

Why Australia Needs Exports

The Economic Case for Exporting

Why Australia Needs Exports: The Economic Case for Exporting

A Discussion Paper of the Australian Trade Commission and the
Centre for Applied Economic Research (CAER) at the University of New South Wales

by
Tim Harcourt*
Chief Economist
Australian Trade Commission
201 Kent Street
Sydney NSW 2000
Australia
Email: tim.harcourt@austrade.gov.au

*This paper is part of the exporter community project at Austrade. Thanks go especially to the Managing Director of Austrade, Charles Jamieson and the Corporate Adviser – Strategic Development, Greg Joffe who were the major initiators and leaders of the exporter community project. Thanks are also due to the Centre for Applied Economic Research for co-publishing the paper. This paper was inspired by the work done by the Institute of International Economics (IIE) in Washington, D.C. under the banner 'Why Exports Matter!' Special thanks go to IIE Senior Fellow J. David Richardson and IIE Director C. Fred Bergsten for their interest in and support for this paper. Comments were provided by Clem Tozer, Chris Price, Jo Bosben, Peter Creyke, Barry Hughes, David Gruen, Guy Debelle, Peter Kriesler, Nixon Apple and Shalini Mathur. Assistance was provided by Bernice Shen, Yat To Lee, Sarea Coates, Robert Samuel, Ankna Parkin and Laura Bowmer. Thanks especially to Nicole Paull for graphic design and layout of this paper. The views of this paper and any errors are the responsibility of the author alone.

Table of Contents

1. Introduction - Why this paper is necessary	1
2. The Economic Arguments	1
3. The Non-economic Arguments	3
4. Special Topics	5
4.1 Why Exports are Good for Workers	5
4.2 Why Exports are Good for Education and Training	8
4.3 Why Exports are Good for Innovation	10
4.4 Why Australia Needs Exports in the 'Information Age'	12
5. Criticism and Counterclaims	15
5.1 What about Imports?	15
5.2 What about Foreign Investment?	16
6. Conclusion - Why Australia Needs Exports	17
7. References	18
8. Appendix: Statistical Note	20

1. Introduction - Why this paper is necessary

This paper has been written for two reasons. The first reason relates to the discussion of trade issues in Australia. When it comes to talking about trade in Australia most discussion centres on the importing side of the equation and the role of tariffs and so on. By contrast, this paper aims to shed some light on the (often neglected) exporting side of the trade equation.

The second reason relates to understanding the exporter community. There is quite a lot of analysis of exports undertaken by economists. We know what is produced, where it goes and the amount of revenue it raises for Australia. We know about the importance of exports to the Australian economy. But what about exporters? Who are they and how do they benefit the Australian community? This short paper aims to rectify some of the gaps in our knowledge by providing some brief analyses of Australian exporters. Drawing on data prepared by the Australian Bureau of Statistics (ABS), the paper provides details of exporters in terms of employment conditions, education and training, innovation and the information age. The paper demonstrates why exports are important to Australia in terms of the benefits to both our economy and to our community.

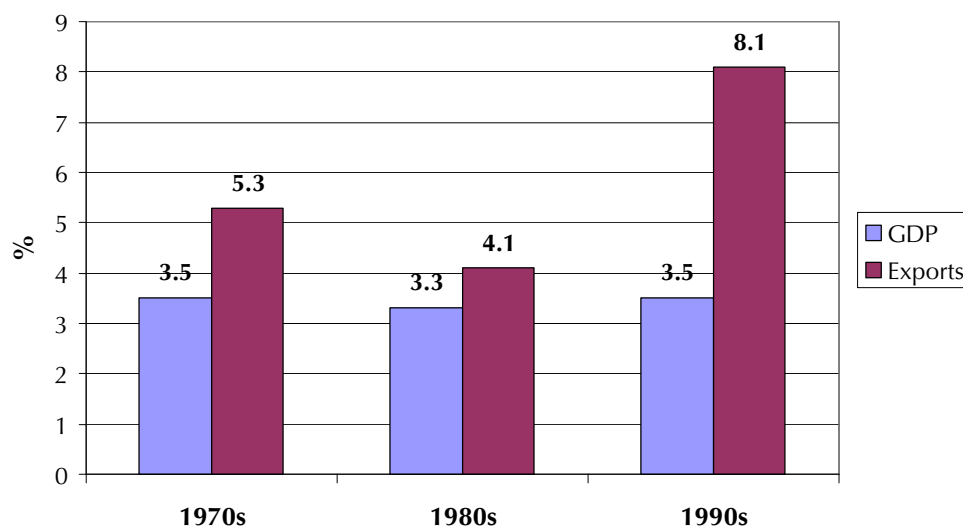
2. The Economic Arguments

Why does Australia need to export? There are, of course, both macroeconomic reasons and microeconomic reasons. In macroeconomic terms, increased exports help us pay for our imports as our economy grows. Exports also assist the employment prospects of the workforce. As shown in the Business Longitudinal Survey undertaken by the Australian Bureau of Statistics (ABS), in 1997-98, exporters comprised 4% of all businesses in the survey but provided 16% of total employment.

Export patterns have changed in recent decades. Exports grew much faster in the 1990s than in the two previous decades. The average annual growth rate of real exports of goods and services was 8.1% in the 1990s compared to 4.1% in the 1980s and 5.3% in the 1970s. By contrast, on an annual average basis, real GDP grew by 3.5% 1990s, 3.3% in the 1980s and 3.5% in the 1970s.

Chart 1 shows how exports and GDP have grown over the years.

Chart 1: Growth Rates in Exports and GDP
Average annual rates in constant dollars
(Source: RBA)

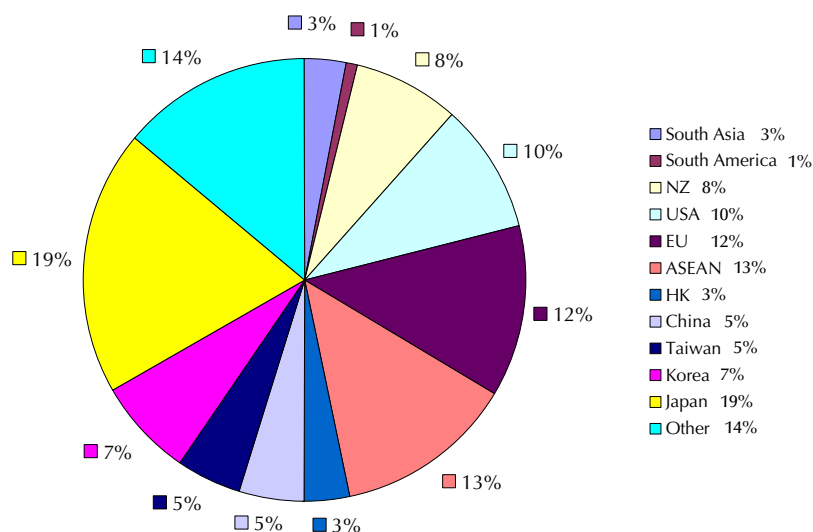


There is also much more geographic diversity in our export base, which is an illustration of Australia's improved economic performance. The recent Asian financial crisis of 1997-99 illustrated the importance trade diversion in helping Australia withstand the 'external' shock to our export income. Exporters were remarkably adaptable in their strategic response to the Asian financial crisis (see Harcourt, 1999a 'Two Years On: Australian Exporters and the Asian Crisis' Austrade, Sydney).

Chart 2 shows that Australian exports have diversified according to country destination.

Chart 2: Australian merchandise exports by destination: 1999

(Source: DFAT, ABS)

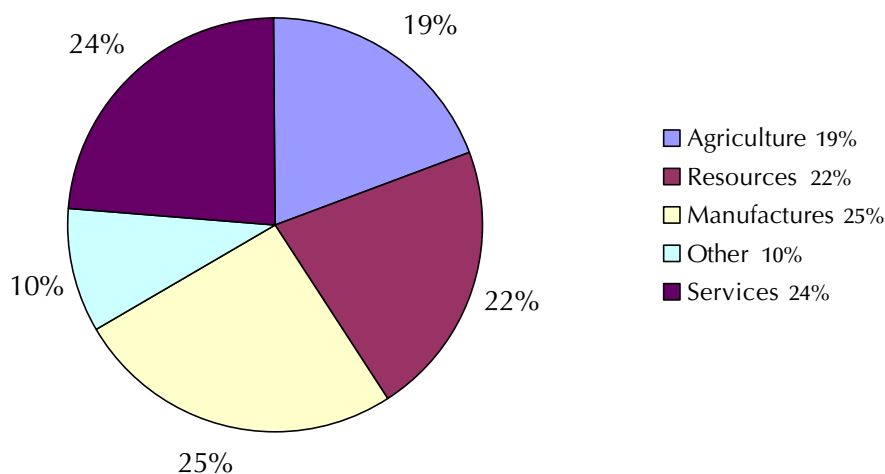


Australia has also diversified its export base in terms of industry sector. Whilst we traditionally 'rode on the sheep's back' with the dominance of primary products (both agricultural and mining) this was later followed by manufacturing and more recently by services. In the new millennium it is expected that knowledge-intensive exports (such as in biotechnology, software and re-engineered services) will become more important (ASN & DISR (2000)).

Chart 3 shows how Australian exports have diversified according to industry sector.

Chart 3: Australia's exports by sector: 1999

(Source: DFAT, ABS)



There are also microeconomic reasons why Australia needs to export. By exporting overseas we compete with the best companies in the world and are therefore driven to be innovative and use the most modern technology and management practices. It is like playing 'away games' in sport. Only the very best teams win on the road as well as when they have the security of their home ground. This enables firms to increase productivity and therefore raise living standards for Australians overall. Like Australia's great sporting teams winning in 1999 with World Cups in Cricket, Rugby Union, Netball, Surfing and Davis Cup Tennis, Australian exporters strive for excellence in international markets.

The main rationale for trade is what economists call '**comparative advantage**'. It is argued that if we specialise in what we are good at and trade with another nation for what they are good at then both nations will ultimately benefit. In the words of leading US trade economist, J. David Richardson, if we export the cream of our nation's competitiveness for the cream of everyone else's competitiveness there will be benefits all round (see Richardson, 1996;13). These mutual benefits are termed 'gains from trade' by economists.

There are also **competitiveness** reasons for exporting. As we have to compete with more firms in the global market we are likely to strive for the best business practices, most innovative techniques, best use of technology and so on. As shown in section 4.3 below, exporters tend to perform better than non-exporters on a range of different indicators.

Another economic reason for exporting is **knowledge transfer** from **'learning by doing'**. Economists argue that the development of knowledge drives modern economies. This is known as 'endogenous growth theory', which has both microeconomic and macroeconomic elements. If Australian firms are exporting they are more likely to be exposed to international trends in technology, product design, consumer behaviour and so on. As exporters benefit from 'learning by doing' their knowledge and access to technology will potentially 'spillover' to the rest of the economy. This will lift the competitive performance of all firms and improve the efficiency of the Australian micro economy (see Feenstra *et al*, 1999 and Clerides, *et al*, 1998).

It is shown in section 4.3 below that exporters are likely to be more innovative than non-exporters. This is related to the international exposure of exporters compared to non-exporters. An example is how much more advanced exporters are in terms of the Information Age (as shown below in section 3.4). Knowledge transfer will become more important to Australia as it relies more on knowledge-intensive industries for its exports. It is argued that the staging of the millennium Olympic Games in Sydney in 2000 will give Australia an advantage in generating economic benefit from the advances in technology and human capital (see section on 'the Knowledge Olympics').

International evidence also shows that exporters help the long-term **survival** of firms in the economy. This is because they enjoy faster sales and employment growth than non-exporters enabling a higher rate of survival and contributing to overall **allocative efficiency** in the economy. Diversification of sales across international borders spreads risk especially if demand patterns differ across borders (see Richardson, 2000 and Bernard and Jensen, 1999). Exporting can therefore boost an individual firm's performance but also benefit other firms and the performance of the Australian economy as a whole.

The 'Knowledge Olympics'

*"As well as the networking opportunities provided at the Olympics, Australia will benefit from the transfer of **technology** and **knowledge** as host of the Olympics. As a world class and internationally visible event, the Olympic Games have attracted innovation as countries try to better each other in terms of technology and technique. The Olympics is not just a competition of the athletes of nations but is also a battle of the scientists, architects, engineers and artists of those nations as well. It is a 'knowledge Olympics' as well as an athletic Olympics. For example the Homebush Bay site and associated venues are examples of design excellence produced by Australian architects. Australia will benefit as many of these great ideas of the new millennium will be put into practice on our own soil in 2000. There will be a vast array of talented people in Sydney in 2000, which Australia can learn from. This will assist us greatly as Australia competes globally in the information age where knowledge and innovation are at a premium. "*

Extract from Harcourt, T. (1999b) "The Export Impact of the Sydney Olympic Games", Austrade Sydney.

3. The Non-Economic Arguments

There are also non-economic reasons why exports are good for Australia. Exports create closer links between Australia and the rest of the world. They help create personal as well as business relationships between Australians and people overseas. By doing so they can assist Australia's international relations. Similarly they create opportunities for Australians to work and live overseas and learn about other cultures. This broadens Australia's skill base, educational experience and cultural diversity.

There are also links between immigration and exports. Immigrants come to Australia with ready-made export markets for future business growth and it has also contributed to the growth of Australian entrepreneurship. For instance much of Australia's success as an exporting nation in the late twentieth century was due to the efforts of the post-war immigrants who ended up leading successful companies. For instance, the names Abeles, Parbo and Adler come to mind. Many of these leaders came to Australia from war-torn Europe with no assets (and often with no English) but with a range of business contacts in their home markets. The connection between Australia's cultural diversity and export growth has been the subject of economic research (see section on 'Immigration and Exports').

Immigration and Exports

As there are important cultural aspects to international business, being a nation of immigrants is a potential advantage to Australia. Some economists have tried to quantify the link between Australia's ethnic diversity and export growth. For instance, Forsyth, *et al* studied the impact of migration on tourism flows. They found that immigration affected both inflows and outflows of tourism (depending on a migrant group's length of residence). In another study, Stanton and Lee attempted to measure the direct link between cultural diversity and export growth. Whilst finding that overall economic growth in Australia's pacific rim trading partners was the most important determinant of export growth, they noted the export opportunities "may be exploited faster as a result of the rapid growth of ethnic groups in Australia for these countries" (page 507). They found the main effect of cultural diversity was to reduce transaction costs in trade (through tacit knowledge help by migrant exporters). They also found that the attitude to exporting of Australian businesses could be enhanced by the presence of cultural diversity in senior management.

References:

Forsyth, P Dwyer, L Burnely, I and Murphy, P (1993) "The Impact of Migration on Tourism Flows to and from Australia" ANU CEPR Discussion Paper 282, Canberra.

Stanton and Lee (1995) "Australian Cultural Diversity and Export Growth" *Journal of Multilingual and Multicultural Development*, vol 16, no 6, 1995.

International evidence in the USA also links immigration to exporting (see Gould, 1994). One way is through the immigrant's ties to their home countries. This reduces search and transaction costs in trade, increases business networks and reduces cultural and linguistic barriers in new markets. Immigrants also influence consumer tastes and preferences and may raise the interest of the Australian-born population in overseas countries.

Cultural Exports

There has been a growing interest in cultural exports following some high profile success stories in music (Savage Garden, silverchair), motion pictures (The Matrix), design (Balarinji Design Studio) and visual art (Emily Kame Kngwarreye). The Australia Council estimates that the cultural sector of the economy is worth \$19 billion a year (or 2.5% of GDP). Austrade has been actively working with the Australia Council to support creative exporters. The EMDG scheme for example supported more than 70 cultural and arts exporters in 1997-98 including the Sydney Dance Company.

Australia's indigenous communities are important contributors to the boom in cultural exports. This is partly because of the emergence commercially of indigenous art. Professor David Throsby of Macquarie University estimates that more than 20% of foreign visitors buy some piece of art to take home with them and a high proportion of this is indigenous art. Austrade has published a directory of indigenous companies to showcase the wide variety of products that Aboriginal and Torres Strait Islander people produce and export.

Sources:

Austrade (1999) "Helping arts and cultural organisations go international" June 1999.

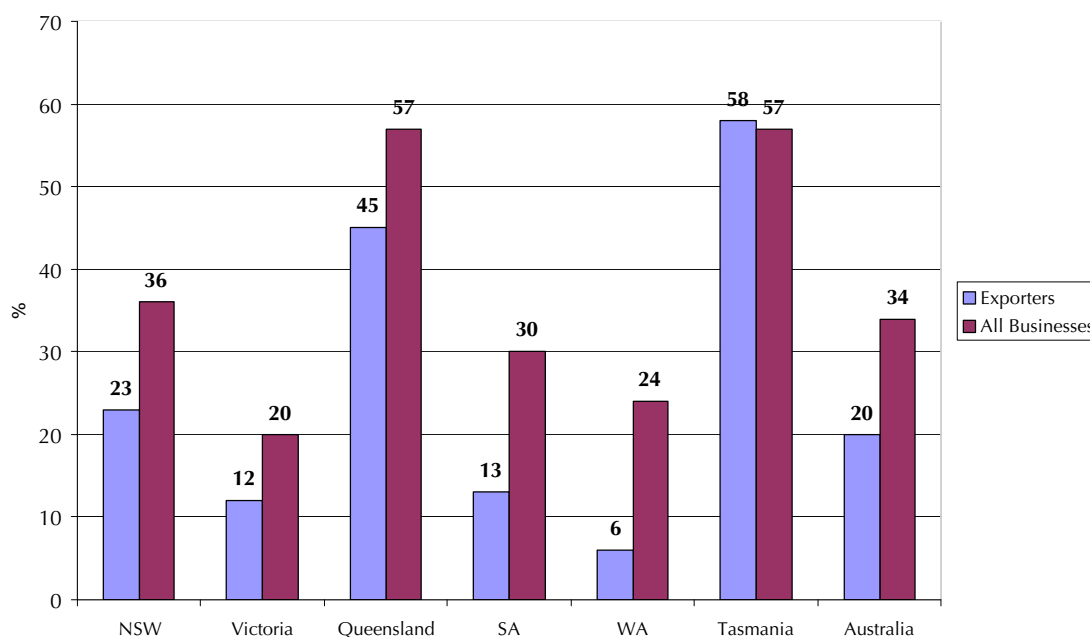
Thaw, J. "All the World's a Stage" *Overseas Trading*, March 2000

Throsby, D. (1998) "Get out there and sell – The Visual Arts Export Strategy, Past, Present and Future" *Artlink*, vol 18 No4

Exports can also help Australia's rural and regional areas that may not have shared in the gains from Australia's improved economic performance. Exports can therefore assist regional balance and social cohesion in the Australian community as a whole. Chart 4 shows the share of non-metropolitan businesses by state. Exporters feature prominently in Tasmania and Queensland. However, caution should be taken with the data as businesses are coded according to the location of their head office rather than the location of their activities. For instance, mining exporters are important to regional WA but most mining companies in the survey are registered in Perth.

Chart 4: Share of Non-metropolitan Businesses by State

(Source: ABS)



In conclusion, exports are important as they link Australia to the rest of the world. An open economy goes hand in hand with an open society. Countries that close off to the rest of the world do not thrive economically or socially (see Rodrik, 1997). Fortunately, Australia is a highly successful nation in both economic and social terms. Exports contribute to this success and enable other nations to learn more about us.

4. Special Topics

The next section provides some special topics on exports and the Australian exporter community.

4.1 Why Exports Are Good For Workers

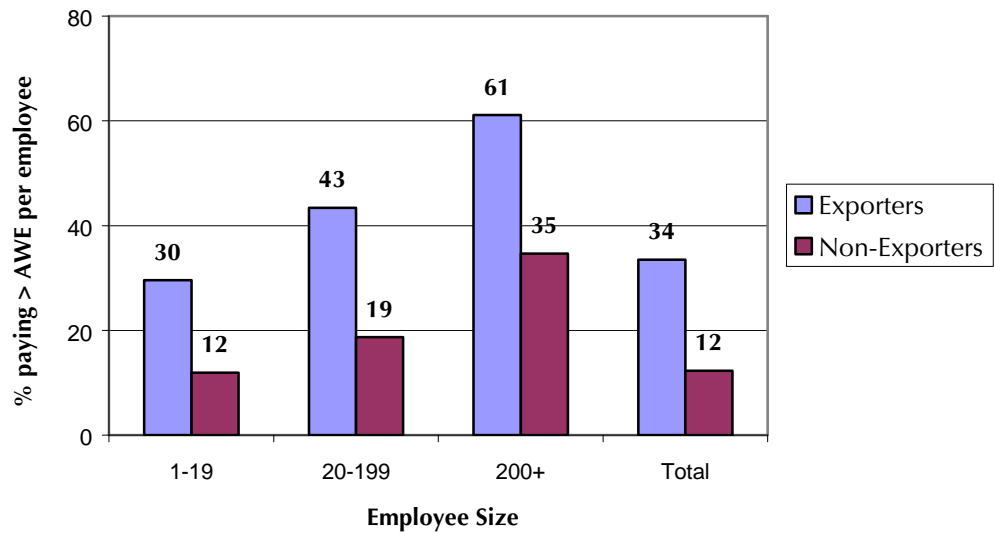
It is all very well to talk about how exports help business and the economy but what does this mean for Australian workers and their families? What about the effect of exports on the labour market? There is much debate about the effect of trade and the labour market. The net effect of trade on jobs will depend on both growth rates and structural change in the economy. It is also important to recognise that there are winners and losers as a result of trade. But for the most part, an open economy that is competitive and growing will produce more better *quality* jobs than a closed stagnant economy that is unable to adapt to new technology and changes in world economic conditions.

But whilst exports are good for the economy and for the successful exporters themselves it is important to know how exports benefit workers and the Australian community in general. Workers, of course, benefit as consumers from trade, especially in terms of real wages, when consumer prices fall. But do exporters make good employers? Evidence from the ABS 's Business Longitudinal Survey (BLS) survey covering 540,000 Australian companies shows that they do (see Appendix). Exporters, on average, outperform non-exporters in terms of wages and salaries, employment conditions, occupational health and safety and employment status. This is shown in the chart below.

In terms of wages and salaries, exporters, on average, pay better than non-exporters. This is because exporters are usually more innovative than non-exporters, investing in technology and using advanced management techniques and their workers are typically highly skilled. The higher productivity generated enables exporters to pay higher wages. According to the ABS data, in 1997-98, exporters overall paid each full-time equivalent employee an average of \$46,000 per annum compared to \$28,600 being paid on average by non-exporters. Using an alternative measure, 34% of exporters paid their workers above average weekly earnings (AWE) compared to only 12% of non-exporters. This occurred for all industry categories in the survey.

It is often said that this is a function of scale (exporters being larger firms and hence more capital-intensive). But the data show that exporters pay better than non-exporters regardless of firm size. For small businesses (less than 20 employees) 30% of exporters paid above AWE compared to 12% of non-exporters. For medium sized businesses (20-199 employees) 43% paid above AWE compared to 19% of non-exporters. For large businesses (200 employees and above) 61 % of exporters paid above AWE compared to 35% of non-exporters. This is shown in Chart 5 below.

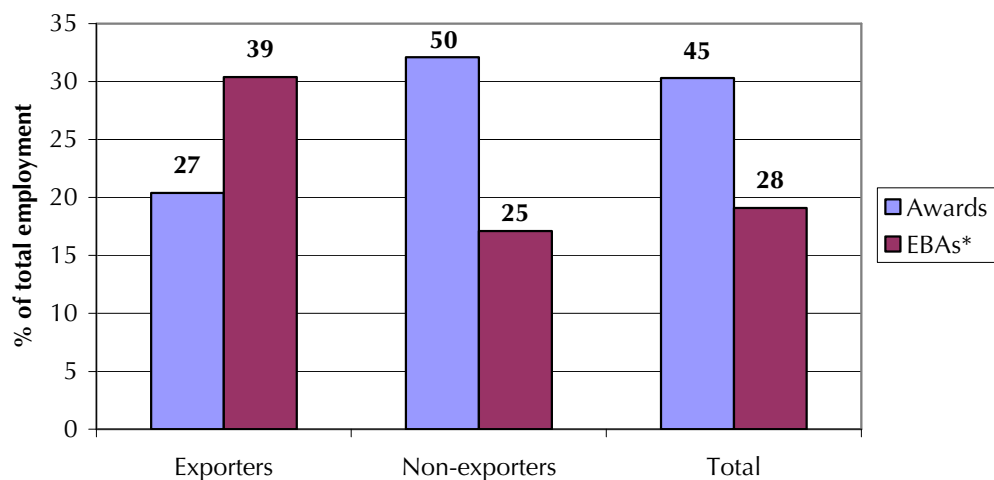
Chart 5: Wages and Salaries Paid by Exporters and Non-exporters: 1997-98
(Source: ABS)



In terms of wages and salaries, exporters, on average, pay better than non-exporters.

Workers have been able to achieve better pay through enterprise bargaining as opposed to awards (see Reserve Bank of Australia, 1996). For exporters, 39% of their employees had their pay determined by enterprise agreements with 27% determined by awards. By contrast, for non-exporters only 25% of the employees were covered by enterprise agreements compared to 50% by awards. This indicates that exporters are more likely than non-exporters to take the high skill, high wage, and high productivity route through enterprise bargaining rather than leaving conditions to the award safety net. This is shown in Chart 6 below.

Chart 6: Employment Arrangements: 1997-98
(Source: ABS)

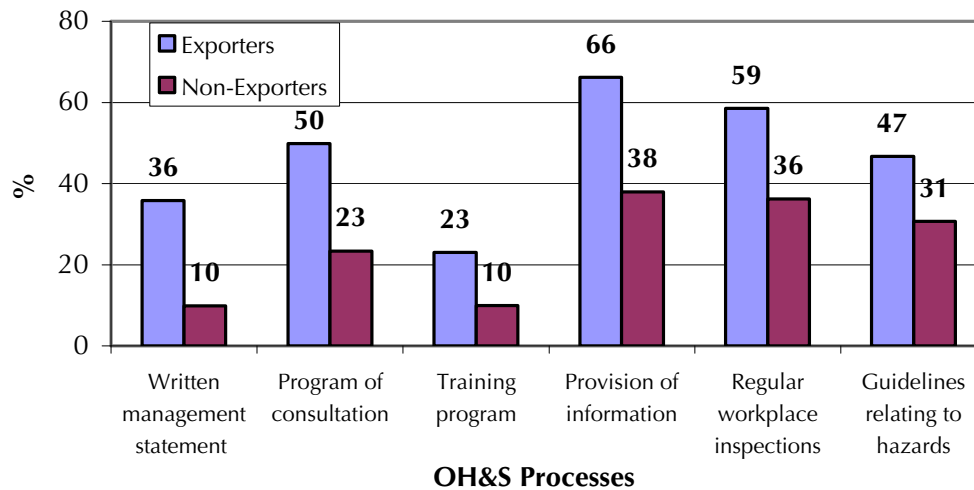


Exporters are more likely to use enterprise bargaining agreements than awards when negotiating with their employees.

Not only do exporters provide a more technologically sophisticated work place than non-exporters but it is also likely to be safer as well. The statistical evidence clearly shows that exporters are more committed to a safe work environment than their non-exporter counterparts. This is the case for written management statements (36% of exporters compared to 10% of non-exporters); consultation programs (50% to 23%); training programs (23% to 10%); provision of information (66% to 38%); regular workplace inspections (59% to 36%) and hazard guidelines (47% to 31%). According to the ABS data shown, exporters generally adopt a policy of high safety standards in their workplaces. This is shown in Chart 7.

Chart 7: Occupational Health and Safety

(Source: ABS)

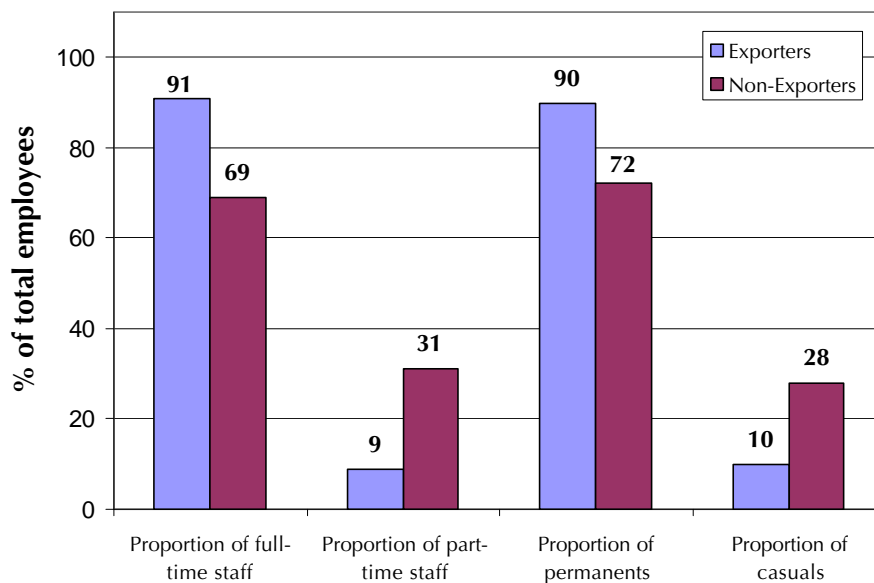


Exporters are more committed to providing a safe work environment than non-exporters.

Finally, exporters are more likely than non-exporters to provide job security to workers on a full-time, permanent basis. The ABS data shows that exporters employ 91% of their staff on a full-time basis, which compares to 69% of non-exporters. Exporters are also more likely than non-exporters to provide more permanent employment. Exporters employ 90% of their staff on a permanent basis compared to only 72% for non-exporters. Casual work is far more prevalent in the non-exporting sectors of the economy. This is shown in Chart 8.

Chart 8: Employment Status: 1997-98

(Source: ABS)



Exporters, on average, provide more full-time jobs and more permanent jobs than non-exporters.

In conclusion, the ABS data shows that exports are good for workers because on these criteria, exporters are good employers relative to non-exporters. On average, exporters pay better than non-exporters. Exporters are more likely than non-exporters to negotiate enterprise agreements than simply relying on the award safety net only. Exporters are more committed to occupational health and safety than non-exporters and provide a higher proportion of full-time and permanent jobs. This reflects the tendency of exporters to be more dynamic, innovative and modern than non-exporters because of the challenges of international competition. It pays exporters to be good employers as they gain in productivity benefits which raises living standards for the economy overall.

In short, Australia needs more companies to export not only to assist our macroeconomic challenges but also to benefit Australian workers and their families. After all, we engage in trade not as an end in itself but to raise living standards for the Australian community as a whole.

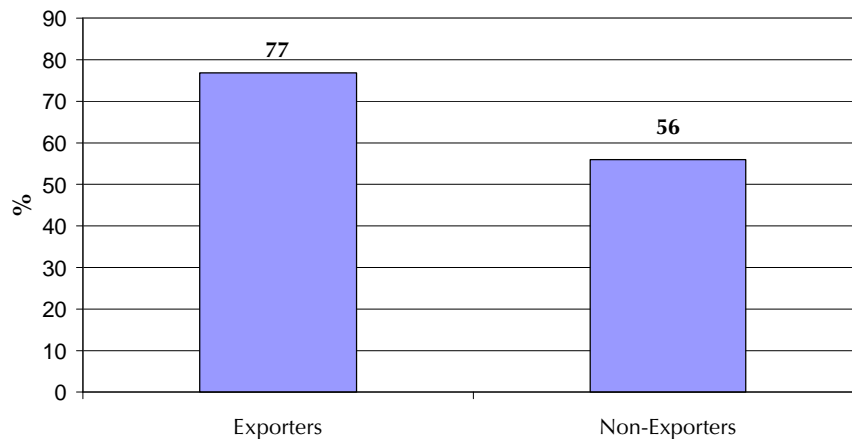
4.2 Why Exports Are Good For Education and Training

Exporters pay their workers better on average than non-exporters. Exporters also provide better working conditions and more job security than non-exporters. That was the key finding of section 4.1 of this study. This section looks at some of the reasons why.

One of the reasons is that exporters are more likely to give their employees *training* than non-exporters. As their workers are better trained they acquire more skills which induces higher productivity. The higher productivity generated enables exporters to pay higher wages. For instance, in 1997-98, over three quarters (77%) of exporters provided training relative to just over a half (56%) of non-exporters. This is shown in Chart 9.

Chart 9: Firms Providing Training to Employees

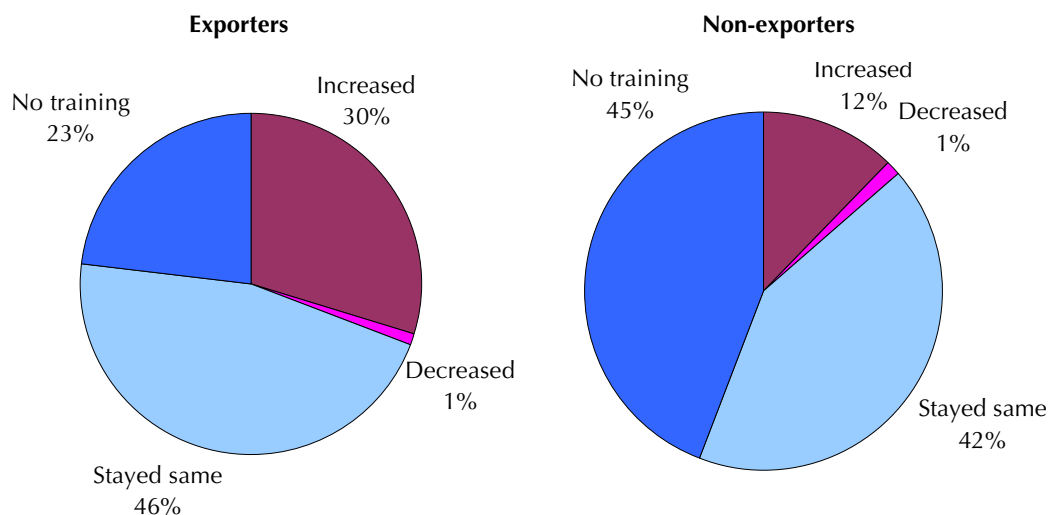
Percent (%) of all firms: 1997-98 (Source: ABS)



This is an on-going phenomenon as exporters are also more likely than non-exporters to increase their training levels over time. According to the ABS data, in 1997-98, 30% of exporters increased their employee training levels over the period (1996-97 to 1997-98) compared to only 12% of non-exporters (see Chart 10).

Chart 10: Training Levels Over Time

(Source: ABS)

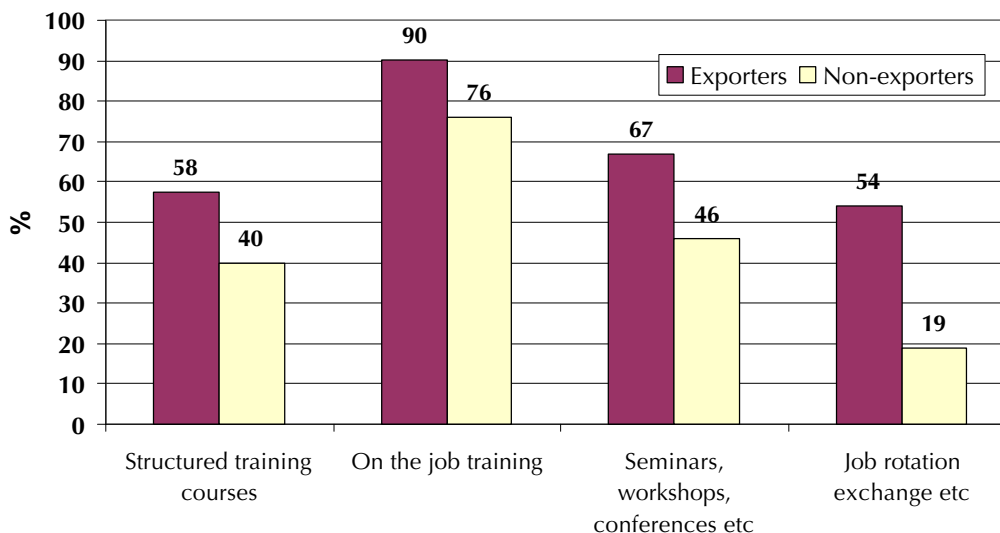


Exporters, on average, are more likely than non-exporters to provide training to their employees ... and are more likely to increase training levels over time.

Looking at the different training methods used, exporters were greater users of each method surveyed than non-exporters. For example, structured training courses are used by 58% of exporters compared to 40% of non-exporters. In terms of in-house methods, on-the-job training is used by 90% of exporters compared to 76% of non-exporters. Just on two-thirds or 66% of exporters send their staff to seminars, workshops and conferences compared to just 46% of non-exporters. Finally, 54% of exporters provide their staff with the opportunity of job rotation and exchange compared to a mere 19% of non-exporters (see Chart 11).

Chart 11: Training Methods Used

(Source: ABS)

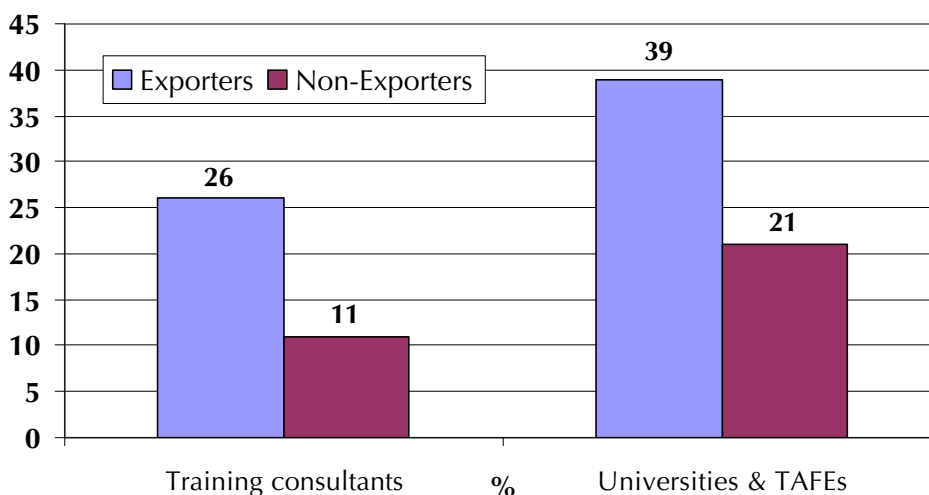


Exporters provide a more diverse and sophisticated range of training methods to their employees than non-exporters.

On the basis of the data, exporters are committed to and provide more career opportunities for their employees than non-exporters. Exporters also provide a better *variety* of training than non-exporters. Exporters offer more opportunities for training to their employees in a range of fields compared to non-exporters. Exporters are more likely than non-exporters to engage training consultants (26% to 11%) and to fund students at formal education institutions such as Universities and TAFEs (39% to 21%). This is shown in Chart 12.

Chart 12: Variety of Training: 1197-98

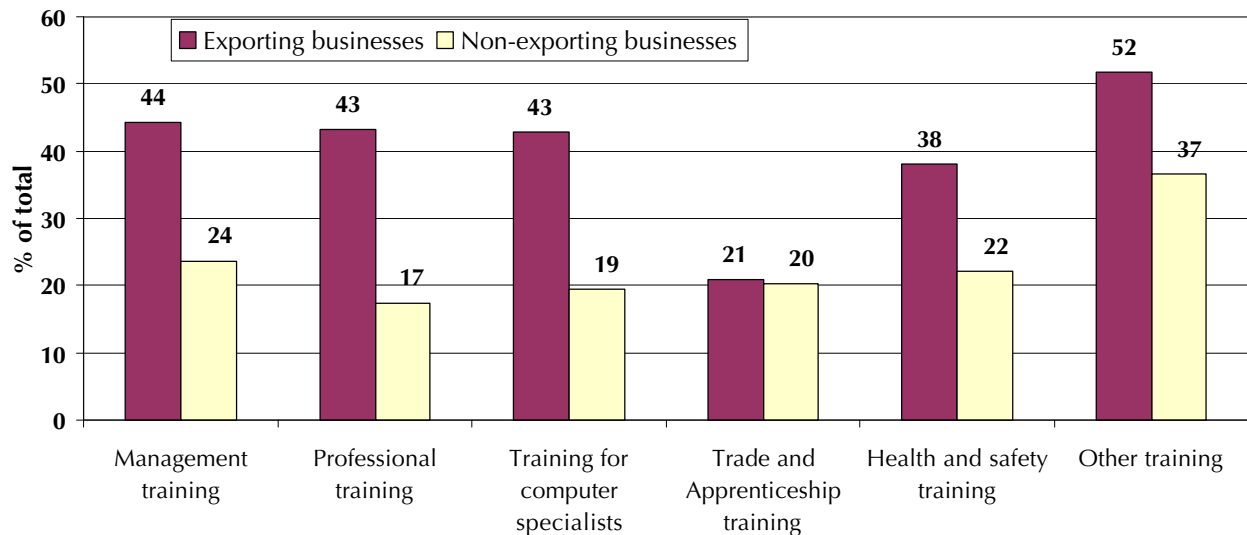
(Source: ABS)



In terms of management training, 44% of exporters offer this form of training, compared to 24% of non-exporters and 43% of exporters offer professional training compared to 17% of non-exporters. Exporters are also more responsive to the training needs of the 'Information Age' or 'New Economy' with 43% of exporters providing computer specialist training compared to a mere 19% of non-exporters. By contrast, the more traditional trade and apprenticeship training was provided almost equally by exporters and non-exporters (see Chart 13).

Chart 13: Different Fields of Training

(Source: ABS)



Exporters provide more computer training than non-exporters and are better linked to formal education institutions than non-exporters.

Section 4.1 of this study showed that, on average, exporters are more committed to occupational health and safety than non-exporters. Examples included employer provision of written management statements, consultation programs, provision of information, regular workplace inspections and hazard guidelines. In similar fashion, exporters also ensure that their employees are skilled in safe work practices as 38% of exporters provide occupational health and safety training compared to 22% of non-exporters.

In conclusion, not only do Australian exporters pay their workers better than non-exporters but they are also committed to upgrading their skills and providing better career opportunities through superior training arrangements. Adding to Australia's stock of human capital through education and training will help advance our international competitiveness. Therefore, the commitment shown by exporters to training is not only important to their own survival but also crucial to Australia's economic future as a 'knowledge-based economy'.

4.3 Why Exports Are Good For Innovation

Exports and innovation are linked. Innovative firms are the ones that are typically exporting in the first place. But it doesn't stop there. By choosing to be exposed to the world market those same firms are taking advantage of innovation overseas and bringing it back to Australia. Therefore innovation creates exports, which in turn assists innovation.

In fact, innovation is a popular (but widely misunderstood) concept. It is often said that innovation is the key to Australia's future as an open economy based on 'knowledge-intensive' industries. But what does it mean?

According to the Department of Industry, Science and Resources (DISR) in the Australian Government:

“Innovation is the process that incorporates knowledge into economic activity... Innovation is about putting ideas to work. It is a process by which firms, industry and governments add value through successful exploitation of a new idea for the benefit of a part or whole of a business, industry or the nation.” (DISR, 2000)

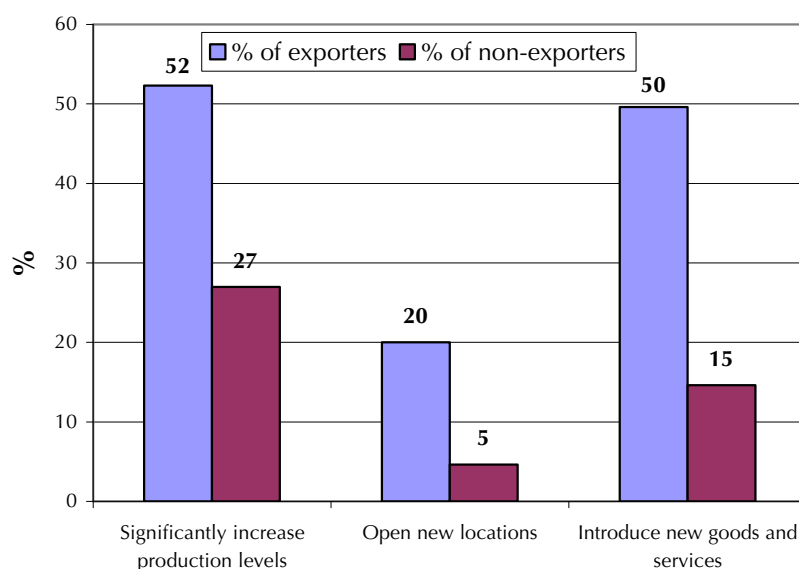
Innovation is about the application of knowledge. So investment in skills and technology is important. Australian business journalist David Uren has used the analogy of the remarkably successful Australian swimming team to show the links between innovation and knowledge for Australian businesses. Uren (2000) writes:

“Australia’s experience demonstrates that refinements come from those with close knowledge of their application. In a similar way, business innovation starts with an intimate understanding of the market. Only with that knowledge can creativity be deployed to experiment and make the most of opportunities. Science can help, but its role is more one of ancillary support. The most important contributor is the relentless investment in human capital.”

Note the emphasis on human capital. This is the key to successful innovation in business, sports and any other facet of life. This point is also linked to exports. Exporters have learnt the lesson well about the ‘relentless investment in human capital’. Exporters tend to invest in human capital by spending more on education and training than their non-exporter counterparts. This was shown in section 4.2 above. Exporters also tend to outperform non-exporters in terms of the variety of training provided; the training methods used, and career development options for their employees. Exporters are more likely to have links to formal education institutions such as Universities and TAFEs. Exporters are also more likely to provide information technology training and are more likely to provide staff with personal computers than non-exporters. Exporters are generally better connected to the Internet than domestic firms are, which is crucial to Australia’s capacity to compete in the ‘Information Age’. Exporters’ greater commitment to education and training is indicative of the tendency of exporters to be more innovative and willing to ‘try things’ than non-exporters. For instance, exporters are more likely than domestic firms to put a new good or service on the market. According to the ABS, in 1997-98, nearly half of all exporters planned to introduce a new good or service compared to only 15 % of non-exporters. This is shown in Chart 14.

Chart 14: Business Intentions

(Source: ABS)

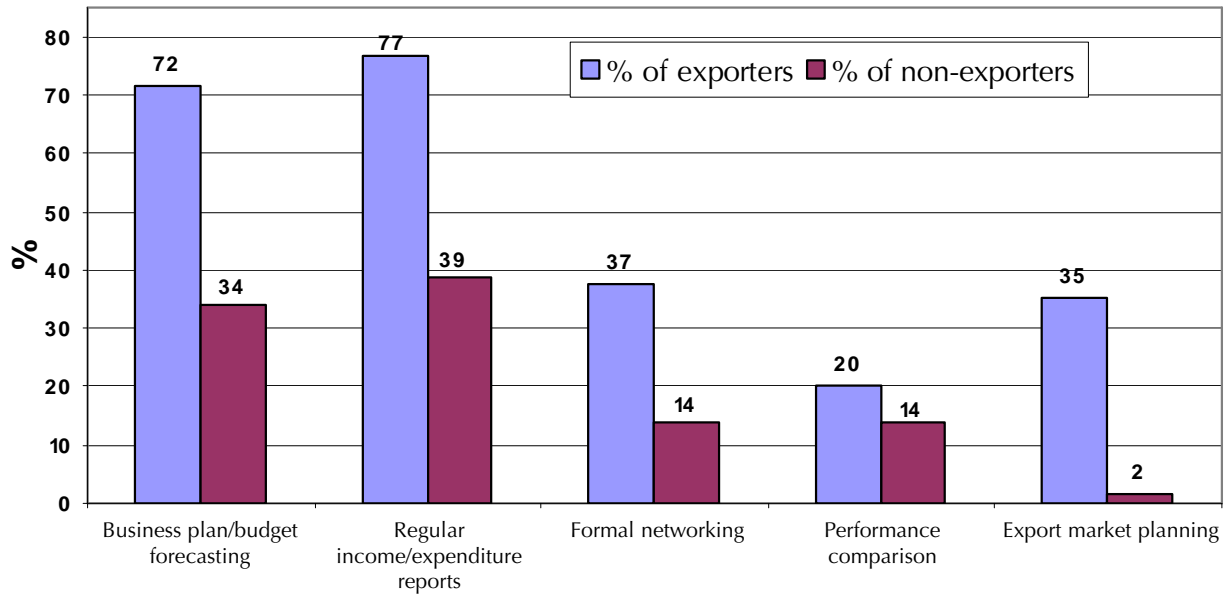


Exporters are more likely to use more sophisticated business practices. The ABS survey showed that in 1997-98, 72% of exporters had a business plan or used budget forecasting compared to 34% of non-exporters. Exporters are also more likely than non-exporters to use advanced management techniques. Just over 37% of exporters engaged in formal business networking compared to 14% of non-exporters. Exporters are able to scout the world for best practice techniques and bring them home to the Australian corporate sector. This is shown in Chart 15.

Exporters tend to be more innovative than non-exporters. Exporters are more likely to introduce a new good or service or use advanced management techniques than non-exporters.

Chart 15: Business Practices

(Source: ABS)



In conclusion, there are many ways in which Australia can become a more innovative economy. Expansion of the sciences can help, as can creation of an economic environment that is conducive to research and development. A little bit of luck can help too. However, investment in human capital through education and training is the key ingredient to innovation and the development of knowledge-based industries. Exporters also help because they expose Australia to new ideas around the world and provide competitive pressures to create new ideas at home. In short, exports helps innovation as exporting itself unleashes competitive and creative forces from the world market to Australia.

4.4 Why Australia Needs Exports In The 'Information Age'

The 'Information Age' or 'New Economy' has dominated economic policy debate in recent times. The Information Age is a shorthand reference to a whole range of technological phenomena impacting information exchange, business systems, commercial transactions and simple communications. Perhaps the most powerful symbol of the information age is the Internet.

What are the changes to the economy that the information revolution has brought forth? In the United States, the impact of the Internet has been compared to the building of the railroads in the nineteenth century. The Internet has brought isolated markets together and has given smaller companies a national presence in the large US market and has reduced distribution and transaction costs. The Internet has affected the consumer to business relationship by providing more information to consumers about the choices available to them. Similarly, electronic commerce has affected business to business relationships by lowering purchase, sales and marketing costs, reducing inventories, lowering cycle times and enabling firms to improve customer service. At the same time e-commerce has enabled firms to gain new sales opportunities.

These changes brought about by the Information Age have created great debates amongst economists and have generated the 'New Economy' literature. Some regard it as a reverse of the 1973 oil 'shock' with a once-off positive impact on productivity, employment and living standards. Federal Reserve Chairman, Dr. Alan Greenspan, regularly mentions the impact of the information economy as a key factor in the macroeconomic resurgence of the United States in the late 1990s.

The Information Age has also been a contributor to Australia's improved economic performance. The 'New Australian Economy' has spurred considerable interest amongst economic commentators. In fact, some economists are saying that the New Australian Economy might ultimately be more sustainable than the golden age experienced from the late 1940s to the early 1970s. (see Skotnicki, 1999).

Indeed, Australia has the potential to be a major beneficiary of the information age. In the past, transport and communication costs made this difficult given Australia's geographic position. However, in the information age, geography is less important as the Internet and e-commerce give Australian firms the economies of scale needed to reach the 'critical mass' of global consumers. This should markedly change the nature of international business as any Australian firm that has a web site has the potential to be an exporter.

How are Australian exporters faring in the information age? Some indicators are quite promising. The survey data shows that, on average, Australian exporters are better connected to the information economy than their domestic market counterparts. For example, 69% of exporters had access to the Internet compared to only 28% of non-exporters, 28% had their own Web site compared to only 6% of non-exporters, and 66% used e-mail compared to 24% of non-exporters (see Charts 16, 17 & 18).

Chart 16: Internet Connections

(Source: ABS)

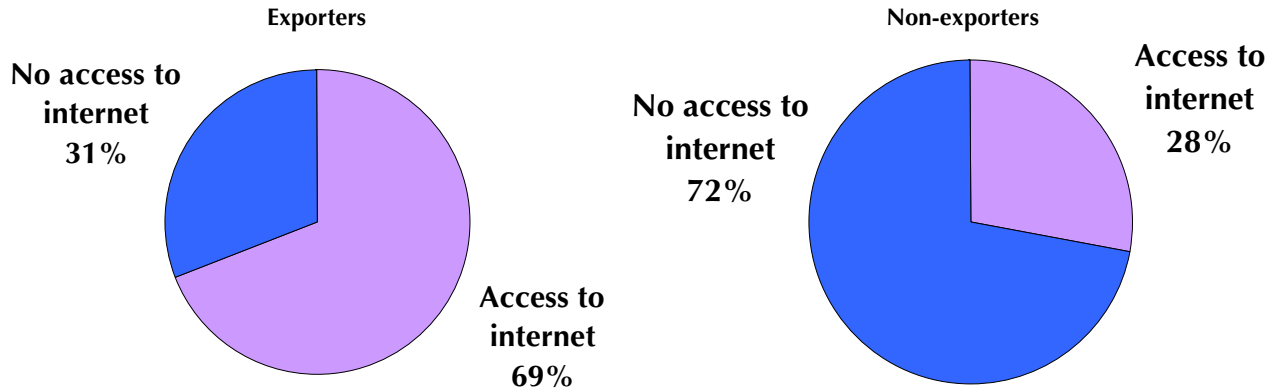


Chart 17: Businesses With Own Website

(Source: ABS)

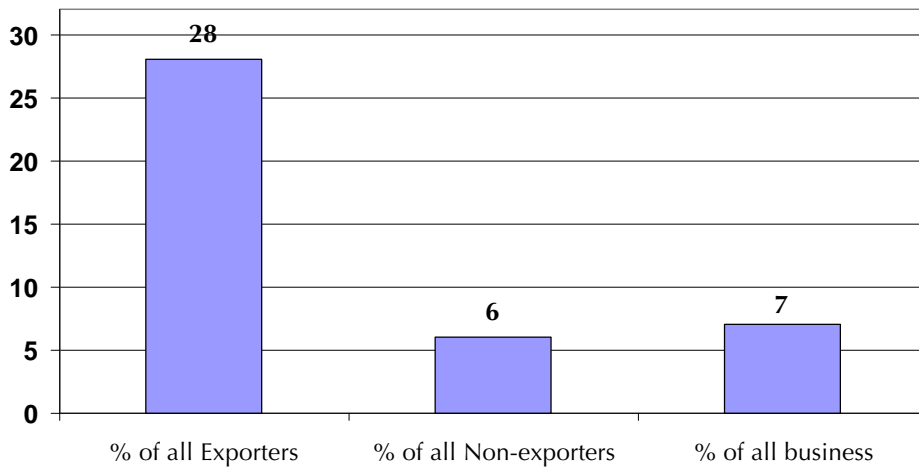
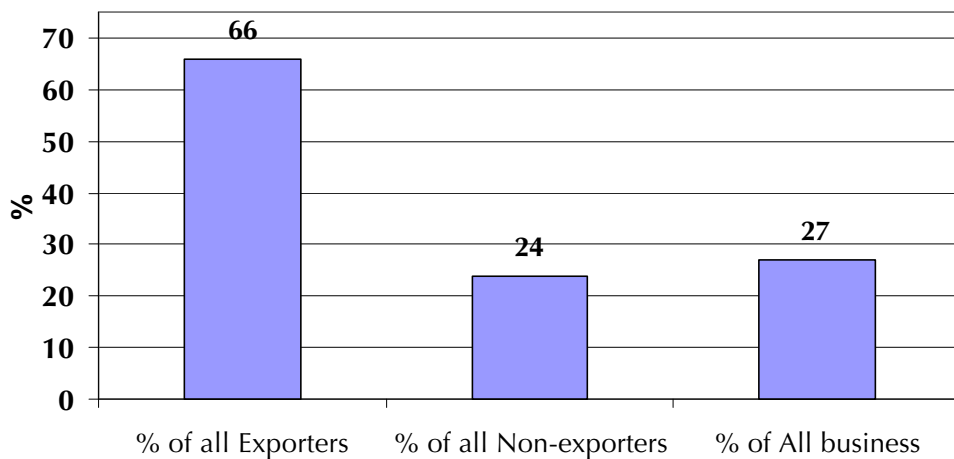


Chart 18: Use of Email

(Source: ABS)



In fact, Internet use by exporters was far more extensive than non-exporters for a range of business activities such as intranet communications, gathering information, receiving sales orders, sending invoices, receiving payments, receiving invoices and placing purchase orders.

Chart 19: Internet Use

(Source: ABS)

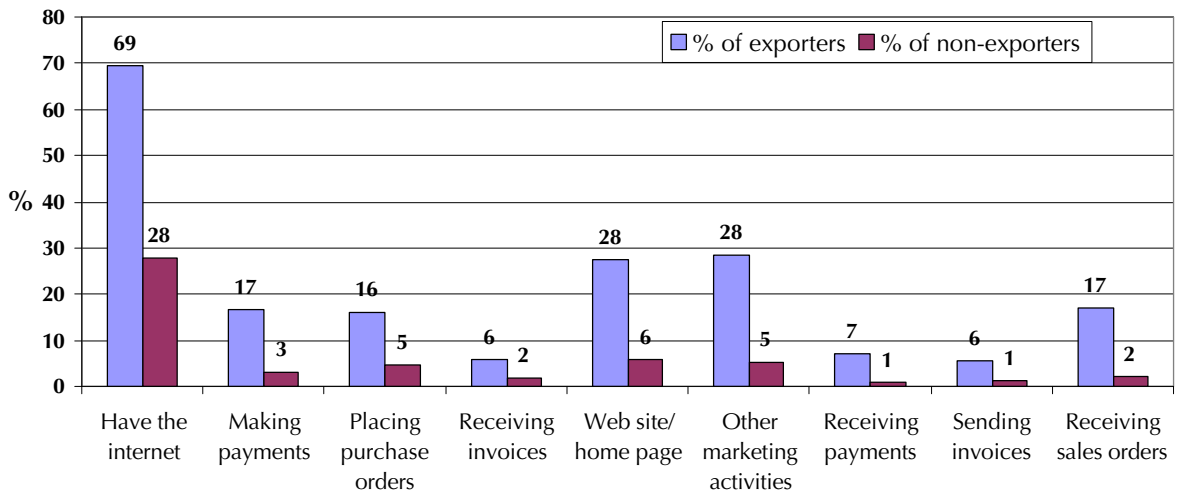
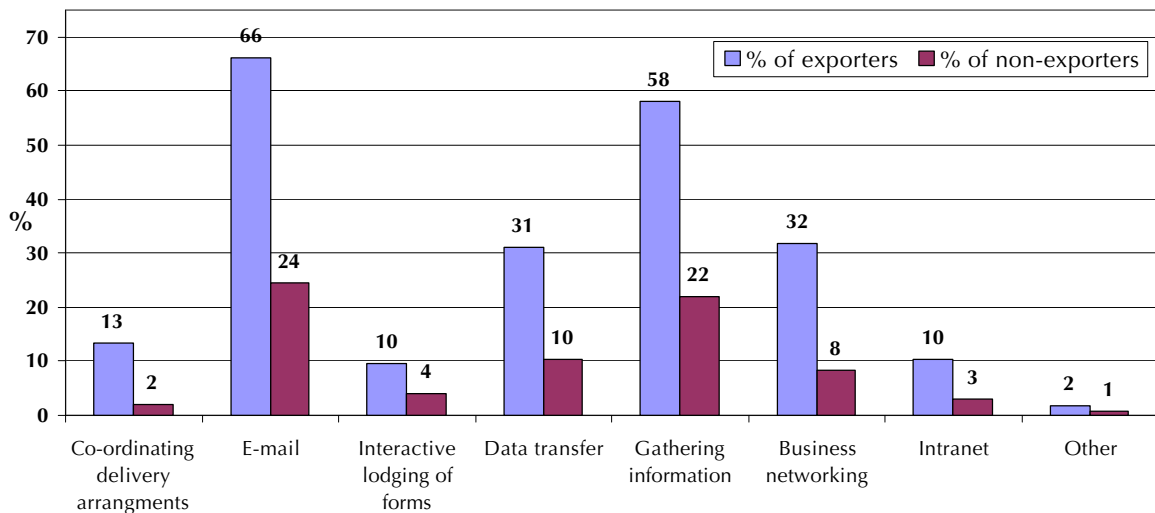


Chart 20: Internet Use (continued)

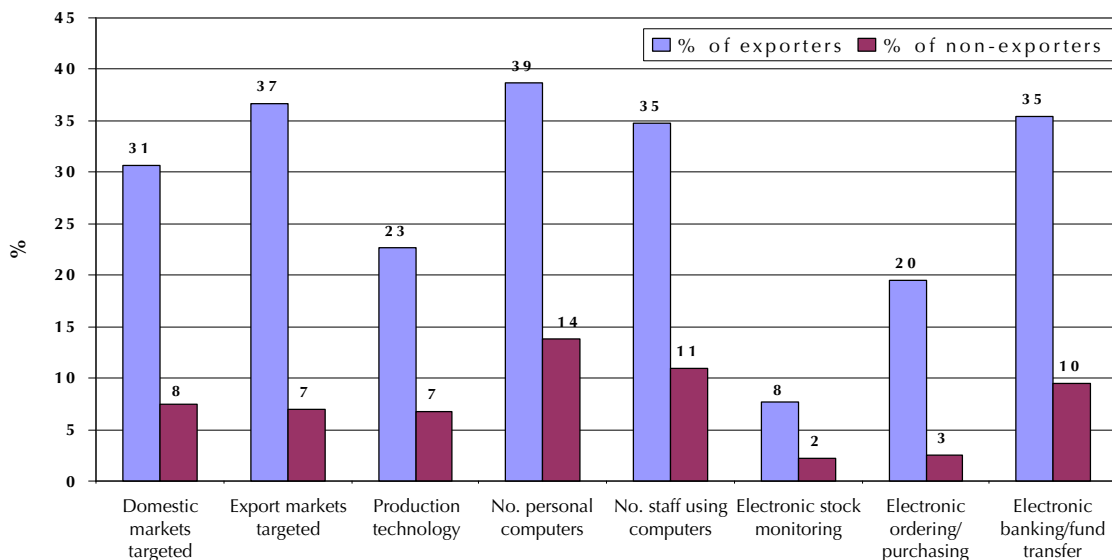
(Source: ABS)



Exporters are also prepared to increase their investment in technology in response to changing market environments. For instance, 39% of exporters increased their number of personal computers used compared to 14% of non-exporters whilst 35% of exporters increased the number of staff that use computers compared to just 11% of non-exporters. Increased use of electronic ordering and purchasing was more prevalent amongst exporters relative to non-exporters (20% to 3%) as was the use of electronic banking and fund transfer (35% to 10%). This is shown in Chart 21.

Chart 21: Business Increase

(Source: ABS)



Exporters are better connected to the Internet than non-exporters and are more likely to use the other business tools of the Information Age.

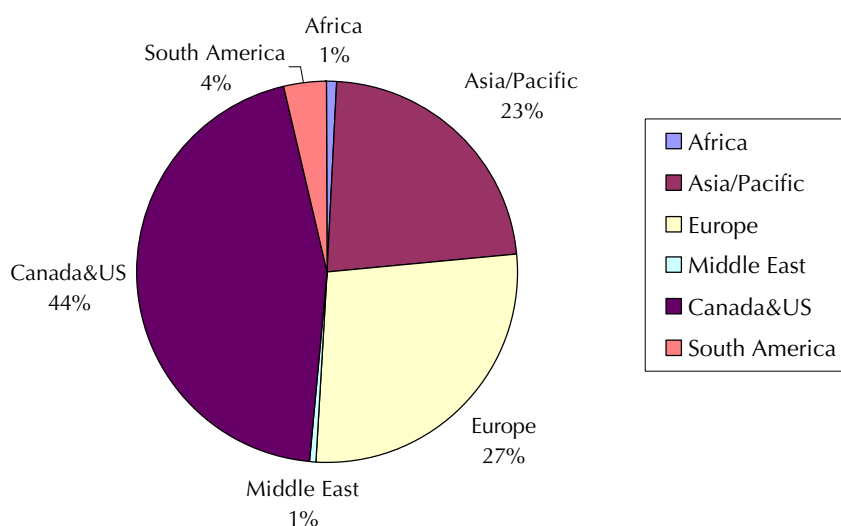
However, Australian exporters have not been assisted by the slow progress of the information economy in Asia. "It takes two to tango" as the old saying goes, and if your potential customers aren't connected to the Internet then it is going to be very hard to sell to them.

According to the US Department of Commerce (2000), of the 304 million people who had accessed the Internet across the globe in mid-2000, just under half (45 per cent) came from the US and Canada. The Asia Pacific accounted for 22.6 per cent of users, behind Europe on 27.4 per cent, but ahead of South America (3.5 per cent), Africa (0.9 per cent) and the Middle East (0.6 per cent). The US Department of Commerce data is replicated in Chart 22 below.

However, whilst developed country dominance of the Internet is expected in the medium term, the highest rates of growth in Internet use are expected to be in the developing Asian countries such as China, India, Korea and Malaysia. This is good news for Australian exporters aiming to reach Asian customers.

Chart 22: Internet Access by Region, March 2000

(Source: US Department of Trade / Nua Internet Surveys)



Given the importance of exports to Australia's economy, the fact that exporters are well connected to the information economy is a positive sign for Australia's economic prospects in the new millennium. However, it should also be remembered that just as the Internet removes the 'tyranny of distance' for Australian exporters, it also opens up our markets for foreign firms. Australian firms without Internet connections and Information Age skills will be unable to compete successfully. Therefore, exports are beneficial because exporters are more likely to have Information Age skills than domestic firms. Therefore they can raise the average level of information age sophistication in Australia.

5. Criticisms and Counterclaims

Unfortunately, much of the substance of the trade debate is lost in the heat of public discussion. One of the objectives of this paper is to illustrate with data and analysis why exports advance Australia. However, it is important to briefly consider some of the related issues in the public discussion, namely the role of imports and foreign investment.

5.1 What about imports?

It is fine to be in favour of more exports but what about imports? Being in favour of exports but against imports is often termed 'mercantilism'. The founder of economics Adam Smith wrote his famous work 'The Wealth of Nations' partly in response to mercantilism that was prevalent amongst the European nations (and their expanding empires) in the eighteenth century. But taking a mercantilist position is neither politically possible nor economically desirable. As noted in section 2, we export and import because of 'comparative advantage'. In principle, we improve our living standards by exporting what we are good at and importing what another nation is good at. So it is not in our interests just to export (nor would other nations be too content to accept our exports while we close our doors to theirs).

We can't have exports without imports. Exports and imports together can raise economic welfare. It should also be remembered too that many exporters use imported components.

Some other reasons why we both export and import have been outlined by Richardson (1996). For instance trade encourages diversity of goods and services. It encourages society to produce goods of high value and consume a wide variety of goods and services. Trade encourages transfer of technology and knowledge. For instance in the same way that exports encourage innovation, imports also provide new techniques and ideas. Many exporters use imported components in the production process. In essence, being an open economy brings in competitive pressures that make Australian firms innovative and adoptive of world class technology and business practices. Trade as a whole also encourages growth in the world economy and those who engage in it. In short, we cannot have exports without imports.

5.2 What about Foreign Investment?

There is also the question of foreign investment that is closely related to exports. Exports enable Australia to gain from knowledge transfer and innovation as does foreign investment. Exports enable firms to develop international business relationships which in turn encourages investment. Trade and investment flows are both important in creating the dynamism of the global economy.

The Australian Department of Foreign Affairs (DFAT) regards foreign direct investment (FDI) as an important contributor to higher living standards and economic prosperity in Australia. According to DFAT, foreign investment refers to "... foreign direct investment (FDI), portfolio investment, reserve assets (foreign financial assets available to, and controlled by, monetary authorities) and other investment (including trade credits, loans, currency and deposits)" (DFAT, 1999:4). FDI is defined as "investment by a foreign investor that aims to obtain a lasting interest in an enterprise and exercise significant influence in its management".

FDI positively assists both recipient and source countries and benefits all sectors of the Australian economy. It also stimulates growth and development, provides employment opportunities, assists in technology and knowledge transfer and expands the potential global network for Australian firms, hence assisting exports.

Foreign investment directly contributes to export growth.

In fact the DFAT evidence shows that FDI directly contributes to export growth. According to DFAT, firms with substantial foreign ownership account for one quarter of Australia's exports. This is also shown in other countries. For instance, in 1996, foreign firms in Ireland exported 89% of their output whilst domestic firms exported only 34%. In the Netherlands the gap was 64% to 37%, in France 35% to 34% and in Japan, 13 to 11%. Only in the USA was it reversed at 11% to 15 % (See *The Economist* (2000)). Similarly, the ABS data shows that foreign ownership is more prevalent amongst exporters than non-exporters, particularly amongst larger businesses.

Foreign investment assists employment and many foreign owned firms pay well compared to domestic firms.

As exports help workers, on average (see section 4.1), so does FDI. According to *The Economist* (2000), foreign firms pay better than domestic firms and are accounting for a greater share of national employment in Ireland, Britain, Canada and Sweden. This is also the case in Australia. According to DFAT, foreign owned and partially foreign owned companies in Australia are likely to pay higher wages and be more productive than wholly Australian owned firms. Foreign investment, like export growth, contributes to improved productivity, higher skills and higher wages. In addition, we need foreign investment now to create exports in the future.

6. Conclusion - Why Australia Needs Exports

In conclusion, Australia needs exports for both macroeconomic and microeconomic reasons. We need exports to help our economy grow and to provide employment for Australians. We need to export to ensure that we engage with the world and are able to show that we can compete in the global market place. We need to be an exporting nation that takes what the world has to offer in terms of knowledge and technology. By exporting we tend to be more innovative and dynamic and more understanding of Australia's place in the world.

As shown in this study, of the characteristics of the Australian exporter community, exports bring benefit to Australia in a number of ways. For instance, as shown in the report, exporters make good employers by outperforming non-exporters in terms of wages, occupational health and safety, and employment conditions. Exporters are more committed to education and training than non-exporters and are more likely to provide career paths for their employees. Exporters are more innovative than non-exporters and quicker to adopt technology and advanced management practices. Exporters are leading the way in the 'New Economy' in terms of Internet usage and use of other tools of the 'Information Age'.

So the bottom line is that Australia needs exports and we need more Australian businesses to be exporters. As shown in this study, exporting not only helps the economy but it also has positive effects on the Australian community as well. So lets help exporters continue to advance Australia in the new millennium.

7. References

- Austrade and Australian Bureau of Statistics (2000) *A Portrait of Australian Exporters*. ABS Cat 8154.0, August, Canberra.
- Austrade (1999) "Helping arts and cultural organisations go international", June 1999.
- Australian Services Network/Department of Industry, Science and Resources – ASN & DISR (2000) "The Australian Services Sector Review 2000", Canberra.
- Bernard, A. and Jensen, J. (1999) "Exporting and productivity", NBER Working Paper, No.7135, National Bureau of Economic Research, Cambridge, Massachusetts.
- Clerides, S., Laul, S. and Tybout, J. (1998) "Is learning by exporting important? Microeconomic evidence from Columbia, Mexico and Morocco", *Quarterly Journal of Economics*, vol. CXIII, pp. 903-948.
- Crowe, D. (2000) "Young guns generate innovation to overdrive", *Australian Financial Review*, 6 January 2000, Sydney.
- Donnan, S. (1999) "Australia enjoys slow flirtation with the net", *Financial Times*, 15 December, London.
- Department of Foreign Affairs and Trade (1997) "Putting Australia on the New Silk Road", Canberra.
- Department of Industry, Science and Resources (2000), *Shaping Australia's Future Innovation – Framework Paper*, DISR, Canberra.
- The Economist (2000) "Foreign Friends", *The Economist*, 8 January, 2000.
- Feenstra, R., Madini, D., Yang, T. and Liang, C. (1999) "Testing endogenous growth in South Korea and Taiwan", *Journal of Development Economics*, vol 60 pp.317-341.
- Forsyth, P., Dwyer, L., Burnely, I. and Murphy, P. (1993) "The Impact of Migration on Tourism Flows to and from Australia", ANU CEPR Discussion Paper 282, Canberra.
- Gould, D. (1994) "Immigrant links to the home country: empirical implications for US bilateral trade flows", *Review of Economics and Statistics*, vol 76 pp 302-316
- Harcourt, T. (1999a) *Two Years On: Australian Exporters and the Asian Crisis*, Australian Trade Commission, Sydney [re-printed in CEDA, Political and Economic Newsletter, September 1999].
- Harcourt, T. (1999b) *The Export Impact of the Sydney Olympic Games*, Australian Trade Commission, Sydney [re-printed in The Sydney Institute Quarterly, Volume 3, Numbers 3 & 4, December 1999].
- James, D. (2000) "Lighting a fire under Australia's future", *Business Review Weekly*, 4th February
- Needham, K. (2000) *Asia's Slow Web Uptake Adds to Export Pressures*, *Sydney Morning Herald*, 11th January, 2000.
- Reserve Bank of Australia (1996) "Measuring Wages", *Reserve Bank of Australia Bulletin*, December 1996.
- Richardson, J. David (1996) *Why Exports Are Worth Promoting*. Institute for International Economics, Washington D.C.

Richardson, J. David (2000) "Exports Matter ... And So Does Trade Finance", Institute for International Economics, Washington D.C.

Richardson, J. David and Karen Rindal (1995), *Why Exports Really Matter!*, Institute for International Economics and The Manufacturing Institute, Washington D.C.

Richardson, J. David and Karen Rindal (1996), *Why Exports Matter: More!*, Institute for International Economics and The Manufacturing Institute, Washington D.C.

Rodrik, D. (1997) *Has Globalisation Gone Too Far?*, Institute for International Economics, Washington DC

Skotnicki, T. (1999) "Heading for a New Golden Age", *Business Review Weekly*, July 9, 1999, Melbourne.

Stanton, P. and Lee, J. (1995) "Australian Cultural Diversity and Export Growth", *Journal of Multilingual and Multicultural Development*, vol 16, no 6, 1995.

Thaw, J. "All the World's a Stage", *Overseas Trading*, March 2000

Throsby, D. (1998) "Get out there and sell – The Visual Arts Export Strategy, Past, Present and Future" *Artlink*, vol 18 No4

Uren, D. (2000) "For Innovation Mix Science, Work and Luck", *Weekend Australian*, 13/14 February

US Department of Commerce (1999) "The Emerging Digital Economy II", Washington, D.C.

US Department of Commerce (2000) "Digital Economy2000", Washington D.C.

8. Appendix: Statistical Note

The statistics used in this paper can also be found in the report "A Portrait of Australian Exporters" a joint publication of Austrade and the Australian Bureau of Statistics (ABS Cat.8154).

Both the report and this discussion paper use statistics that are drawn from the Business Longitudinal Survey (BLS). The BLS was established by the ABS in 1994-95 to better understand the links between business characteristics and particular business behaviours and performance. It is one of the first publications of its kind drawing on the first official longitudinal survey of business in Australia and one of the few in the world.

The BLS has traced firm behaviour over four years with the last survey conducted in 1997-98 (This survey is based mainly on the 1997-98 results). It must be emphasised that there are certain exemptions from the BLS which, was commissioned by the Office of Small Business. The exemptions include Agriculture, Health and Community Services, Education and Communication Services, Government enterprises and non-employing businesses. However, it is the ABS's view that most exporting businesses (particularly the smaller businesses) are covered by the survey, which covers 90 % of Australia's non-agricultural businesses.

The ABS estimates that the BLS accounts for an estimated \$57 billion from export sales of goods in 1997-98 (out of a total of \$88 billion (exports f.o.b). However the BLS only has partial coverage of trade in services - because of some of the exemptions (eg freight and transportation services)

However, notwithstanding those exemptions, the ABS regards the report as a "wealth of information on the characteristics and behaviour of a large proportion of Australian exporting businesses" (8154.0, ix).