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South Australia's Overseas Exports

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Director's Note

Welcome to the fourteenth issue of *Economic Issues*, a series published by the South Australian Centre for Economic Studies as part of its Corporate Membership Program. The scope of *Economic Issues* is intended to be broad, limited only to topical, applied economic issues of relevance to South Australia and Australia. Within this scope, the intention is to focus on key economic issues — public policy issues, economic trends, economic events — and present an authoritative, expert analysis which contributes to both public understanding and public debate. Papers will be published on a continuing basis, as topics present themselves and as resources allow.

The author of this paper is Paul Huntley, Research Associate, SA Centre for Economic Studies.

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Michael O'Neil
Director
SA Centre for Economic Studies
March 2005

South Australia's Overseas Exports

Overview

South Australia exported \$8.9 billion of goods and services in 2003-04. The value of exports declined in 2002-03 and 2003-04 following a decade of sustained export growth. In volume terms, the average annual growth in State exports over the last fourteen years has been an impressive 10.7 per cent. More recently the volume trend has been essentially flat; the dip in values results from prices coming off very strong levels.

South Australia is becoming more oriented to overseas exports. The ratio of State overseas exports to Gross State Product now stands at 16.6 per cent. This is an historically above-average level. It is higher than the ratios for New South Wales and Victoria and is roughly on par with the national average. South Australia's historic reliance on interstate markets in lieu of overseas markets has diminished.

There has been strong growth in exports to the United States, the European Union, and the Middle East (although exports to the latter have fallen back in the last two years as the Australian dollar strengthened). Export growth to East Asia and ASEAN has been considerably weaker.

Ten years ago, about half of South Australian exports went to Asia. Over the course of the decade, the relative importance of the United States, Europe, and the Middle East as export destinations rose. State exports are now spread more evenly around the world, and thus the State economy is arguably better placed to ride out an economic downturn in any one region.

Historically, South Australia's main export commodities were unprocessed agricultural products, metals, and minerals. In recent years wine and motor vehicles have leaped ahead to take first and second place in our list of exports. They have been by far the biggest contributors to export growth. Together they now represent one-third of State exports.

Growth in manufactured exports has clearly been important to the fortunes of the manufacturing sector and has acted to offset notable losses in previously protected domestic markets since the 1980s. An important, but unresolved, question is the extent to which new exports are founded upon sustainable comparative advantage. To the extent that exports come from 'footloose' industries with marginal viability, their outlook is uncertain.

1. Trends in Aggregate Overseas Exports

According to the latest figures from the Australian Bureau of Statistics (ABS), South Australia exported \$7.942 billion of goods and \$0.979 billion of services to overseas customers, for a total of \$8.921 billion in 2003-04. This represented a fall of 4.7 per cent from total exports in 2002-03. Exports had also declined in 2002-03, by 7.2 per cent.

This two-year fall comes at the end of over a decade of sustained export growth. Figure 1 shows that from 1989-90 to 2001-02, exports measured in current prices increased in ten out of twelve years.

Figure 1
Overseas Exports
 South Australia – Current Price

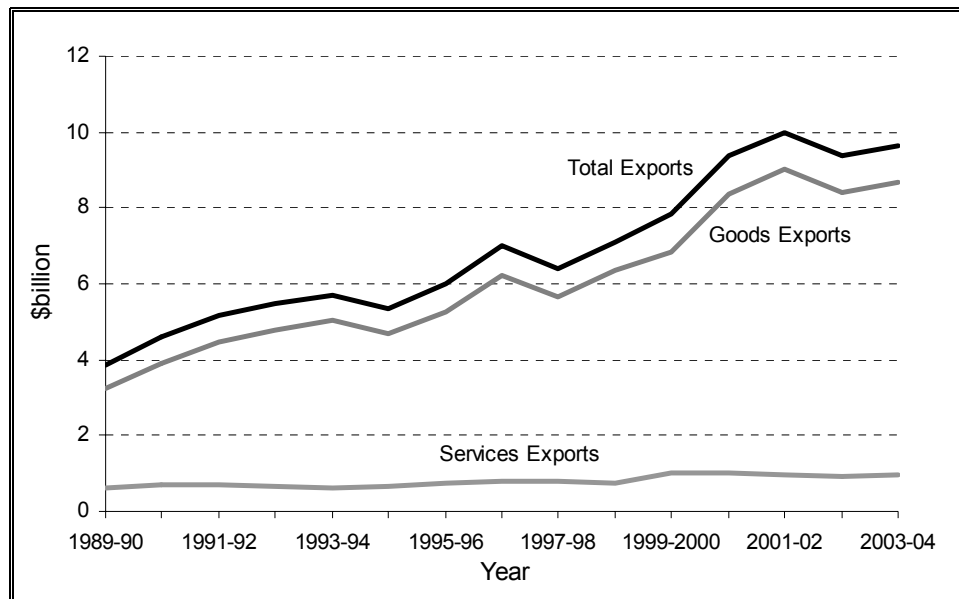


Source: ABS *AusStats*, 5220.0 Australian National Accounts: State Accounts, Table 12.

Figure 1 is based on current prices – the actual dollar amounts received in each year. However, this includes the effect of inflation, which means that we would tend to see stronger growth when inflation increases and weaker growth when it falls. For many purposes it is useful to consider a measure which strips out inflation. One such measure is the ABS ‘chain volume measures’. By eliminating the influence of export price movements, they give an indication of trends in export volume.

The volume estimates of South Australian exports tell a similar story to the current price figures. From 1989-90 to 2003-04, the volume of exports rose in twelve years and fell in only three. Over the course of one and a half decades, the export volume rose by 150 per cent (see Figure 2).

Figure 2
Overseas Exports in Real Terms
 South Australia – Constant Price (Chain Volume Measures)



Source: ABS *AusStats*, 5220.0 Australian National Accounts: State Accounts, Table 11. Data are at 2002-03 prices.

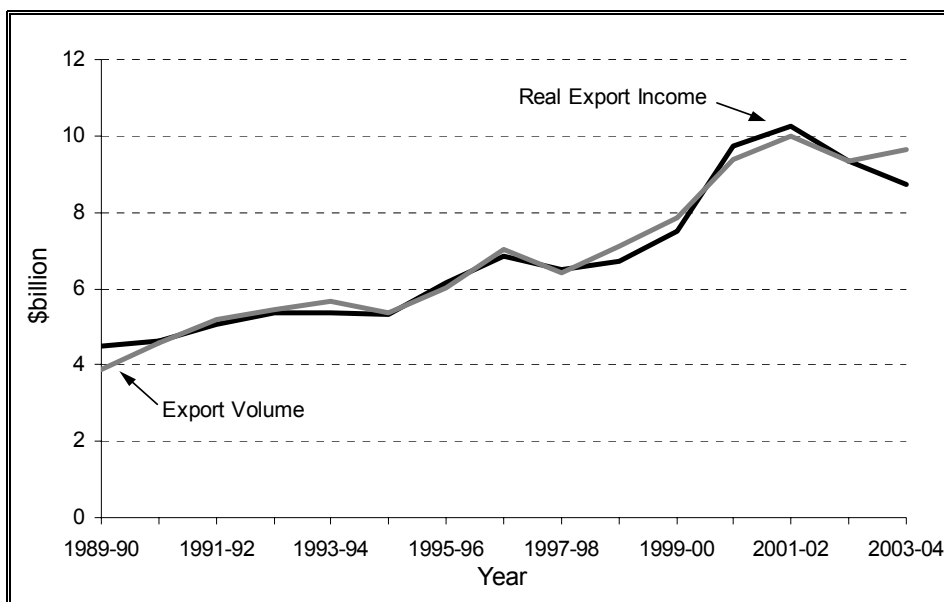
An alternative inflation adjustment involves considering the purchasing power of exports. Trends in the purchasing power of exports can differ from trends in export volumes inasmuch as the prices received from exports move differently from the prices of goods and services that are purchased with export income. A measure of the purchasing power of exports can be calculated by deflating export values by a price index for State final demand. This measure, which we will call 'real export income', is shown in Figure 3 below.

Figure 3 compares export volumes and real export income. The two move together quite closely year-to-year and over the long-term. This suggests that the predominant contributor to our export income growth has been volume growth and not favourable relative price trends.

Table 1 sets out, for several periods, the average annual growth in exports using the three measures discussed above: current price, constant price, and real export income.

Ideally one would consider as well trends in South Australia's interstate exports. A dollar earned from interstate exports is of course as valuable as a dollar earned from overseas exports, and historically South Australia's interstate exports have been greater than its overseas exports. But unfortunately there is no robust contemporary data with which to identify trends in aggregate interstate exports. It is likely that interstate exports have been growing rather more slowly than overseas exports.

Figure 3
Overseas Exports in Real Terms
 South Australia – Real Export Income and Export Volume



Source: Derived from ABS *AusStats*, 5220.0 Australian National Accounts: State Accounts, Tables 11 and 12. Data are at 2002-03 prices.

Table 1
Average Annual Growth in Exports to 2003-04: Alternative Measures
(Per cent)

Since:	1989-90	1993-94	1998-99	2001-02
Current Prices	11.5	9.3	9.4	-5.8
Constant Prices	10.7	7.0	7.2	-1.6
Real Export Income	6.7	6.3	6.0	-7.4

Source: Derived from ABS *AusStats*, 5220.0 Australian National Accounts: State Accounts, Tables 11 and 12.

2. Trend in Overseas Export Orientation of the South Australian Economy

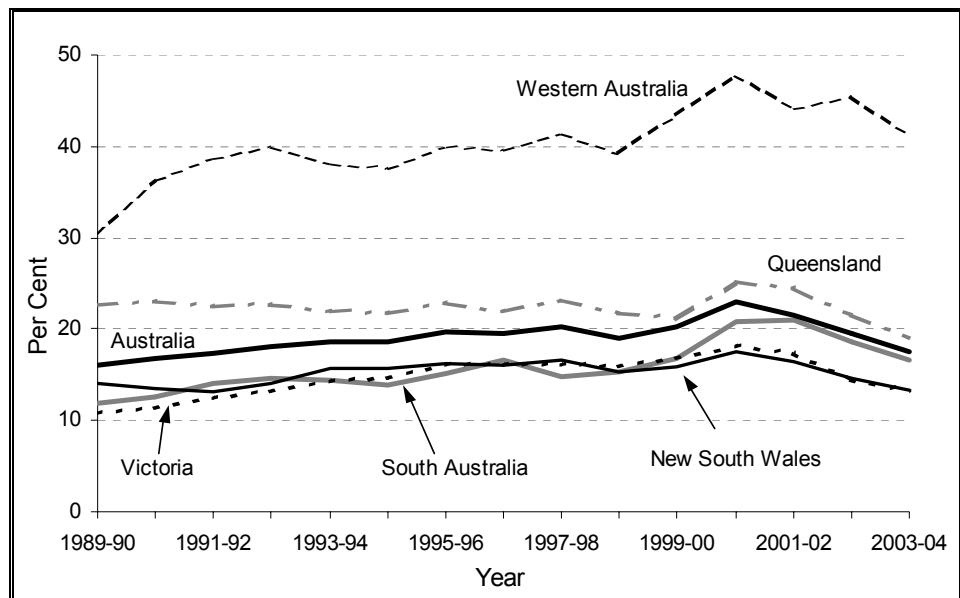
In 2003-04, overseas exports accounted for 16.6 per cent of the Gross State Product (GSP) of South Australia. This was slightly below the figure for Australia as a whole (17.6 per cent).

Figure 4 shows that the overseas export orientation of the South Australian economy, as measured by the ratio of exports to GSP, was around 13-15 per cent throughout the 1990s – similar to New South Wales and Victoria, lower than Queensland and much lower than Western Australia, which have the advantage of large tourism and natural resource industries respectively.

Strong export growth in 2000-2002 pushed the South Australian exports-to-GSP ratio to over 20 per cent. The ratio has now fallen back from that peak, but remains at an historically above-average level. Moreover, it is

now roughly equal to the Australian ratio and is higher than the ratios for New South Wales and Victoria. Although robust interstate export data are not available, it is highly likely that South Australia's historic reliance on domestic markets has diminished as the overseas export sector has grown.

Figure 4
Ratio of State Exports to Gross State Products



Note: The line for Australia plots the ratio of National Exports to Gross Domestic Product.

Source: ABS *AusStats*, 5220.0 Australian National Accounts: State Accounts, Tables 6, 8, 10, 12, 14, 16 and 22.

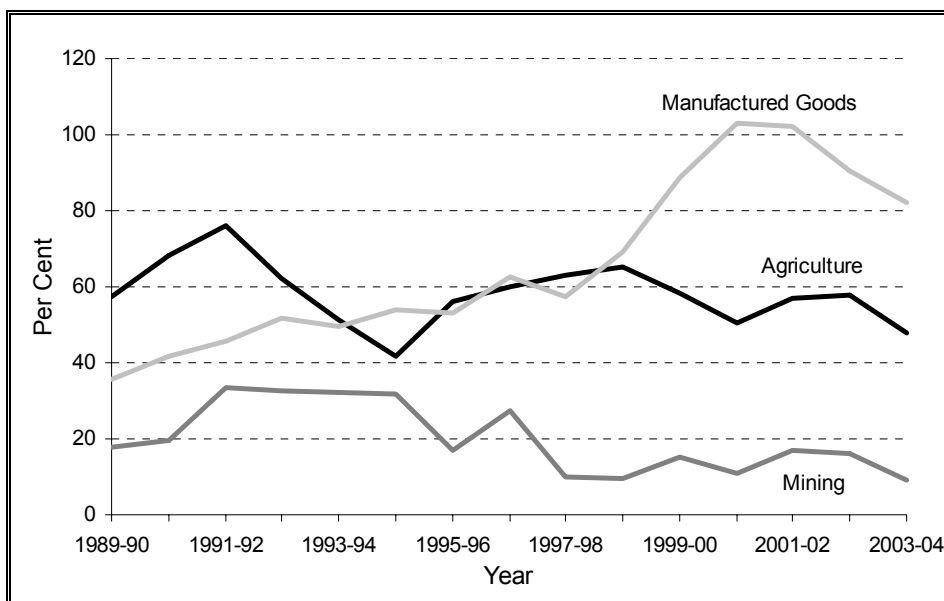
Export to GSP ratios can also give us a sense of the export orientation of major industry sectors. Figure 5 shows the ratio of export income to total factor income for each of the three main goods-producing sectors of the State economy. Manufacturing industry has substantially increased its export orientation since the late 1990s. The export orientations of agriculture and mining are volatile from year to year but arguably have weakened over the last ten years. This could relate to a greater extent of value adding, which would see agricultural and mining sector output flowing to a greater extent into the South Australian manufacturing sector and then to exports. Trends in exports of specific commodities will be examined later in the report.

3. Key Destination Markets

Merchandise exports to all major destinations have increased over the last fifteen years (in current values). However, the trends have varied significantly between countries.

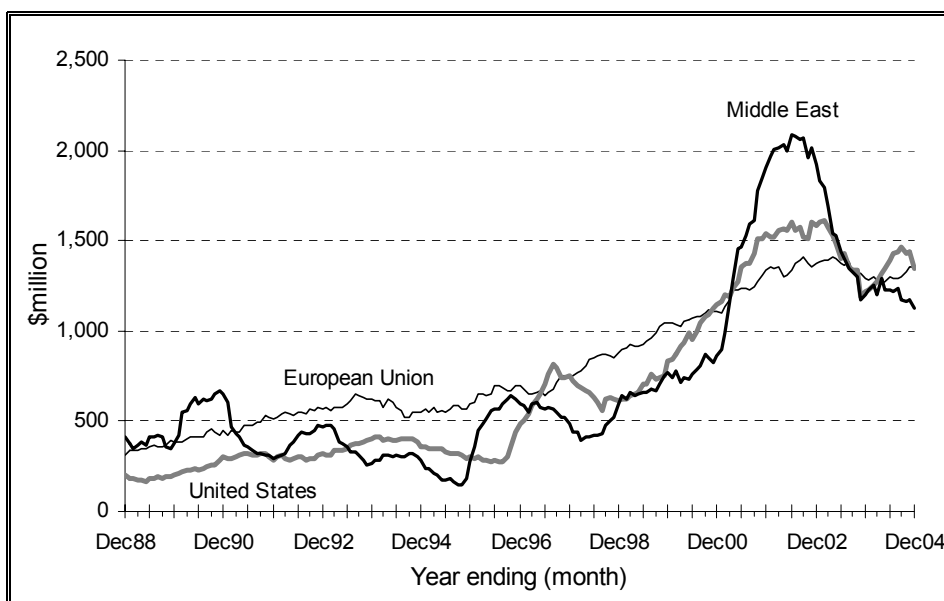
Most rapid growth has been in merchandise exports to the United States, the European Union, and the Middle East (see Figure 6).

Figure 5
Ratio of Export Income to Total Factor Income – Major Industry Sectors



Note: Industries classified according to Australian & New Zealand Standard Industrial Classification (ANZSIC) system.
Source: ABS unpublished data.

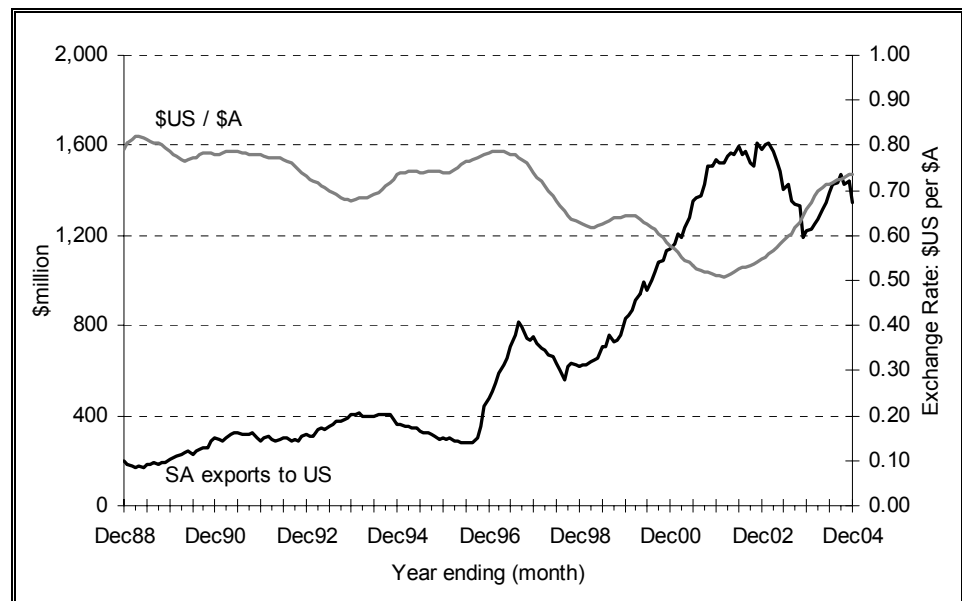
Figure 6
Major Export Destinations (Moving Annual Totals)



Source: ABS *AusStats*, 5368.0 International Trade in Goods and Services, Australia, Table 18.

As the graph shows, there was a very strong surge in exports to the United States and Middle East from the late 1990s through to 2003. This rise is partly attributable to valuation effects associated with a weak Australian dollar (especially in 2002), but strong volume growth also played a part. To illustrate the potential significance of exchange rate movements on export values, Figure 7 below shows the US dollar / Australian dollar exchange rate and the Australian dollar value of exports to the US.

Figure 7
US/Australian Exchange Rates and South Australian Exports to US

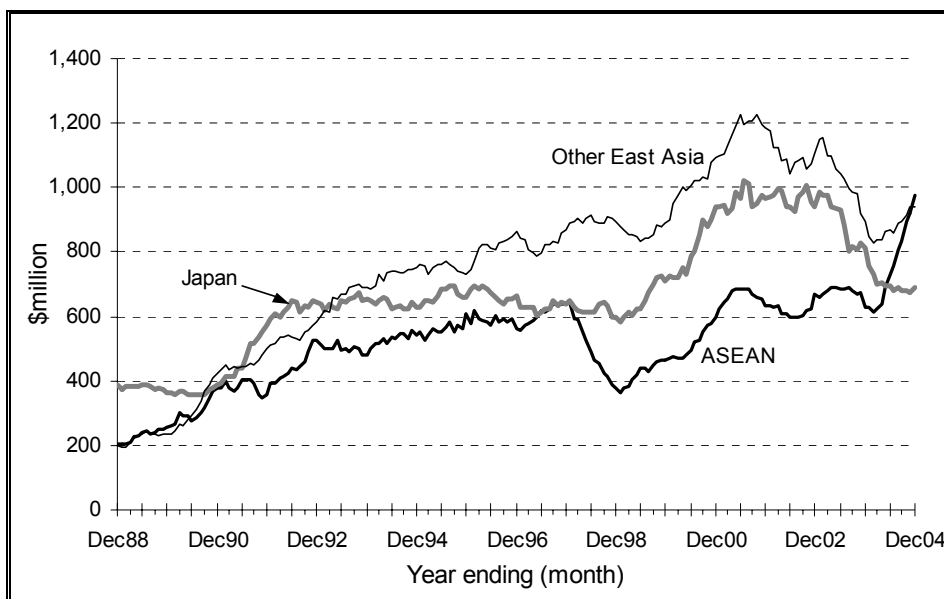


Source: ABS *AusStats*, 5368.0 International Trade in Goods and Services, Australia, Table 18 and Reserve Bank of Australia.

Merchandise exports to ASEAN have also experienced reasonably strong growth, and have recovered from the slump which occurred in the Asian financial crisis of the late 1990s. It is notable however that recent exports to Japan and East Asia have not been much stronger than levels recorded in the late 1990s, and are considerably below levels achieved in the early 2000s. There is a ready explanation in the case of Japan: until quite recently it was going through a prolonged period of stagnation. In the case of East Asia, exports to China steadily rose through the 1990s as the Chinese economy boomed. However, exports to Hong Kong, Taiwan, and South Korea have remained static or declined in recent years. Exports to Asia are illustrated in Figure 8.

To eliminate the 'noise' effects of random short-term movements, it is useful to compare the most recent five-year average figures (2000-2004) with those of a decade ago (1990-1994). These figures are presented in Table 2, which confirms that the US, EU and Middle East have been the main drivers of export growth: between them, they contributed 65 per cent of export growth over the ten-year period (while accounting for only 40 per cent of exports in the base period).

Figure 8
Major Export Destinations (Asia)
Value of Merchandise Exports



Note: 'Other East Asia' is an aggregate comprising exports to China, South Korea, Taiwan and Hong Kong.

Source: ABS *AusStats*, 5368.0 International Trade in Goods and Services, Australia, Table 18.

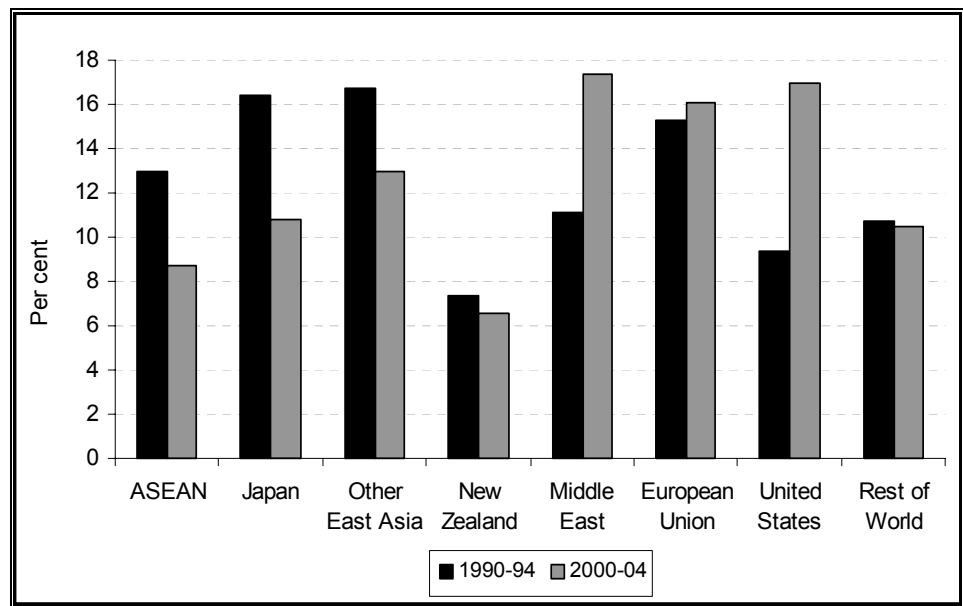
Table 2
Merchandise Exports to Major Regions

	Average Annual Exports				Growth from 1990-94 to 2000-04	Contribution to Total Growth	
	1990-94		2000-04				
	\$m	(%)	\$m	(%)	(%)	\$m	(%)
United States	334	9.4	1,366	17.0	309	1,032	+29
European Union	545	15.3	1,293	16.1	139	752	+21
Japan	578	16.4	870	10.8	50	292	+8
Other East Asia	589	16.7	1,043	13.0	77	454	+13
ASEAN	457	13.0	701	8.7	53	243	+5
New Zealand	263	7.4	532	6.6	102	269	+8
Rest of World	377	10.7	846	10.5	124	469	+13
Total	3,532	100.0	8,052	100.0	128	4,521	+128

Source: Derived from ABS *AusStats*, 5368.0 International Trade in Goods and Services, Australia, Table 18.

The large variation between regions in growth performance has led over time to a significant change in the composition of South Australian exports. Ten years ago, about half went to Asia (see Figure 9).

Figure 9
Exports by Major Destination: 1990-94 to 2000-04

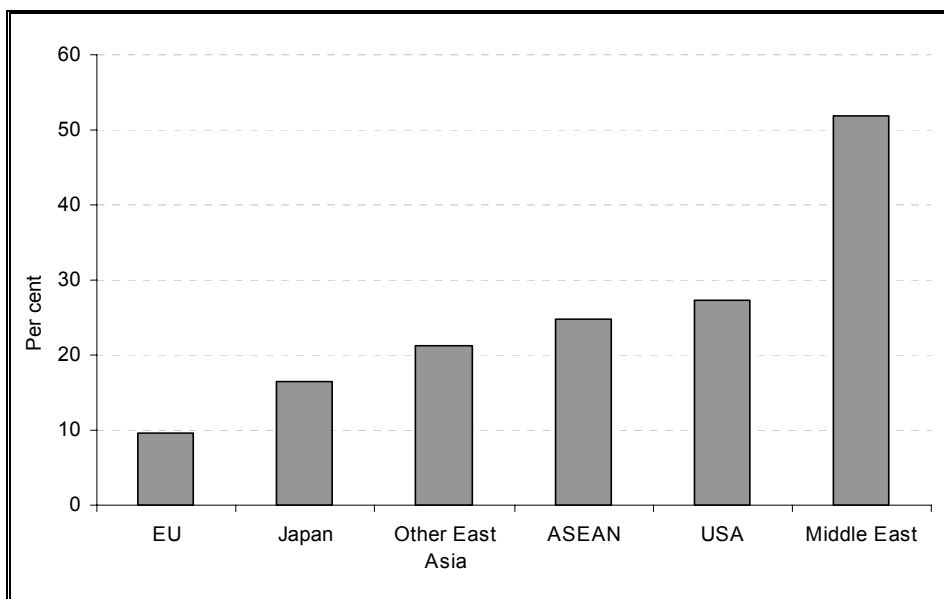


Source: ABS *AusStats*, 5368.0 International Trade in Goods and Services, Australia, Table 18.

However, the relative importance of Asia has since fallen, and exports are now spread more evenly across the world (see Figure 9). This suggests that South Australia is generally less exposed to economic cycles in Asia. Moreover, it has probably also achieved a less exposed position in aggregate by virtue of a more diversified market mix. As such, the South Australian economy is probably better able to ride out an economic downturn in any single region.

It is also worth noting that demand from some export destinations is more volatile than others. Figure 10 shows the variation in annual growth, as measured by the standard deviation.¹ Exports to the Middle East were particularly volatile.

Figure 10
Exports by Major Destination: 2000-04
Standard Deviation of Annual Growth Rate



Source: Derived from ABS *AusStats*, 5368.0 International Trade in Goods and Services, Australia, Table 18.

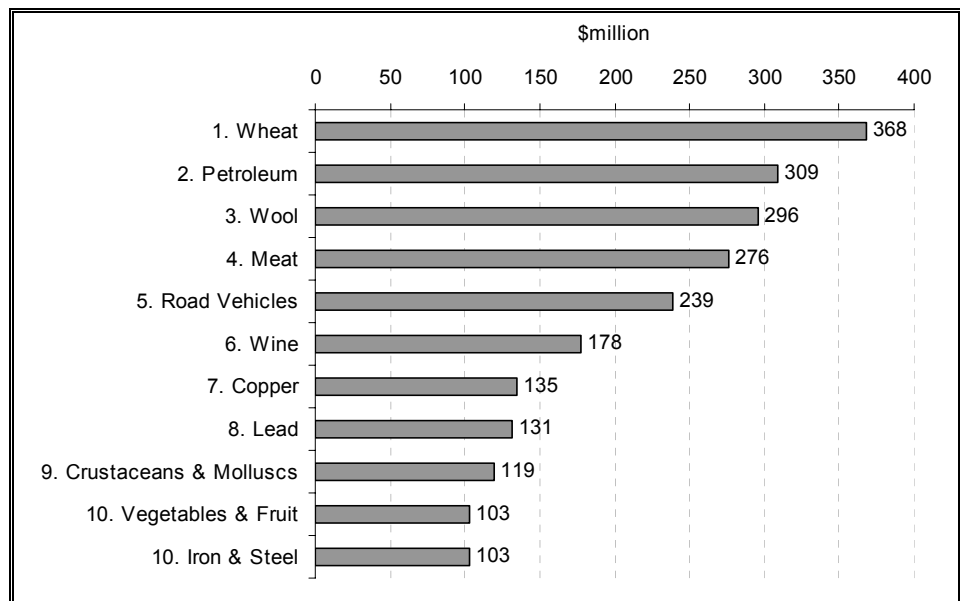
4. Commodity Breakdown of South Australian Exports

This part of the report examines the major commodities that constitute South Australian exports. As before, it is useful to compare the most recent five-year average figures (2000-2004) with those of a decade ago (1990-1994) to reduce the effect of annual volatility and obtain a picture of longer-term trends.

In the early 1990s, South Australian exports were primarily based on natural resources – unprocessed agricultural products, minerals and metals. Some of these had been mainstays of the State economy since the 19th century.

South Australia’s exports now involve a much higher level of processing. There is a much greater prevalence of processed agricultural products (particularly wine) and elaborately-transformed manufactures (particularly motor vehicles). Wine and motor vehicles have leaped over the traditional agricultural products to take first and second place in our list of exports.

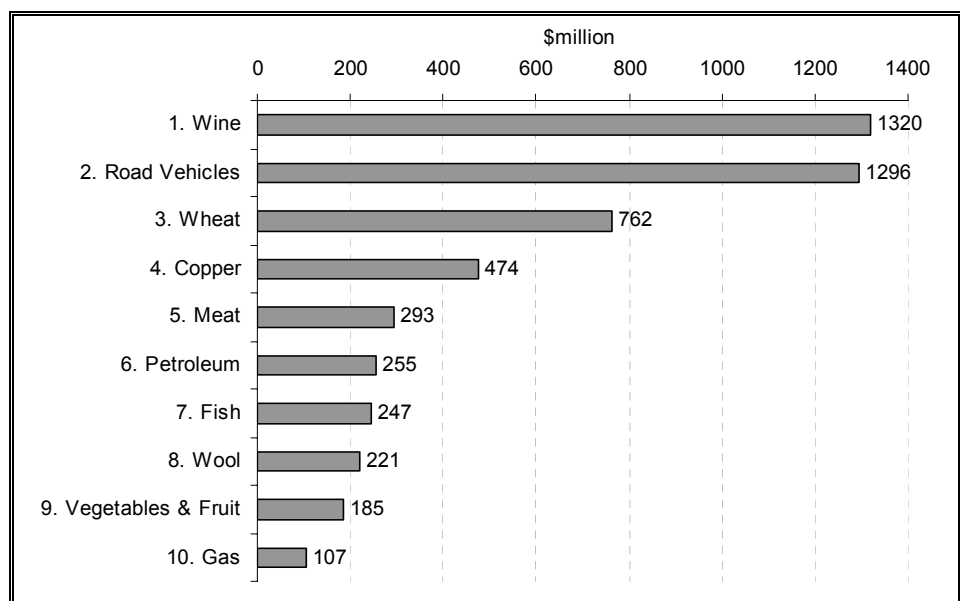
Figure 11
Top 10 Export Commodities, Annual Average, 1990-1994



Note: Commodities classified in this figure under Standard International Trade Classification (SITC) system.

Source: ABS unpublished data.

Figure 12
Top 10 Export Commodities, Annual Average, 2000-2004



Note: Commodities classified in this figure under Standard International Trade Classification (SITC) system.

Source: ABS unpublished data.

A possible downside is that our exports have become more concentrated on particular goods than they used to be. Wine and motor vehicles together now represent one-third of State exports. If there were to be a global or regional slump in demand for wine or motor vehicles, it would have a major impact on total exports and on the South Australian economy as a whole. Motor vehicle exports in particular may be exposed to decisions in a few multinationals.

In the five years 2000 to 2004, average per annum State merchandise exports were \$8.05 billion. This was 128 per cent higher than the average \$3.53 billion recorded in the five years from 1990 to 1994. The largest contributors to growth were, not surprisingly, wine and motor vehicles: they each added over a billion dollars of exports per annum. They were followed by copper, wheat, and fish.

Table 3
Biggest Contributors to Annual Export Growth
(\$ million)

	Increase in Average Per Annum Exports from 1990-94 to 2000-04
1. Wine	1,142
2. Road Vehicles	1,057
3. Wheat	395
4. Copper	339
5. Fish	232

Note: Commodities classified in this table under Standard International Trade Classification (SITC) system.

Source: ABS unpublished data.

On the negative side, a few commodities experienced falls in export value over the decade. The losses to export income from these commodities were much smaller than the gains made by other commodities.²

Appendix A

The 'European Union' category is what is referred to as the 'EU 25': Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

The 'Middle East' category comprises: Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen.

The 'Other East Asia' category comprises: China, Hong Kong, Taiwan, and South Korea.

End Notes

- ¹ The standard deviation is a measure of how much a statistic varies around its mean. A low standard deviation implies that it is relatively steady; a high standard deviation means that it varies a lot.
- ² It is difficult to analyse movements in exports of some commodities because of the way the Australian Bureau of Statistics implements data-confidentiality requirements. Certain commodities are aggregated by the Australian Bureau of Statistics into one category – “confidential items” – in order to protect commercially-sensitive information. Some of the commodities involved are quite significant to the South Australian economy, including barley, wool tops, and uranium ore. It is not possible to meaningfully discuss the trends in such commodities.