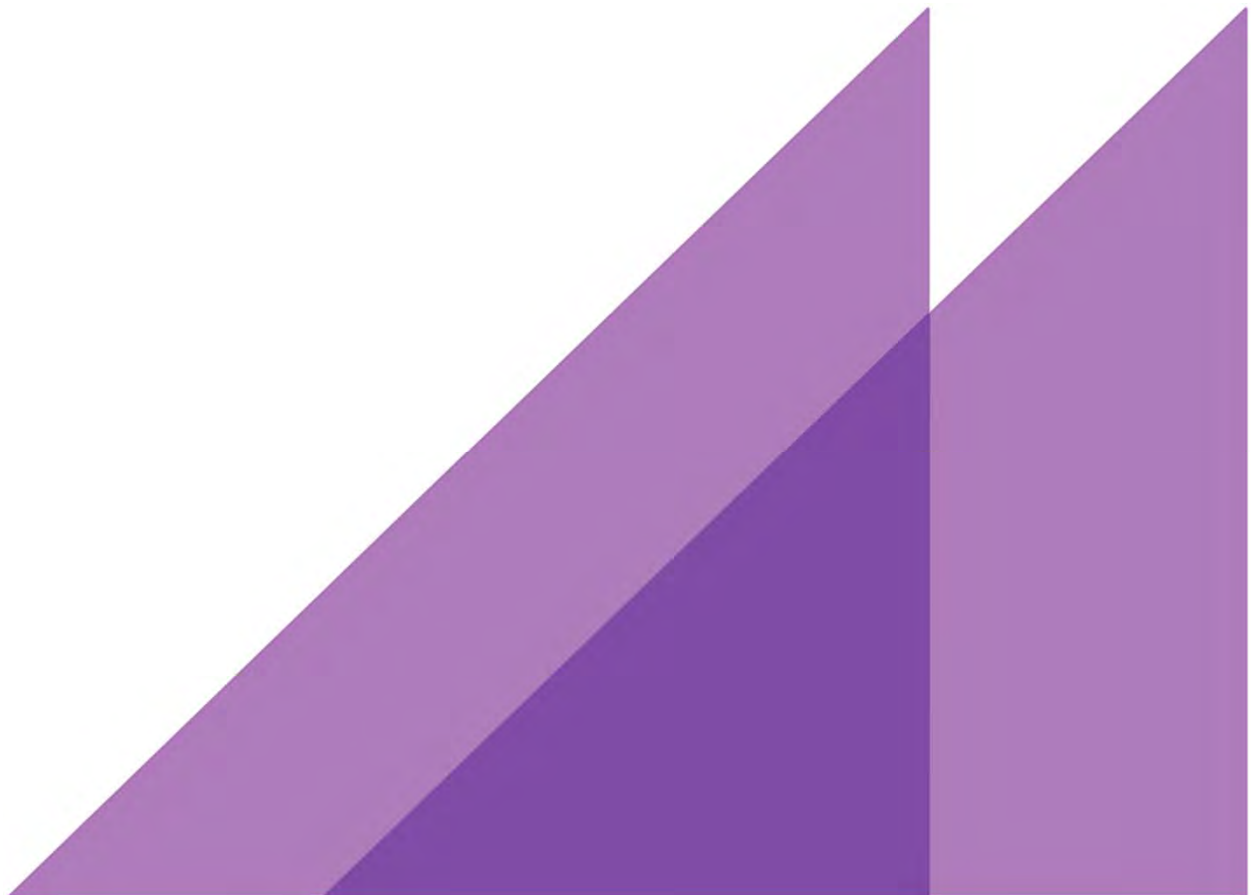


ACIL ALLEN CONSULTING

REVISED REPORT TO
**AUSTRALIAN COUNCIL OF LEARNED ACADEMIES
(ACOLA)**

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AUSTRALIA'S COMPARATIVE ADVANTAGE IN SERVICES





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Executive summary

A country has a comparative advantage in the economic activities it does relatively well, relative to how other countries do them. This concept is difficult to understand; indeed it has been called the only concept in economics that is both true and not obvious.

Beginning with the English economist David Ricardo in his *Principles of Political Economy and Taxation* (1817), it has been well-understood that a country's overall economic welfare will be improved if it concentrates its production of goods and services amongst those in which it has a comparative advantage, exporting what it doesn't consume itself, and using the export income to pay for the importation of goods and services in which other countries have a comparative advantage. This has been taught to generations of economics students, with the message filtering its way into policy action in varying degrees.

This story is fine as far as it goes, but the story leaves out a very important part, which is that a country's comparative advantage evolves, and what's more it is possible for countries to influence that evolution by good (or bad) economic policies and strategies.¹

This report argues that Australia has a comparative in three service industries: (post school) education, health and financial services. Having a comparative advantage in these industries is a very good thing because each can be subject to high rates of innovation, hence productivity growth and hence be a driver of growth for the economy as a whole. Each also employs skilled labour and is relatively high paying, which is also a very good thing. It is much better for a country to have a comparative advantage in industries that are high value added.

However, this is all about potential, not realisation. Each of these industries faces significant challenges, such as the high exchange rate brought about by the mining boom. What's more, other countries are developing these industries as well. A scenario where Australia builds on its strengths in these industries to develop its comparative advantage and drive economic growth is plausible, but far from guaranteed.

Government will play a critical role in determining the outcome. Each of these industries is characterised by pervasive government involvement: as funder, purchaser and regulator. If these industries are to prosper, government will need to be nimble and smart. This means, where needed, appropriate investment and regulation, and provision of supporting infrastructure. It also means being supportive but not interfering unnecessarily.

¹ In the economics textbooks a country's comparative advantage is determined by its endowments of technology and stock of productive resources (land, labour and capital) and cannot be changed.

1 Introduction

1.1 Purpose

The Australian Council of Learned Academies (ACOLA) has commissioned ACIL Allen Consulting to prepare a report on Australia's comparative advantage in services. The aim of this report is to identify Australia's strengths and comparative advantages in selected service industries and establish which contexts and policy settings will best ensure the future of Australia's comparative advantage in this sector.

This report has been prepared for the "Australia's Comparative Advantage" project, which is part of a broader "Securing Australia's Future" (SAF) project currently underway under the direction of the Australian Council of Learned Academies.

This report investigates the Australian service sector, and the health, education and finance industries specifically. The report presents an overview of the Australian service sector and relevant sub sectors including details of their employment, trade, gross value added (GVA), discussion of Australia's comparative advantage, and analysis of industries strengths, opportunities, weaknesses and threats.

The discussion throughout the report assumes a framework of drivers, shapers and enablers. The drivers, shapers and enablers of comparative advantage are identified and discussed in section 1.2 below.

Finally, Chapter 8 provides recommendations based to help shape the future of Australia's comparative advantage in health, education and finance.

1.2 Australia and comparative advantage

What is comparative advantage?

Comparative advantage is a difficult concept to understand. Paul Samuelson, the most influential economist of the second half of the 20th century, once said that it is the only idea in economics that is both true and not obvious.² Comparative advantage is, first and foremost, a relative concept. A country has a comparative advantage in industries in which it is relatively efficient, compared to other countries. This has a number of important implications:

- Just because a country has a comparative advantage in one or more industries, does not mean it that is 'does' those industries particularly well. In fact, it might do those industries particularly badly, in absolute terms, and even compared to other countries. But it will still have a comparative advantage in those industries. (A country that does things badly in all industries will have a comparative advantage in industries in which it is least bad.)
- All countries, by definition, have a comparative advantage in something. This is true for rich and poor countries alike, for Norway and the Central African Republic. Even the

² Samuelson also said that if his students still remembered the theory of comparative advantage one week after their final exam, he had done a good job. And Samuelson taught at MIT, which only has very smart students.

- most inefficient, poorly governed, corrupt, resource-lacking, civil-war ridden, disease ridden, woe-begotten countries have a comparative advantage in one or more industries.
- A country that makes the most of its comparative advantage does not guarantee itself prosperity. But it will maximise its chances of being prosperous, given the other factors that determine prosperity in the long run; that is, an educated, healthy population, a stable democratic political system, transparent property rights, well-functioning markets, and a tax and transfer system that provides a minimum standard of living for the poor and avoids extremes of income and wealth inequalities.
 - A country's comparative advantage is inextricably connected with its exports and imports. In the absence of barriers to international trade, it will export the goods and services in which it has a comparative advantage and import the goods and services in which it does not. (That doesn't mean that it will export everything it produces of goods and services in which it has a comparative advantage. It might export only a small proportion of that production.)
 - Comparative advantage is not the same thing as competitive advantage, a term that is often used in business discussions. Competitive advantage applies to individual businesses (or organisations). A business with a sustained competitive advantage (gained through having better products, clever branding, lower costs and perhaps lower prices) will be successful in its markets, probably gaining market share and certainly being profitable. But, critically, this does not apply to countries, where the concept of competitive advantage is much more difficult to apply.³ This is because a business that is uncompetitive will most likely go out of existence. However, countries, even those where productivity is low, corruption is high, etc, do not go out of existence. They will be poor, but poor *and* producing things in which they have a comparative advantage (and maybe things in which they do not have a comparative advantage, if barriers to trade exist). Rich countries most likely have businesses that have a competitive advantage (e.g. German precision tools manufacturers) as well as a comparative advantage in related industries, but these are separate concepts.
 - This report argues that Australia has a comparative advantage in health, (post-school) education and financial services. This does not mean that Australia is the best in the world at producing these kinds of services.⁴ There might or might not be other countries that are better than we are in an absolute sense at these industries, but, either way, Australia still has a comparative advantage in these industries.

Textbook analyses of comparative advantage state that the industries a country has a comparative advantage in are pre-determined by technology and its endowments of productive resources (land, labour and capital). According to these analyses there is nothing it can do about these, so it might as well make the best of them by making the most of its comparative advantage. However, this view is too limiting. In practice, a country can affect, and indeed create or destroy, comparative advantage, with the right investments and policies. Comparative advantage can come and go; the industries in which a country has a comparative advantage can be, at least to some extent, a matter of choice.

³ However, countries can be assessed in terms of factors that contribute to the competitive advantage of individual businesses on world markets; see chapter 2 of this report.

⁴ For example, it is unarguable that the best universities in the United States are of higher quality than the best universities in Australia (though whether American universities are better on average than Australian universities is another matter altogether). But this is irrelevant to the question of whether Australia has a comparative advantage in university education, and can successfully export education services. Likewise, it can plausibly be argued that the Australian financial services industry will always be dwarfed by the City of London and the big Asian financial centres Hong Kong and Singapore. Again, this is not relevant to the question of Australia's comparative advantage in financial services.

Modern analyses of comparative advantage also now recognise that comparative advantage can be held in parts of broadly defined industries. The canonical example is the motor vehicle industry. Germany and Italy export Audis and Fiats, respectively, to each other. This is explained by the existence of economies of scale and consumer preferences for a variety of goods and services. The implications are that even though Australia's comparative advantage in, say, financial services, might be restricted to part of that industry, say funds management, Australia could export funds management services while importing other financial services. The same is true in principle for education and health.

While comparative advantage can be encouraged by appropriate action, this does not mean that any country can create a comparative advantage in any industry, though some have tried. Iceland, best known for its cod fishing industry, tried to create a comparative advantage in financial services. For a while, this strategy looked to be successful, and Iceland's banking system grew to have assets equal to ten times its GDP, but unfortunately it all came crashing down with the Global Financial Crisis, at immense economic cost. This reality was that Iceland never did have any such comparative advantage, and any such apparent advantage was the product of weak or non-existent financial regulation.⁵

An interesting case of actual comparative advantage coming and going is Finland and mobile telephones. Nokia, Finland's biggest company, was a forestry business that in a relatively short amount of time became one of the largest manufacturers in the world of mobile phones. In recent years, having missed the smart phone revolution, Nokia found itself in deep trouble, and its mobile telephony business was acquired by Microsoft in September 2013 for a small sum. Few people would have said, 30 years ago, that Finland had a comparative advantage in mobile phone technology and manufacture. Even fewer would have predicted 15 years ago that that comparative advantage was about to disappear.

Australia can exploit its comparative advantage in the education, health and financial services industries, under the right conditions. The role of government will be crucial, because government is the principal funder of two of them (education and health) and regulates all of them. However, other countries can build comparative advantage in these industries. Australian success is not guaranteed. To take an example from the education industry, Australia has been successful in exporting university services, and there is potential for further success. But will Australian universities be the next Apple, or the next Nokia?

The services sector

Like most similar countries, the services sector in Australia is growing as a share of the economy. This is to be expected as the share of the manufacturing sector declines (with much manufacturing more efficiently undertaken in developing countries) and with greater demand for services by Australians as incomes increase.

The services sector is large and disparate, and in some ways is defined in the negative: it is that part of the economy that is not devoted to making things (manufacturing) or taking them out of the ground (mining) or growing plants and herding animals (agriculture).

The service sector dominates the economy, but it is not widely understood. Most people can visualise manufacturing (it's what happens in a factory), mining (a mine) and agriculture (a farm), but many people have difficulty understanding how value can be created by services,

⁵ This was notwithstanding the plethora of self-serving reports commissioned before 2008 by Iceland's Government and banks which concluded that the source of Iceland's comparative advantage in financial services, *inter alia*, was its interconnected social networks.

and are not convinced by the fact that three quarters or so of people are employed in the service sector. Where does the money come from to pay them? It can't be other services, so the argument goes, because there is no inherent value in services. Surely, goes the argument, value can only be created by making something tangible? It all seems to be a sleight of hand.

Of course, this view is false. The fact that service industries employ large numbers of people and other people are prepared to pay for these services is itself convincing evidence that service industries create value. This is because service industries exist to satisfy basic human needs (health, education) as well as things that are not strictly necessary but nice to have (dog walking, yoga classes). Some services are basic (supermarket checkouts) while some involve a large amount of transformation of basic knowledge into something important (architecture, anaesthesia).

An important distinction needs to be made between service industries which are the consequences of economic growth and those that are the drivers of economic growth.

The former include the retail industry, entertainment, private schools and cafes and restaurants – the kinds of services on which people spend their money. These are not high productivity, innovative industries, though they play a very important role in the economy, such as employing a lot of people.

The industries that are the drivers of growth in an economy are those that are based on research and development, innovation and high productivity, with key inputs from highly educated (or highly skilled) workers. In the United States, the IT sector is the exemplar (though not the manufacturing part of IT, which has been outsourced to other countries). Australia does not have a large IT industry, but Australia's education, health and financial services industries are – or could be – the drivers of national economic growth.⁶

This report details the strengths, weaknesses, opportunities and threats of the Australian health, education and finance sectors to identify Australia's comparative advantage in these industries and how to manage this comparative advantage in the future. It examines how well Australia is doing on the key factors that drive success in the education, health and financial service industries.

These three industries have been chosen for several reasons. First, they are well-established, accounting between them for around 20 per cent of GDP. This means that there already exists a critical mass of people, capital and expertise in these industries. Second, these industries are subject to potentially high rates of innovation and hence productivity growth, and so can be an engine of growth for the Australian economy. Finally, Australia already does quite well in these industries, but could do better, so they have potential upside and downside. They are thus very good candidates for industries where comparative advantage can be created and enhanced under the right conditions – but also potentially diminished with bad policies and bad management.

None of this rules out the possibility that Australia could develop a comparative advantage in other service industries (though subject to the constraint that by definition it is not possible for a country to have a comparative advantage in everything). Unsurprisingly, Australian mining services companies are very well regarded, and there are other niche industries (such as film post-production) where Australian companies also do well. The Australian tourism industry, which as a matter of national accounting comprises parts of many other

⁶ This is obviously a simplified account. The mining industry is clearly a driver of economic growth in Australia, but its role is outside the scope of this report. Spending on health, education and financial services is also a consequence of economic growth.

services, is another where Australia could certainly be considered to have a potential comparative advantage, given Australia's scenic and other attractions.

However, it is important to remember that much of the service sector, even in this era of internet-based commerce, is not internationally traded, or even tradable. Wholesale trade, retail trade, public administration and safety – to name just a few – are large service industries which are not best analysed through the lens of comparative industry. Their evolution, rather, is a primarily result of economic growth rather than a driver of it.

Australia's divers, shapers and enablers

Australia's strengths and weaknesses change over time and are influenced by world trends. The evolution of Australia's comparative advantage can be thought of as being affected by drivers and shapers. The drivers of comparative advantage are long run forces that affect trends and are reasonably well-predicted e.g. demography. These can also be characterised as Rumsfeldian "known knowns". Shapers of comparative advantage are factors which are known to affect comparative advantage, but their magnitude and timing is uncertain (e.g. the pace and nature of economic development in China). These are "known unknowns".

In light of identified drivers and shapers, enablers of comparative advantage are factors over which a country has some control, e.g. regulation and infrastructure, and that can help shape the evolution of Australia's comparative advantage.

Finally, there are apparently random forces, the "unknown unknowns", which if serious enough will permanently affect actual or perceived comparative advantage e.g. the Global Financial Crisis.

Table 1 identifies drivers, shapers and enablers relevant to the evolution of Australia's comparative advantage. These drivers, shapers and enablers help drive the discussion of the service sector in Australia and its strengths, weaknesses, opportunities and threats.

Table 1 Australia's drivers, shapers and enablers

Drivers	Shapers	Enablers
<ul style="list-style-type: none"> Global population Growth Social, demographic and cultural trends Economic and financial trends and globalisation Labour force, industrial and workplace trends Science, technology and innovation An ageing and growing population Growth in population and cities Human capital and workplace relations Regulation and governance Increasing reliance on natural resources Restructuring of the Australian economy Business environment 	<ul style="list-style-type: none"> Asia Growth: including increasing demands for resources and services Climate Change Technological revolution: including increased and unprecedented connectivity What other countries are doing Rise of emerging economies Changing attitudes (work and family roles) Cultural diversity 	<ul style="list-style-type: none"> Tax and fiscal policy Governance and public policy Regulations Global engagement Infrastructure Institutions and culture Research funding

Source: ACIL Allen Consulting

The items listed in Table 1 are illustrative, and this report does not attempt to analyse each of them as they affect the service sector. The report does undertake a SWOT analysis (strengths, weaknesses, opportunities, threats), drawing on the drivers, shapers and enablers.

The following chapters present data that show the size and scope of the education, health and financial services industries and which illustrate where they stand and the challenges that lie ahead. The data are not intended to be used as formal test of the hypothesis that

Australia has a comparative advantage in these industries. In some respects, that is taken as given. The data are intended to give a factual background and basis to the discussion in this report on how these industries may contribute to Australia's future prosperity.

1.3 Report structure

Chapter 2 provides an overview of the Australian services industry, its total imports, exports and a discussion of its comparative advantage.

Chapter 3 provides greater detail on the Australia Health care and social assistance industry, Education and training industry, and the Finance and insurance industry.

Chapter 4 outlines Australia's strengths in services.

Chapter 5 outlines Australia's weaknesses in services.

Chapter 6 outlines Australia's opportunities in services.

Chapter 7 outlines Australia's threats in services.

Chapter 8 draws the analysis into an overall picture.

2 The Australian service sector

2.1 Introduction

In 2013 Australian service industries (defined in Table 2) accounted for close to 60 per cent of Australia's GDP. The services industries as a proportion of GDP have followed an increasing trend since 1990. The service industries account for an ever higher proportion of Australian employment, in 2013 the service industries accounted for 78 per cent of total full time and part time employed persons.

While Australia's service sector is growing, net exports of services are not. Australia's net trade in services (exports less imports) has been declining since it reached a peak over the 2001- 2003 period.

This chapter provides a high level overview of the service sector in Australia, including its contribution to gross domestic product (GDP), employment and trade.

2.2 The service industries contribution to GDP and employment

The Australian service industries form the majority of our GDP and in 2013 accounted for close to 60 per cent of Australia's GDP.

Throughout this section the Australian service industries have been defined using the Australian Bureau of Statistics ANZIC definitions of Australian industries (ABS 2006a). It has been assumed that the industries summarised in Table 2 constitute the Australian services industries.

Table 2 Service industries in Australia

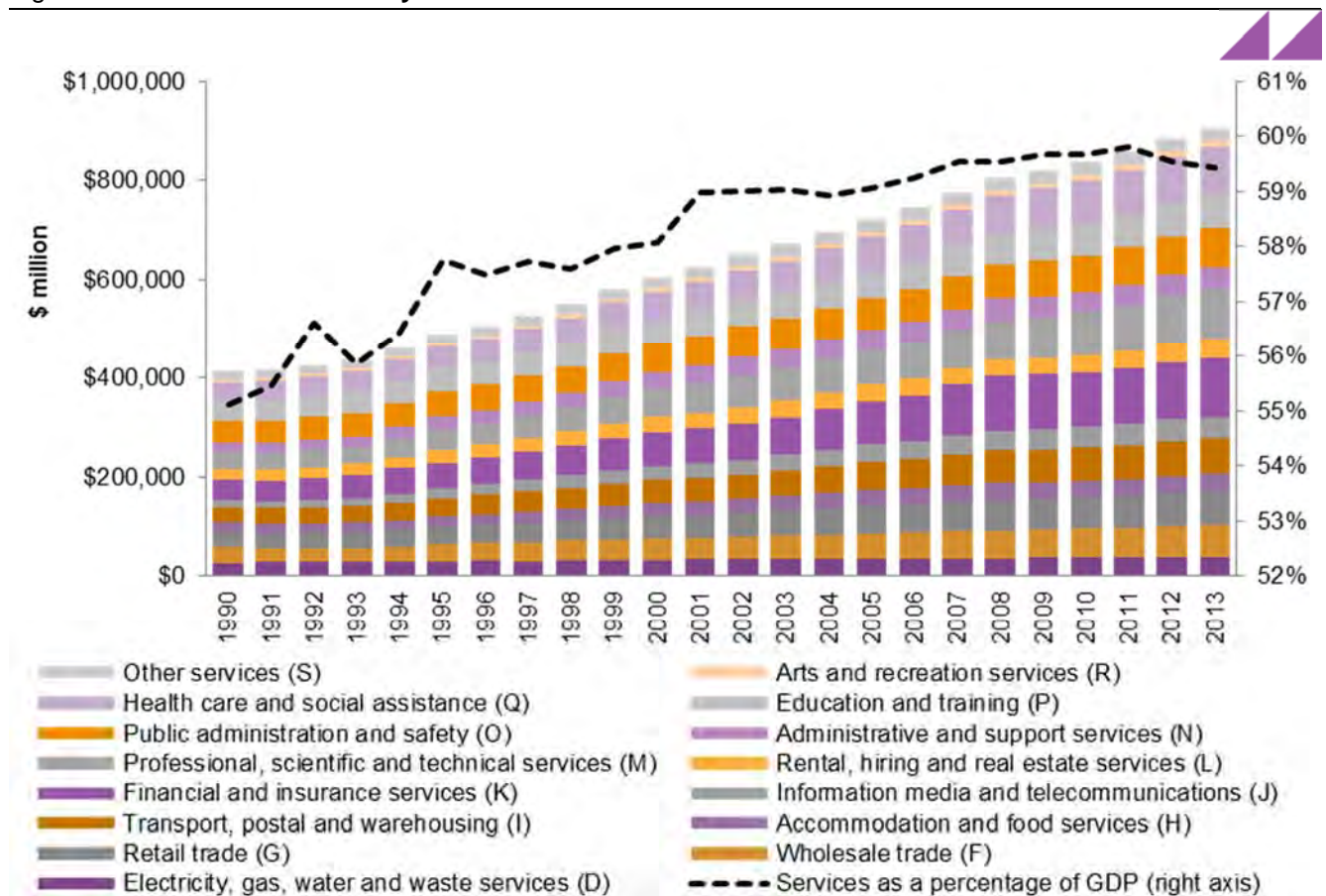
Electricity, Gas, Water and Waste Services (D)	Professional, Scientific and Technical Services (M)
Wholesale Trade (F)	Administrative and Support Services (N)
Retail Trade (G)	Public Administration and Safety (O)
Accommodation and Food Services (H)	Education and Training (P)
Transport, Postal and Warehousing (I)	Health Care and Social Assistance (Q)
Information Media and Telecommunications (J)	Arts and Recreation Services (R)
Financial and Insurance Services (K)	Other Services (S)
Rental, Hiring and Real Estate Services (L)	

Note: The remaining industries not considered service industries include: Agriculture, forestry and Fishing (A), Mining (B), Manufacturing (C), and Construction (E).

Source: ABS 2006a

Figure 1 shows the size of the service industries in Australia and the service sectors as a percentage of GDP. The total and relative size of the service industries has increased consistently since 1990. The services industries as a proportion of GDP increased from 55.1 per cent in 1990 to 59.4 per cent in 2013.

Figure 1 Gross value added by service industries



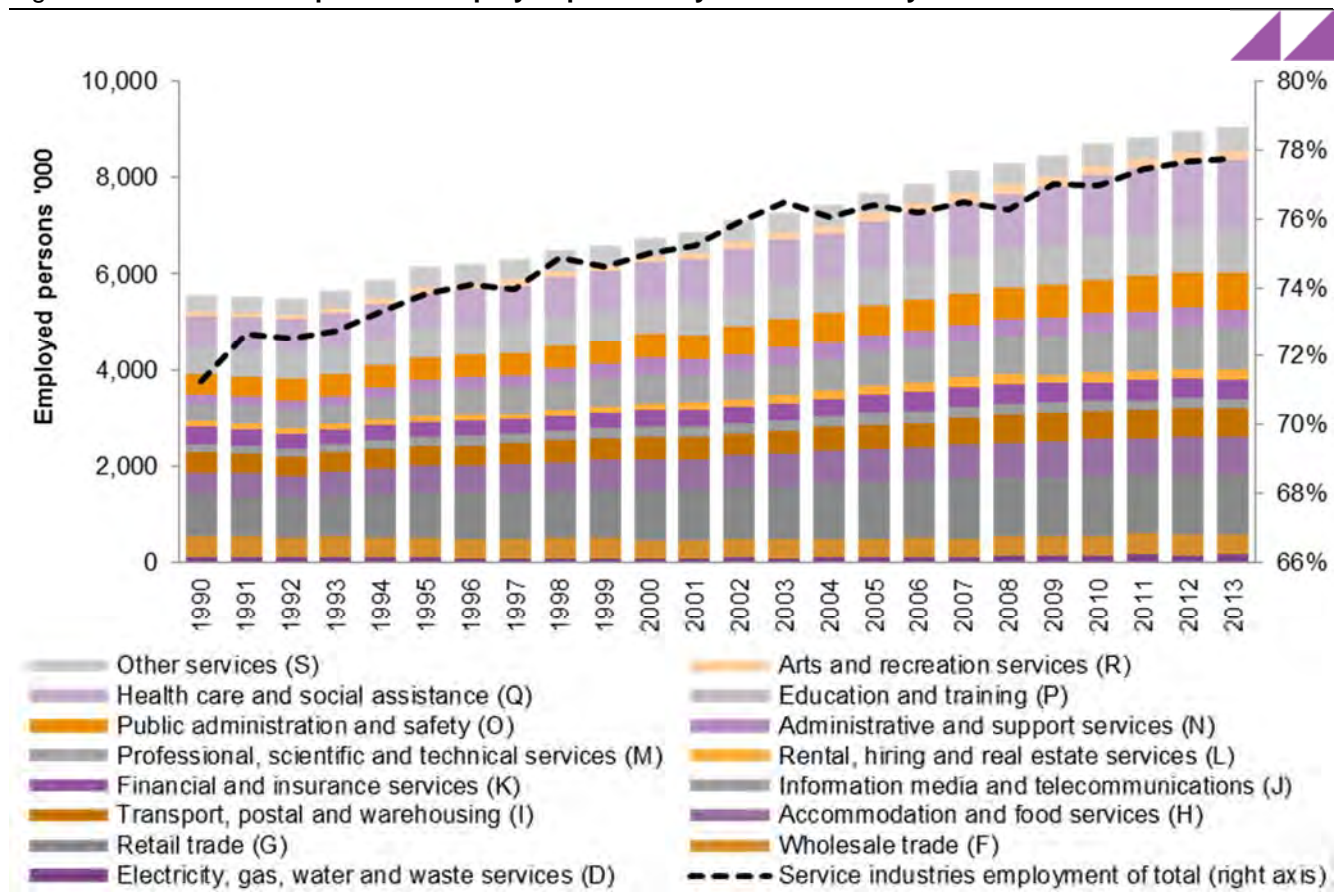
Source: ABS 2014 a

The service sector accounts for a large proportion of full and part time employment in Australia; in 2013 the service industries accounted for 78 per cent of total full and part time employed persons.

Figure 2 shows the number of employed persons (both full time and part time) in the Australian service industries and service sector employment as a percentage of total.

The service industries employment as a proportion of total increased from 71 per cent in 1990 to 78 per cent in 2013. In 2013 the service sector accounted for 78 per cent of all full and part time employment and 59.4 per cent of GDP. Since the service sector accounts for a larger proportion of employment in the economy, its output is relatively labour intensive.

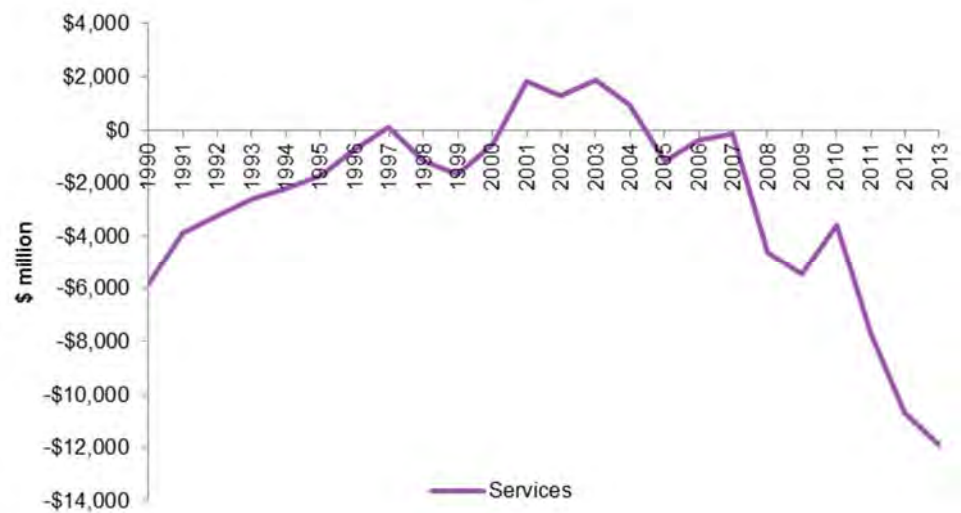
Figure 2 Total full and part time employed persons by service industry



Source: ABS 2013 b

2.3 Service industry imports and exports

While Australia's service sector is growing, our net exports of services are not growing across the sector as a whole. Figure 3 shows Australia's net trade in services (exports less imports). Australia's net trade of services has been declining since it reached a peak over the 2001- 2003 period.

Figure 3 Net trade of service industries (exports less imports)

Source: ABS 2014 c, ABS 2014 b

While Australia's net trade balance in services has been falling overall, Australia's net trade in particular services may be increasing. It is widely accepted that possible areas of comparative advantage for Australia are in the health, finance and education sectors. The following Chapter investigates the relevant industries in more detail.

Australia's service export partners

Table 3 shows Australia's exports of services to its top ten trading partners. Australia's major services export partners are China (12.7 per cent), the United States (10.5 per cent), United Kingdom (7.5 per cent) and Singapore and New Zealand (6.8 per cent each).

Table 3 Australia's trade in services by top ten partners, 2012-13

Country	Services exports (\$ million)	% share
China	6,662	12.7
United States	5,507	10.5
United Kingdom	3,927	7.5
Singapore	3,584	6.8
New Zealand	3,559	6.8
Japan	2,101	4
India	1,844	3.5
Hong Kong	1,831	3.5
Republic of Korea	1,698	3.2
Malaysia	1,663	3.2
Total	52,411	100

Source: DFAT 2013

2.4 Australia's global rankings

2.4.1 Introduction

The following section details Australia's rankings in various innovation and competitiveness ranking indexes. These indexes give insight into Australia's overall innovation capability, competitiveness, strengths and weaknesses. The criteria used to determine these rankings

can vary significantly and is not always completely transparent however give an indication of the performance of countries at the broadest level.

Australia's rank in the education, health and economy specific sub-indexes is discussed further in the subsequent chapter.

2.4.2 Global innovation index

The global innovation index aims to capture the level of innovation in a society. It is calculated using the average of two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-index. The Innovation Input Sub-Index is calculated using the following inputs on the national economy: Institutions, Human capital and research, Infrastructure, Market sophistication, and Business sophistication. The Innovation Output Sub-index is calculated using the following inputs: Knowledge and technology outputs and Creative outputs.

The Innovation Efficiency Ratio is calculated as the ratio of the Output Sub-Index to the Input Sub-Index, and aim to show the amount of innovation output received by a country for its inputs.

In 2013 Australia ranked 19th on the global innovation index, with Switzerland, Sweden and the United Kingdom in 1st, 2nd and 3rd positions. Australia ranked significantly lower in the innovation efficiency ratio at 116th, with a value of 0.65.

Table 4 Global Innovation index (out of 142)

Index	Score	Rank
Global Innovation Index (out of 142)	53.1	19
Innovation Output Sub-Index	42.0	32
Innovation Input Sub-Index	64.1	11
Innovation Efficiency Ratio	0.65	116
Source: INSEAD 2013		

Further detail of the trade and competition index which is used in calculating the Global Innovation index is shown in Table 5. Australia has a rank of 5 in Trade & competition. This high rank is driven by a high level of local competition rather than low tariffs as shown in Table 5.

Table 5 Global Innovation Index – Trade & competition breakdown

Index	Value	Ranking
Trade & competition	88.2	5
Applied tariff rate, weighted mean, %	1.9	42
Non-agricultural market access weighted tariff, %	0.6	58
Intensity of local competition	80.9	5
Source: INSEAD 2013		

Australia ranks well overall for innovation and has a high ranking for local competition. Australia however has a low efficiency ratio ranking at 116th.

2.4.3 Global Competitiveness Index

The Global Competitiveness Index (GCI), produced by the World Economic Forum, is a tool that measures the microeconomic and macroeconomic foundations of national competitiveness. The index defines competitiveness as the set of institutions, policies, and factors that determine a countries productivity level. The main index is calculated using a

number of pillars (shown in Table 5), and each of the main pillars are calculated using a number of sub-indices.

The 2013-14 Global Competitive Index ranked Australia 21st of 148, with Switzerland, Singapore and Germany placing 1st, 2nd and 3rd (World economic forum 2014). The 2013-14 edition of the Global Competitive index is the first edition in which Australia (21st, down one from 2012-13) has fallen out of the top 20. Australia was overtaken by New Zealand which moved up five places to 18th.

Table 6 Australia on the Global Competitiveness index

Index	Score	Rank
Global Competitive index 2013-14	5.09	21
Basic requirements (20%)	5.69	17
-Institutions	5.04	23
-Infrastructure	5.60	18
-Macroeconomic environments	5.75	25
-Health and primary education	6.36	22
Efficiency enhancers (50%)	5.18	13
-Higher education and training	5.51	15
-Goods market efficiency	4.72	31
-Labour market efficiency	4.45	54
-Financial market development	5.41	7
-Technological readiness	5.82	12
-Market size	5.15	18
Innovation and sophistication factors (30%)	4.56	26
-Business sophistication	4.66	30
-Innovation	4.45	22

Source: World economic forum 2014

'Prevalence of trade barriers' is a component of 'Goods market efficiency', and in 2013-14 Australia was ranked 25th (World economic forum 2014). 'Trade tariffs, % duty' is also a component of 'Goods market efficiency', and in 2013-14 Australia was ranked 53rd (World economic forum 2014).

Australia ranked 7th in the financial market development pillar, which was Australia's only pillar where it was included in the top 10. Australia also placed well in higher education and training, where it placed 15th.

On investigation of the sub-indices a number were identified as areas of concern for Australia. Australia ranked 54th in the 'rigidity of its labour market', down 12 positions from 2012-13. Australia also ranks poorly for the 'rigidity of the 'hiring and firing practices' and 'wage setting', where Australia ranks 137th and 135th respectively. Australia ranks highly for the 'quality of its public institutions' however ranks poorly at 128th for the 'burden of government regulation'.

Australia ranks reasonably well, 21st, in its overall competitiveness. Australia has a particularly well developed financial market (7th), and higher education and training sector (15th). However, as stated above, Australia has a poor ranking for 'rigidity of its labour market', 'hiring and firing practices', 'wage setting', and 'burden of government regulation'.

2.4.4 Ease of doing business index

The Ease of Doing Business Index by the World Bank Group aims to provide a measure of business regulations, their enforcement and the ease of doing business. The economies which rank the highest on the ease of doing business index are those economies whose

regulatory system facilitates interactions in the marketplace and protects important public interests without unnecessarily hindering the development of the private sector (Doing Business 2013).

In 2013 Australia was ranked 11th of 189 countries on the Ease of doing business index (Doing Business 2013).

Table 7 Australia's rank in 'Ease of doing Business' and its sub-components

Index	Rank
Ease of doing business (rank)	11
Starting a business (rank)	4
Dealing with construction permits (rank)	10
Getting electricity (rank)	34
Registering property (rank)	40
Getting credit (rank)	3
Protecting investors (rank)	68
Paying taxes (rank)	44
Trading across borders (rank)	46
Enforcing contracts (rank)	14
Resolving insolvency (rank)	18

Source: Doing Business 2013

Table 7 shows Australia has a relatively high rank in 'Starting a business' (4th) and 'Getting credit' (3rd). Australia has a relatively poor rank for 'protecting investors' (68th), 'Trading across borders' (46th) and 'Paying taxes' (44th).

2.4.5 Legatum Prosperity Index

The Legatum Prosperity Index, produced by the Legatum Institute, analyses a countries' prosperity level based on eight foundations: economy, entrepreneurship and opportunity, governance, education, health, safety and security, personal freedom, and social capital. Australia's overall rank and rank in the eight foundations on the Legatum Prosperity index is shown in Table 8.

Table 8 Australia's rank on the Legatum Prosperity Index

Index	Ranking
Legatum Prosperity Index	7
Economy	10
Entrepreneurship and opportunity	11
Governance	7
Education	2
Health	17
Safety and security	16
Personal freedom	3
Social capital	4

Source: Legatum institute 2013

Table 8 shows that Australia has a particular strength in 'Education' (2nd), 'Personal freedom' (3rd), 'Social capital' (4th), and 'Governance' (7th). Australia has relative weaknesses in 'Health' (17th), and 'Safety and security' (16th).

3 Health, education and finance services

3.1 Introduction

This chapter provides an overview of the Australian health care and social assistance industry, education and training industry and finance and insurance industry.

3.2 The Australian Health Care and Social Assistance industry

3.2.1 Overview

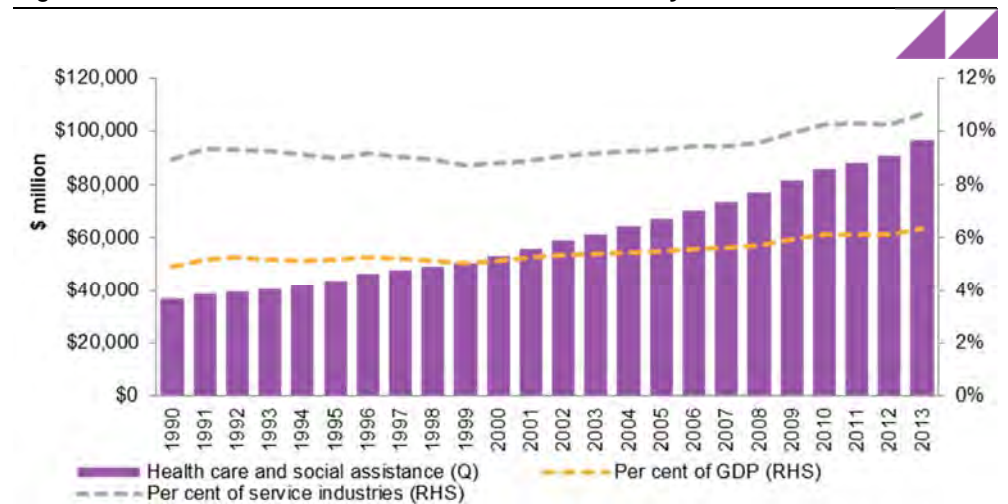
The following section summarises the Australia health care and social assistance industry, including GVA and employment, using the Australian Bureau of Statistics ANZIC definition. The Australian health care and social assistance sub-industries are shown in Table 9.

Table 9 Australian health care and social assistance sub-industries

Hospitals	Hospitals
	Medical services
	Pathology and diagnostic imaging services
Medical and other health care services	Allied health services
	Other health care services
Residential care services	Residential care services
Social assistance services	Child care services
	Other social assistance services

Source: ABS 2006a

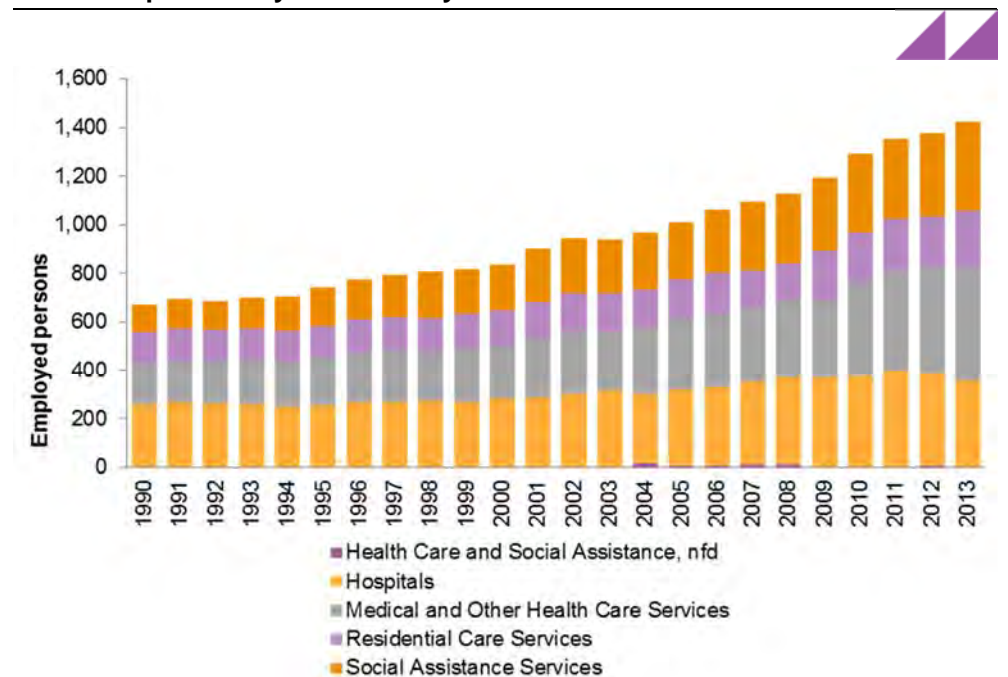
Figure 4 shows the size of the health care and social assistance industry in GVA. The size of this industry has grown over the past twenty years. In 2013 the health care and social assistance industry contributed \$96,708 million of GVA, and accounted for 6.3 per cent of Australia's GDP.

Figure 4 Health care and social assistance industry GVA

Source: ABS 2014 a

Figure 5 shows the breakdown of full and part time employment by service sector sub-industries. The health and social assistance industry has seen moderate employment growth and continues to be a large source of jobs growth, particularly given its share of Australian employment.

In 2013 there were 787,000 full time employed persons and 635,000 part time employed persons in the health care and social assistance industry (ABS 2013 b). In 2013 full time employed persons accounted for 55.3 per cent of all employed persons (ABS 2013 b). There has been a trend over the past twenty years towards more part time workers. The proportion of full time employed persons has fallen from 62.6 per cent in 1993 (ABS 2013 b).

Figure 5 Total full and part time health care and social assistance employed persons by sub-industry

Source: ABS 2013 b

Health care services funding

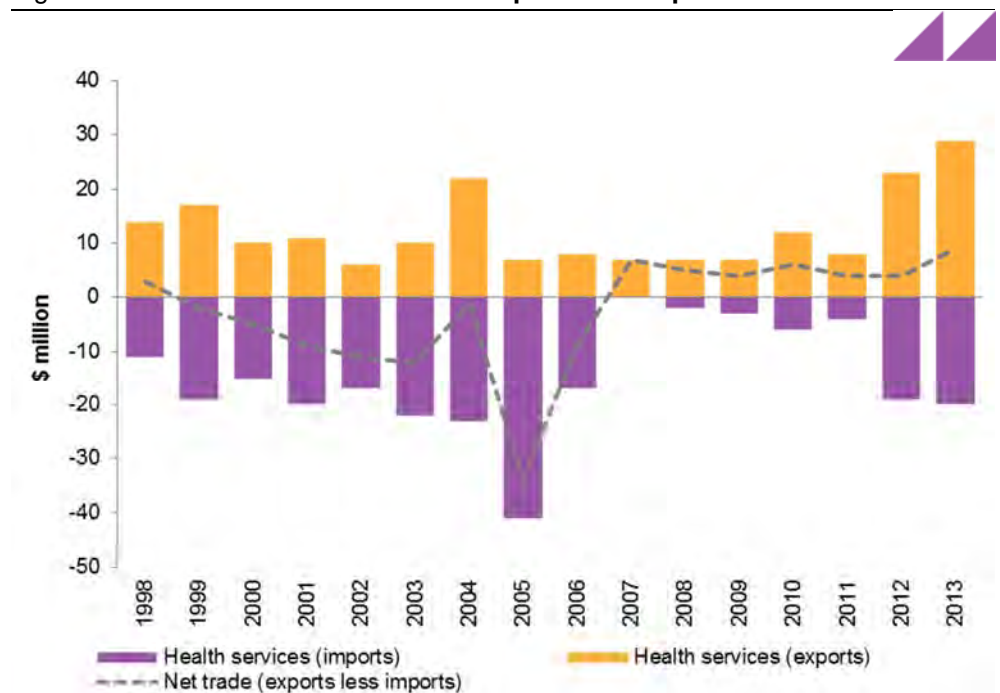
Health care services are funded by both the public and private sectors. The majority of public funds come from the Australian Government which provides over 40 per cent of total health funding (Attorney-General's Department 2010). State, territory and local governments provided approximately 25 per cent of total funding, and the remaining 35 per cent come from non-government sources (Attorney-General's Department 2010).

3.2.2 Health service trade

Figure 6 shows the health services imports, exports and trade balance. Australia's net trade balance in health services has been positive since 2007. In 2013, Australia's health service net trade balance was \$9 million, which represents 0.01 per cent of the Health care and social assistance sector GVA (2013 GVA was \$96,708 million).

In 2013, Australia's health exports were \$29 million, equivalent to 0.03 per cent of the Health care and social assistance sectors GVA (2013 GVA was \$96,708 million). The existence of imports and exports of health services of roughly equal size indicates that Australia has a comparative advantage in some health services and not others. This is entirely consistent with modern analyses of international trade.

Figure 6 Australian health services imports and exports



Source: ABS 2014 b, ABS 2014 c

Box 1 Medical tourism in Australia

Medical tourism in Australia includes the provision of medical care and procedures to patients travelling from abroad to Australia. Australia accounts for 0.6% of the global tourism market by visitors and 3.3% by visitor expenditure. Australia's share of the medical tourism market however is only around 0.001%.

In 2010, Australia received approximately 12,800 visitors for medical reasons, which accounted for only 0.23% of the total 5.5 million visitors to Australia (TRA 2011). This number however has been growing compared to the total number of visitors. There was a 14 per cent annual growth in medical tourists between 2005 and 2010, compared to 2% for all tourists. Australia's current main markets for medical tourism include Papua New Guinea and New Caledonia.

The economic benefit of medical tourism is significant, conservative estimates suggest an average medical tourist spends 14 nights and \$3,973 in Australia, including airfares, accommodation, and medical treatments.

Key medical specialities which are emerging in Australia which will further develop the medical tourism industry include: cosmetic surgery, fertility treatment, bariatric surgery, and dermatology.

Australia's medical tourism industry offers quality over price competitiveness. In terms of relative price of health services Australia ranks against its main competitors in the region, including India, Thailand and Singapore. However, ranks as good as or better than the UK, New Zealand and the US.

Australia's quality of health services, measured by metrics such as prevalence of antibiotic resistance rates, state of the healthcare system and safety measures; ranks favourably compared to its competitors in the region, in particular India.

Source: DAE 2011

3.2.3 Australian health sector in the world market**OECD Health Data 2013 – How does Australia Compare**

In 2010-11 Australia's total health spending accounted for 8.9% of total GDP, slightly lower than the 2011 OECD average of 9.3% (OECDa 2013). In 2011 Australia's health spending as percentage of GDP was lower than in the United States (17.7% of GDP), the Netherlands (11.9%), France (11.6%) and Germany (11.3%) (OECDa 2013).

Australia's total health spending per capita is above the OECD average, with US\$3,800 of health expenditure per capita in 2010-11 (OECD average of US\$3,339) (OECDa 2013). Health spending per capita in Australia is lower than in the United States which spent US\$ 8,508 per capita in 2011; others include Norway, Switzerland and the Netherlands (OECDa 2013).

In 2011, Australia had 3.3 practising physicians per 1000 population which is slightly above the OECD average of 3.2 (OECDa 2013). In 2011 Australia had a balance between general practitioners and specialists, with around 1.5 of each per 1000 population (OECDa 2013). Australia had 10.1 nurses per 1000 population in 2011, higher than the OECD average of 8.7 (OECDa 2013).

Over the past two decades most OECD countries have seen a growth in diagnostic technologies such as CT scanners and magnetic resonance imaging (MRI) units (OECDa 2013). The number of MRIs machines (eligible for Medicare reimbursement) in Australia increased from 0.6 per million population in 1990 to 5.7 in 2011. This is lower than the OECD average of 13.3 in 2011 (OECDa 2013). In 2011 Australia had 44.4 CT scanners per million population, which is significantly above the OECD average of 23.2 (OECDa 2013).

Legatum Prosperity Index

The Legatum Prosperity sub-index, 'Health', measures a country's performance in three areas: basic health outcomes, health infrastructure, and preventative care (Legatum institute

2013). In 2013 Australia's health ranking was 17, which is substantially lower than our overall rank of 7 (Legatum institute 2013).

3.3 Australian education and training industry

Education is another area in which Australia likely has a comparative advantage. This section focusses on the education industry in Australia and the extent of Australia's comparative advantage.

3.3.1 Overview

This section summarises the Australia education and training industry, including GVA and employment, using the Australian Bureau of Statistics ANZIC definition of the education and training sub-industries shown in Table 10.

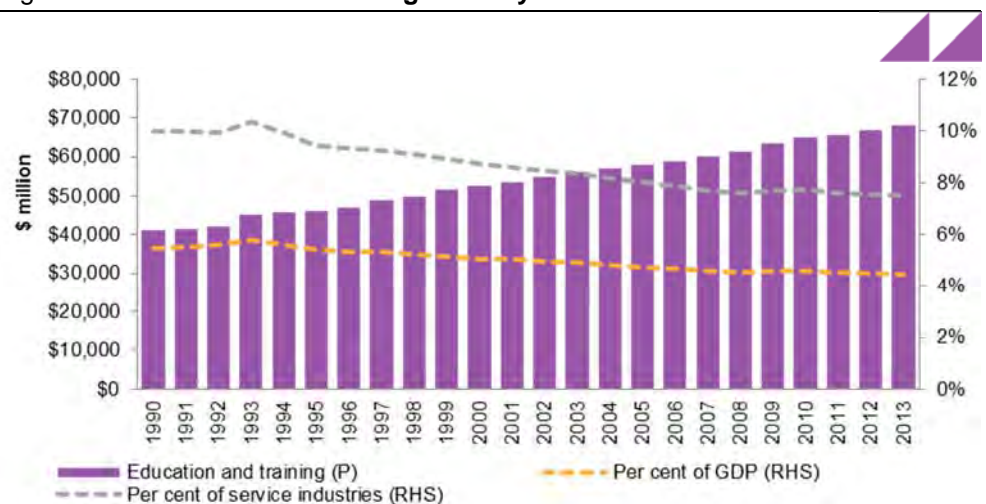
Table 10 Australian education and training sub-industries

Preschool and School Education	Preschool Education
	School Education
Tertiary Education	Tertiary Education
Adult, Community and Other Education	Adult, Community and Other Education
	Educational Support Services

Source: ABS 2006a

Figure 7 shows the size of the Australian education and training industry. The education and training industry has grown year on year for the past twenty years. In 2013 the Australian education and training industry contributed \$67,976 million in GVA to Australian GDP, equivalent to 4.5 per cent of total GDP. The relative size of the education and training industry has been declining over the past two of decades.

Figure 7 Education and training industry GVA



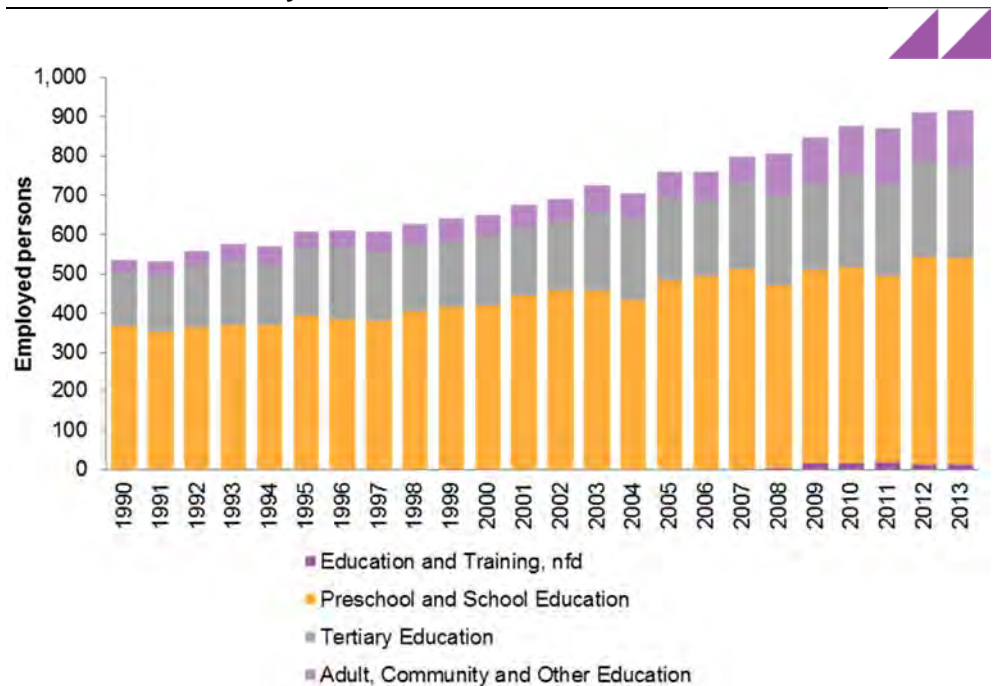
Source: ABS 2014 a

Figure 8 shows the breakdown of full and part time employment in the education and training sub-industries. In 2013 there were 563,000 full time employed persons and 354,000 part time employed persons in the education and training industry (ABS 2013 b).

In 2013 full time employed persons accounted for 61.4 per cent of all employed persons (ABS 2013 b). There has been a trend over the past twenty years towards more part time

workers. The proportion of full time employed persons has fallen from 70.0 per cent in 1993 to 61.4 in 2013 (ABS 2013 b).

Figure 8 Full and part time education and training employed persons by sub-industry



Source: ABS 2013 b

Higher education

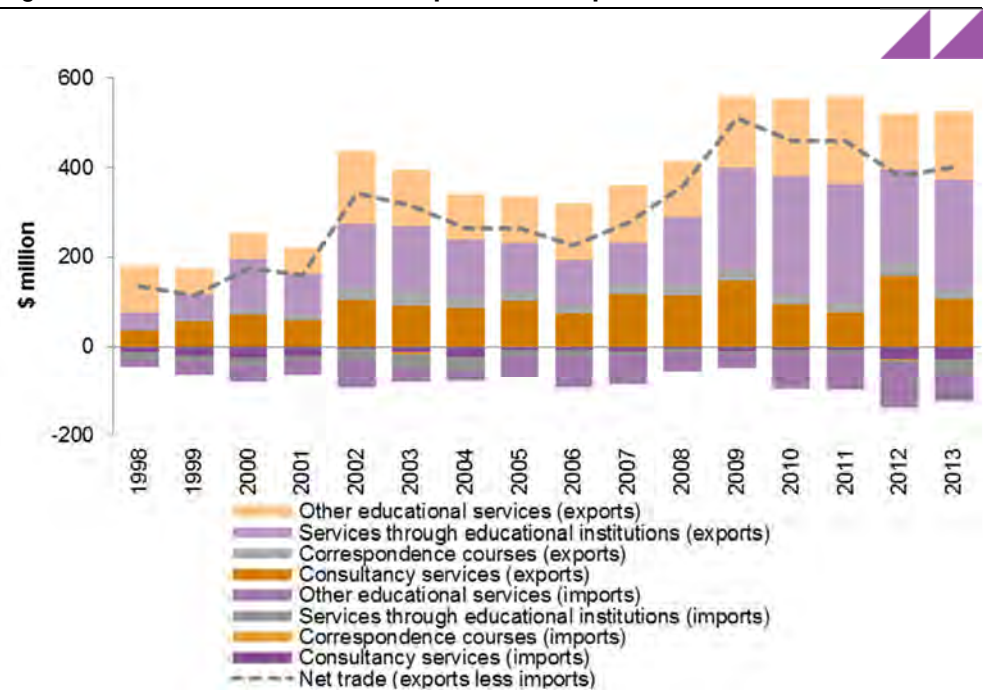
Australia's higher education sector includes 39 full universities and over 130 other higher education providers (Grattan Institute 2013). Together these institutions annual revenue exceed \$24 billion, equivalent to nearly 2 per cent of Australia's GDP (Grattan Institute 2013).

Higher education's international students also provide benefits for Australia, including course fees, expenditures on accommodation and living expenses, student diversity and provide and enhance cultural links between individuals, institutions and countries.

3.3.2 Education services trade

Figure 9 shows Australian education service imports, exports and trade balance. Australia's net trade balance of education services grew strongly in the decade to 2009, but has been declining since then. In 2013, the education service net trade balance was \$401 million, which represents 0.6 per cent of the Education and training sectors GVA (2013 GVA was \$67,976 million).

Figure 9 Australian education imports and exports



Source: ABS 2014 b, ABS 2014 c

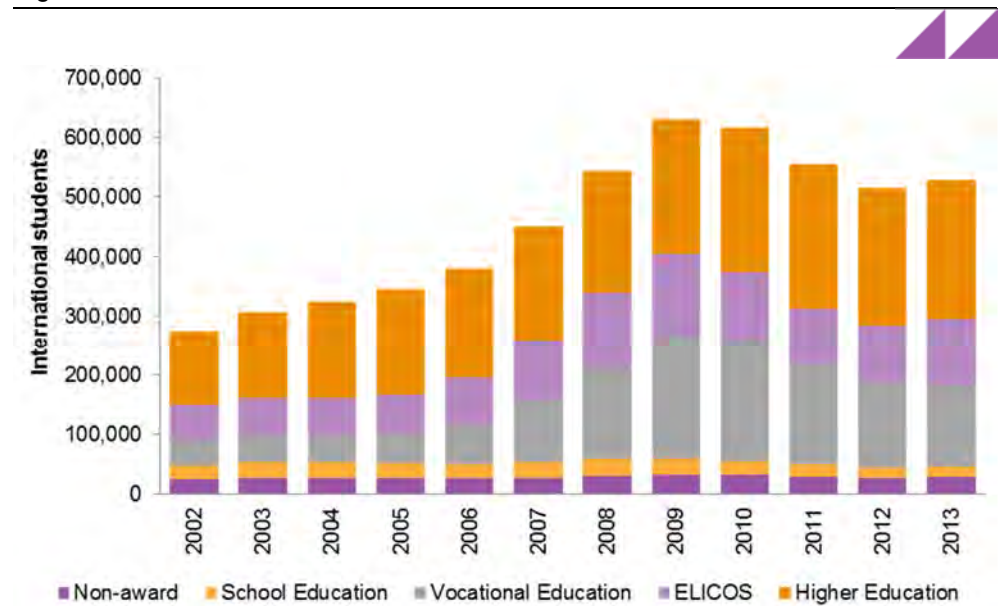
International student enrolments

Figure 10 shows the number of international student enrolments in Australia by education category. In 2013, higher education accounted for the largest proportion of enrolled students at 44 per cent, followed by English Language Intensive Courses for Overseas Students (22 per cent), vocational education (26 per cent), non-award (5 per cent) and school education (3 per cent).

Since 1986, universities have been permitted to accept international student and set their fees (Grattan Institute 2013). From 1986 double-digit growth rates in international enrolments were common (Grattan Institute 2013). These high growth rates were inflated due to migration policies favouring international students (Grattan Institute 2013).

In 2009 growth finally slowed and changes to migration policy, a strong Australian dollar, and negative international publicity on student safety contributed to a decline in Australia's international students (Grattan Institute 2013).

Figure 10 International Student Enrolments in Australia



Source: AEI 2013

Economic benefits from international students

In 2012-13, international students studying and living in Australia contributed \$14.5 billion to the Australian economy through university fees, travel and living expenses (AEI 2013 b).

In 2012-13, within the education sector, the higher education sector generated the largest export income at \$9.8 billion (67.6% of total on-shore earnings), followed by VET which generated \$2.5 billion in earnings (17.4%), ELICOS with \$736 million (5.1%); schools with \$581 million (4.0%); and non-award with \$479 million in earnings (3.3%) (AEI 2013 b).

China and India account for the majority of our education imports by value and in 2012-13 accounted for 26.4 and 8 per cent of total Australian earnings Australia's exports of education-related services respectively. (AEI 2013 b)

Regulation

The Department of Immigration and Citizenship (DIAC) controls eligibility for student visas, and the post-study temporary and permanent migration programs that effect prospective international student's decision to study in Australia (Grattan Institute 2013).

Prior to 2009 international students were gaining student visas for Australia by studying courses linked to occupations on the Migrant Occupations in Demand List (MODL) (Grattan Institute 2013). Students studying these courses were not required to work in these occupations to obtain permanent residence after completing their courses (Grattan Institute 2013). In 2009 the MODL arrangements were abolished, which lead to a fall in demand from international students.

In 2009, DIAC made changes to student visa and post-study migration requirements which weakened the link between studying in Australia and achieving permanent residency (Grattan Institute 2013). These changes included stronger measures to identify fraud in student visa applications, an increase in the minimum amount of money required for living expenses and clearer guidelines for cancelling a student's visa if they defer or cancel their studies (Grattan Institute 2013).

2012 saw new migration rules for international students which allowed students who applied for a visa after 5 November 2011 to have an automatic right to work for two to four years, following the completion of their degree (Grattan Institute 2013). Before the two to four year period ends, a further visa such as an independent skilled migration visa or employer sponsorship visa must be attained if they wish to remain in Australia (Grattan Institute 2013).

Chinese and Indian students

2008-09 to 2010-11 saw a decline in the number of international student visa applications lodged and granted, and has stabilised since 2011-12 (Grattan Institute 2013).

The decline was largely among Indian applicants, in whom there was a decline in visas applications and higher application rejection rates (Grattan Institute 2013). Student visas granted to other major countries including China, Malaysia, Vietnam and Saudi Arabia did not show such a decline (Grattan Institute 2013).

These trends in student visa applications reflect changes to Australian migration policy which led to post-study permanent residence being more difficult to obtain, student safety issues, greater international competition, and a high Australian dollar (Grattan Institute 2013).

Transnational higher education

Transnational education is the provision of education services by Australian institutions to students located outside Australia. This includes services provided by Australian university campuses abroad or courses provided through distance education, online learning or correspondence.

In 2012, there were 323,612 international students studying at Australian higher education institutions and of these, 82,468 were at campuses located abroad and 25,552 were distance education students (AEI 2014). Combined, these 108,020 transnational students account for 33.4% of total higher education international students (AEI 2014).

Transnational VET education

Transnational education in the vocational education and training (VET) sector includes award and non-award courses provided by Australian providers overseas or through distance education. In 2012, 37 public VET institutions delivered qualifications offshore to 56,952 students (AEI 2013c).

From 2006 to 2009 the number of onshore international student enrolments in public VET institutions grew from 16,319 to 30,210 (AEI 2013c). Similar growth was seen in the number of overseas students in public VET institutions, which grew from 30,894 in 2006 to 64,819 in 2009 (AEI 2013c).

From 2009 to 2012 enrolments of international students onshore at Australian VET institutions fell at an annual average rate of 14 per cent and enrolments at overseas public VET institutions fell by 4 per cent (AEI 2013c).

Box 2 Case study – RMIT internationally**RMIT Vietnam**

In 1998, Vietnamese authorities invited RMIT to establish a fully foreign-owned university in Vietnam and granted RMIT a licence in 2000 to deliver undergraduate and postgraduate education, training and research. The University was established and began offering programs in Ho Chi Minh City in 2001 and Hanoi in 2004.

The establishment of this institution allowed Vietnamese students to receive an international education domestically. Degrees offered by the University are recognised by the Vietnamese Ministry of Education and Training (RMIT 2014c).

The Ho Chi Minh City campus currently has around 6,000 students enrolled and offers programs in IT, business, fashion merchandising and economics. The Hanoi campus currently has around 1,400 students enrolled and offers programs in English, IT, commerce, accountancy and professional communication.

RMIT Spain

RMIT Europe is based in Barcelona, Spain and was established by RMIT to strengthen its connections with European research and industry partners. RMIT Europe coordinates RMIT's teaching and research across Europe and is responsible for exhibitions, master classes or seminars in the region.

RMIT Partnerships

RMIT has a number of international partnerships across the world, which include:

- *China*: RMIT works together with the Shanghai University of International Business and Economics (SUIBE) to offer a range of programs in international economy, logistics and trade.
- *Hong Kong*: RMIT partners with the Hong Kong Arts School (HKAS) to provide an opportunity for students to draw on a vast spectrum of artistic practices offered in Hong Kong.
- *Singapore*: In 1987, RMIT University partnered with the Singapore Institute of Management (SIM) to provide education in the fields of business, management, marketing, logistics and supply chain management, construction management, communication design and professional communication and aviation management.
- *Indonesia*: Since July 2012 RMIT has been working with Universitas Pelita Harapan College in Jakarta to provide in English for Academic Purposes and Foundation Studies, and a selection of business and communication programs.
- *Sri Lanka*: RMIT has partnered with Brandix College of Clothing Technology to provide technical skills to individuals seeking a career in the clothing industry.

Source: RMIT 2014b, RMIT 2014c, RMIT 2014d, RMIT 2014e

3.3.3 Australian education sector in the world market

Australia has a reputation for providing high quality education. This is the case across: higher education, vocational education and training (VET), the teaching of English (ELICOS), and primary and secondary schools.

Australia has high quality providers across all areas of education, however recently some low quality providers have entered, particularly the private VET sector (Knight 2011).

The future of Australia in the international education sector is dependent on maintaining and bettering Australia's reputation for quality. The following details Australia's current standing in the international education market.

Global Innovation index

The Global Innovation index is calculated using a number of sub-components, of interest to the education industry are the 'Tertiary education' and 'Research and development (R&D)' sub-indices. Table 11 shows the index value and rank of the 'Tertiary education' and 'Research and development' sub-indices and their components.

Australia's tertiary education rank was 29 in 2013; this is lower than Australia's Global Innovation Index rank of 19. It is interesting to note that Australia ranks 4th for the average score of its top three QS university rankings, implying that Australian universities are highly regarded.

Australia's inbound mobility rate, defined as the total is the number of students from abroad studying as a percentage of total tertiary enrolments, is relatively high in Australia. Australia's Tertiary inbound mobility was 21.2 per cent in 2013, positioning Australia 6th in this category.

Table 11 Global Innovation index – Tertiary education and Research & development, 2013

Index	Value	Rank
Tertiary education	44.3	29
Tertiary enrolment, % gross	79.9	9
Graduates in science & engineering, %	16.6	65
Tertiary inbound mobility, %	21.2	6
Gross tertiary outbound enrolment, %	0.7	86
Research & development (R&D)	69.1	7
Researchers, headcounts/mn pop	n/a	n/a
Gross expenditure on R&D, % GDP	2.4	13
QS university ranking, average score top 3	84.0	4

Source: INSEAD 2013

Australia's strengths as identified in Table 11 include 'Australia's university rankings' (4th), and 'Tertiary inbound mobility' (6th). Australia's relative weaknesses in education include 'Gross tertiary outbound enrolment' (86th), 'Graduates in science and engineering' (65th), and 'Gross expenditure on R&D' (13th).

Legatum Prosperity Index

The Legatum Prosperity sub-index, 'Education', measures countries performance in three areas: access to education, quality of education and human capital. Australia's education ranking is 2nd, compared to its overall ranking of 7th, which is substantially higher than our overall ranking (Legatum institute 2013). Implying Australia has a relatively developed education system.

Education at a Glance 2013: OECD Indicators

Australia is the preferred study destination for a large proportion of international students and host to more than 6% of the world's foreign students (OECD 2013 b). This ranks Australia as the third most popular study destination for international students after the United States (16 per cent) and the United Kingdom (13%) (OECD 2013 b).

In 2011 one in five enrolled tertiary students in Australia were international students, the highest proportion among all OECD countries (OECD 2013 b). The OECD average was 7 per cent in 2011 (OECD 2013 b). Australia receives nearly 20 times more international students than Australian students who study tertiary programmes abroad (OECD 2013 b).

In 2010 Australia's total education expenditure was 6 per cent of GDP, comparable to the OECD average of 6 per cent (OECD 2013 b). The Australian Government increased education investment spending by 14 per cent between 2008 and 2010, which is more than four times the OECD average increase of 5% (OECD 2013 b). In 2010, Australia spent about US\$10,825 per student each year for all levels of education, primary to tertiary, slightly higher than the OECD average of US\$ 9,313 per student (OECD 2013 b).

In 2010, 74 per cent of Australia's total educational institutions expenditure was from public sources (OECD 2013 b). This is lower than the OECD average of 84 per cent (OECD 2013 b).

The remaining 26 per cent of private expenditure ranks Australia sixth amongst the OECD countries in the proportion of private expenditure for all levels of education (OECD 2013 b). This is significantly higher than the OECD average of 16 per cent (OECD 2013 b).

Tertiary level education's share of private expenditure was 54 of all private education spending, which is higher than the OECD average of 32 per cent (OECD 2013 b).

Another way of measuring Australia education exports is by a detailed look at the number of international students at Australian universities. According to australianuniversities.com.au, 22.3 per cent of university students are from overseas (233,099 out of 1,046,788). There is considerable variation between universities, with the largest proportion at the University of Ballarat (47.7 per cent) and the smallest proportion of at the University of Notre Dame (5.9 per cent). Among the large universities (more than 30,000 students) the proportions range from 9.6 per cent at Charles Sturt University to 33.6 per cent (Macquarie University). There is little variation in the international student proportion at the G8 Universities, with international students comprising around one quarter of the student population at all of them except the University of Western Australia, where the proportion is 18.3 per cent.

It is difficult to say whether the number of international students at Australian universities has reached a kind of saturation point, though the variation in numbers and proportions by institution suggests that there is potential for more students at some institutions. It is noticeable that the proportion tends to low at regional universities, such as Charles Sturt (9.6 per cent), Southern Cross (9.8 per cent), University of New England (6.7 per cent), University of Newcastle (11.5 per cent), James Cook (18.5 per cent) and Charles Darwin (7.4 per cent). Whether this reflects student preferences (e.g. to live in cities where there are more employment opportunities), university strategies, university reputations and branding or other factors is not apparent from the data.

It is also important to note that these numbers reflect international students who are resident at Australian universities, not students overseas who are studying online with Australian universities.

3.4 Australian Finance and Insurance industry

The Australia finance and insurance industry is an industry in which Australia likely has a comparative advantage. This section focusses on the finance industry in Australia and the extent of Australia's comparative advantage.

3.4.1 Overview

The following section summarises the Australia finance and insurance industry, including GVA and employment, using the Australian Bureau of Statistics ANZIC definition shown in Table 12.

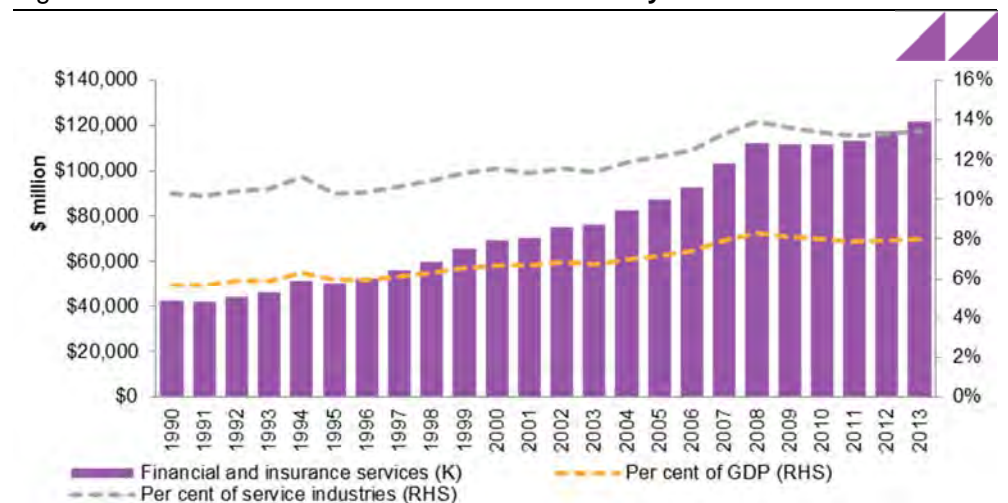
Table 12 Australian Financial and insurance services sub-industries

Finance	Central Banking
	Depository Financial Intermediation
	Non-Depository Financing
	Financial Asset Investing
Insurance and Superannuation Funds	Life Insurance
	Health and General Insurance
	Superannuation Funds
Auxiliary Finance and Insurance Services	Auxiliary Finance and Investment Services
	Auxiliary Insurance Services

Source: ABS 2006a

Figure 11 shows the size of the Australian finance and insurance industry. The finance and insurance industry has grown over the past twenty years. In 2013 the Australian finance and insurance industry contributed \$121,493 million in GVA to the Australian GDP, which is equivalent to 8.0 per cent of total GDP.

The Australian finance and insurance services sector is an important contributor to Australia's national output, employment, economic growth and development. In 2013 the Australian finance and insurance service sector accounted for close to 8 per cent of Australian GDP. The finance and insurance service sector as a proportion of GDP has grown over the past decade from around 7 per cent.

Figure 11 Finance and insurance services industry GVA

Source: ABS 2014

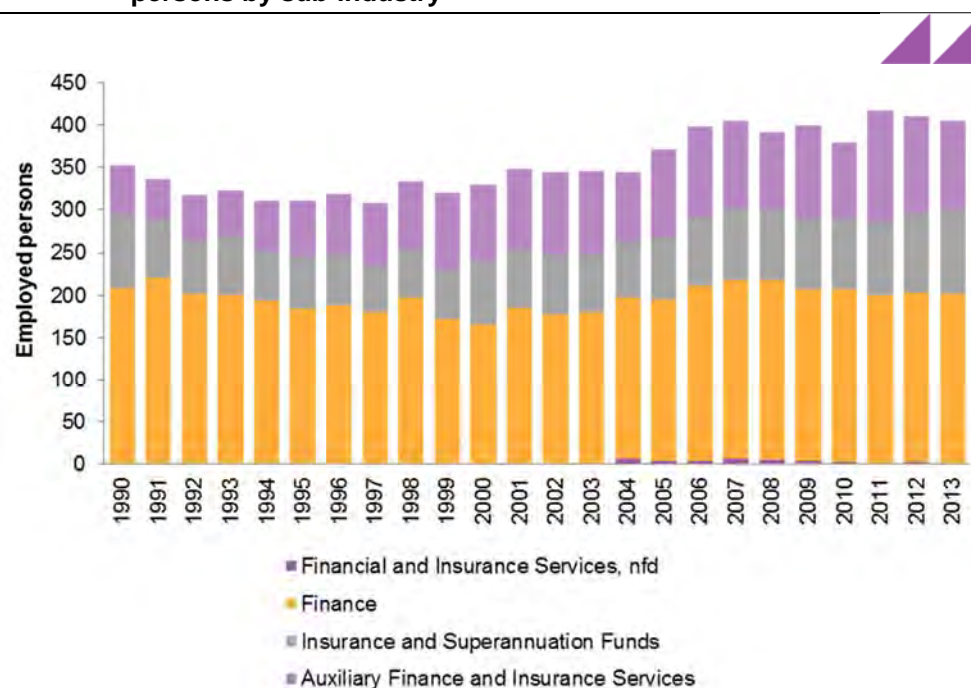
Figure 12 shows the breakdown of full and part time employment in the finance and insurance sub-industries.

In 2013 there were 335,000 full time and 69,000 part time employed persons in the finance and insurance industry (ABS 2013 b). In 2013 full time employed persons accounted for 83.0 per cent of all employed persons (ABS 2013 b). There has been a slight trend over the past twenty years towards more part time workers. The proportion of full time employed persons has fallen from 84.8 per cent in 1993 to 83.0 per cent in 2013 (ABS 2013 b).

In 2013 employment in the financial and insurance services sector was largely in finance (predominantly banking) and accounts for 200,000 jobs. Employment in insurance and superannuation funds account for a combined 100,000 jobs. Auxiliary Finance and Insurance services — which include stock exchange operation; investment and funds

management; credit card administration services; non-bank money changing services; and share registry operation — account for a further 104,000 jobs.

Figure 12 Full and part time finance and insurance services employed persons by sub-industry



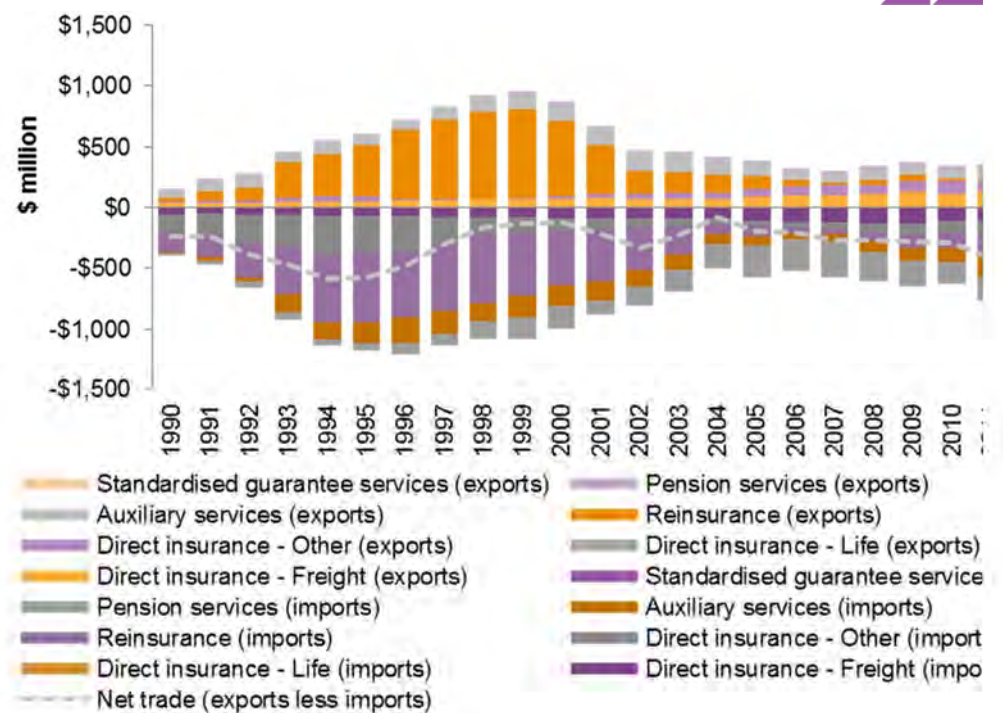
Source: ABS 2013 b

3.4.2 Finance and insurance services trade

The following section details the imports and exports of Australian insurance and pension services and Australian finance services.

Figure 13 shows the Australian insurance and pension service imports, exports and trade balance. Australia's net trade balance in insurance and pension services has been negative for the past 20 years.

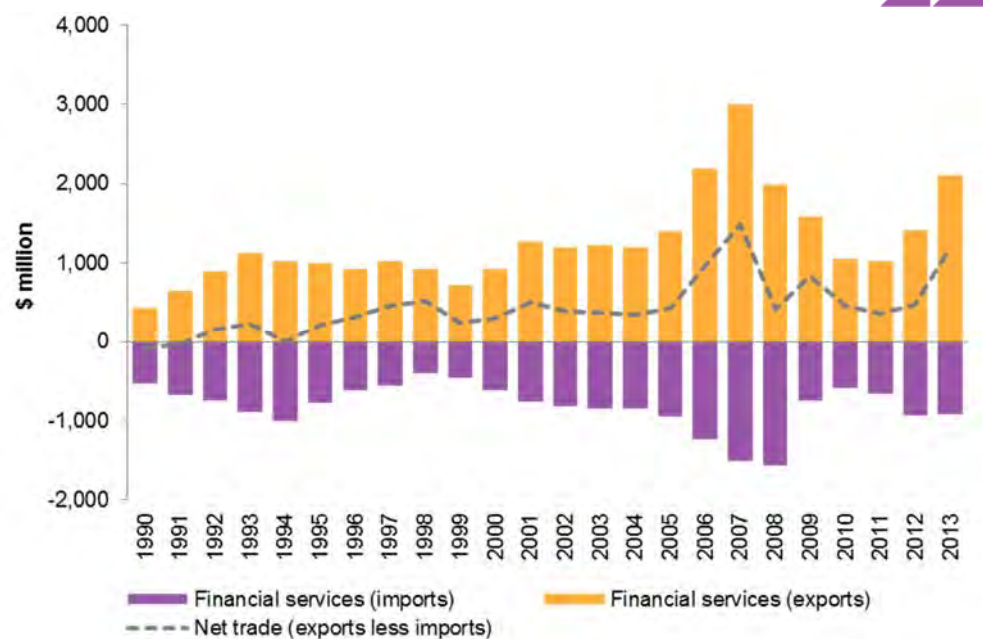
In 2013 the insurance and pension service exports totalled \$474 million. Of this total 'Auxiliary services' accounted for 38 per cent, followed by 'Direct freight insurance' (28 per cent), 'Other direct insurance' (26 per cent), 'Pension services' (7 per cent) and 'reinsurance' (2 per cent).

Figure 13 Australian insurance and pension service imports and exports

Source: ABS 2014 b, ABS 2014 c

Figure 14 shows the Australian finance service imports, exports and trade balance. Australia's net trade balance in finance services has been positive for the past 20 years.

The value of finance service exports in 2013 was \$2,111 million, which accounts for 82 per cent of finance, insurance and pension services.

Figure 14 Australian finance service imports and exports

Source: ABS 2014 b, ABS 2014 c

In 2013, the finance service net trade balance was \$1,194 million, and the insurance and pensions services trade balance was -\$284 million, which together sum to a \$910 million trade balance. This represents 0.7 per cent of the Financial and insurance services industries GVA (2013 GVA was \$121,493 million).

Australia's level of exports and imports as a proportion of financial services is low compared to other advanced economies (ACFS 2013b). Unlocking the potential increase in trade of financial services could boost Australia's productivity in financial services sector and the economy as a whole.

You can have comparative advantage in some services and not others within a given industry. This appears to be the case for the finance and insurance industry where we import and export a sizable amount of services.

Funds management

Australia's superannuation sector is very large by international standards. The Australian pension fund sector is one of the biggest in the world, both in absolute and relative terms, and is the largest pool of funds under management in the region. The Australian pension fund sector was the third largest behind the USA and Japan in 2011, and fourth largest relative to GDP, behind the Netherlands, Iceland and Switzerland (ACFS 2013a).

Estimates of Australia's funds under management sourced from offshore range from 3.5 to 11 per cent of total funds under management (AFCF 2009). This is a relatively low percentage and to some extent reflects the relative size of domestically sourced superannuation funds. Regardless, the total amount of funds sourced from offshore is estimated at \$42 billion, which is low, given the size, quality and experience of the Australian funds management sector (AFCF 2009).

Box 3 Case study – Macquarie bank

Macquarie bank is an example of an Australian business which successfully advanced into the world stage and is currently one of the world's leading investment banks.

Macquarie's operations began in 1969 as merchant bank Hill Samuel Australia (HAS) and opened in Sydney in 1970 with three staff.

In 1981, following the deregulation of financial markets, HSA began work on become a trading bank, and in 1985 was given authority to become Macquarie Bank Limited (MBL) by the Federal Treasurer of Australia.

In July 1996, MBL listed on the Australian Securities Exchange and by October 1996 had entered the ASX's All Ordinaries Index with a market capitalisation of approximately \$A1.3 billion.

Today, Macquarie provides banking, financial, advisory, investment and funds management services from more than 70 offices around the world.

Source: Macquarie 2014

3.4.3 Australian finance sector in the world market

There are a range of international surveys which rank countries competitiveness and provide insight into their financial sectors specifically. The following section highlights some of these in relation to the finance sector.

Global Innovation index

The Global Innovation index is calculated using a number of sub-components, of interest to the finance industry is the 'investment' sub-component. Australia's 'investment' rank was 13 in 2013.

Australia's strengths as identified in Table 13 include 'Market capitalization' and 'Total value of stocks traded'. Australia's total value of stocks traded as a proportion of GDP was 90.4 per cent which ranked Australia 11th. Australia's market capitalisation as a percentage of GDP was also relatively high, at 86.9 per cent, ranking Australia 17th overall.

Australia's main weakness according to Table 13 is 'Ease of protecting investors', where Australia ranks 65th overall.

Table 13 Global Innovation index – Investment 2013

Sub index	Value	Rank
Investment	52.7	13
Ease of protecting investors	57.4	65
Market capitalization, % GDP	86.9	17
Total value of stocks traded, % GDP	90.4	11
Venture capital deals/tr PPP\$ GDP	0.0	26

Source: INSEAD 2013

Legatum Prosperity Index

The Legatum Prosperity sub-index, 'Economy', measures countries performance in four key areas: macroeconomic policies, economic satisfaction and expectations, foundations for growth, and financial sector efficiency (Legatum institute 2013). Australia's rank in 'economy' was 10 in 2013, which is slightly lower than Australia's overall rank of 7 (Legatum institute 2013).

Global Competitive Index

In 2013-14 Australia was ranked 7th globally in terms of financial development by the WEF (World economic forum 2014). The financial development index comprised seven categories: (i) institutional environment; (ii) business environment; (iii) financial stability; (iv) banking financial services; (v) non-banking financial services; (vi) financial markets; and (vii) financial access. Australia ranked well across the seven categories however Australia's ranking fell below the top 20 for 'Availability of financial services', 'Affordability of financial services', and 'ease of access to loans'.

Table 14 Financial market development pillar

Sub-index	Value	Rank
Availability of financial services	5.6	21
Affordability of financial services	4.9	36
Financing through local equity market	5.0	8
Ease of access to loans	3.5	28
Venture capital availability	3.6	19
Soundness of banks	6.4	9
Regulation of securities exchanges	5.5	11
Legal rights index, 0–10 (best)*	10	1

Source: World economic forum 2014

Australia's financial market strengths, as identified by Table 14, include 'Legal rights index' (1st), 'Financing through local equity market' (8th) and 'Soundness of banks' (9th). Australia's relative weaknesses include 'Affordability of financial services' (36th), and 'Ease of access to loans' (28th).

4 Australia's strengths

4.1 Introduction

The following section identifies Australia's strengths in the health, education and finance sectors which are believed to give Australia an advantage over other countries.

4.2 Common strengths

Australia's highly educated workforce, political stability, successful macroeconomic policy, legal and regulatory framework, proximity to Asia and appetite for innovation, places Australia as a leader in the region. The following details some of Australia's common strengths.

Public R&D expenditure

The Australian government provides substantial support for science and innovation; in 2012-13 this amounted to \$8.9 billion (Australian Government 2012). The support includes expenditure which supports business research and commercialisation; research and research training in higher education institutions; cross-sectoral programs and Cooperative Research Centres (Australian Government 2012).

Geographic proximity to Asia

Australia's proximity to Asia and similar time zone places Australia in an advantageous position to access Asian markets and customers, compared to locations such as Europe or the US. Australia's growing trade integration with Asia further reinforces our advantageous position as a trading partner to the growing region.

Highly educated work force

Australia's highly educated workforce provides a strong base for our comparative advantage. Australia has some of the highest post-secondary education attainment rates in the world and as such offers a highly skilled workforce and quality of service.

Urban environment

Australia is a highly urban environment with the majority of the population living in cities. Combined with Australia's highly educated workforce, the close interaction of the population leads to high collaboration and sharing of ideas between individuals.

Macroeconomic policy and regulatory environment

Australia's macroeconomic policy and regulatory environment has proved itself over the recent past. This has been shown by increased business in the region following the global financial crisis for Australia's major banks due to their high credit rating and strong capitalisation (AFCF 2009). Australia's strength through the global financial crisis has improved the reputation of our regulatory system across the world (AFCF 2009).

4.3 Health industry strengths

World leading research infrastructure and workforce

Due to decades of investment in research and development, Australia has developed world-leading research infrastructure and scientific workforce with expertise in health and medical research (Australian Government 2012).

Cost effectiveness

Australia's high health outcomes are achieved at a moderate cost, with Australia's total health spending as a proportion of GDP slightly lower, at 8.9 per cent, than the OECD average of 9.3 per cent (OECDa 2013). In 2011 Australia's health spending as percentage of GDP was lower than in the United States (17.7% of GDP), the Netherlands (11.9%), France (11.6%) and Germany (11.3%) (OECDa 2013).⁷

Medical research spending

Australia's research spending is strongly weighted towards medical and health related disciplines. According to 2010 ABS data, medical and health research accounted for 29 per cent of higher education research spending, and remaining sciences together responsible for approximately the same share of research expenditure (Grattan Institute 2013).

4.4 Education industry strengths

World renowned higher education institutions

Australia's higher education institutions are well established and some are world renowned. The high level of quality is evident across the entire Australian university sector. Australia's universities are regarded as well managed institutions with a high level of accountability and transparency (Knight 2011).

The high quality of the university sector is supported by its recruitment of a large number of international students. It is Australian universities which are held in high regard by both parents and governments across countries which Australia recruits international students (Knight 2011). When parents and governments are spending large amounts of money to educate students, it is often to study at universities (Knight 2011). As such it is universities which are central to maintaining Australia's global education "brand" as one of quality (Knight 2011).

Regulation

Australia's universities are generally of high quality, (though their research output could be improved). According to Knight 2011, this high level of quality is preserved by keeping the number of recognised universities relatively small (Knight 2011). Because of the relatively small number of Australian Universities, 39 of them, the sector is able to be relatively easily monitored and regulated.

⁷ Care needs to be taken in interpreting and comparing health spending as a percentage of GDP. A lower proportion is only desirable, given population health outcomes. In public discussion of health systems, it is often argued, simultaneously, that a strength of Australia's health system is the relatively low ratio of health spending to GDP (especially in comparison to the United States) but a weakness of the health system is that health services are often rationed and that governments should spend more on health.

Another way in which Australia's quality is preserved is by the requirements to become a university. It is almost impossible to create a new university in Australia without the very high standards common to the existing Australian universities (Knight 2011). As an example a reputable university from abroad would still be required to meet a range of very rigorous and demanding criteria to classify as a university in Australia (Knight 2011).

Benefits to foreign students

Given the history of study as an avenue for Australian citizenship, concerns exist about the unintended consequences of loosening visa controls. As such Australia needs to balance the ease and attractiveness of studying in Australia with the unintended consequences of relaxed visa controls.

A major consideration for international students choosing their location to study is the opportunities of work in that country. 2012 saw new migration rules for international students which provided students the right to work for a period following completion of their degree (Grattan Institute 2013). This period ranges from two to four years depending on the qualification completed. This opportunity is a major strength for the attractiveness of the Australian education sector.

4.5 Finance industry strengths

The Australian financial sector as a proportion of GDP is larger than in most other developed economies. Australia's financial markets are ranked highly in the latest World Economic Forum Financial Development Report, where Australia ranks 8th overall for financial markets (out of 62) and 7th for foreign exchange markets, 8th for derivatives markets and 4th for equity market development (WEF, 2012).

Superannuation sector

Australia's superannuation sector is very large by international standards. The Australian pension fund sector is one of the biggest in the world, both in absolute and relative terms, and is the largest pool of funds under management in the region. The Australian pension fund sector is the third largest behind the USA and Japan in 2011, and fourth largest relative to GDP, behind the Netherlands, Iceland and Switzerland (ACFS 2013a).

The relatively large size of the sector and the funds under management reflects the compulsory superannuation system in Australia. The superannuation funds under management grew from \$184 billion in December 1996 to \$1,511 billion in December 2013 (RBA 2014).

Funds management business typically exhibits strong economies of scale (AFCF 2009). This together with both political and competitive pressures on fees resulted in many Australian funds management businesses putting a high premium on growing funds (AFCF 2009). For the five year prior to December 2007, funds under management saw an annual growth of 16.5 per cent (ACFS 2013a). From December 2007 to 2011 the growth rate was essentially zero. This zero growth rates reflected the fall in the market value of assets, rather than fall in funds into fund managers (ACFS 2013a). The growth in the value of funds following December 2011 has increased significantly due to the recovery of asset values and continuing superannuation contributions (ACFS 2013a).

Australian Stock Exchange

The ASX is relatively large by international comparison when measured by market capitalization to GDP and listed companies to population. The ASX is also large in absolute

terms, the ASX is 7th largest exchange in terms of market capitalization and 5th largest measured by free-float market capitalization (ACFS 2013a).

The ASX has a large volume of trade, in 2012- 13, the total volume of trades on exchange traded markets was \$52.0 trillion, and this included \$1.15 trillion ASX equities, \$0.86 trillion ASX derivatives and \$49.9trillion ASX futures (AFMA, 2013). There was also \$83.4 trillion trades in over the counter (OTC) markets in 2012/13, including foreign exchange (\$42.4 trillion), overnight index swaps (\$8.9 trillion) and repurchase agreements (\$7.9 trillion) (AFMA, 2013).

Regulation

Australia has good regulatory management of systemic risk, as well as highly resilient financial market institutions, including banks and financial markets (ACFS 2013b).

5 Australia's weaknesses

5.1 Introduction

The following section identifies Australia's weaknesses in the health, education and finance sectors which are believed to give Australia a disadvantage compared to other countries.

5.2 Common weaknesses

The Australian dollar

The value of the Australian dollar has grown over the past decade and is making Australia's goods and services less attractive to foreign consumers. Similarly, the high Australian dollar is making travel for education and business purposes less attainable for foreign visitors.

Distance from European and US markets

Australia's geographic location and in particular its distance from markets such as the US and Europe and the resulting high trading costs disadvantaged Australia's ability to draw foreign investment from and provide services to these markets.

Private sector R&D expenditure

While Australia's public expenditure on research and development is high by international standards, private investment is low due to poor incentives for private sector investments in R&D. Australia is ranked towards the bottom of the OECD rankings for private sector investment in research and development (Mapping Australian Science and Innovation 2003).

In addition to low levels of private funding there are low levels of collaboration between industry and publicly-funded research organisations and global counterparts (Mapping Australian Science and Innovation 2003).

High taxes

The attractiveness of Australia for businesses is affected by Australia's relatively high company and personal tax rates.

5.3 Health sector weaknesses

Technology adoption

The use of new technologies for achieving better healthcare outcomes has been advocated for decades. A key obstacle in achieving this has been the difficulty in the integration of new technologies into the whole healthcare delivery process and the implications to the current systems in place (DIISRTE 2012).

An example of a lower uptake of technology in the health sector is the investment in information technology and communication systems, which has typically been 1.5 per cent of revenue, compared to 2.5 per cent in other sectors (Business Council of Australia 2011b).

Productivity

The level of productivity in the healthcare sector is low compared to the rest of the Australian economy (Business Council of Australia 2011b).

One of the factors leading to the low level of productivity is the lack of information on quality, price and availability of healthcare services to the major funder, the Australian Government. The Government acts as a single buyer of health care services and exerts large market pressure, but operates with lagged and incomplete information due to them not been the end-user, but rather an intermediary between the Australian population and the healthcare sector.

As such one of the greatest structural problems facing the Australian health care sector is the disconnect between charging for health services, paying for health services, the consumers of health care and providers of health care, which leads to inefficient application of resources (ACHR 2011).

There is essentially a disconnect between those consuming the health services, those paying for the services, and the providers. This separation leads to consumers been unaware to the costs of the services provided and a diminished incentive to search for the most cost-effective option (ACHR 2011).

Workforce availability

The growing demand for healthcare professionals and the resulting shortages threaten the future of the sector and its ability to take advantages of growth opportunities from abroad. Restricting the number of training places for many years has limited the number of suitable applicants for the sector. The workforce is renowned for poor morale and workplace stress in public systems (Business Council of Australia 2011b).

Responsiveness

The Australian health sector fails to adequately response to changing pattern of disease and treatment (Business Council of Australia 2011b). The causes of this are inadequate focus on preventative health; uncoordinated patient journeys; and inappropriate balance and configuration of services (Business Council of Australia 2011b).

The lack of ability to respond is due to incentives for providers and individuals been based on old patterns of disease (Business Council of Australia 2011b). The provision of services relies on market signals which have been slow to change (Business Council of Australia 2011b). The industry also lacks a widely understood statement of need and strategy (Business Council of Australia 2011b).

Regulation

The growth in health bureaucracies has been displacing additional outputs by requiring additional labour inputs required for internal red tape and hampering efficient services delivery (ACHR 2011).

5.4 Education sector weaknesses

Changes to reputation

Violence against international students, particularly Indian students, in Australia over recent years has hurt Australia's reputation as a safe and welcoming destination for students.

There is evidence to suggest that as result of these incidents students are looking to the United Kingdom and North America as alternative destinations to study (Baird 2010).

Research

Australian universities rank poorly for research, and are not ranked in the top 50 in the world (Grattan Institute 2013). However Australia's ranking has been improving over time (Grattan Institute 2013).

Regulating the VET sector

In contrast to the university sector, of which there are 39 universities, in 2010 there were 730 other higher education and VET providers registered to provide courses for international students. The high number of institutions makes the task of monitoring and regulating the institution a much more difficult task for government (Knight 2011).

The education sector is heavily regulated, and with this comes benefits such as high criteria of operation, however there is a risk that over-regulation is hampering the ability of institutions to compete and innovate.

VET has arguably had poor policy settings, including migration settings which lead to a fast growth in international students and then a collapse.

5.5 Finance sector weaknesses

Trade availability

Australia's financial services sector is of similar size as a share of GDP and plays a similar role within the economy to other advanced economies such as the US, the UK and Canada. However relative to these other economies the Australian financial services sector is less exposed to international trade due to its lack of proximity to the European and North American financial hubs.

According to the Johnson Report, both imports and exports contributed less than five per cent of the Australian finance sector's value add (AFCF 2009). The contribution of Australia's imports and exports to the finance sector is lower than France, approximately half the level of the US and substantially lower than Canada, Hong Kong, Singapore and the UK (AFCF 2009).

There are a number of contributing factors to the relatively inward focus of our financial sector; among these are policy settings which inhibit the greater volume of cross-border financial transactions (AFCF 2009). These attributes include our relatively high corporate and personal tax, our geographic location close to but not in Asia limits the attractiveness of Australia as a location for a regional headquarters of large international financial companies (compared to Singapore and Hong Kong) (AFCF 2009). Also limited access to some financial markets in the region has limited Australian companies' opportunities to expand offshore (AFCF 2009). Finally the Australian banking sector has historically been concentrated on domestic lending, and therefore has not had significant amounts of excess capital for offshore ventures (AFCF 2009).

Common Law Jurisdictions

Many potential foreign investors in the Asia-Pacific region and further afield do not come from common law jurisdictions. As a result these investors and their advisors are typically

unfamiliar with trust structures used in Australia and are more familiar with managed funds structured as a corporate vehicle or a limited partnership (AFCF 2009).

The limited use of unit trusts in the region contributes to Australian based funds management companies resorting to the use of collective investment vehicles established and administered offshore, and occasionally basing their fund managers offshore as well (AFCF 2009). Resorting to these measures is expensive and not in Australia's interests as it results in employment and funds been lost to offshore centres (AFCF 2009).

6 Australia's opportunities

6.1 Introduction

The following section identifies Australia's opportunities in the health, education and finance sectors which can be used to Australia's advantage.

6.2 Common opportunities

The rise of Asia

The economic rise of Asia is a huge opportunity for Australia. The past 20 years has seen China and India triple their share of world GDP and the size of their economies grow by approximately six times (Australian Government 2012). It is predicted that in just over a decade four of the world's largest ten economies will be in Asia, and Asia will constitute 60 per cent of world output in terms of purchasing power parity (Australian Government 2012).

As incomes in the region have grown there has been an increase in the wealthy and mobile middle class. According to the Brookings Institution, by 2030, there will be over 3 billion middle class people living in the Asia Pacific, representing 66 per cent of the world's middle class (Kharas 2010).

As the income of households in Asia rise, less income is being used for necessities and demand for a diverse range of goods and services increases, which include health and aged care, funds management and education.

6.3 Health sector opportunities

Ageing population

The ageing population in Australia and countries throughout the world is likely to transform markets in which older people are significant participants, for example health and aged care. The induced changes in demand by older people will be met by a supply response from health providers; however this response may be inadequate. As such, we will see Australia's ageing population drive demand for health services, which will be further exemplified by demand worldwide, creating domestic and foreign opportunities in the health and aged care sector.

In addition, the ageing population will change the composition of demand for health services. Rising life expectancies in Australia and abroad will lead to greater demand for services surrounding chronic conditions such as diabetes, some types of cancer, dementia, Parkinson's disease, cardiovascular disorders and musculoskeletal diseases (Business Council of Australia 2011a). Identifying the demand for these services and positioning Australia as a country of expertise will open export and growth opportunities for Australia.

Technology

There are a growing number of technologies available for use in the health and aged care sector, and there is an opportunity for Australia to be at the forefront of these technologies.

The current healthcare sector and the services offered reflect past patterns of disease and treatment as well as the historical method of knowledge generation and storage. The development of new communication technologies, including smart phones, electronic medical records and home health monitoring will change the medical sector and the way it accesses, analysis and provides information; and the way in which treatment can be managed.

Examples of such technologies include: using diagnostic technology and big-data mining to better identify a patient sub-population (such as aged people at risk of dementia); using social media and portable devices to better monitor patients, and use portable devices to allow patients to monitor themselves so more specific and effective care can be delivered (DIISRTE 2012). The National Broadband Network (NBN) will provide a platform for a wide range of innovative and more accessible e-Health services (DIISRTE 2012).

Adopting and effectively using new knowledge and technologies in the health sector involves considerable change and associated challenges. Australia has an opportunity to be at the forefront of these changes.

Productivity

There is indirect evidence to suggest that government owned and managed health care service providers, such as public hospitals, are not performing as efficiently as the private sector equivalents (ACHR 2011). As such there is an opportunity to identify why this is the case and improve the efficiency of our public hospitals.

Ideas to improve productivity performance in the health services sector include: reduce limitations on competition, and incentivise providers to generate better outputs for a given set of inputs (ACHR 2011).

Asia's ageing population

Asia's health spending as a proportion of total expenditure is likely to grow as incomes increase. Historically health spending has grown over time, as health services are highly income-elastic, that is as income grows individuals spend a larger amount of their income on health care. As such, as the incomes in Asia begin to grow we will expect to see a high increase in demand for health services.

Investment in Health research

Recently the government announced that from 1 January 2015, the Government will establish a Medical Research Future Fund that will grow to \$20 billion (Australian Government 2014).

From 2015-16, the net earnings from the Fund will provide a permanent revenue stream provided primarily to the National Health and Medical Research Council (NHMRC) (Australian Government 2014). By 2022-23 the net earnings from the fund will provide an additional \$1 billion a year into medical research and roughly double the Government's direct funding to medical research (Australian Government 2014).

This large amount of funding in medical research is an example of investment in one of Australia's possible strengths and is an opportunity for Australia to develop new research and technologies and strengthen our comparative advantage in health.

6.4 Education sector opportunities

Expanding offerings to international students

The number of international enrolments in Australia has grown substantially over past years. Domestic students are enrolled across a range of courses, whereas international students enrolments are concentrated to a few areas. International students are mostly studying management and commerce, accounting for over half of those enrolled, engineering and information technology also constitute a significant proportion (Grattan Institute 2013). As such there is a large opportunity to provide education services to international students across other disciplines to increase enrolments.

Exporting VET services

Australia is a world leader in vocational education and has the potential to provide VET services to students in Asia. Currently, for the vast majority of potential students in Asia, studying in Australia is not financially possible. However as incomes rise, there will be a large emerging market for VET training across Asia. As such, rebuilding the export of VET education services is a focus and great opportunity for the Australian education sector.

Research partnerships

There has been a change in the global landscape for publication and co-authorship with Australia. Australia has grown collaborations with traditionally strong countries in North America and Europe, but there has been much faster growth is occurring within areas of scientific strength in Asia (Office of the Chief Scientist 2012). China is now Australia's leading partner in collaboration for several fields of research in mathematics, engineering and chemistry (Office of the Chief Scientist 2012).

There is an opportunity for Australia to continue and expand its strategic engagement with its Asian counterparts in the field of R&D, not only to improve our capability through R&D but also to enforce our position as a leader in education.

Research partnerships are likely to also increase the pool of higher degree research students wanting to undertake research in Australia. There is heavy global competition to attract the brightest students and researchers, not for their expenditure but also the productivity gains and jobs created in the economy by applying their research outcomes (Knight 2011).

Growing University capacity

While the size of the university sector allows it to be relatively easily regulated and monitored, the benefits of its growth to satisfy additional international demand may outweigh this benefit. Similarly, while the rigorous criteria to become a university in Australia command quality institutions and retain Australia's reputation for quality, these rules may be challenged when expanding the sector to deliver to the growing Asian market.

In order to meet the increase demand for education services from Asia, the Australian education sector will need to grow. Previous international education experience, and growth in international students, has shown that the private sector has the greatest capability and capacity to respond to demand quickly (Baird 2010).

While growing the sector to benefit from the growing international demand is in the benefit for Australia and its future in the education sector it should not be at the cost of quality. For example providing poor quality courses to poor quality students will have a short term

economic benefit, however at the cost of Australia's reputation and future growth of the sector. Such outcomes are neither socially desirable nor helpful for building a long-term viable international education sector. Note that where profit is a key driver, the quality of the education service will at some point come under pressure (Baird 2010).

Off-campus study

Australia has a history of offering off-campus study, which was originally carried out by correspondence, with distance education never fallen below 5 per cent of total enrolments (Grattan Institute 2013). The proportion of students studying off-campus has increased since the early 1990s and currently, if 'multi-modal' students are included, almost one in four students study off-campus, or approximately 298,000 people (Grattan Institute 2013).

This trend has been encouraged due to improved technology such as the internet, lecture streaming, and e-mail enabling instant transfer of course material. This technological change coincided with increased demand for postgraduate study and student's often juggling significant work and family responsibilities, leading to greater demand for off-campus study in this group (Grattan Institute 2013).

An example of an Australian provider is Open Universities Australia (OUA) which through aggressive marketing, has increased its student numbers by a factor of five since 2004, to almost 55,000 in 2011 (Grattan Institute 2013).

As technology improves and is adopted by our major trading partners, off-campus study will be a major opportunity for education exports from Australia.

6.5 Finance sector opportunities

Financial markets for Asia

Australia is located in close proximity to the fastest growing region in the world, and in particular, China and India. Many countries in the region will need ongoing development and liberalisation of their financial markets, and as such presents an enormous opportunity for Australia. Australia's finance sector is one of, if not, the most efficient and competitive 'full service' financial sectors in the Asia-Pacific region (AFCF 2009). The Australian financial sector ranks highly on in international surveys, including the world economic forum report which ranked Australia 7th globally for financial development in 2013. The Australian finance industry has a highly skilled workforce and a world class regulatory framework which helped Australia through the global financial crisis (AFCF 2009). However, given the strength of our financial sector, Australia's exports and imports of financial services is still low by international standards, as such there exists an opportunity to expand our service offering abroad (AFCF 2009).

Australia has a relatively large and sophisticated financial market. There is an opportunity for our financial markets to take advantage of the economic rise of Asia, like the funds management sector.

Funds management for Asia

The Australian funds management sector is the largest in the region and one of the largest and most sophisticated in the world. Despite its size however the sector only manages a small amount of funds sourced from offshore (AFCF 2009).

The size of the funds management sector is expected to grow in absolute terms and as a proportion of the economy due to demographic changes and the rising superannuation guarantee from 9 to 12 per cent (ACFS 2013b).

The estimates of funds under management sourced from offshore range from 3.5 to 11 per cent of total funds under management (AFCF 2009). This relatively low percentage to some extent reflects the relative size of domestically sourced superannuation funds. Regardless, the total amount of funds sourced from offshore is \$42 billion, which is low, given the size, quality and experience of the Australian funds management sector (AFCF 2009).

The Australian funds management sector has been increasingly managing international and Australian assets, and a relatively small (but increasing) proportion of funds sourced from offshore (AFCF 2009). The majority of the funds sourced offshore are invested in offshore assets; however Australian companies are the dominant local managers of offshore sourced funds (AFCF 2009).

Evidence suggest strongly that Australia would benefit from access to a wider range of appropriate financial vehicles to sell into Asia (taxed on a flow-through basis), as this would likely result in more funds been managed and administered out of Australia (AFCF 2009).

Over the coming years Asia will experience not only growth in total and per capita GDP but also population ageing. Australia shares geographic proximity, a similar time zone and possesses many advantages in providing the financial services that will likely be demanded by the increasingly wealthy and older population, such services includes funds management and retirement income products (ACFS 2013b).

Australia has recently signed a free trade agreement with Korea, which will allow better export of investment advice and portfolio management services for investment funds, and insurance and insurance related services (DFAT 2014). The agreement will further benefit financial services providers by allowing Australian institutions to transfer data into and out of Korea (DFAT 2014).

Financial planning for Asia

Australia's financial planning industry is mostly of high quality and has much to offer the growing middle class of Asia.

This was shown by the UK Financial Services Authority (FSA) which identified the Australian financial planning industry as a potential model for the UK (AFCF 2009). The FSA has considered ways to achieve better standards of competence and definition of service, and have since released a report using Australia's Financial Planning Association as a case study of a strong professional body (AFCF 2009).

Australia is also positioned positively to offer financial planning services abroad through its close involvement in the globally accredited Certified Financial Planner (CFP) qualification (AFCF 2009). As at June 2009, 72 per cent of Financial Planning Association practitioners were CFP qualified, as such the Australian financial planning workforce has qualifications which improve their ability to provide advice into overseas markets (AFCF 2009).

Islamic Finance

There has been a significant growth in the size of the global market for Islamic finance services over recent decades due capital accumulation by oil exporting countries (AFCF 2009). As such there is an opportunity for Australia to develop skills in Islamic Finance and export Islamic finance services, including Sharia compliant investments offered by banks and sukuk (the Islamic alternative to conventional bonds).

Many countries have already implemented changes to accommodate Islamic finance, including the UK which has made changes to regulation of mortgages and banking to accommodate Islamic finance (AFCF 2009).

7 Australia's threats

7.1 Introduction

The following section identifies Australia's threats in the health, education and finance sectors which may place stress on the sectors.

7.2 Common threats

A high exchange rate

Since a high towards the end of 2011 the Australian dollar has decreased its value against the currencies of our main competitor countries. From December 2011 to December 2013 there was a 12 per cent fall relative to the US dollar, 18 per cent fall for the UK pound, and 17 per cent fall against the NZ dollar (RBA 2013). As demand for Australian goods rise, there is a risk of the value of the Australian currency rising. While this is advantageous for Australians buying goods from abroad however will strain our ability to competitively export our services. As the Australian dollar's value increases Australian services become comparatively more expensive for international consumers, and Australia's price and quality advantages may be quickly outweighed by higher costs.

The ageing of society

The ageing of the Australian population will also bring with it strains on the health sector; superannuation and investment; and workforce changes. Demographic projections estimate that the proportion of Australians aged over 65 was 8.3 per cent in 1970, this is expected to increase to 22.7 per cent by 2050 (ACFS 2013b). Similarly, the increase in the proportion of population aged over 85 is expected to increase from 0.5 per cent in 1970 to 5.1 per cent by 2050 (ACFS 2013b).

The changes to the proportion of those aged over 85 will place strain on the health and aged care services (ACFS 2013b). The growth in those aged over 65 will be a challenge for the financial sectors providing post-retirement income products for these people (ACFS 2013b).

7.3 Health sector threats

Pressures of an aging population

The ageing population and the resulting changes on Australia's demographic profile will have effects on labour force participation and create fiscal pressures as demand grows for health, aged care and disability services (Australian Government 2012).

Workforce restrictions

The workforce pressure in the health sector poses a risk to the future of the industry, its quality and its ability to benefit from opportunities abroad. Entry into the health sector labour market is relatively difficult due to high barriers to entry which include: funding schedules; accreditation and extent of specialisation; availability of subsidised university and clinical

training places for key health professionals; and high R&D costs (Business Council of Australia 2011b).

Availability of cross country health insurance

The availability of cross country health insurance is likely to affect the uptake and future of health trade. If health procedures overseas or in particular countries are not covered by an individual's insurance, this will likely deter them undertaking the procedure abroad. Similarly, if foreigner's personal health insurance doesn't cover procedures undertaken in Australia; this may be a barrier to the export of Australian health services.

Medical tourism insurance is available in Australia and abroad, however the extent and adoption of these products is varied.

In Australia, health insurer NIB, released plans in 2013 to offer overseas medical treatments and insurance. NIB's entry into this market involves a scheme called NIB Options which allows clients to search both local and international options for cosmetic surgery (HICA 2013). Clients with Australian health insurance will also pay an additional amount to cover the overseas procedure and any follow-up treatment that may be needed after their return to Australia (HICA 2013). The medical tourism scheme is expected to launch in 2014, exclusively for cosmetic surgery, however NIB has plans to expand the offering to dental and surgical treatments (HICA 2013).

7.4 Education sector threats

Quality

While increasing the size of the Australian education sector has the benefit of being better able to benefit from the growing demand from Asia, there is also a danger that a bigger industry will lead to reduced quality and integrity of the education on offer.

As the size of the industry grows, there will be a conflict between available resources, funding per student contact hour and meeting growth targets. There is a risk that as the sector grows there will be fewer resources spent on each individual student and a fall in the quality of the education provision.

Bad publicity

Over 2009 and 2010 a significant number of education providers closed, primarily in the private VET sector. In 2009 16 providers closed which displaced 5,795 international students, in 2010 another 33 providers closed displacing a further 5,891 students (Knight 2011). Despite Australia's tuition assurance protection arrangements helping the displaced student find places in other education providers, the closures resulted in negative publicity internationally (Knight 2011). Future students deciding on their location of study would understandably be hesitant about Australian providers and the possibility of closures on students (Knight 2011).

Australia has also seen damage to Australia's reputation due to international students' safety concerns. During 2008 and 2009 there was a rise in reported crimes where international students were victims (Knight 2011). Unsurprisingly, these safety concerns received publicity overseas and damaged Australia's reputation as a safe country for students to study.

Global competition

The global competition for quality education to international students is strong and is almost certainly going to grow. In absolute terms there are more international students studying at US universities than in Australian universities; however as a percentage of total students Australia has a significantly higher proportion (Knight 2011). Recently there has been a significant increase in the number of US and Canadian universities and colleges actively recruiting international students (Knight 2011). The UK has a presence in the international education market across Asia, particularly in the university sector (Knight 2011). New Zealand is also active however on a significantly smaller scale (Knight 2011). Recently countries including Singapore and Malaysia, which historically sent students to Australia, are competing with Australia for international students (Knight 2011).

Migration policy

Australia's migration policy has a big effect on the international education industry. In particular Australia's migration policy can have effects on the reputation and quality of Australian education services. There has historically been a link between migration policy and education providers essentially 'selling' a migration outcome rather than a quality education service. Such practice undoubtedly hampers the reputation and quality of the Australian education sector.

In 2009 DIAC made numerous changes to student visa requirements and post-study migration rights which weakened the link between education in Australia and permanent residency (Grattan Institute 2013). Regardless however, future changes to migration policy need to account for issues of education as a means to gain citizenship.

7.5 Finance sector threats

Regulation

There has been an emergence of an international financial regulatory agenda from the G20 and international organizations which may lead to an increase in the cost of intermediation relative to capital market funding (ACFS 2013a). A lengthening of the financial intermediation chain will possibly lead to an increased cost of intermediation. These increased costs may result in a relative loss of competitive advantage.

8 The picture overall

8.1 Introduction

It is now well known that the service sector is the dominant sector in the Australian economy. What is less well known is that this has always been so; as long ago as 1901 the services accounted for more than half of all employment.⁸ The often heard lament that Australia is becoming a nation of shopkeepers' is only partly true; Australia (since European settlement) has always been a nation of shopkeepers.⁹ The share of the service sector in the economy keeps going up and up, with no obvious end in sight.¹⁰

What is new, however, is thinking about the service sector as an engine of growth. The traditional engines of growth in the Australian economy have been the mining sector, in fits and starts, beginning with the 1850s gold rushes and occasionally thereafter in various mining booms; the agriculture sector (though not so much recently), whereupon Australia 'rode on the sheep's back', receiving the 'wool cheque'; and, of course, though not entirely successfully, there were the post war attempts to build a manufacturing sector.

Australia remains a major player in some parts of agriculture and perhaps also in some parts of high value added manufacturing, but these sectors will never drive the economy. The mining sector will always be an integral part of Australia's growth strategies, given our exceptional endowments in minerals and expertise in exploration and extraction, but unless Australia aspires to be the Kuwait of the South Pacific, another driver of long run growth will be needed.

That driver is the services sector, or at least parts of it. As discussed in Chapter 1, service industries can be classified as those that are the drivers of economic growth, the consequences of economic growth, or a combination of the both. The three industries analysed in this report: health, education and financial services all are – or could be – driver of growth of the Australian economy, because they all do – or could – contain the elements that lead to industries being drivers: their potential for productivity growth is high, because they are all subject to and can be the beneficiaries of, innovation, and because their workforces are (on the whole) highly educated, highly paid and add a lot of value in both the GDP accounting sense and plain English sense.

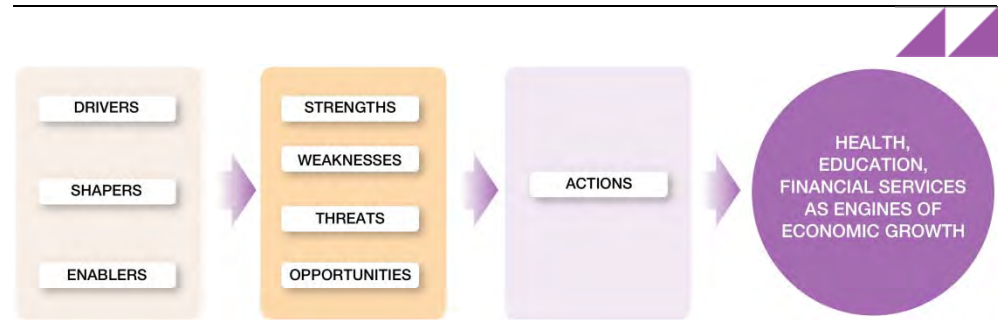
As discussed at the beginning of this report, a country's comparative advantage is not simply given to it as manna from heaven. Comparative advantage is a process that is created by a country's economic environment. This environment can be advantageous or not, and actions by government are crucial. The process is illustrated in Figure 1 below.

⁸ Monica Kenely, "The service economy", in Simon Ville and Glenn Withers (eds), *The Cambridge Economic History of Australia*, figure 17.1, p.378.

⁹ Or, in the early days, a nation of jailers, but prisons are also part of the service sector.

¹⁰ The relative shares of other sectors have waxed and waned. Mining has waxed recently; the share of agriculture has declined secularly since Federation, while the share of Manufacturing grew from Federation until the mid 1960s but has fallen steadily since.

Figure 15 Evolution of Comparative Advantage



Source: ACIL Allen analysis

8.2 The role of government

As well as being high value-adding, the health, education and financial services industries have another characteristic in common, which is that government involvement is ubiquitous in all of them, and in more than one dimension.

In *health*, government (that is, either the state or Australian governments, or both) is a funder of health services, a provider of health services (sometimes in competition with the private sector), a provider of health insurance (through Medicare) and a regulator of health services.

In *education*, government is a funder (though the proportion of funding to higher and other post school education is secularly declining), a provider of finance to students (through the HELP scheme), a regulator of prices (notwithstanding recent policy moves to allow universities to set their own fees) and a regulator of foreign student intake (through immigration policy). Many universities are constituted under state law and state governments still make appointments to their governing bodies. State governments provide much of the funding of TAFE Institutes and in some cases are heavily involved in their governance.

In *financial services*, government, through a variety of bodies (e.g. APRA, the RBA) is a regulator and through its monetary policy controls the overnight cash rate and hence, to a large degree, borrowing and lending rates.

In other words, government is *everywhere* in these three industries. This is not necessarily a bad thing. All these industries, in varying degrees, have to be regulated in the public interest and government, for good reasons, will always be heavily involved in the funding of education and health.

The inevitable involvement of government does mean, however, that if Australia is to exploit its comparative advantage in them and they are to be a driver of growth then government has the opportunity to enable that growth with good policies, or it might retard that growth with bad ones. Either outcome is possible. Unlike the mining industry, which is almost impossible to kill because of Australia's endowment of minerals that the rest of the world wants to buy, there is nothing inevitable or necessarily enduring about Australia's comparative advantage in health, education and financial services.

8.3 What is to be done?

The title of this section is borrowed from Lenin's famous 1901 pamphlet of the same name, in which he argued that there was nothing inevitable about the working classes becoming revolutionary, and action was needed to guide them to the correct (Leninist) course.

Likewise, while there is nothing inevitable about the health, education and financial service industries becoming the engines of future Australian economic growth, there is much that can be done, mostly by government to guide them in that direction. Some of it simply involves not doing bad things.

Invest in the right areas

Medical research

Government investment in particular industries has a bad reputation because it has a spotty record and, it is thought, that governments have no particular expertise in 'picking winners'. Expressed in this way, the point is unarguable. However, governments don't have to pick winners if the winners are already evident.

In this respect, government investment in Australian medical research should not just continue but be expanded. Medical research is undeniably something that Australia is very good at, whether measured by Nobel Prizes or other measures of success. The people who do it in Australia (or at least lead it) are world leaders in their fields, and the connection with commercial and clinical success, while highly uncertain, is demonstrable¹¹.

The Government's recently announced \$20 billion medical research fund is thus *exactly* the kind of policy that should be pursued. A fund of that size will produce earnings of around \$1 billion per year, and that will employ a lot of medical researchers, and attract leading researchers from around the world.¹² This doesn't mean that Australian researchers will find a cure for cancer, but that is not the point. Medical research is something that Australia does very well and is intimately linked to a vibrant health industry.

In this respect, successful medical research doesn't just require smart people and state-of-the-art labs. It also requires state of the art hospitals, so research can be translated into clinical outcomes. Thus serious investment in hospitals will also be required.

It might be asked, if Australian medical research is so successful, why does it need government money?. Could it not be funded by the private sector? The answer is that research in general is subject to a market failure, namely the inability of the researcher to capture the commercial benefits of the research. This will lead to privately financed research being underdone. This is not always true. Pharmaceutical companies retain the benefit of their research through patents, but it is generally true for medical research.

Universities

The Australian Government has recently announced that it is reducing the proportion of the costs that it will pay to educate students, so students will have to pay more themselves. Whatever the merits of this policy, government cannot get out of the game of funding universities altogether, nor should it.

The Government has stated a goal of Australia having one or more universities of the same standard as the best universities in the United States. This is a laudable if somewhat

¹¹ For example, Cochlear.

¹² This doesn't mean that the way it should be financed should be by a \$7 tax per doctor consultation.

fantastic goal, and increasing the quality of Australian universities is certainly necessary if Australia is to exploit its comparative advantage in education, especially if comparable countries are increasing the quality of their universities. However, the best universities in the United States have one thing in common: they are rich, with endowments of tens of billions of dollars. These endowments generate incomes that go a long way towards making the best American universities as good as they are, by enabling them to hire the best people and build the best facilities. Australian universities do not have these endowments, and probably never will.

What's more, even private universities in the United States receive copious amounts of government funding: through the National Science Foundation, National Institutes of Health, Department of Defense, Department of Energy, and so on.¹³

There is no avoiding the conclusion that even with students paying higher fees, government is going to have put more money into universities if Australia is to realise its comparative advantage in education.

Telecommunications Infrastructure

There is no need for governments to invest in the financial services industry. But this industry requires a highly functioning telecommunications infrastructure to function effectively, as indeed do the education and health industries.

Government has a critical role in ensuring that Australia has a competitive, fast and efficient telecommunications infrastructure. But telecommunications policy has not been a fabulous success, with successive governments enabling Telstra to establish a monopoly in critical areas, followed by the very expensive NBN which has been created by government specifically to circumvent Telstra's monopoly. Hopefully the future will be better than the past.

These are just some of the areas where government spends money and will need to spend more. How it manages all of this, together with its other commitments, will be interesting to watch.

Be a smart regulator

Regulation is often framed as being too much or too little, but the important point is that regulation needs to be smart, which is to say that it needs to achieve its maximum intent with the least amount of intrusion.

This report is not the place to discuss specific regulations of specific industries, but it is noticeable that several submissions to the Murray inquiry into the financial system¹⁴ have pointed out that some regulations of the financial system not only do not achieve their objectives but are counter-productive. Whatever the merits of these claims, they do point to an important principle of regulation (in general) that is not always observed: regulation should be aimed at expected outcomes, and not based on processes. While consistent processes are an important element of administrative fairness, regulators who hide behind processes are unlikely to be doing a good job.

This said, overall, it has to be concluded that Australian financial regulators have done a good job, evidence for which is the general absence of Australian financial institutions in distress during the GFC. However, it is noticeable that very recently financial regulators

¹³ For example, Princeton University has recently received a grant from the Department of Energy to study the role of plasma in the synthesis of nanoparticles. <http://www.princeton.edu/main/news/archive/S40/23/43A48/index.xml?section=topstories>

¹⁴ E.g. those by former RBA Governor Ian Macfarlane and former CBA senior executive Rod Maddock.

have taken what appears to be a dogmatic and doctrinaire approach against deploying macroprudential instruments to dampen the housing market and the financing thereof, unlike financial regulators in an increasing number of countries overseas.¹⁵ It would be regrettable if Australian financial regulators' past success were to lead them to hubristically think they know it all.

Be an enabler

Only governments can negotiate with other governments to reduce trade barriers. If Australia is to fully exploit its comparative advantage in services, it is the Australian Government's role to negotiate to have restrictions on exports of these services reduced. It already does this, but there is always more that can be done.

The Government also controls immigration and visas. If Australia is to export education and health services, it is important that unnecessary restrictions on entry into the country not exist. While the authors of this report have not uncovered any of these problems as they relate to these industries, it is notable that the process of obtaining visas for Chinese tourists are apparently quite burdensome.¹⁶ This type of thing is counterproductive and easily fixed.

¹⁵ Such as the United Kingdom. <http://www.centralbanking.com/central-banking/news/2350144/bank-of-england-given-far-reaching-macro-prudential-powers-over-housing>

¹⁶ <http://www.news.com.au/finance/business/crown-boss-says-tourism-must-lift/story-e6frfkur-1226937256146>



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