



Intellectual Property and the Australian economy

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Executive summary

Despite often being seen through the prism of the traditional industries of agriculture, manufacturing and resources, the Australian economy has reformed significantly over the last 20 years. Australia's economy is now built on banks, financial services, telecommunications and food retailers. These industries are heavily dependent on intellectual property for their creation, growth and ongoing sustainability. Similarly, productivity and efficiency gains in traditional industries have developed as a result of the application of innovation underwritten by a strong IP regime.

Australia is an innovative economy. Internationally it has a strong standing as one of the most innovative economies and has regularly ranked in the top 16 innovative economies of the world. Underwriting Australia's innovative record is its IP regime. Over recent years there has been a stalling of Australia's innovation ranking directly linked to weakening of its IP regime.

Australia's IP regime provides the property rights system necessary for intangible goods to be traded in the economy. Despite popularly being recognised as benefiting large companies, registered rights (patents, trademarks and industrial designs) are heavily used by small and medium enterprises and individual innovators to protect their property rights. They use IP for protection of their ideas, but also because it assists them in licensing their ideas for commercialisation.

Australia's IP regime also plays a vital role in securing government, domestic, industrial and foreign research and development funding. International surveys show that protection of IP is one of the primary factors when deciding where to locate research and development activities. And the benefits of R&D underwrite both the manufacturing and services sectors.

In the different streams of IP the use is significant. The number of industrial designs (mostly registered by individuals) has doubled over the past ten years. Similarly, the number of trademarks registered in Australia over the past ten years has more than doubled. The volume of Australians pursuing patents outside of Australia for Australian inventions has seen steady growth; as has Australian patents in the major consumer markets of the United States, Europe and Japan. The willing use of IP is a good indicator of its importance and integration into Australia's economy.

As a non-registered right, copyright also makes an important contribution to the economy and has increased steadily as a percentage contribution to Australia's GDP and in real numbers through wholesale sales and royalties. However, the music and audio visual sectors have been hard hit by piracy. Despite growth in audio visual products, particularly DVDs, the industry is now in decline from the competition posed by internet and other transportable media-aided piracy.

Written works are also economically significant with the vast majority of books of Australian origin.

IP is well integrated into the Australian economy. It is recognised by innovators and creators to be essential to the creation of intangible goods.



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1.0 Abbreviations

AUD\$	Australian Dollars
AUSFTA	Australia United States Free Trade Agreement
EPO	European Patent Office
ICT	Information and Communications Technology
IPRIA	Intellectual Property Research Institute of Australia
JPO	Japan Patent Office
OECD	Organisation for Economic Co-Operation and Development
PCT	Patent Cooperation Treaty
PPP	Purchasing power parity
SME	Small and medium enterprise
TRIPS	Trade Related Aspects of Intellectual Property Rights
US	United States
USD\$	United States Dollar
USPTO	United States Patent and Trademark Office
WTO	World Trade Organisation



2.0 Introduction

Australia's economy is often misrepresented as dependent on the traditional industries of resources, agriculture and manufacturing. Yet over the past twenty years major growth has occurred in the innovative services sector. In particular banking and financial services has emerged as a new powerhouse industry. Similarly, growth has occurred in resources, agriculture and manufacturing as technology and methods have been integrated to improve productivity and efficiencies.

This growth has been underwritten by many factors, including Australia's strong intellectual property infrastructure. IP provides the property rights necessary to inventors and investors to conduct research and development into new inventions and methods to assist industry in improving efficiency and productivity.

IP is a vital component of the Australian economy to promote the productivity gains that drive economic growth. Yet, it is often under-valued in its contribution. There is a paucity of information and statistics available articulating the contribution of IP to the Australian economy.

This paper outlines the basic contribution IP adds as a framework to the Australian economy. The paper also sources data on how IP is used by innovators and creators; and its growing economic contribution.



3.0 An innovative economy

Australia is an innovative economy. Its innovation system is rooted in inventions and their application to drive efficiencies and productivity. The framework supporting Australia's innovation system is its intellectual property regime.

The Australian IP system has come a long way from the Jones review of the late 1980s. The then Minister for Science, Customs and Small Business reformed Australia's patent regime to ensure Australia's IP system was working to promote R&D and innovation.

Australia's economy was still built on the foundations of resources, agriculture and manufacturing. At the time the Government argued that 'the economic costs of the patent system probably exceeded its benefits'.¹ Australia's ongoing commitment to IP related mostly to international obligations rather than a commitment to fostering innovative industries.

Since then there have been numerous reviews and amendments to IP law, notably in all areas of IP following the formation of the WTO and its TRIPs Agreement. In the late 1990s and early 2000s there were also significant amendments to deal with copyright due to the development of digital media technology. Further amendments to copyright followed the ratification of the AUSFTA.

Since the Jones review it is no longer possible to say IP is an economic cost to Australia. Over the last 20 years Australia's economy has transformed into an innovative economy. At the beginning of 1980 Australia was an economy dominated by mining or resource based companies. They made up eight of the top 10 companies, by 1987 that number had dropped to four, by 1998 that number had dropped to a mere two.²

Australia's traditional industries were built on its unique abundance of resources, competitive advantage in agriculture and protection to develop a local manufacturing industry.

Today Australia's top companies are dominated by 'banks, financial services companies, a telecoms group and food retailers'.³ The large growth has come from service-based industries. One of the core reasons for the change in the structure of Australia's economy and the significant growth of service-based industries was the strengthening of IP. Strengthening IP promoted Australia as a centre that was conducive and supportive of research and development investment capital.⁴ The total value of Australia's IP is currently estimated at AUD\$30 billion.⁵

¹ Jones, B., "Patents Bill: Second Reading", Speech, House of Representatives, Parliament of Australia, 01/06/1989

² Guthrie, J. & Petty, R., "Intellectual Capital: Australian annual reporting practices", Journal of Intellectual Capital, v1, n3, 2000, p242

³ Forbes.com, "Australia's top companies", ninemsn.com.au, 11/2006, cited on 29/04/2008 at <http://money.ninemsn.com.au/article.aspx?id=157517>

⁴ Gans, J. & Stern, S., "Assessing Australia's Innovative Capacity in the 21st Century", Intellectual Property Research Institute of Australia, University of Melbourne, 27/06/2003, p36

⁵ Department of Foreign Affairs and Trade, "Intellectual Property", Fact Sheet, Commonwealth of Australia, 2008, cited at 01/03/2008 at http://www.dfat.gov.au/trade/trade/fs/wto_ip.html

Australia's innovative capacity is often overlooked because of the prominence of the resources and manufacturing industries. But innovation is more than just innovating new technologies. Innovation also comes from applying technology. Many of Australia's innovative service industries have developed as a result of the application of technology, not the creation of it.

Technological innovation has the capacity to boost productivity through the invention of new technologies or processes. IP matters because it drives the innovation that provides the productivity gains and efficiencies to promote economic growth in developed countries, like Australia.⁶ Economic growth is in large part driven by productivity gains through increased output from decreased inputs.

As Gans and Stern argue, there is no such thing as low technology industries, only industries that fail to use technology sufficiently. While some industries are entirely driven by the use of technology, ie software writing on computers, technology is also used in every other industry to boost productivity.⁷

The Australian wine industry has achieved enormous success by utilising new technology and processes. Australia's agriculture industry is successful in export markets 'in no small part to the development and application of advanced technologies specific to the agricultural sector, including farming techniques guided by computers and agricultural biotechnology'.⁸

While the necessity for forms of IP varies from industry to industry, IP plays a vital role to promote innovation.⁹ IP provides the incentive to investors and inventors to commit resources to research and development and allow for the commercialisation of the output with certainty.¹⁰ Australia's innovative culture is strongly rooted in its IP regime.

3.1 Australia's global standing

There are two major international studies that have assessed the strength of IP regimes and a country's innovation capacity. On both studies Australia's IP regime ranks highly in its own right and as a contributor to innovation. However there is room for improvement.

In the most recent International Property Rights Index, Australia ranks equal eleventh in the world with Luxembourg for protection of property rights. The Property Rights Index is a ranking based on a combination of the legal and political environment, physical property rights and IP rights.

Specifically on IP rights, Australia ranks equal tenth with New Zealand, the US, Austria and Belgium. Not surprisingly the countries with the highest rankings for IP rights include many of those who have the most significant innovation industries, including Finland, Germany, the UK, Japan, Denmark and

⁶ *Ibid.*, 2003, p3

⁷ *Ibid.*, 2003

⁸ *Ibid.*, 2003, p7

⁹ *Ibid.*, 2003, p14

¹⁰ Harcourt, T., "Innovation not a question of old or new economies", *The Age (Business)*, 01/06/2007 & Sala-i-Martin, X., Blanke, J., Hanouz, M. D., Geiger, T., Mia, I. & Paua, F., "The Global Competitiveness Index: Measuring the productive potential of nations", *The Global Competitiveness Report*, World Economic Forum, 2007, p3

Switzerland. Equally, those with poor IP rights rankings also have economies not driven by innovation industries.¹¹

The University of Melbourne’s Intellectual Property Research Institute of Australia (IPRIA) compiles an innovation index of economies. Since its creation, Australia has always ranked in the top 16 innovative economies of the world.¹² As Table 1 shows, while Australia is in the top ranking of countries overall its standing has wavered over the last 10 years and has only seen subtle improvements in the past few years specifically.

Table 1 | Australia’s Global Innovation Ranking

1975	1980	1985	1990	1995	2000	2004	2005
11 th	16 th	15 th	15 th	14 th	16 th	16 th	15 th

Source: Gans, J. & Hayes, R., ‘Assessing Australia’s Innovative Capacity: 2006 Update’, Melbourne Business School and Intellectual Property Research Institute of Australia, University of Melbourne, 18/12/2006



In compiling their index, the authors identify IP as one of the most important foundations for an innovative economy. The authors also identify that one of the reasons for recent stagnation in Australia’s innovative capacity includes a ‘decline in IP protection’.¹³ Having a strong and well regulated IP regime is vital to ensure the Australian economy remains innovative.

3.2 Innovators embrace intellectual property

The benefits of an IP regime are not lost on the innovators. Innovators, both individual and businesses, utilise IP because of the certainty it provides. Innovators use patents to protect new technologies and methods, particularly those that require high, upfront capital investment and are easily replicable. Innovators use trademarks to assist in the marketing of their goods and develop brand identity in the marketplace. Innovators use copyright to protect their artistic creations from reproduction. And designers use industrial designs to provide short-term protection for their innovative aesthetics.

Often IP, like property rights generally, is purveyed as primarily serving the interests of big business. The process of registration can be expensive, prohibitive and time consuming. The challenges of registration are exacerbated when a registered right is sought internationally, particularly patents which require patentability registrations in each registered country.

But even with the cost of registering an IP right, it needn’t mean that IP is solely within the domain of the rich or large companies.

¹¹ Tahllam, S., “International Property Rights Index: 2008 Report”, Property Rights Alliance

¹² *Ibid.*, 2003, p14

¹³ Gans, J. & Hayes, R., “Assessing Australia’s Innovative Capacity: 2006 Update”, Melbourne Business School and Intellectual Property Research Institute of Australia, University of Melbourne, 18/12/2006, p9

An IPRIA study found that SMEs strongly utilise certain forms of IP. The paper found ‘SMEs apply for patents and trademarks at the same rate, given their innovative potential, as large enterprises ... imply(ing) that the size of a firm’s resources may not be as critical to the(ir) patenting and trade marking decision’.¹⁴

The high use of IP rights by SMEs should not come as a surprise. SMEs have a real incentive to use IP protection because they are likely to license and build strategic alliances with other companies, both large and small. IP rights confer certainty in business transactions and make these arrangements easier.¹⁵

But the statistics show that some forms of IP are used significantly by individuals. The increased use of IP has partly been driven by the changed structure of Australia’s dominant industries as well as the recognised value of IP.¹⁶ Table 2 breaks down the primary users of the registered forms of IP – patents, trademarks and designs – based on organisational-style. While companies use patents the most, individual innovators use them to a considerable degree. Similarly, industrial designs are primarily used by individuals.

The only registered rights that are overwhelming used by companies are trademarks. It is logical that companies would use trademarks as they are most likely to be mass-marketing products that heavily rely on consumer awareness and market differentiation which trademarks afford.



Table 2 | Utilisers of intellectual property, per cent

IP Right	Company			Total	Individuals
	Large enterprises	SMEs	Not matched		
Patents	21.3	12.0	21.3	53.2	46.8
Trademarks	24.1	20.0	34.5	78.9	21.1
Designs	13.2	13.4	22.5	46.1	53.9

Source: Hensen, P. & Webster, E., ‘SMEs and their use of Intellectual Property Rights in Australia’, Intellectual Property Research Institute of Australia, Working Paper n09/04, 08/04, p13

IP also works for SMEs and individuals because it may remove the need to source investment capital to commercialise their invention. IP provides a tangible property right that can then be licensed by individuals and SMEs to investors and larger businesses with the capacity to commercialise the invention.

¹⁷ Licensing enables inventions to reach the marketplace. The latest OECD Science, Technology and Industry Outlook came to this conclusion:

¹⁴ Hensen, P. & Webster, E., “SMEs and their use of Intellectual Property Rights in Australia”, Intellectual Property Research Institute of Australia, Working Paper n09/04, 08/04, p21

¹⁵ Productivity Commission, “Public Support for Science and Innovation”, 09/03/2007, p205

¹⁶ Daley, J., “The intangible economy and Australia”, Australian Journal of Management, Australian Graduate School of Management, v26, 08/2001, p12

¹⁷ OECD, “OECD Science, Technology and Industry Outlook”, 2006, p156

*'Licensing has become an increasingly important channel for diffusing inventions – and the knowledge embedded in them – and facilitating follow-on innovation. Licensing can increase the efficiency of innovation processes by putting inventions in the hands of those best capable of commercialising them'*¹⁸

From an export perspective, licensing also provides opportunities for Australian companies to license out their invention to foreign businesses to commercialise in foreign markets. Australian companies then collect a licensing fee with minimal capital expense.

Usage of IP rights varies from industry to industry. For example the highest users of patents in Australia are the pharmaceutical and cosmetics industry. The lowest is the nuclear engineering industry.¹⁹ This is both reflective of the structure of Australia's economy, as well as the replicable nature of the inventions developed by each industry. Nuclear engineering's output is highly sophisticated and unlikely to be readily reproduced.

3.3 Intellectual property secures research and development

The benefits of IP are not just limited to enabling businesses to commercialise their inventions. IP is also important for underwriting the justification for domestic research and development funding and particularly important for securing foreign direct investment (FDI) and research and development funding.

There is strong evidence that in the absence of IP protection private investors shy away from spending on research and development.²⁰ In an international survey IP has been cited as a very important factor in decisions locating R&D in developed countries. As Table 3 shows, on a five point scale on whether participants agreed that IP was a factor in locating R&D and the degree of its importance, IP protection nearly topped the ranks of surveyed participants. IP was considered exceptionally important. In the survey the only category that received higher rankings as a factor and degree of importance was the in-country availability of qualified R&D personnel.

For the Australian private sector R&D is vital, and hence so is the IP that supports it. As Table 4 shows, Industry is responsible for nearly half of all R&D expenditure. R&D capital is also spread across industry sectors. Table 5 demonstrates that R&D is important for both the manufacturing and services sector.

Industry is not the only one who recognises the benefit of R&D supported by IP rights. Governments are conscious of the role IP rights play through licensing to promote commercialisation, particularly between

¹⁸ *Ibid.*, 2006, p16

¹⁹ Productivity Commission, "Public Support for Science and Innovation", 09/03/2007, p767

²⁰ Maskus, K., Dougherty, S. & Mertha, A., "Intellectual property rights and economic development in China" Fink, C. & Maskus, K., "Intellectual Property and Development: Lessons from Economic Research", World Bank, 2005, pp325-327, cited at <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/TRADE/0,,contentMDK:20360014~menuPK:167375~pagePK:148956~piPK:216618~theSitePK:239071,00.html> on 01/02/2008

the public and private sectors.²¹ This is important in Australia considering more 40 per cent of R&D is funded by Government.²²

Table 3 | IP Protection as a factor in locating R&D activities in developed countries on a five point scale, 5 = strongly agree, 1 = strongly disagree

Agree	Importance
4.3 out of 5	4.15 out of 5

Source: OECD, 'OECD Science, Technology and Industry Outlook', 2006, p139

Table 4 | 2004 Australian Gross Domestic Expenditure on Research and Development, in PPP USD\$



Industry	Government	Total
\$4,688,996,800	4,074,046,400	\$9,608,600,000

Source: Adapted from OECD, 'OECD Science, Technology and Industry Outlook', 2006, p208

Table 5 | Business R&D expenditures by sector, 2002

Manufacturing	Services
47.3%	42.2%

Source: Adapted from OECD, 'OECD Science, Technology and Industry Outlook', 2006, p245

IPRs are important to ensure Australia remains an attractive destination for foreign research and development capital. Australia's R&D competitors – such as China and India – have both strengthened their IP regimes to boost the innovative capacity of local industry, but also to become more attractive for foreign development R&D capital.

Australia currently competes for R&D foreign capital. To do so it needs a strong IP regime. The cost of not doing so would be significant. As Table 6 demonstrates, currently more than 40 per cent of Australian R&D is conducted by foreign affiliates under foreign control.²³

²¹ OECD, 2006, p65

²² *Ibid.*, 2006, p208

²³ *Ibid.*, 2006, p125

Table 6 | Research and development expenditure of foreign affiliates in Australia as a percentage of R&D expenditure of enterprises

1998	2000
31%	42%

Source: OECD AFA database, June 2006

The United States remains Australia's most important foreign investor. Hence US capital bolsters R&D conducted in Australia. As Table 7 demonstrates, US-owned subsidiaries have spent more than US\$420 million on R&D in Australia and the value is growing.²⁴

Table 7 | R&D expenditures of affiliates of US parent companies abroad in Australia, USD\$ millions



1995	2000	2003
289.4	347.8	424

Source: Adapted from OECD, 'OECD Science, Technology and Industry Outlook', 2006, p133

As a total net importer of investment capital, much of which is dedicated to R&D, Australia cannot afford to undermine its IP regime. For domestic government and industry, as well as foreign industry, IP is recognised as a major factor in allocating R&D capital.

²⁴ *Ibid.*, 2006, p45

4.0 Inventors are using the IP system

Differing forms of IP protection reflect their usefulness to inventors. Because copyright is conferred automatically statistics ascertaining the volume of use are limited. However, there is data available for registered rights and the data demonstrates that the use of IP by inventors is significant and growing.

4.1 Industrial designs

Industrial designs are an IP right granted for ‘the visual appearance of the product but not how the product works’.²⁵ Industrial designs do not include the technical aspects of a product, which is covered by patents, nor the name of a product, which is covered by trademarks.

Industrial designs apply to products from furniture, packaging and containers to household goods. An industrial design must be ‘new’ and ‘distinctive’ to be awarded protection.²⁶ Both two and three dimensional products are covered by industrial designs.²⁷



Table 8 | Registered industrial designs in Australia

1995/96	2000/01	2004/05	2006/07
3,287	3,203	4,615	7,273

Source: IP Australia, ‘IP Statistics’ available at <http://www.ipaustralia.gov.au/about/statistics.shtml>

As demonstrated by Table 8, the volume of industrial designs registered each year is rising, and has more than doubled in the past ten years. The majority of industrial designs are registered by individuals and strong growth suggests both a strong awareness of the importance of utilising IP by individual artists.

4.2 Patents

Patents are a registered right for a ‘device, substance, method or process’.²⁸ Patents provide the property right necessary to promote innovation for new inventions, particularly where significant capital is

²⁵ IP Australia, “Designs”, Commonwealth of Australia, 2008, cited at <http://www.ipaustralia.gov.au/designs/index.shtml> on 20/03/2008

²⁶ IP Australia, “What is a Design?”, Commonwealth of Australia, 2008 cited at http://www.ipaustralia.gov.au/designs/what_index.shtml on 20/03/2008

²⁷ Wilson, T., “Intellectual Property Matters”, Institute of Public Affairs, 25/04/2008

²⁸ IP Australia, “What is a Patent?”, Commonwealth of Australia, 2008, cited at http://www.ipaustralia.gov.au/patents/what_index.shtml on 20/03/2008

necessary for research and development and the output is easily replicable. Patents allow a patent holder to prevent others from commercial use of a patented invention without the owner's consent.²⁹

To secure patent protection an application must be registered in each country that the patent is sought. Because of burdensome domestic patent examination processes, governments negotiated the Patent Cooperation Treaty (PCT). PCT provides an international mechanism to seek patent protection through a central application process. However, PCT applications are still expensive and are only applied for when an invention has significant commercial potential.

The volume of PCT applications are a good indicator of the number of patented inventions that have a large commercial potential coming from a country. Table 9 demonstrates that the number of PCT applications Australians make each year is large, and steadily growing.

Table 9 | Australian PCT Applications

2000	2002	2004	2006	2007
1,576	1,759	1,837	2,002	2,052

Source: World Intellectual Property Organisation, 'PCT filings by country of origin', www.wipo.int

Of particular importance are triadic patents. Triadic patents are patents registered with the three domestic competent IP agencies with the largest commercial markets – the United States, the European Union and Japan. Their IP offices are the United States Patent and Trademark Office, the European Patent Office and the Japan Patent Office. The number of triadic patents tends to demonstrate the volume and growth of consumer-targeted inventions. Table 10 demonstrates that there has been strong growth in triadic patents.

Table 10 | Australian Triadic patents registered

1997	2000	2003
252	360	431

Source: Adapted from OECD, 'OECD Science, Technology and Industry Outlook', 2006, p237

Separate to the PCT application process, individual applications can be made for patents to IP Australia. The volume of patent applications in Australia is significant. Table 11 shows that there are large numbers of non-PCT patents registered in Australia.

But not all non-PCT patent applications are submitted by Australians. The vast majority of patents registered in Australia come from foreign patent applicants who recognise Australia as a potential market to protect their invention. However, despite only having around 10 per cent of all patents registered by

²⁹ Wilson, T., "Intellectual Property Matters", Institute of Public Affairs, 25/04/2008

Australians, it is actually a significant achievement. Globally Australia only completes about one per cent of the world's R&D.³⁰

Table 11 | Non-PCT patent applications in Australia

2000/01	2004/05	2006/07
6,418	5,985	5,856

Source: Source: IP Australia, 'IP Statistics' available at <http://www.ipaustralia.gov.au/about/statistics.shtml>

Having patented inventions registered in Australia by foreign applicants can also be beneficial. There is strong evidence that patent holders are more likely to license their technology into a market where it receives patent protection. Similarly, patent holders are more likely to invest in FDI when there is a strong IP regime.³¹



4.3 Trademarks

Trademarks are a registered right and traditionally take the form of a symbol or word that is identifiable with a good or service. The recent advent of the internet has resulted in trademarks being expanded to domain names as well.

Table 12 | Trademarks registered in Australia

1995/96	2000/01	2004/05	2006/07
16,756	26,720	35,164	40,552

Source: IP Australia, 'IP Statistics' available at <http://www.ipaustralia.gov.au/about/statistics.shtml>

Trademarks assist individuals and businesses by providing them with an identifiable mark that they can use to trade their goods and services in the marketplace. The intent is that over time the mark will become sufficiently recognisable by consumers that they will identify the mark with that product.³² Because trademarks assist consumers through brand identification, increases in trademark registration tend to demonstrate growth in inter and intra-consumer product variety. As Table 12 shows, since 1995/96 the number of trademarks registered in Australia has more than doubled.

³⁰ Gruen, N., Bruce, I. & Prior, G., "Extending Patent Life: Is it in Australia's Economic Interests?", Industry Commission, Staff Information Paper, 06/1996, p12

³¹ Maskus et al., 2005, pp325-327

³² Wilson, 2008

4.4 Copyright

Copyright traditionally refers to the exclusive right of a creator (literary, musical or artistic) of a work from the point that it is produced in a tangible form. However, the evolution of digital technology has resulted in the significant broadening of copyright to ‘deal with particular forms of creativity, concerned primarily with mass communication’.³³

As a form of IP, copyright is necessary to promote commercial incentive and a market for creators of copyrightable material. In the absence of copyright there would be no incentive for authors or artists to produce works, as it provides them with a property right to trade their creation which is ultimately how they make their livelihood.

Statistics on the value of copyright are scarce. As a non-registered right the volume of copyright in Australia is voluminous and incapable of being calculated. What is known is the financial value of copyright to Australia’s economy. As a contributor to GDP copyright is significant. As Table 13 demonstrates, it increased in its economic importance by nearly 50 per cent between 1980 and 2000. While appearing to be a minor contributor to Australia’s overall GDP, copyright industries are also major employers. In June 2000 copyright-dependent industries employed the equivalent personnel as government administration and defence.³⁴



Table 13 | Copyright industries’ value add contribution as a percentage of Australia’s GDP

Years	Per cent
1980/81	2.2
1985/86	2.6
1992/93	2.9
1995/96	3
1999/2000	3.3

Source: Allen Consulting Group, Australian Copyright Council & Centre for Copyright Studies, ‘The economic contribution of Australia’s copyright industries’, 2001, p7

The income from copyrighted goods is not just sourced from original products. Income is also sourced from royalties paid over time which accumulate until the expiry of copyright. Table 14 demonstrates that there is a strong trend of increased royalties. Similarly, copyright is an export industry. Table 15 outlines the progressive growth of the different copyright industries.

³³ World Intellectual Property Organisation, “Fields of Intellectual Property Protection”, Chapter 2 of the “World Intellectual Property Organisation Intellectual Property Handbook: Policy, Law and Use”, e2, 2004, p40, cited at <http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf> on 01/03/2008

³⁴ Allen Consulting Group, Australian Copyright Council & Centre for Copyright Studies, “The economic contribution of Australia’s copyright industries”, 2001, piii

Table 14 | Income from copyright royalties, AUD\$ million

1995/96	1996/97	1997/98	1998/99	1999/00
260	268	307	370	444

Source: Adapted from Allen Consulting Group, Australian Copyright Council & Centre for Copyright Studies, 'The economic contribution of Australia's copyright industries', 2001, p13

Table 15 | Exports of copyright goods and services, AUD\$ millions

Year	Core copyright industries	Partial copyright industries	Distribution copyright industries	Total Value
1995/96	582	293	4	879
1996/97	618	319	7	944
1997/98	659	321	10	990
1998/99	783	302	13	1,100
1999/00	839	342	16	1,200

Notes:

Core copyright industries | Newspaper printing or publishing; free to air TV; data processing services; television services; film and video production; creative arts; book and other publishing; other periodical publishing; radio services; recorded media manufacturing; music & theatre production; commercial art and display services; photographic studios; Internet service providers; pay TV and sound recording studios

Partial copyright industries | Printing; architectural services; paper stationery manufacturing; surveying services; advertising services; services to printing and toy and sport good manufacturing.

Copyright distribution industries | Newspaper, book and stationary retailing; paper product wholesaling; libraries; motion picture exhibition; photographic film processing; book and magazine wholesaling; film and video distribution; computer and software retailing; museums; video hire outlets; performing arts venues; information storage and retrieval services; recorded music retailing; photography equipment wholesaling; toy and sporting good wholesaling; services to the arts and toy and game retailing.

Source: Adapted from Allen Consulting Group, Australian Copyright Council & Centre for Copyright Studies, 'The economic contribution of Australia's copyright industries', 2001, p11

Copyright is particularly important for creators of works that can be easily replicable. Music and the audio visual sector are vulnerable to piracy because of the internet and transportable media. Table 16 demonstrates the decline in sales caused by piracy since 1998 and the cost to the Australian economy. The growth in the audio visual sector can be attributed to the growth in DVD sales. But DVD sales are already declining due to the cost of piracy.

Books do not share the same risk as music and the audio visual sector. Copyright provides the protection necessary to authors to ensure that their product can be commercialised. As Table 17 demonstrates,

copyright in books primarily benefits local producers, not importers. Book royalties also deliver economic gains. The total income from book royalties and sale of rights in 2003-04 was \$18.9 million.³⁵

Table 16 | Australian sales at wholesale value, 000s AUD\$

	1998	2000	2002	2004	2006	2007
Singles	45,803	44,664	37,523	26,745	12,126	6,804
Albums	509,756	538,460	535,082	513,313	422,597	362,413
Audio Visual	11,513	10,610	36,929	66,912	49,192	53,030

Source: Adapted from statistics provided by the Australian Recording Industry Association, cited on 30/03/2008 at <http://www.aria.com.au/pages/documents/Physical-Salesxvalue.pdf>

Table 17 | 2003-04 Sales of Books, AUD\$ millions

Australian Books			Imported Books		
General	Education	Total	General	Education	Total
468.5	343.4	811.9	355.1	186.2	541.3

Source: Adapted from Australian Bureau of Statistics, 'Book Publishers', 1363.0, 17/08/2005

Table 18 | Domestic and export sales of books, AUD\$ millions

	Education		General		Total	All books
	Hardback	Trade paperback	Mass-market paperback			
Domestic sales	452.0	209.8	235.4	258.3	703.5	1155.5
Export and re-export sales	74.1	28.9	71.9	15.3	116.1	190.2
Total	526.1	238.6	307.3	273.7	819.6	1345.7

Source: Adapted from Australian Bureau of Statistics, 'Book Publishers', 1363.0, 17/08/2005, p13

Books are also an export earner. While not voluminous, it still contributes AUD\$190 million to the Australian economy.

³⁵ Australian Bureau of Statistics, "Book Publishers", 1363.0, 17/08/2005, p9

The use of IP by innovators and creators is significant. The property rights afforded by IP provides incentives for individuals and businesses to create new inventions and works, and assist them in their commercialisation. While most industries have seen steady growth for IP protection, reflecting the level of its integration, copyright protection is a concern. Copyright is becoming increasingly important to the music and audio visual sector who face competition from internet and transportable media-aided piracy.



5.0 Conclusion

IP plays a vital role in the Australian economy. The popular perception that Australia is a country dependent on the traditional industries of resources, manufacturing and agriculture is false.

Much of the growth in the Australian economy has stemmed specifically from IP-dependent industries. Similarly, efficiency gains and productivity improvements in Australia's traditional industries have stemmed from innovation.

IP is vital in providing an economic framework to promote innovation. By providing a property right to intangible goods IP creates incentives for inventors and investors. It also enables the commercialisation, trading and licensing of technologies that promotes diffusion and economic returns.

IP is also well utilised throughout the community. Despite suggestions that IP favours large companies; SMEs and individuals are frequent users of IP. In particular they use IP as a means to commercialise technologies they may not otherwise be able to working with larger companies.



Perhaps most importantly, the available data suggests that the IP system is well utilised by innovators. A well utilised system suggests that it is well integrated in Australia's economic fabric. And the available data suggests that IP-dependent industries contribute significantly as a share of and to the Australian economy.

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