

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

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1. Introduction - Why

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.

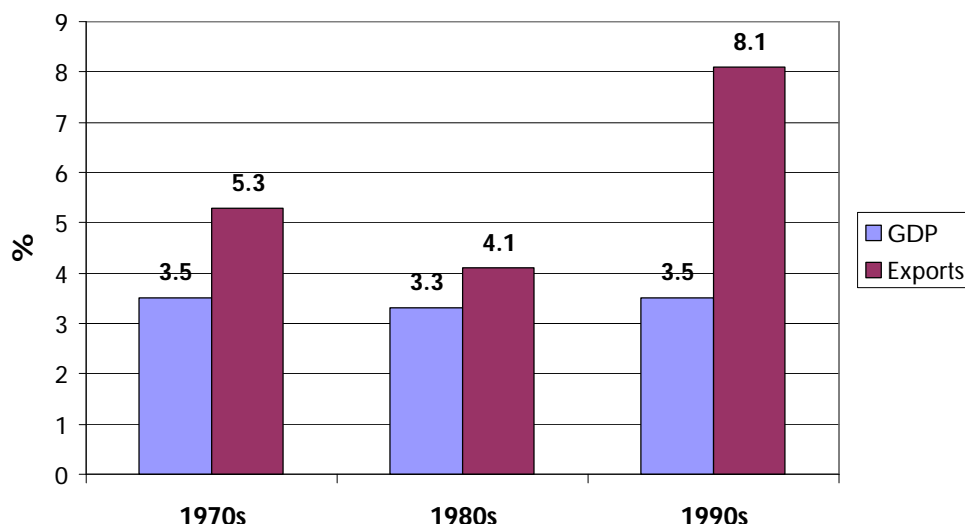
2. The Economic Arguments

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)

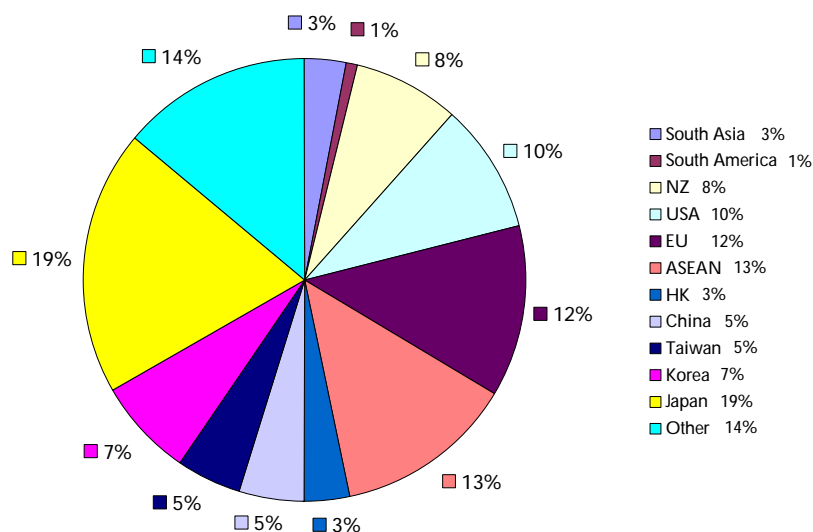


There is also much more geographic diversity in our export base, which is an illustration of Australia's improved economic performance. The recent Asian financial crisis of 1997-99 illustrated the importance trade diversion in helping Australia withstand the 'external' shock to our export income. Exporters 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)

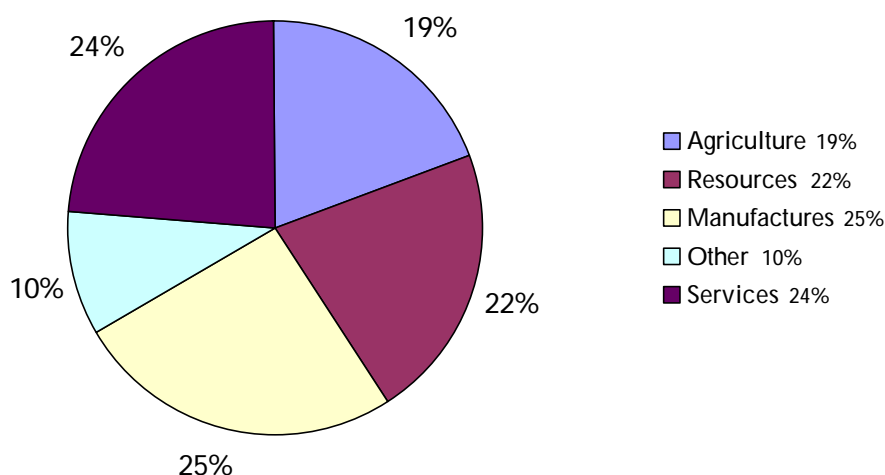


Australia has also diversified its export base in terms of industry sector. Whilst we traditionally 'rode on the sheep's back' with the dominance of primary products (both agricultural and mining) this was later followed by manufacturing and more recently by services. In the new millennium it is expected 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.

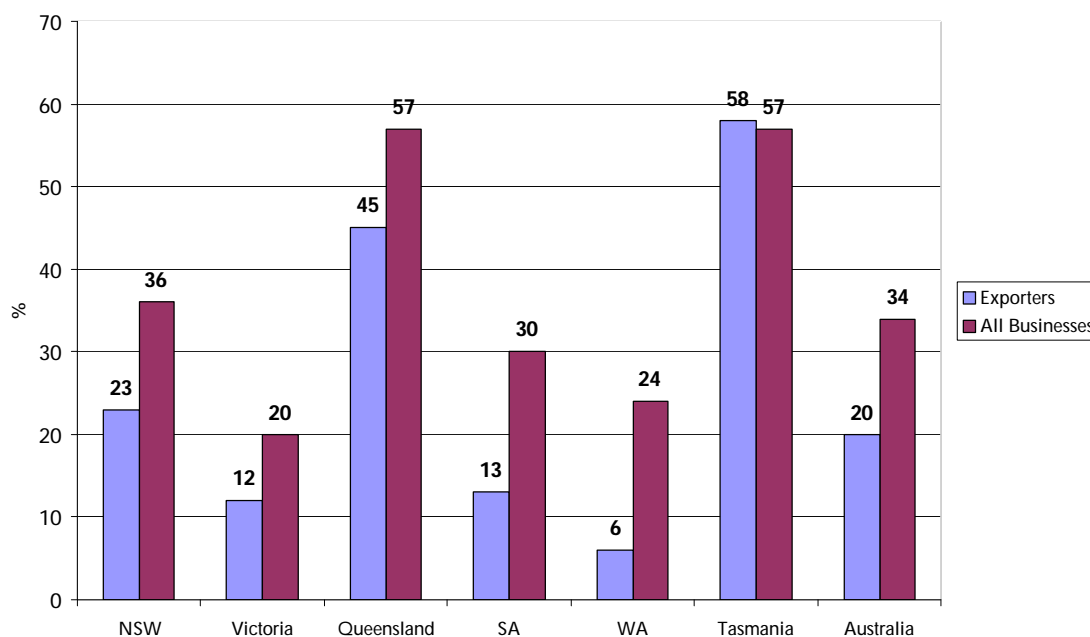
There are also **competitiveness** reasons for exporting. As we have to compete with more firms in the global market we are likely to strive for the best business practices, most innovative techniques, best use of technology and so on. As shown in section 4.3 below, exporters tend to perform better than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



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.

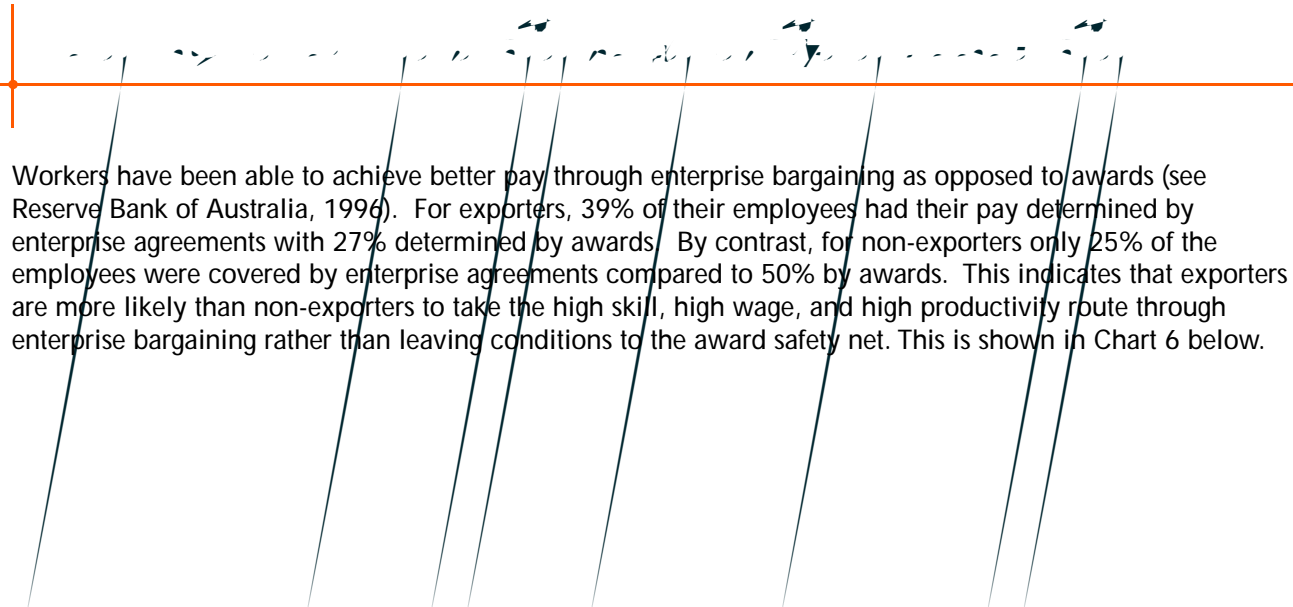
4.1 Why Exports Are Good For Workers

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.



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.

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.

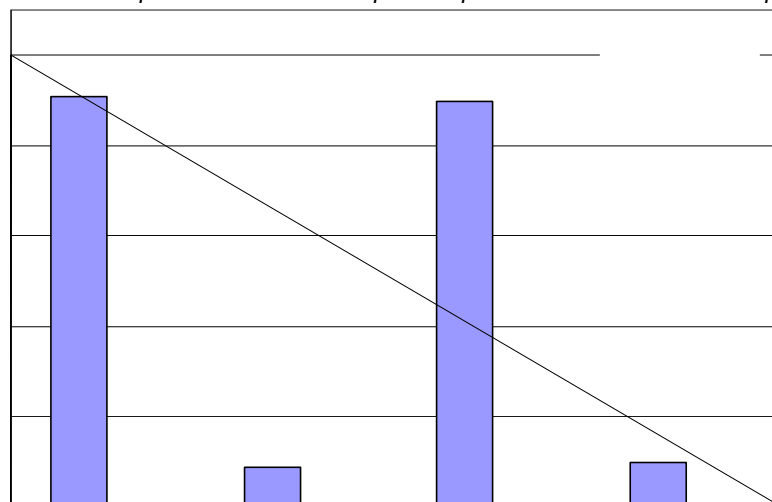
Chart 7: Occupational Health and Safety

(Source: ABS)

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)



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.

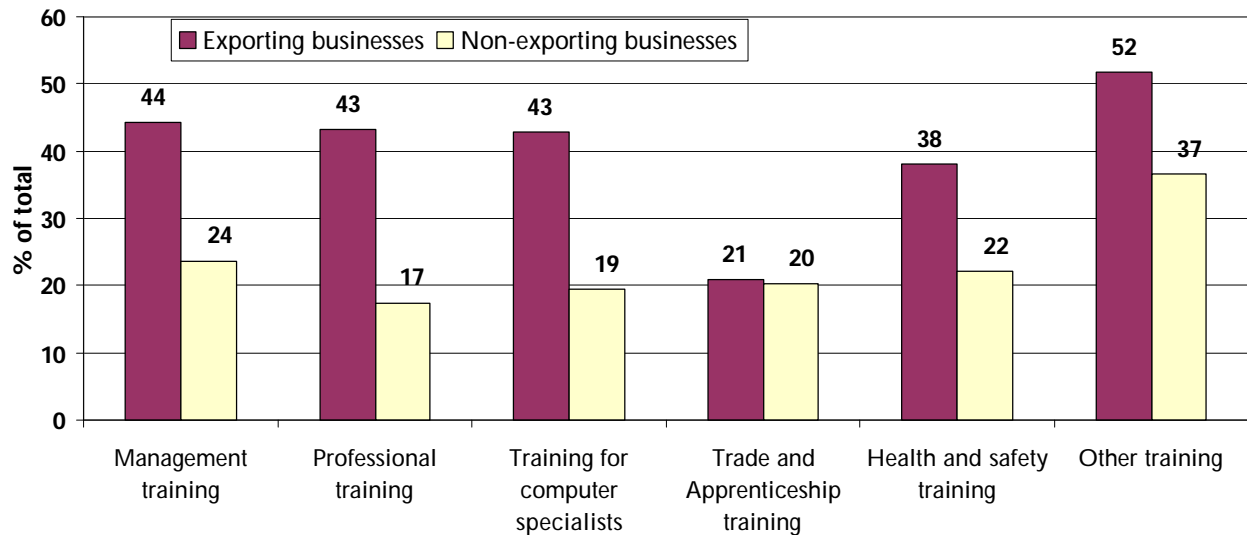
This is an on-going phenomenon as exporters are also more likely than non-exporters to increase their training levels over time. According to the ABS data, in 1997-98, 30% of exporters increased their employee training levels over the period (1996-97 to 1997-98) compared to only 12% of non-exporters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

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).

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.

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)



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)

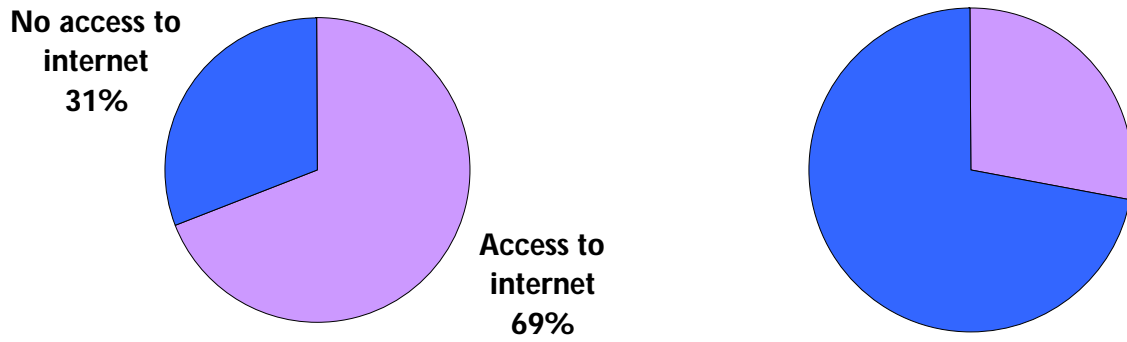
Innovation is about the application of knowledge. So investment in skills and technology is important. Australian business journalist David Uren has used the analogy of the remarkably successful Australian swimming team to show the links between innovation and knowledge for Australian businesses. Uren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

Chart 15: Business Practices

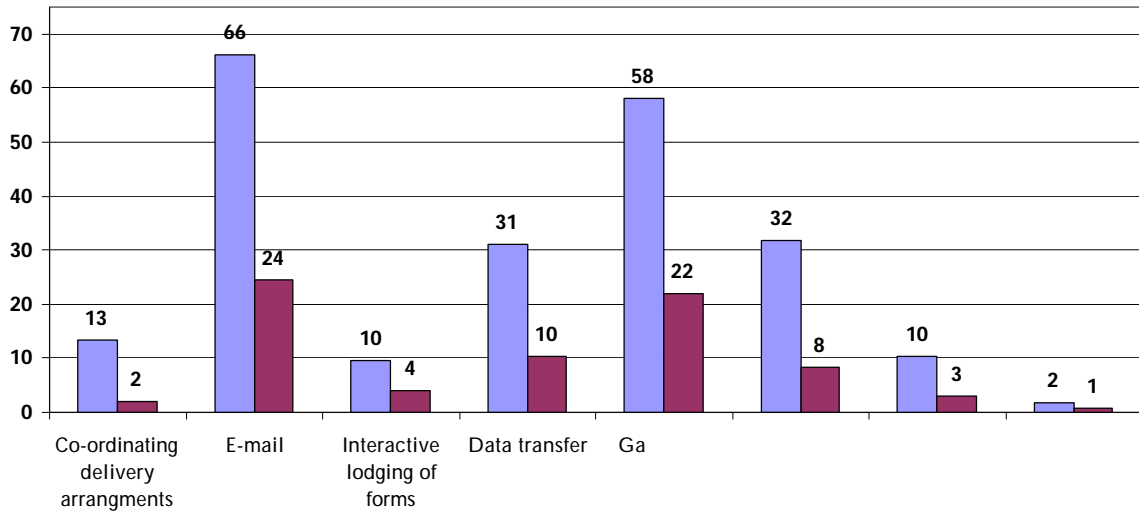
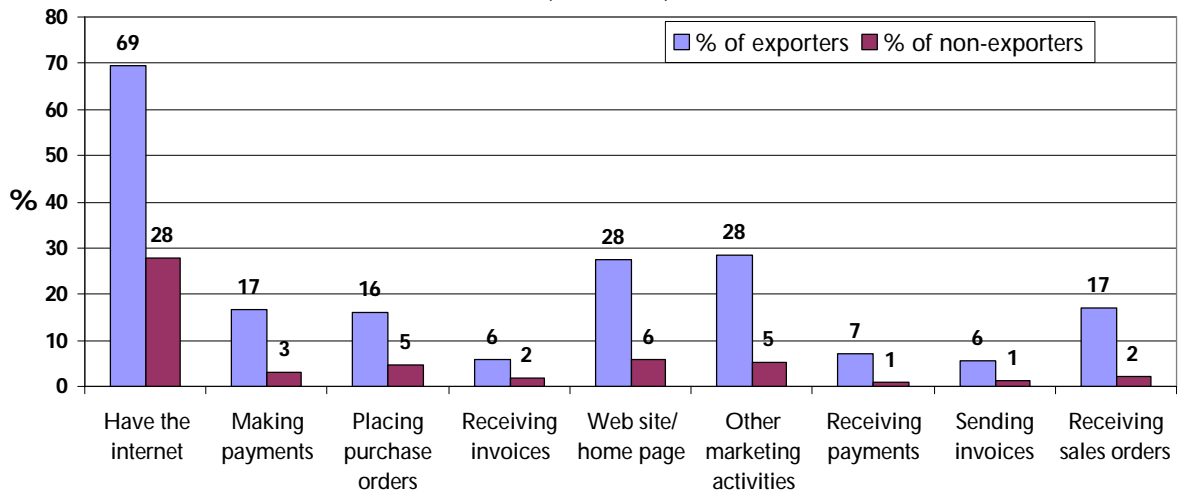
How are Australian exporters faring in the information age? Some indicators are quite promising. The survey data shows that, on average, Australian exporters are better connected to the information economy than their domestic market counterparts. For example, 69% of exporters had access to the Internet 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).



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)



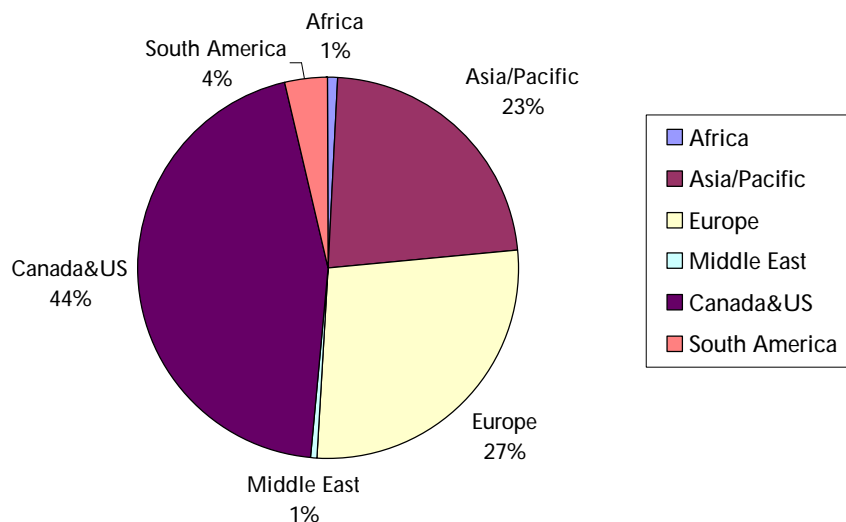
Exporters are also prepared to increase their investment in technology in response to changing market environments. For instance, 39% of exporters increased their number of personal computers used compared to 14% of non-exporters whilst 35% of exporters increased the number of staff that use computers 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.

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).

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. D

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

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.

8. Appendix: Statistical Note

The statistics used in this paper can also be found in the report "A Portrait of Australian Exporters" a joint