The standard calculation of “real” GDP or after inflation output and income will eliminate the independent influence of price changes. The percentage increase in the value of exports will be reduced by the percentage increase in the price of exports, and the result is the percentage change in the volume of exports. The bigger the price increase, the more will be taken off export values growth to reach export volumes growth. The same will apply to imports. When the value is adjusted for price changes in this way to arrive at the underlying volume change, it is said to be “deflated”.

The ABS also publishes a GDP measure intended to show an effect on real incomes of a change in Australia’s terms of trade, or the ratio of export prices to import prices. The technique it uses here is essentially to deflate exports by the change in import prices and imports by the change in export prices. If export prices are rising faster than import prices (which has been true in Australia most of this decade), then the effect of this calculation is to increase apparent export volumes and decrease apparent import volumes. Since export volumes are added to the calculation of GDP and imports are subtracted from it, the overall result is to increase real GDP (and real incomes) compared to the normal method of calculation.

Price is also important, of course, because sooner or later changes in relative prices cause change in volumes. Higher relative prices ought to cause more production, lower relative prices less.

In these respects the value of exports is significant, even if there is no change in volumes. But the change in volumes is also important. While price changes may guide changes in production, the average price of an export will stabilise over time (other than for a general inflation trend) and the returns to exporters will be determined by changes in volume. It is also true that it is the volume of exports that shows actual production of tonnes of iron or coal, and that is therefore most closely tied to the number of employees in the industry, the number of mines, factories and facilities. It is volumes that are counted in the normal calculation of GDP.

The differences in trends between volumes and values is instructive. It guides us to what is better than it appears, and what is worse than it appears. Because the volume of manufactured exports is rising while the value is falling, for example, we can conclude that this export category has not become uncompetitive. It is doing better than it seems. Because the volume of coal exports is falling while values are rising, we can conclude that increases in supply are constrained. There is clearly a problem with coal exports.

Explaining the downturn

It is apparent from the detailed examination of export categories that no single reason explains Australia’s poor performance since 2000. It does seem clear that demand influences have played an important role for manufacturing and for services.

For manufacturers, the high real effective exchange rate and the appreciation of the Australian dollar against the US dollar from the bottom of its range to the upper part of its range in the years from 2000 to 2006 would certainly have cut profit margins and discouraged sales.

Even so, the fact that the volume of manufacturing exports rose faster than the volume of commodity exports over the period suggests the price effect on either demand or supply was less than might have been expected. The mechanical effect of currency appreciation in lowering the Australian dollar returns from sales invoiced in foreign currency is unavoidable, and would show up as reduced value of exports. But the increase in volumes indicates that Australian manufactures produced more, despite lower Australian dollar prices.

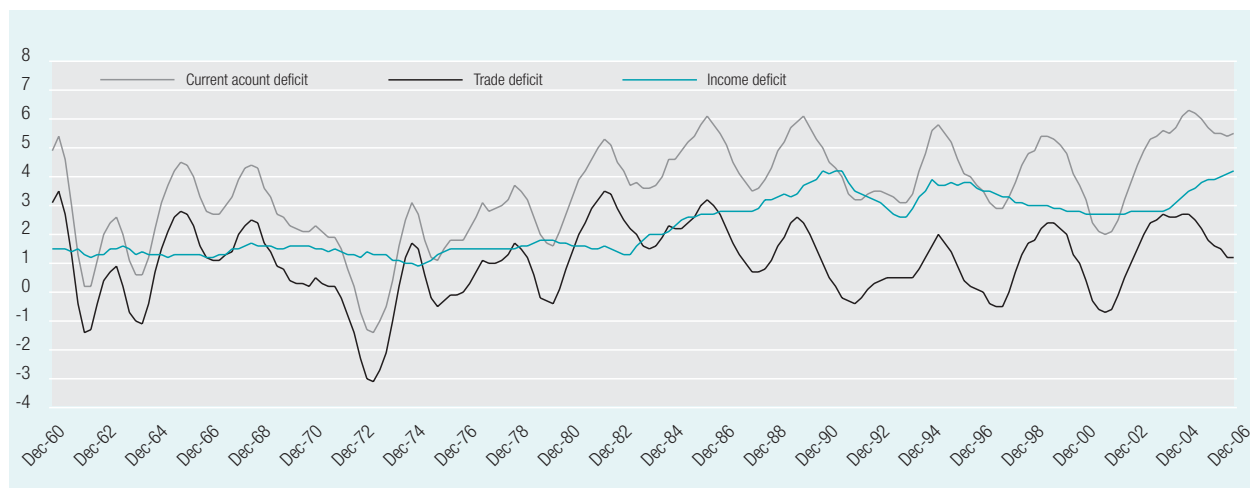
It is also true that the value of some elaborately transformed manufactures has been growing quickly. This is true of the ABS export categories of inorganic chemicals, pharmaceuticals, fertilisers, plastics, chemicals, metals manufactures, power-generating equipment, general industrial machinery and equipment, electrical equipment, and professional, scientific and controlling instruments.

Wine is another high value-added product, not included in the manufacturing totals, that has done well. The rate of growth has slowed, but the value of beverage exports nonetheless increased by over one-third to just short of \$3 billion in the five years to 2006.

The area of greatest disappointment in Australian manufacturing exports has been motor vehicles. The level of exports has held up quite well, with exports in 2006 at \$3.8 billion, only a little below the level of \$4.3 billion in 2000 when the currency was much cheaper. However, in the previous six years motor vehicle exports had more than doubled.

Metals may be thought of as simply (as opposed to elaborately) transformed manufactures. By value, some

FIGURE 5 AUSTRALIA'S CURRENT ACCOUNT DEFICIT AS PERCENTAGE OF GDP, 1960–2006



SOURCE: ABS, HSBC

have done well. Not surprisingly, the biggest increase by value was for non-ferrous metals, which include copper and aluminium. By contrast, iron and steel exports have fallen due to rationalisation of the Australian industry, offshore production, and the manufacturers' discovery that domestic sales were far more profitable than export sales.

The decline in services sector export growth has been due to slower demand growth. This is true of tourism, which has been hit hard by the fall in long-distance travel after September 11 2001. Australian dollar appreciation, higher aviation fuel prices and higher fares may also have contributed to slower growth. It took three years for visitor arrivals to return to where they were in June 2001. Numbers subsequently increased, but at the end of 2006 tourist arrivals were not much higher than they had been two years before. After very rapid growth in the 1990s, the growth of foreign student numbers at Australian institutions slowed in the new decade. This reflected the higher exchange rate as well as the expansion of China's own education institutions.

For Australian commodities, supply constraints rather than falling demand explain most of the weakness since the turn of the decade. This is certainly true of rural exports, which were cut by drought earlier in the decade and again in 2006. It is also true of oil and gold exports. The volume of oil exports in 2006 was half the volume at its peak in 2000, and the value was also a little less than it had been when it peaked in 2000 despite the increase in price. The value of gold exports nearly doubled in 2006 compared to the previous year, but there had not been much increase over the previous five years. While exports of coal have increased, they have not increased as much as in the past two decades – despite markedly higher prices. Constraints in coal exports are quite apparent in the shipping delays in the major coal ports of Newcastle and Dalrymple Bay in Queensland. Iron ore exports have increased faster this decade than in

earlier decades, but there too the industry reports difficulty in meeting demand and considerable investment has been undertaken to increase future production.

Why exports matter

Because export growth has fallen, Australia's trade deficit has been higher than it would have been had exports continued to increase at the trend rate prior to 2000. This in turn means that the current account deficit has been higher than it would have been otherwise, and Australia has had to borrow more offshore to match the deficit. The decline in export performance coincides with the sharp increase in net foreign liabilities compared to GDP (see figures 5 and 6).

Net foreign liabilities are now 60 per cent of GDP. It can be shown that if Australia wants to stabilise net foreign liabilities at say 100 per cent of GDP, it must at that point permanently limit the current account deficit to a maximum of 5 per cent of GDP, and it must do so by running a trade surplus of 1 per cent of GDP (See Appendix 1). If it wished to limit foreign liabilities to 60 per cent of GDP, the required trade surplus would be lower, but it would still have to be permanent.

How hard is for Australia to move to a persistent surplus of exports over imports?

The required surplus is not big, but Australia has not run a consistent trade surplus for over 30 years – and then not for very long. In recent years the trade deficit has been 3 per cent of GDP. The move to a surplus of 1 per cent of GDP means exports have to be increased by 4 per cent of GDP or imports cut by 4 per cent of GDP, or some mix of the two. The current account surplus is also equal to the gap between domestic savings and domestic investment. Looking at the requirement for stabilisation of foreign liabilities to GDP from this point

FIGURE 6 AUSTRALIA'S FOREIGN LIABILITIES, PERCENTAGE OF GDP, 1988–2006

SOURCE: ABS, HSBC

of view, it means Australia has to save 4 per cent of GDP more than it does, or invest 4 per cent of GDP less, or some mix of the two.

Australia experienced a business investment boom in the three years to 2006, much of it in mining. No doubt, that investment will result in higher export production in coming years. It would take several years of growth at the rate achieved towards the end of 2006 to restore export volumes to the same share of GDP they had reached at the beginning of the decade.

The unexpected and disappointing export performance of the new decade caught Australia by surprise. The experience contains an important lesson. Almost all trade policy emphasis for the last several decades has been on measures to increase the foreign demand for Australian goods and services. This policy objective motivates Australia's leading participation in the World Trade Organisation and its search for regional trade agreements. It rationalises government support for export marketing through Austrade and export financing through EFIC and AusAid.

But the lesson of the new decade is that failures of supply can be as damaging as failures of demand. Accordingly, restoring Australia's export success and, in doing so, stabilising the rate of growth of foreign liabilities compared to GDP requires policies that influence supply. These include the removal of infrastructure bottlenecks, the provision of additional infrastructure to meet expected demand, programs in education, training and retraining that increase the supply of skilled workers, and programs that support the basic science, engineering and research and development that no single business can make commercially viable.

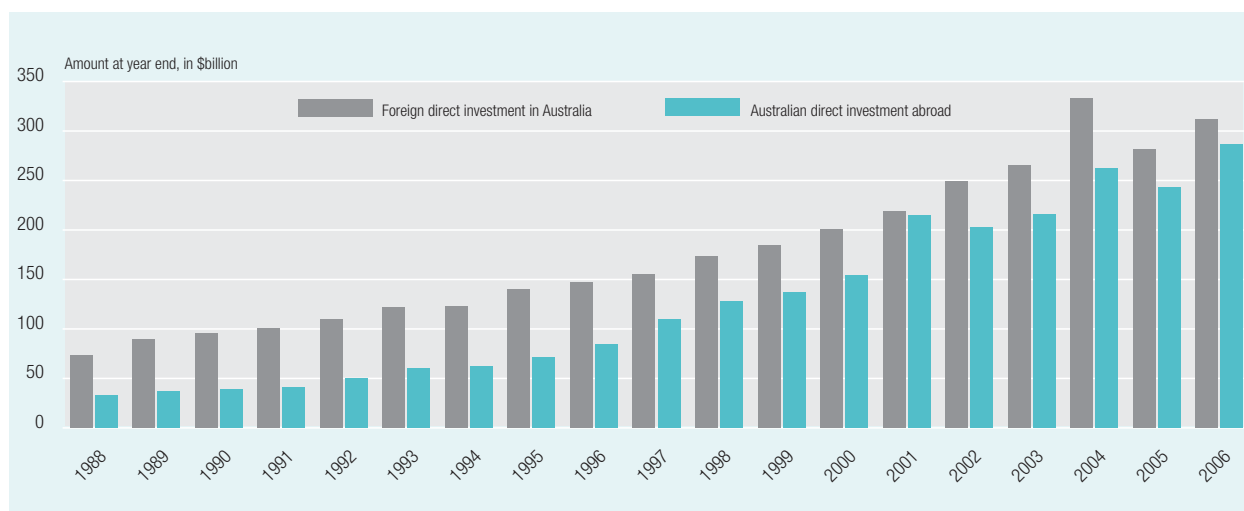
The investment revolution

Though the deterioration of export performance might suggest Australian business is less interested in seeking success in the global economy, the acceleration of direct offshore investment shows otherwise. Far from retreating from the global economy, Australian businesses integration into it has accelerated (see figure 7).

A quarter of a century ago the stock of Australian direct investment abroad was only one-fifth of the stock of foreign direct investment in Australia. (As distinct from portfolio investment, direct investment is where the investor owns ten per cent or more of the business). Even by the beginning of the 1990s, Australian investment abroad was less than half of foreign direct investment in Australia. Over the last two decades the stock of foreign direct investment in Australia has trebled, while the stock of Australian direct investment abroad has increased seven-fold. Australian direct investment abroad now rivals foreign direct investment in Australia. By the end of 2006 the stock of direct Australian investment abroad (AIA) was \$286 billion, compared to the stock of foreign direct investment (FDI) in Australia at \$312 billion. In just 20 years the stock of Australian direct investment abroad increased from 32 per cent to 92 per cent of the stock of foreign direct investment in Australia.

Given these trends, it will not be long before Australian business assets abroad exceed foreign business assets in Australia. It is already the case, for example, that the value of Australian direct investment in the US very considerably exceeds the value of US direct investment in Australia. Were it not for the change in the domicile of News Corporation, a transaction that reduced the stock of Australian investment abroad and at the same time increased the stock of foreign investment in Australia, Australian ownership of foreign businesses worldwide

FIGURE 7 AUSTRALIAN DIRECT INVESTMENT ABROAD COMPARED WITH FOREIGN DIRECT INVESTMENT INTO AUSTRALIA, AMOUNT AT YEAR END IN \$ BILLION, 1988–2006



SOURCE: ABS, HSBC

would already exceed foreign ownership of Australian businesses.

Australia does not have a single international flagship such as a Nokia or a Sony or a Phillips, but it does have plenty of successful businesses that have turned their experience of the Australian market to global advantage. Australian firms dominate parts of the US buildings materials business. They are expanding in insurance, medical technology, real estate, investment banking, mining and mining services, rural products, software – all sectors in which Australia developed world-class domestic firms which then expanded offshore.

In just ten years the value of Australian direct investment abroad has increased by a solid \$200 billion. This massive offshore expansion is not without risk. Many offshore expansions succeed, but as we have seen over the years, some do not. And the big push into offshore equity investment has also changed the structure of Australian net foreign liabilities. As a country we borrow abroad both to finance our current account deficit and to acquire foreign businesses. The result is that we borrow more than we otherwise would, and while our net equity liabilities have fallen, our net debt liabilities have dramatically increased. Net foreign debt is now ten times the size of net equity liabilities. This creates a potential vulnerability, but over the long haul the returns on equity will be higher than the returns on debt and we will be better off tomorrow for the energetic global expansion of Australian business today.

By 2005, many of the iconic corporations of Australia's earlier development were wholly or partly owned offshore. Mount Isa Mines had been purchased outright, and CRA absorbed wholly into Rio Tinto. BHP Billiton was still largely managed from Australia, but nearly two-

thirds of its ownership was offshore. The international media company News Limited, which began its life in Adelaide, had changed its domicile to the US.

But the wave of offshore investment by Australian businesses created a new generation of Australian-owned and operated businesses earning an increasing share of their revenue offshore and becoming global leaders in their fields. The two major retailers, the four big banks and Telstra remain very largely domestic businesses, but a great many of the rest of Australia's top 100 public corporations had internationalised by 2005. They included Westfield, Macquarie Bank, CSL, Resmed, Cochlear, Rinker, Boral, Brambles, QBE, James Hardie and many, many others.

Explaining the globalisation of Australian business

One common motive of investment abroad is the pursuit of lower labour costs in less developed economies. This motive explains some but not much of the boom in Australian direct investment abroad. Of the total of Australian direct investment offshore at the end of 2005, just under 90 per cent was located in OECD countries. The US economy, which on average has higher labour costs than Australia, accounted for a little less than half of the total stock of Australian investment abroad. The UK accounted for 17 per cent and New Zealand for 16 per cent.

Australian businesses owned smaller but significant assets in Canada, Germany and the Netherlands. The two biggest investment destinations in Asia were Singapore and Hong Kong, both economies with labour costs that match or exceed Australia's (though some investment in Hong Kong may be through Hong Kong into China). The stock of Australian investment in China was still

under \$1 billion at the end of 2005; in Indonesia it was only \$0.8 billion.

These shares in the stock of direct investment abroad have not much changed in recent years. Most investment continues to go into the US, the UK and New Zealand. Investment in China is growing, but remains quite small.

The forces driving this change are readily apparent. Businesses that succeed in Australia often do so against international competition, and in a market that has many of the same characteristics as other developed country markets. More effective competition law in Australia in the last two decades has forced successful Australian businesses to look offshore for expansion, rather than absorbing the domestic competition.

"... Globalisation encourages midsized specialists against national heavyweights."

The destination of foreign investment reveals a great deal about the motives and drivers of Australian investment abroad. Partly because of its small population, relatively high labour costs and the past decades of tariff protection, Australia has developed very few mass market manufacturing industries. It is typically these industries that have relocated their labour-intensive processes into East Asia over recent decades. Japan, Korea, and Taiwan, for example, have moved much of their manufacturing into China. Australia did not have much labour-intensive mass market manufacturing to move⁴.

A 2002 survey by the Productivity Commission asked companies why they invested offshore. Not surprisingly, it found that "improved access to overseas markets is by far the most important commercial factor influencing decisions by Australian firms to move offshore". In some cases and especially for manufacturers, lower labour costs were important. Other motives included closer proximity to shareholders, deeper capital markets, more congenial tax regimes, and a wider spread of market and production risks.

The typical Australian globaliser is a business that has been successful in Australia but has outgrown the relatively small home market. Stronger competition laws in Australia over the last few decades have discouraged domination of the home market by a single business, increasing the pressure to look offshore.

Economic globalisation increases the opportunities for differentiation and specialisation by vastly increasing the market size. One implication is that successful globalisers are not necessarily big businesses, though they will often

be dominant within their market segment in Australia. Offshore investment reflects specialisation rather than size. In the last decade or so the typical successful business has intellectual property, marketing and management skills and a business concept that have been successful in Australia and can be replicated elsewhere. Globalisation encourages midsized specialists against national heavyweights.

Australia is a wealthy OECD country, with similar characteristics to other wealthy OECD countries – especially the US, UK, Canada and New Zealand. For example, the Australian economy has a very large service sector that utilises world-class management, marketing and technology. Because of its characteristics and preferences it has developed particular skills in transport and logistics, medicine, real estate and residential development, funds management and finance generally, sport, gambling, farm technologies, mining and mining services.

Boral, Rinker and James Hardie dominate sectors of the US building materials market. The global businesses of medical technology firms CSL, Resmed and Cochlear are now much more important than their Australian businesses. In logistics, Brambles dominates the global market for shipping pallets. In finance, Macquarie Bank is important in infrastructure funds management, QBE in insurance, Westfield in shopping mall development and management, Lend Lease in construction, BHP and Woodside in mining, WorleyParsons in mining services, Foster's in alcohol, PBL in gambling and Amcor in packaging. These are just a few of hundreds of Australian businesses, large and small, public and private, which have substantial businesses offshore as well as in Australia.

Export failure, investment success

The deterioration in Australia's export performance is not due to the failure of Australian manufacturing to compete, as is sometimes supposed. On the contrary, the facts suggest that while manufacturing exports are not growing as fast as in the previous two decades, they have held up as least as well as exports of metals, minerals and energy this decade. The downturn in service export growth is related to lower demand growth for Australian education services, and lower growth in long haul flight tourism. Otherwise, much of the weakness has been precisely in those export categories where Australia is thought to be doing well – metals, energy and minerals. The shortcomings are in supply rather than demand, and the remedies must be at home rather than abroad. More attention to Australia's export infrastructure needs and workforce skills must be part of the solution. Meanwhile, as is apparent in the acceleration of direct business investment abroad, Australia's integration into the global economy flourishes in new ways.

Appendix 1: Stabilising Australia's net foreign liabilities

It is noted earlier in this paper that if Australia wants to stabilise net foreign liabilities at, say, 100 per cent of GDP, it must at that point permanently limit the current account deficit to a maximum of 5 per cent of GDP, and it must do so by running a trade surplus of 1 per cent of GDP.

The current account deficit is also equal to the excess of domestic investment over domestic saving. In principle, the additional liability created by the current account deficit is matched by additional investment, which will service that liability. Not all the additional investment, however, is capable of servicing the additional liability. About half of the increased investment in the last decade has been in the construction of houses. These houses provide many valuable services, but there is only a tenuous link between the quality and cost of the housing stock, and a nation's capacity to export and thus service debt.

Business investment has certainly increased, but not all of business investment is capable of servicing an increased liability by adding to output. The capital stock is roughly five times the size of annual investment, and each year roughly one-tenth of capital stock wears out. Depending on the asset type, around half of total new investment therefore only replaces worn out capital, rather than adding to the capital stock. Since this proportion of new investment does not increase the existing capital stock, it cannot add to output.

The best measure of an additional capacity to service debt is the addition to net capital stock. This varies but in the period 1990–91 to 2004–05 it averaged around 5 per cent of GDP. There is a good argument for saying the average addition to net capital stock (excluding housing) should also be the average maximum sustainable current account deficit. If the current account deficit is bigger than the addition to net productive capital stock, the additional liabilities must be bigger than the additional productive assets. Part of the offshore borrowing must have been used to sustain the existing capital stock, household consumption and house building. Since the additional debt has to be serviced, the result would be a relative decline in living standards in future years.

This rule sets a desirable limit to the current account deficit. It does not say the foreign lenders will not provide the funding to exceed it. It does say that beyond about 5 per cent of GDP Australians are using foreign savings to fund household consumption, house building, and the depreciation of existing business capital rather than the creation of assets which would service the new debt.

A deficit of around 5 per cent of GDP is actually higher than the 4.3 per cent average of the 14 years of expansion to the end of 2005, and would not therefore

appear to be a difficult challenge. It will increasingly become so, however, because of the iron arithmetic of the current account.

The first proposition in this arithmetic is that the Australian economy grows by around 5 per cent a year on average, including both increase in the volume of goods and services and the increase in their prices. The second is that net foreign liabilities are now equal to 60 per cent of GDP. The third is that foreign lenders and investors expect to receive a return of around 6 per cent on their Australian assets.

Those three propositions have some powerful implications. The first result is that any current account deficit higher than 3 per cent of GDP will see net foreign liabilities increasing as a share of GDP. (This is because 3 per cent of 100 is 5 per cent of 60.)

The second is that the cost of servicing existing liabilities is 3.6 per cent of GDP. (This is because 6 per cent of 60 is 3.6 per cent of 100.)

It follows that to stabilise net foreign liabilities at 60 per cent of GDP Australia would need to run a trade surplus of at least 0.6 per cent of GDP. This is because the net income deficit or cost of servicing foreign liabilities is a component of the current account deficit, and the net income deficit is 3.6 per cent of GDP. To get the current account deficit down to 3 per cent requires a trade surplus of 0.6 per cent.

When net foreign liabilities are 100 per cent of GDP the net income deficit will be 6 per cent of GDP. If at the point the economy is growing at 5 per cent, any current account deficit higher than 5 per cent of GDP will increase net foreign liabilities as a share of GDP. But since the net income deficit is already 6 per cent of GDP, it follows that Australia requires a trade surplus of 1 per cent of GDP to prevent liabilities continuing to increase faster than GDP. It also requires a trade surplus to prevent the current account deficit increasing and remaining beyond the critical level of 5 per cent of GDP.

So, the conclusion: if Australia does want to stop net foreign liabilities at 100 per cent of GDP in 2015, it must at that point to limit the current account deficit to a permanent maximum of 5 per cent of GDP, and it must do so by running a trade surplus of 1 per cent of GDP.

Appendix 2: Export volumes from 2004

In the period from 2004 onwards export volumes have continued to perform below their post-1982 trend rate of growth.

In the financial year 2004–05 the volumes of goods exports increased 3.2 per cent, and in the following year, 2.1 per cent. Rural exports were above the average of all goods in 2004–05, but fell in 2005–06, perhaps because drought conditions had initially stimulated sales as cattle were turned off, and then cut sales as the stock fell. Exports of metals ores and minerals were stronger than the average of all goods in both years, through at 3.9 per cent, the growth in 2005–06 was less than half the 8.4 per cent increase the previous year. Exports of metals fell in each of the three years to 2004–05, but then rose by a little over 9 per cent in 2005–06.

In 2005–06 manufactured export volumes increased well above the average of goods exports as a whole. Machinery exports expanded 11 per cent in 2004–05 and 4.2 per cent the next year, transport equipment (which includes cars) fell in 2003–04 and again in 2004–05 but rose nearly 6 per cent in 2005–06. The category “other manufactures” rose 6 per cent in 2005–06, and had increased in each of the previous years.

If the strength of manufactures is unexpected, so too is the persistent weakness of coal export volumes. They increased nearly 6 per cent in 2004–05 but fell by 0.6 per cent in 2005–06. So too, oil exports fell nearly 4 per cent in 2005–06 after increasing a little over 1 per cent in 2004–05. The volume of gold exports may be recovering. They rose nearly 9 per cent in 2005–06 after falling in the previous two years. However, gold exports are volatile from year to year and a sustained increase is not yet apparent.

Wine exports were widely said to be in trouble, but the numbers show the volume of beverage exports rose substantially in the three years to 2005–06, although at a little under 4 per cent export growth in 2005–06 it was less than a third of the previous year.

The weakness in volumes in the last year has been in coal, oil and rural exports.

ENDNOTES

- 1 Using the three Balance of Payments categories of machinery, transport equipment, and other manufactures. ABS 5302.0
- 2 Though the change was not as big, the real effective exchange rate also fell after the float. This is the exchange rate against a basket of currencies weighted for Australia's trade composition, and adjusted to take account of the different inflation rates in the countries concerned. The average real effective rate in the 23 years following the float was 27 per cent less than the same rate in the 13 years prior to the float.
- 3 Taking financial years, the value of exports in 2005–06 was 51 per cent higher than in 2000–01 and the volume 12 per cent higher.
- 4 A study by the Productivity Commission appears to show otherwise. It reported that for 1999–2000 two-thirds of the businesses investing offshore were in manufacturing, and that the share had increased from 51 per cent at the beginning of that decade. The ABS data on the destination of offshore investment, however, suggests that labour cost cannot be the predominant motive. Presumably, manufacturers have indeed invested offshore but they are by and large small businesses. For example, this would be true of textiles, clothing and footwear, which have been forced offshore by tariff cuts. (Very often these businesses will contract with a local firm to make the product, so the move offshore does not show up as investment.)

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