

The Allen Consulting Group

Submission to the Productivity Commission Retail Inquiry

June 2011

On behalf of eBay

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Suggested citation for this report:

Allen Consulting Group 2011, Submission to the Productivity Commission Retail Inquiry: on behalf of eBay, June 2011.

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Acronyms & Definitions

| | |
|------|--|
| ABS | Australian Bureau of Statistics |
| ACG | Allen Consulting Group |
| ACMA | Australian Communications and Media Authority |
| ACRS | Australian Centre for Retail Studies |
| AFR | Australian Financial Review |
| ASGA | Australian Sporting Goods Association |
| B2C | Business-to-Consumer, as per eBay.com.au working definition. |
| C2C | Consumer-to-Consumer as per eBay.com.au working definition. |
| CGE | Computable General Equilibrium |
| ICT | Information & Communications Technology |
| MMRF | Monash Multi Regional Forecasting |
| LVT | Low Value Threshold |
| NBN | National Broadband Network |
| OECD | Organisation for Economic Cooperation and Development |
| PC | Productivity Commission |
| PWC | PricewaterhouseCoopers |
| TERM | The Enormous Regional Model |

Executive summary

Introduction

- The Allen Consulting Group welcomes the opportunity to make a submission in response to the Productivity Commission's inquiry into the Australian Retail Industry.
- This submission is made on behalf of eBay.

Objective

- The submission aims to:
 - present an overview of the benefits of online retail to consumers, business, jobs and growth;
 - dispel the myth that online retailing destroys jobs;
 - demonstrate that there would be a negative and significant impact from reducing the GST low value import threshold; and
 - demonstrate that there is a need for investment that supports online retail, particularly shipping infrastructure.

Main Summary Points

- eBay.com.au is an important part of the Australian economy. It provides a growing 'many to many' online marketplace that connects millions of buyers and sellers a year. Indeed, eBay is Australia's leading online marketplace with 5.6 million unique visitors in March 2011 (Nielsen, 2011).
- eBay.com.au offers unique advantages to consumers and business.
- Online retail offers consumers low prices, usually significantly lower than RRP and prices offered in traditional retail outlets, and has significant economic advantages. ACG (2007) found that prices on eBay.com.au were 25 per cent cheaper than RRP, which demonstrates that price savings exceed the rate of GST.
- There is evidence of suppliers and manufacturers attempting to stifle online retail through restrictive trade practices.
- Online retail offers significant benefits to regional Australia.
- It is a myth that online retailing is bad for employment. Although structural shift from traditional retail to online retail may cause some friction, online retail creates other jobs, and Allen Consulting Group modelling has demonstrated that there is no evidence to suggest that online retailing causes a loss of jobs overall.

- There is no case for a reduction in the GST low value import threshold. This is due to:
 - significant impacts on businesses, consumers and potentially all importers that would arise from reducing the threshold;
 - regulatory and compliance issues;
 - the significant barrier to international trade that such a move would incur; and
 - the purchasing power of the current GST low value threshold is already significantly below its original level.
- There are a number of infrastructure gaps in the Australian economy which are impeding the growth of online retail and which should be addressed in order to realise the full benefits that online retail can bring to consumers, business and the economy. In particular, there is a gulf between postage costs in Australia and overseas which requires investment in infrastructure.

Conclusions/Recommendations

- eBay.com.au, and the online retail industry, make a significant contribution to national welfare and on aggregate are good for growth and hence jobs.
- The contribution of online retail is significantly eroded by restrictive trade practices, and it is encouraging that the ACCC is taking a stronger stance in this area.
- This contribution would be significantly eroded if the GST low value import threshold is reduced due to additional costs (in excess of the 10 per cent GST) and delays this would cause.
- Further any moves to slow down the uptake of online retail would punish consumers, who would subsequently pay higher prices.
- Consequently there is no justification for lowering the threshold.
- Investment in shipping infrastructure that supports ecommerce would provide significant economic benefits.

Chapter 1

eBay.com.au

eBay has grown rapidly in Australia, and facilitates trading of millions of items. For example, on an average day on eBay.com.au an electronics item is sold every 6 seconds, a fashion item every 12 seconds and a mobile phone every 21 seconds. eBay.com.au has changed markedly since inception, from a consumer to consumer auction site, to a platform which also enables innovative businesses to sell new products at set prices.

1.1 Summary

The Allen Consulting Group (ACG) welcomes the opportunity to make a submission to the Productivity Commission (PC) inquiry on the economic structure and performance of the Australian retail industry.

This submission is made on behalf of eBay. It focuses primarily on the economic benefits that arise from the growth of online retailing, and demonstrates that online retail is good for business, consumers, jobs and growth. It focuses on two key threats to the long-run growth of online retail, these being the impact of a reduction in the GST low value import threshold and the challenges presented from current shipping infrastructure and high shipping costs.

Chapter 2 and Chapter 3 examine the strengths of online retail as a sales channel and eBay.com.au as an example. Chapter 2 specifically looks at the advantages of online retail for consumers and business, while Chapter 3 summarises and expands on earlier work by the Allen Consulting Group in assessing the economic benefits of online retail. Chapter 4 looks in detail at the impact of online retail on jobs.

Chapter 5 looks at the opportunities for online retail in light of a rapidly growing technology savvy population and the existing low penetration of online retail in Australia by global standards.

Chapter 6 looks at a specific threat to the growth of online retail which could stifle these benefits to consumers, business and the economy, namely the impact of a reduction in the GST low value import threshold. The analysis contained in this chapter forms a key recommendation of this paper, that:

- the GST low value import threshold is appropriate and any moves to reduce this would be bad for jobs, growth, consumers and business.

Chapter 7 looks at a specific enabler of the growth for online retail which could enhance the economic benefits for consumers and business raised in the first part of this paper, namely, improving postage standards and costs in Australia to keep pace with other developed nations. The analysis contained in this chapter forms another key recommendation of this paper, that:

- infrastructure investment that enables ecommerce, specifically shipping infrastructure would have significant economic benefits and benefit a number of important stakeholders, including business, consumers and regional Australians.

Chapter 8 uses a CGE framework to analyse the impact of reducing the low value threshold from \$1000 to \$250. The impact, contrary to the view expressed by large retailers, is definitely not good for jobs.

1.2 eBay.com.au

The eBay Sites provide the world's largest online marketplace, and provide a platform for users to meet, negotiate and transact on an enormous range of products, domestically and globally. Online auctions first emerged in the early 1990s, with eBay.com establishing itself in September 1995 as the first 'many to many' online auction website. eBay's Australian web site, eBay.com.au, was launched in October 1999, and quickly became the most popular online auction site in the country.

Notably, eBay.com.au has transitioned from being a predominantly consumer-to-consumer (C2C) auction site offering largely second hand goods, to a site where new products make up over 78 per cent of available items (eBay, 2011). New items contribute the majority of sales in the two largest categories: clothes, shoes and accessories (79 per cent); and electronic products (67 per cent) (eBay 2011a). Also, 61 per cent of eBay.com.au sales are now undertaken through fixed prices rather than auctions (Allen Consulting Group analysis of eBay.com.au data), which reflects the popularity of normal retail pricing methods. Increasingly, businesses are selling on eBay.com.au and these include larger businesses, including wholesalers and retailers as well as small and start up businesses.

A significant facilitator of Australian commerce, eBay.com.au has over eight million registered users (eBay 2009) and around 6 million Australians visit eBay.com.au every month. This makes eBay.com.au Australia's most popular online shopping site, with an average of 60 per cent of online shoppers visiting every month (Nielsen Netview data cited in eBay 2011a).

1.3 eBay facilitates business growth

The 2000 largest sellers on eBay.com.au in 2010 had an annual turnover of between \$120,000 to over \$12.6 million per year. There are also a significant number of 'eBay millionaires' — sellers who generate \$1 million or more in sales on the site — with a 13 per cent growth in eBay millionaires. Of the eBay millionaires in 2010, 42 were not millionaires in 2009 (Allen Consulting Group analysis, using data provided by eBay), indicating the speed with which eBay can help generate thriving businesses.

This growth reflects how online businesses are significantly outperforming their retail counterparts, with all sellers on eBay.com.au experiencing an average sales growth 10 times the growth in the retail industry in 2010 (eBay 2011b). The 2000 largest eBay.com.au sellers saw 38 per cent growth in turnover during this uncertain period, compared with a relatively flat growth in traditional retail sales (eBay 2011b).

These figures reflect consumer demand for online retailing, which was identified as the key driver of sales growth by 60 per cent of respondents to an eBay survey of eBay.com.au business sellers (eBay 2011b).

What kind of businesses does eBay.com.au facilitate?

According to a survey of the top 3000 sellers on eBay.com.au, a wide range of business structures benefit from trading on eBay. The majority of eBay sellers' businesses operate as either sole-traders (43 per cent) or as companies (42 per cent). (eBay, 2011b).

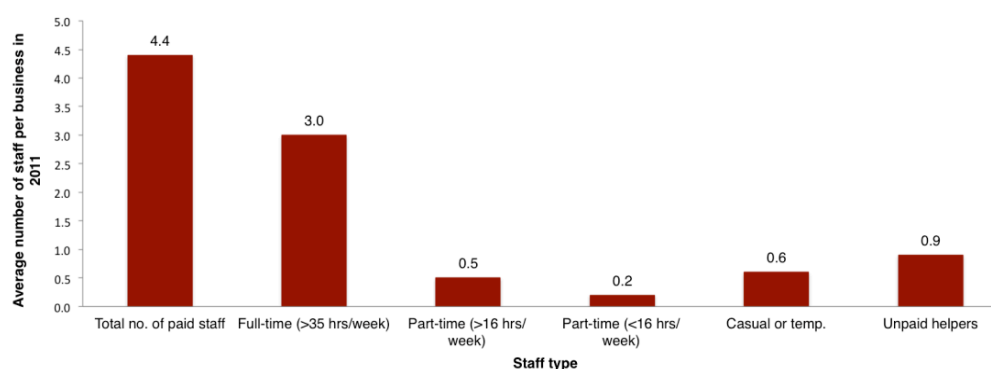
The most popular categories are home and garden; clothes, shoes, accessories and jewellery; and sporting goods and memorabilia (eBay 2011b).

Staffing

The latest survey of eBay.com.au's top sellers indicates that each business currently employs on average 4.4 paid staff members, with that average expected to increase to 6 paid staff over the next 12 months — a 36 per cent increase in employment as illustrated in Figure 1.1 (eBay 2011b). Over 60 per cent of staff are employed full time, but part time and casual staff are also used.

Figure 1.1

STAFF COMPOSITION OF EBAY.COM.AU SELLERS' BUSINESSES



Source: eBay 2011a, p. 3.

eBay's help for businesses

eBay also proactively provides support to its business users. Its Business Selling Help Centre provides free tips, hints, templates and tools for selling on eBay; a dedicated seller education section for business sellers; and a host of other resources to help businesses start up and thrive (eBay 2011c).

1.4 Successful eBay businesses

Box 1.1, Box 1.2, Box 1.3 and Box 1.4 describe a number of businesses that exemplify the successful use of eBay for entrepreneurship. Many are businesses often started by coincidence that have grown to successful enterprises, with their owners recognising the potential to expand from auction and C2C formats to fully fledged B2C operations.

Box 1.1

PAUL GREENBERG AND MICHAEL ROSENBAUM

Prior to October 2004, Paul Greenberg and Michael Rosenbaum were eBay.com.au's largest sellers. They subsequently established DealsDirect.com.au, which is now one of Australia's favourite discount department stores according to Hitwise. Deals Direct's business success is widely recognised, with Paul and Michael being finalists in the Ernst & Young Entrepreneur of the Year awards 2008, and being ranked number 3 in Business Review Weekly's list of Fast Starters. They continue to sell on eBay.com.au in addition to through their own site.

Source: Deals Direct, 2011.

Box 1.2

ANDREW ASTLEY

Andrew Astley's CarsRus business began with a 'fluke' sale of spare car parts on eBay in 2007. The speed with which these were sold led Andrew to expand into new car parts only 3 months later. The business now turns over \$3.5–4 million per annum and has 11 employees.

Source: eBay 2011b, p. 7.

Box 1.3

ASHLEY RYAN

Ashley Ryan started on eBay selling spare clothes from her wardrobe. The ease and convenience of eBay sales encouraged her to pursue an online surfwear business, as well as selling electronics. The business turns over \$100,000 per annum and Ashley has continued on eBay, citing it as a convenient way of selling that outperforms websites (which she established and then shut down) and provides greater exposure than a bricks and mortar store.

Source: eBay 2010, p.5.

Box 1.4

RAY CAMPBELL

Ray Campbell's appliance parts and repair business went broke in 2004, leaving him with a large inventory of stock which he successfully auctioned on eBay. Ray sourced more appliance parts to sell, leading to a business that is rapidly expanding to have turnover close to \$500,000 in 2010. Ray has also extended into multiple channels, establishing his own website containing catalogues for consumers to browse, and has diversified his online presence beyond eBay.

Source: eBay 2010, p. 7.

These examples illustrate eBay's ability to provide an efficient transaction environment in which everyday people can become entrepreneurial success stories.

eBay's structure enables users to easily display products, overcoming significant infrastructure investments — such as the purchase/lease and fit out of retail premises — associated with bricks and mortar retailing.

These low barriers to entry enabled Andrew Astley, Ashley Ryan and Ray Campbell — people who never intended to start a business — to discover entrepreneurial opportunities that would otherwise not exist. Ray Campbell was able to overcome financial hardship to create a thriving global business on eBay, and some, like Ashley Ryan, find eBay's setup more profitable than operating a separate website. Others such as Paul Greenberg and Michael Rosenbaum of Deals Direct have successfully launched into an independent website operating one of Australia's largest and most popular online department stores.

Low infrastructure requirements on eBay and online also reduce the costs of operating and expanding businesses. Overheads such as leasing of premium retail space or the fitting out of stores are reduced or eliminated compared to bricks and mortar stores, and the same computer and basic facilities required to sell one item can be used to sell hundreds, with physical investments mainly required for storage facilities.

Furthermore, eBay's global presence links millions of consumers to buyers worldwide, eliminating the costs traditionally associated with the geographic expansion of businesses.

The internet's 24 hour operation also allows online businesses to operate free from the constraints of shopping centre or store trading hours, and be accessible at consumers' convenience.

eBay's format benefits customers too by reducing their 'search costs' — the time, cost and effort of finding products and information which 'represent the real and opportunity costs of identifying vendors, locating products, comparing offerings, and making a purchasing decision' (Clemons, Hann and Hitt 1999, cited in ACG 2007, p13).

Additionally, consumers' ability to quickly search for products and undertake transactions creates a highly responsive market, with the eBay sellers outlined above demonstrating the ability to rapidly expand and fill gaps in consumer demand, thus enhancing market efficiency. The wealth of information available on eBay further enhances efficiency by easily allowing consumers to find and compare products and descriptions; ask sellers about product attributes; and obtain information about sellers' reputations — features which contribute to a dynamic marketplace in which businesses can thrive.

eBay's ability to connect buyers and sellers is a key feature enabling B2C transactions and facilitating online retailing in Australia (eBay 2011b). The ability to set prices, together with facilities such as the ability to create a store on the eBay site, allows businesses to display their stock and use normal retail methods whilst bypassing expensive infrastructure investments associated with bricks and mortar retailing.

The use of seller feedback helps to establish business reputation in the same way as conventional stores, and the ability for each consumer to provide feedback on each transaction generates a significantly greater amount of reputational information compared with conventional retail stores. The ability to connect to a worldwide consumer base further reduces infrastructure and marketing costs traditionally required for business expansion.

eBay.com.au is Australia's leading online marketplace. In listing an item for sale on ebay.com.au a seller is effectively marketing to nearly 6 million Australian shoppers per month at minimal cost. Consumers pay more attention to adverts on ecommerce than elsewhere (eBay, 2010b).

1.5 Large businesses thrive on eBay.com.au

Further to these case studies, eBay.com.au also offers a platform for large business to expand into online, or to improve their online sales. Well known brands on with stores on eBay.com.au include Cellarmasters, Logitech and Ezibuy.

Effectively, eBay has acted like an ecommerce "incubator" for many large business success stories, and in many cases with businesses such as oo.com.au and Deals Direct, these businesses have become relatively large during their time on eBay.com.au, and beyond.

Chapter 2

The advantage of online retail

2.1 Why do consumers buy online?

Consumers go online due to a number of important drivers. The key drivers are convenience, choice and value for money. In addition online overcomes geographic barriers, particularly for regional Australians.

Convenience

Recent surveys found around 74 to 85 per cent of consumers shop online simply due to convenience (ACMA 2010; Colmar Brunton 2011, cited in Marketing Magazine 2011), with the avoidance of crowds and queues also important considerations, especially during Christmas shopping (IBISWorld 2011; Sands and Ferraro 2010, cited in Access Economics 2010).

Another recent survey found that convenience was the most important driver for 39 per cent of consumers, followed by twenty-four hour availability for 22 percent, and 'easier than visiting a store' for 17 per cent (Leading Edge Research 2010, p. 16). These categories can be viewed as forms of convenience, and the combined total of 78 per cent brings this survey more in line with the Colmar Brunton responses.

Furthermore, the internet's twenty-four hour operation expands the interface in which retailers and customers can interact. Retailers need not shut their doors to potential customers, and customers can shop at their convenience. This is particularly important for Australians, who until the Global Financial Crisis in 2009 had some of the longest average working hours among OECD countries (OECD 2010, p. 290). Australia has since maintained a low unemployment rate relative to other OECD economies, and online shopping helps to meet demands of time-poor dual-income households (IBISWorld 2011b; OECD 2011).

eBay is also expanding its capability to enable sales over mobile devices, such as through eBay's iPhone app which has been downloaded over 30 million times worldwide and is one of the three most popular iPhone apps worldwide (eBay 2011a; eBay 2011b).

This responds to the enthusiastic uptake of mobile shopping in Australia with an item being purchased every 15 seconds in Australia through eBay mobile apps (eBay 2011b), and mobile PayPal payments growing 12 fold from \$2.7 million in 2009 to \$35 million in 2010 (PayPal 2010). Almost 25 per cent of Australians shop on their mobile phones, and Australia has amongst the highest level of smart phone penetration in the world (Pure Profile 2010, in Sharkey 2011b), reflecting its position as one of the world's fastest growing mobile eBay markets (eBay 2011a).

The increased convenience arising from reduced search costs is another of the largest drivers of consumer demand for online shopping. The internet helps buyers to reduce the time, cost and effort of information gathering compared to traditional channels. These costs (termed ‘search costs’) ‘represent the real and opportunity costs of identifying vendors, locating products, comparing offerings, and making a purchasing decision’ (Clemons, Hann and Hitt 1999, cited in ACG 2007, p13). Online shopping reduces research, travel and waiting times by enabling buyers to obtain and process information about products more efficiently. The information is available at the click of a mouse, rather than consumers having to, for example, visit stores, call retailers for information or check advertising. This has an immense impact on consumers, as is aptly observed by Cohen (2002, cited in ACG 2007):

Things a buyer once would have spent days, weeks, or a lifetime tracking down — the rocking horse he played on as a child, the exact buffalo nickel he needs to complete a collection — are suddenly available at any hour of the day or night, from a PC in the buyer’s home.

Choice from a wider geographic area

The ability to access numerous stores at the click of a mouse also provides far greater choice and information compared to conventional shopping. Over 50 per cent of respondents to Colmar Brunton survey moved to online shopping due to product choice (Colmar Brunton 2011, cited in Marketing Magazine 2011). ACMA (2010) also found similar sentiments, with 16 per cent of respondents agreeing a better range of products as their reason for online shopping, and 11 per cent responding that goods were only available online.

Online consumers are also equipped with a variety of mechanisms to verify and compare product and retailer quality.

Increased price competition, information and choice generate value for consumers, thus enhancing their welfare. Furthermore, as consumers have differentiated tastes, the wide variety of goods available on the internet compared to offline retailers results in buyers making fewer sub-optimal product choices — thus increasing consumer welfare.

Online retailers and buyers are not constrained by the same physical limitations as traditional retailers, allowing access to a full product range regardless of each party’s geographic location. Retailers can establish a broad consumer base and reach geographically disparate markets, which would be virtually impossible (and prohibitively expensive) using traditional retailing and marketing techniques (ACG 2007).

A key point which demonstrates the importance of the wide geographical reach of eBay.com.au is the large number of purchases from buyers located in regional areas. Galaxy research found that 33 per cent of rural and regional Australians are moving online to sites like eBay to purchase everyday items. This reflects the benefits provided by the internet and eBay in breaking down geographic barriers for regional Australians, and highlights that any initiatives which adversely impact online shoppers will have a magnified effect on regional Australians. (ACG analysis using data from ABS 2011 and eBay).

Value

One of the key drivers which brings consumers online is the perception and evidence that online shopping results in better value for money. 66 per cent of consumers believe that they obtain better deals online (Colmar Brunton 2011, cited in Marketing Magazine 2011).

An ACMA survey found that 38 per cent of consumers find online shopping cheaper (ACMA 2010), and research undertaken by the Allen Consulting Group (ACG 2007) found that eBay.com.au users can save an average of 25.2 per cent by purchasing on eBay the items most commonly transacted on eBay.com.au, and that these cost savings are considerably larger for products such as clothing and accessories.

Lower prices relative to traditional retailing are a major reason why consumers prefer online shopping. Prices are lower due not only to the large number of sellers trading and competing online, but also to the significantly reduced search and information costs incurred by consumers, which allows them to gauge market prices more easily than through offline price comparisons (ACG 2007). A host of online forums and websites enable comparisons of products and prices (IBISWorld 2011b).

Fixed price listings, which comprise over 60 per cent of eBay sales, allow consumers to view and compare a large number of competing products in seconds, with assurance as to the final price of the item. Furthermore, eBay's default sort order for search results ranks fixed-price listings based on algorithms which include relevance, price and popularity, as determined by buyer activity — which naturally tends to favour competitively-priced items.

Everything has a value to someone (Garfield 2004, cited in ACG 2007), and the internet enables goods to be transferred from people who value them less to people who value them more (Cohen 2002, cited in ACG 2007), whilst competition keeps prices low and further enhances the value extracted from each transaction.

The utility or use obtained from any particular item over and above its price represents a consumer welfare benefit. For example, if a buyer in Sydney values an item at \$100 but a seller in Perth at \$50, it would be difficult for them to meet and exchange the product. However if the product was listed online, an internet search could reveal the existence, location and price of the product to the buyer. If the transaction went ahead, it would generate \$50 of value for the buyer (if s/he paid \$50 for something s/he valued at \$100). The benefits these savings can bring to the economy are discussed further in Chapter 3.

2.2 Why do businesses trade online?

The relative ease of establishing an online business compared to a bricks and mortar store, allows business creation and enhances retail competition. This is true of online markets generally, and specifically for eBay which is easy to join and use to transact or sell. The discussion in the earlier chapter about the rapid increase in eBay.com.au millionaires, demonstrates that thriving businesses — not just small businesses — are being created.

While cost of sales is the largest expense for both online and traditional retailers, making up over 75 per cent of traditional retailers' costs in 2011 (IBISWorld 2011a; 2011b), differences in other set-up and operating costs drive down online retailers' prices. Thus online retailers are able to avoid the high cost of retailing space and the costly advertising that usually occurs with traditional retail

The recently released McKinsey Global Institute research highlights the opportunities the internet provides small to medium businesses. It notes that on average, "Companies using the internet with a high intensity grow twice as quickly as low web intensity companies, export twice as much and create more than twice as many jobs." (McKinsey 2011)

In Chapter 1, the key drivers that bring businesses to eBay.com.au where they can thrive and grow were examined through the mirror of case studies of successful businesses. The case study analysis supports that the key factors that drive businesses online are:

- low cost structures of online retail — while wages remain a key cost of online sales, other overheads such as renting premium retail space are not borne;
- low barriers to entry — thriving businesses can be created with a PC and an idea; and
- low barriers to geographic expansion — through online retail businesses can reach all corners of Australia, and potentially overseas without costly investments in creating a physical presence in many markets.

Many companies also use online as a direct distribution method where the absence of intermediaries can also serve to reduce costs, allowing the retailer to pass on savings to the consumer through lower overall prices.

Sellers also benefit from the internet's ability to connect people. As sellers incur minimal search costs in finding prospective buyers, they can afford to offer a broader range of products and are more likely to achieve the market price compared to traditional retail channels. Using the example from the consumer welfare section above if the buyer paid the seller \$100, this generates \$50 value for the seller who only valued the item at \$50.

This extra value, or producer surplus, can be realised by business owners and normal consumers alike through selling online. Websites such as eBay have virtually no barriers to enter, and enable almost anyone to sell goods and gain a surplus.

This ability to extract value out of products adds to the welfare of both individual consumers and producers, which aggregates to improve total welfare in the entire economy.

Chapter 3

The economy wide benefits of online retail

3.1 Price competition: Lower prices online

Not only are buyers looking for price savings online, but the structure of online retailing means that sellers are increasingly able to meet their price expectations. The benefits of the low-cost structure of online retailers as discussed in section 2.2 are passed on to consumers in the form of lower prices online.

As online retailing has become more established in consumer culture, online prices have exhibited a consistent downward trend. For example, prices on eBay are often significantly below the recommended retail price (RRP): a 2005 study showed that consumer electronics were sold on eBay on average at 33 per cent below traditional RRP, while cosmetics and beauty products were sold on average at 45 per cent below traditional RRP (eBay 2005a, cited in ACG 2007, p. 28).

This price saving with respect to eBay in particular was crossed checked by economic modelling undertaken by ACG (2007), which used The Enormous Regional Model (TERM) — a dynamic, multi-regional computable general equilibrium (CGE) model of Australia. TERM uses data provided by the ABS and other sources to detail the inter-industry and production relationships within the Australian economy.

ACG modelled two scenarios: firstly, the *direct* effect of price savings to eBay.com.au users; and secondly, the impacts of both the *direct* price savings and the *indirect* effects of competitive online retailing on offline retail prices. It found an average price saving by purchasing items from eBay.com.au compared to the best available price in-store of 25.2 per cent, which reduced price levels and had a positive impact on economic activity (ACG 2007). The modelling also found positive impacts on economic growth, investment and expenditure, and price levels.

Website Crikey.com.au has undertaken online survey based research to identify some of the particularly significant price differentials between retail prices in Australia and overseas. The key message is that retail prices in Australia are very high, relative to overseas. Some of the more interesting differentials uncovered by Crikey.com.au are:

- There are significant benefits to buying fashion and accessories online — for example a pair of Ray Ban sunglasses purchased online cost around \$110 AUD including postage, compared to an RRP of over \$250 in Australian stores;
- Electronic equipment is significantly cheaper in the United States, with the example of a Malaysian made Dell Inspiron 580 retailing for \$999 AUD in Australia, compared to around \$450 AUD in the United States; and
- Whitegoods, like an LG refrigerator can be purchased for around \$1500 AUD on Amazon, but retails for \$2500 AUD at Harvey Norman (Crikey, 2011a, Crikey, 2011b).

This, along with the work done in the context of ACG (2007) demonstrates a clear and significant differential between prices obtained at bricks and mortar stores in Australia, with online retail — both through local and domestic channels. In Chapter 6, the paper discusses the arguments for keeping the GST low value import threshold set at \$1,000. Not discussed there, is that the evidence above demonstrates that even changing taxation arrangements such that the threshold is reduced significantly would not be sufficient to bridge the difference between the high retail prices in domestic bricks and mortar stores, and the online retail sector.

3.2 Market creation and new value

The internet is creating inevitable structural changes to the way consumers are linked with goods and services. Consumer preferences for the convenience of different shopping methods, together with greater choice of products available online, has generated a booming online retail industry as outlined in Chapter 1.

The ability to connect vast geographic areas enables the creation of markets for goods that would otherwise have non-existent or limited markets, particularly for rare and second-hand items. By reducing the search costs for sellers to find prospective buyers, and for buyers to find and compare items, the internet improves market efficiency by matching buyers to sellers at considerably lower expense than could occur through more traditional channels. Through the internet, ‘things a buyer once would have spent days, weeks or a lifetime tracking down ... are suddenly available at any hour of the day or night’ (Cohen 2002, cited in ACG 2007 p. 25).

3.3 Economy-wide effects

The benefits to consumers and businesses discussed in section 2.1, aggregate to improve total welfare in the entire economy, and as a result the online retail sector directly and indirectly contributes to the Australian economy.

Modelling by ACG (2007, p. 40) found that sales on eBay.com.au alone bring the following positive economic benefits to the Australian economy:

- ‘increased economic growth — eBay stimulates real GDP by up to 0.273 per cent (\$2.1 billion) annually;
- increased investment and expenditure — eBay stimulates real aggregate household expenditure, real aggregate investment and aggregate capital stock, reflecting the productivity and income gains to businesses and households;
- increased real wage growth — average real wages increase; as the economy grows, the workforce receives a higher return, and as prices are lower this impacts on real wages (effectively an individuals purchasing power).
- reduced price levels — eBay contributes to a decrease in the GDP price deflator, the consumer price index and the export price index, reflecting lower prices within the economy.’

Note that there has been significant growth in the volume and value of sales on eBay.com.au since the 2007 ACG study, and it is likely that the results above are understated, and that the benefits of online retail have grown and will continue to grow. Further, As eBay.com.au, represents only one marketplace within the total online retail industry, the positive impact on the economy of the total online retail industry is likely to be larger than the eBay-only figures as modelled.

Recent data arising out of McKinsey Global Institute research suggests that the internet contributes a greater percentage towards GDP in countries which have embraced the internet and ecommerce, such as in Sweden where the internet contributes 6.3 per cent of their GDP. McKinsey argues that there is still substantial room for growth and further expansion of the internet economy given the internet is still in its infancy — even in those countries which have embraced it. (McKinsey 2011)

3.4 Regional and remote area benefits

Online retailing provides particular benefits to remote and regional Australia as the internet provides access to goods and services not normally available in these regions using traditional retail methods. Over 35 per cent of online shoppers live in rural areas (Leading Edge Research 2010, p16). Remote area eBay users have the highest level and value of purchases per capita (ACG 2007) highlighting the importance of online trading for these areas.

Given the importance of these regions to the economic health of Australia, it is important that these regions have access to a range of price competitive products. There is a limitation in the willingness or ability of large bricks and mortar stores or small specialty stores to service these areas due to sparse populations and lower returns on investment, accordingly there has been under provision of shopping to these regions. It is no surprise then, that the regions have been such a fertile area for the online shopping.

Chapter 4

Online retailing and jobs

Online retailing does not destroy jobs, the emergence and growth of online retail is part of a fundamental structural change in the economy and creates jobs. Consequently, the myth that online retailing destroys jobs should not be used as a rationale to introduce or maintain anti-competitive policies and practices.

There is a concern that the increasing trend towards online retail shopping, including buying online from overseas retailers and sites, is resulting in overall job losses to the Australian economy. This chapter will dispel this myth and instead examine the level of employment generated in the economy as a result of online retailing and outline how the growth in online retailing will have net positive labour market impacts.

4.1 The myth

Online shopping has taken the world by storm, with an increasingly internet-savvy population seeking the convenience and choice offered by a worldwide marketplace that is always open. As a consequence, concerns have been raised that the growth in online spending by consumers, in conjunction with the rise in the Australian dollar, will result in job losses to the overall Australian economy.

This is highlighted by comments from major retailers such as Gerry Harvey, Bernie Brookes and Solomon Lew.

In support of lowering the \$1,000 GST threshold on imported goods, Gerry Harvey stated:

Yes, you might have to pay more, but it's the right thing to do. You'll pay a lot more if we lose jobs and retailers close down (Collier 2011).

These comments reflect the possible short-term labour impacts projected by domestic retailers responding to growing global competition, and the rising appeal of online shopping. However, they fail to take into account the structural transformation of the retail sector, and the employment opportunities that this brings, which is occurring as a result of technological changes and the rise of the Internet.

The McKinsey Global Institute's research released in May 2011 further dispels the myth that online retail will cost jobs. McKinsey highlights that the internet is actually a net job creator and that the 'traditional' economy benefits as much, if not more, than the emerging start-ups. (McKinsey 2011)

Reinforcing the point that the growth of online retailing does not necessarily mean overall net job losses, Senator Conroy stated in the context of the recent demise of the book chain Angus and Robertson that 'technology marches on and there will be a transformation, there will be new jobs' (SMH 2011).

4.2 Employment in the online retail sector

As indicated in Table 4.1, the ABS definition of the ‘non-store retail sector’, which includes online and commission based sales, employs around 14,500 individuals. Interestingly, while it employs 1.2 per cent of the retail workforce it produces only 0.8 per cent of the revenue of the industry, as such it is a relatively labour intensive industry.

Table 4.1

INCOME AND EMPLOYMENT OF THE FIVE RETAIL SUBDIVISIONS, 2008-09

| | Sales and service income (\$m)* | Share of total (%) | Number employed ('000) | Proportion of retail employment (%) |
|--|---------------------------------|--------------------|------------------------|-------------------------------------|
| Motor vehicle and motor vehicle parts retailing | 68,049 | 20.6 | 90.5 | 7.2 |
| Fuel retailing | 35,044 | 10.6 | 35.0 | 2.8 |
| Food retailing | 90,037 | 27.3 | 398.9 | 31.9 |
| Other store-based retailing | 133,890 | 40.6 | 670.0 | 53.6 |
| Non-store retailing and retail commission-based buying and/or selling (including e-commerce) | 2,678 | 0.8 | 14.5 | 1.2 |
| Retail trade, not further defined | N/A | N/A | 40.6 | 3.2 |
| Total | 329,698 | 100.0 | 1,249.5 | 100.0 |

Source: ABS 2010a.

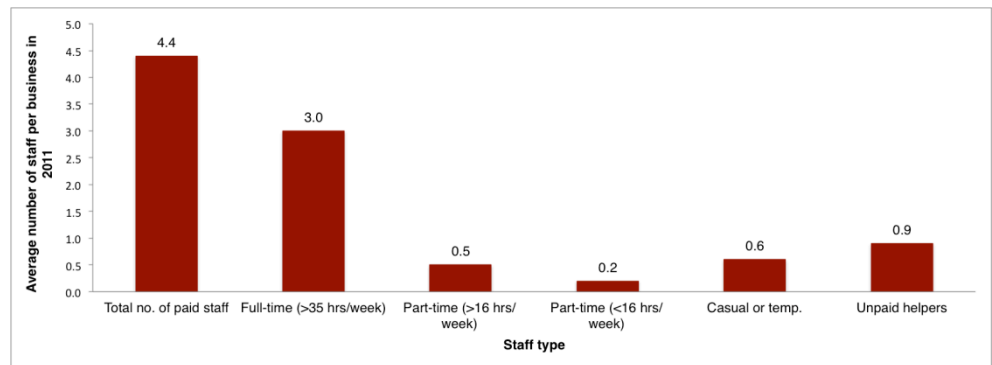
* current prices.

This estimate is conservative as there are likely to be a range of additional individuals employed as a direct consequence of online retail sales. For example, there are numerous couriers that are employed to deliver goods and services bought online. In addition, there are numerous IT specialists that have been employed to develop and maintain online platforms. Given that many of these types of jobs have been outsourced by companies, this employment would not be picked up by the ABS employment data. Also, given the rapid growth of the sector outlined in Chapter 1, these numbers are likely to also have aged badly and the true figure will have evolved much in the past two years.

What is clear from the table is that non-store retailing, which includes online retailing and commission based sales, achieved a 0.8 per cent share of total income and employed 1.2 per cent of the total retail employment. These figures highlight that this particular subdivision of the retail sector is a high labour user by the industry standard. This suggests that when the online retail sector grows, it employs a significant amount of labour and proportionately more than traditional retail.

This is in stark contrast to the misconception that when online retail grows, there is a replacement of labour with capital. Figure 4.1 demonstrates that this is clearly not the case — eBay.com.au's top 3000 sellers on average employ between 4 and 5 people. Further the businesses surveyed to produce Figure 4.1 expect to grow substantially over the next 12 months.

Figure 4.1

STAFF COMPOSITION OF EBAY.COM.AU SELLERS' BUSINESSES

Source: eBay 2011a, p. 3.

4.3 How online retailing is changing Australia's retail landscape

As the popularity of online retailing grows, retailers will need to re-think their business models, coordinate their strategies between different sales channels and work towards an integrated multichannel approach (Petre 2011; Mitchell 2010). Importantly, innovation and improvements in the retail industry will not only impact on the retail industry itself, but through upstream and downstream industry linkages as well.

As discussed in Chapters 1 and 2, there are a range of reasons that bring retailers online. The growth and success of the online business models discussed in Chapter 1 demonstrates a clear ability for traditional retailers to successfully transition or incorporate online retail as an additional sales channel. Given the ease of getting established online, and the ability for online retailers to reach an enormous customer base without the need to pay for expensive retail space, a transition to multi-channelling is something which should make sound business sense to most companies.

Online retail's impacts on employment, in the aggregate sense will be shown to be positive, although there are potentially some negative direct impacts, the sustained growth of a new sector, and the overall gains in productivity can be shown to more than compensate. (McKinsey 2011)

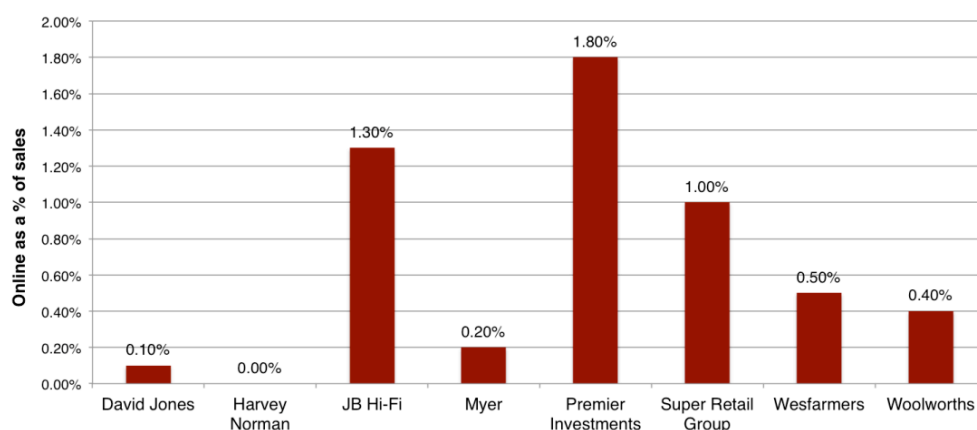
Direct impacts on employment

There are direct employment impacts from growth in online retail sales. They include the change in employment from:

- the rise of new domestic online retailers — this change has a positive impact on employment;
- the decline in traditional domestic shop fronts — this change has a short term negative impact on employment; and
- the rise of new overseas online retailers — this change has a short term negative impact on domestic employment.

A direct positive impact on employment of online retailing is driven by the emergence and growth of new domestic online retailers. Such online retailers include DealsDirect and Ozsale. There is evidence that much of the growth in online sales in Australia has come from such new smaller non-listed retailers as opposed to the more traditional listed retailers, such as Myer, David Jones, and Harvey Norman. As a weighted average, online sales are 0.4 per cent of listed retailer sales compared with 5.5 per cent for non-listed retailers (Woolford and Bowley 2010). Some of the more established names are lagging to an extent in establishing an online presence (Woolford and Bowley 2010).

Figure 4.2

ONLINE SALES AS A PERCENTAGE OF TOTAL SALES (2009–10)

Source: Woolford and Bowley 2010.

The relatively low online sales of the larger listed retailers highlights the opportunity for them to substantially increase their online presence and associated sales. Overseas experience shows that offshore retailers have had greater success with adopting an online presence compared to their Australian counterparts with 3 per cent of group revenue for Tesco and over 8 per cent of JC Penney's sales arising from online sales (Woolford and Bowley 2010).

In fact, several retailers have recently embraced e-commerce as part of their business models. Last year, Woolworths launched the Big W and Dan Murphy's e-commerce sites, joining its established online grocery store. Furthermore, Coles re-engineered its website from the 'warehouse distribution model to one where groceries are picked from supermarket shelves' (Mitchell 2010).

According to a Nielsen survey the major growth is being seen by larger traditional retailers. Woolworths is up 48 per cent, JB Hi-Fi is up 42 per cent and Kmart is up 46 per cent (Nielsen, 2011). Such growth in the online presence and sales of Australia's more traditional retailers will result in positive direct employment impact.

As the popularity of online retailing grows, and domestic retailers respond to online competition, the latest McKinsey Global Institute research suggests that rather than the traditional retail industry suffering as a result of online retail, if traditional retailers embrace the internet and multi-channel their sales, then the contributions the internet can make to their existing traditional business significantly exceeds those benefits derived by newly created online only businesses (McKinsey 2011).

Indirect impacts

In addition to these direct impacts from growth of online retail sales, there will also be indirect impacts. New jobs will be created, and jobs in other sectors will also experience increased labour demand as the industry players respond to structural changes in the economy.

As Petre (2011) observed, while fewer physical stores may in the short term mean less retail jobs, there will be an ‘increase in logistics employment and increase in work opportunities provided by the expanding array of online shopping provides. That means more and larger distribution centre, more trucks on the road and more people manning customer service centres.’ Online retailing, and e-commerce in general, can grow jobs and employment in the economy over the longer term. This happens through several channels:

- the productivity dividend as a result of investment in labour saving technologies;
- creation of new industries; and
- increased demand for existing and newly created jobs.

These are discussed in more detail below.

Productivity dividend

As more firms enter the online market and engage in ‘clicks and mortar’ strategies, investment in ICT systems and other e-commerce technologies will increase.

These technologies lead to lower operating costs, which can be passed to the consumer as lower prices. Now that consumers have more money to spend in other sectors, the economy grows via the multiplier effect, leading to jobs growth in the long-term (OECD 1999).

Furthermore, as the larger domestic retailers increase their efficiency and innovative efforts, and embrace online there is scope for local domestic retailers to expand into overseas markets, markets which they are unable to penetrate through their traditional shop fronts. There is also potential for small to medium enterprises to cater to international markets via niche products and services. For instance, Australian online business ‘Shoes of Prey’ which started in 2009 and allows customers to design their own shoes, is now a net exporter for Australia.

Additionally, as investment and expenditure on e-commerce technology increases, this will itself create jobs in those sectors. Investment in IT systems and other retail technology will also speed up technology diffusion, spurring innovation and productivity. The ‘output and employment effects of innovation... are expected to be expansionary’ (OECD 1999).

E-commerce activity will also grow as the National Broadband Network is phased into the economy, stimulating further technological developments and organisational innovations (Access Economics 2010).

Further as McKinsey (2011) states the productivity dividend from the internet is significant. Out of the 13 countries in their analysis, McKinsey notes that the internet contributed 11 per cent of growth over the past five years and that, “This is a reflection of small and medium enterprises (SMEs) receiving a performance boost from the internet.” (McKinsey 2011)

Creation of new industries

Creative destruction — the process of newer, more innovative firms taking the market share of older ones — is a part of ongoing structural change in the economy. In the long term, new jobs are created as the overall economy expands. Technological advances can spur growth in certain industries, at the same time as they present a challenge to others (IBISWorld, 2011).

In the case of online retailing, the industry to be first affected will obviously be traditional retail (OECD 1999). However, through innovative efforts, retailers may establish their online presence, improve their online offerings and adopt a ‘clicks and mortar’ strategy. Wrigley and Lowe (2010), in the OECD commissioned report, *The Globalization of Trade in Retail Services*, argued that a ‘bricks and clicks’ strategy can enable an established brand to capitalise on their online sales channel.

The May 2011 McKinsey report goes further and demonstrates through the more than 4,800 SMEs it surveyed that, “those with a strong Web presence grew more than twice as quickly as those that had minimal or no presence, an outcome that holds across sectors. In addition, SMEs that took advantage of the internet reported the share of total revenues that they earned from exports was more than twice as large as that reported by others. They also created more than twice the number of jobs as others.” (McKinsey 2011)

Australia has yet to see this happen, but that does not mean a similar story cannot occur here.

Internet intermediaries also facilitate the creation of businesses in several ways. These are discussed below.

- Aggregating demand and advertising cheaply: this assists SMEs to engage in ‘long-tail’ transactions and specialise in niche products, which may not be feasible before due to the small quantities sold. Barriers to the online market are lowered, and marketing costs are driven down, encouraging more businesses to emerge.
- Enabling SMEs and businesses in rural areas to reach a wider market: this is especially pertinent to ‘location-independent’ businesses who deliver goods that do not require physical delivery or can be delivered cost-effectively, such as informational goods (Stayner and McNeill 2003).
- Creating opportunities for wholesalers to cater to smaller business: this is contrary to the disintermediation argument. The internet has the potential to create profitable opportunities for wholesalers to cater to businesses, especially ‘start-up’ enterprises (IBISworld 2010b).

Online retailing encourages entrepreneurship, in the form of enabling new businesses to emerge, which spurs long term economic growth (Stayner and McNeill 2003). Entrepreneurship, via online retailing, creates more jobs by enabling new and existing businesses to enter the online marketplace (which may be consolidated with a physical shopfront), and by fostering business innovation.

Increased demand for existing and newly created jobs

As the online market grows, the economy's composition of skills will begin to evolve away from more traditional industries (manufacturing and agriculture) towards the ICT, commerce and business sectors. There will be increased demand for existing skills (software and online services), as well as new skills.

Some examples of jobs that will experience an increase as a result of the growth of online retail are discussed below.

- ***Administrative staff:*** needed for technical support, updating customer databases, and day-to-day administration. In addition to ensuring that websites are running efficiently, administrative staff are needed to ensure that products displayed online are updated at a regular basis, there is also significant scope for data entry and records management in these roles (IBISworld 2010b).
- ***Transport services:*** an increase in the delivery of physical merchandise will increase demand for transport services. Delivery can be outsourced or conducted internally, depending on the nature and size of the business and delivery location. For instance, flower and online grocery retailers employ their own delivery staff. Smaller goods (books, clothing) are delivered via post (increasing demand for postal services), while larger goods like furniture require couriers. Logistics, warehousing and inventory management jobs are a component of this growth (IBISworld 2010b).
- ***Electronic financial services:*** required as the growth of online retail will drive increased demand for electronic financial services. Furthermore, as online transactions grow, so does demand for security systems specialists, online consultants and technicians.
- ***IT professionals:*** as demand for software and other e-commerce technologies experience increases, so will demand for IT personnel. Computer engineers, IT consultants and software and website developers will also be needed to design sophisticated e-commerce strategies as more firms cash in on the online market.
- ***Photography:*** online sales require photos of the product being sold, so that consumers can make informed decisions, this can be a labour intensive task and leads to a number of opportunities for amateur and professional photographers.

Net employment impacts

In the short-term, some job losses can be expected however, the magnitude of job losses is negligible — the majority of Australians will still frequent ‘bricks-and-mortar’ establishments as online retailing is still relatively less established in Australia. In the long term, the productivity gains from e-commerce will result in a significant increase in jobs. Furthermore, the creation of new industries and increased demand for existing and newly created jobs will have a considerable impact on employment. The McKinsey global SME survey found that “75 per cent of the economic impact of the internet arises from traditional companies that don’t define themselves as pure internet players,” and that 2.6 jobs were created for every one destroyed. (McKinsey 2011)

In summary, it is likely that the positive employment impacts will outweigh any job losses. Overall, the growth of online retailing should have a positive impact on jobs. Furthermore, McKinsey 2011 demonstrates that the impact of the move to online retailing has a significant positive impact on GDP, which yields significant positive impacts on the compensation of labour.

Chapter 5

Opportunities and challenges for online retail

Australia is relatively slow in embracing online retail. This presents significant opportunities as well as challenges that need to be overcome.

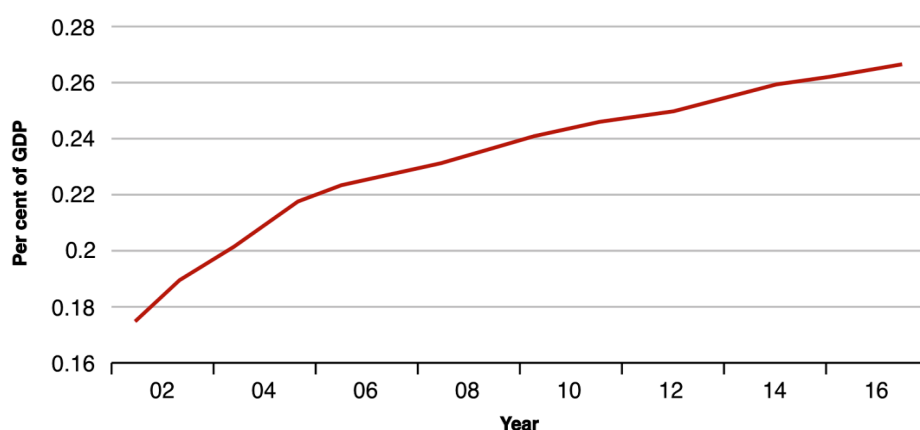
5.1 Australia is lagging in uptake of online retail

There is evidence that Australia is lagging in the uptake of online retail. This demonstrates an opportunity for strong growth in the sector, however, a number of challenges will need to be overcome. This section compares Australia's online retail penetration with other countries and Chapter 7 examines a key factor which may impact Australia's ability to improve penetration and bridge the gap namely shipping price and quality.

The online retail industry is increasing its contribution to Australia's economy, and is set to have doubled its share of GDP between 2002 and 2016. Figure 5.4 illustrates that online retail's share of the economy has risen from 17 per cent in 2002 to 24 per cent in 2009, and is projected to rise to over 26 per cent of GDP by 2016 (IBISWorld 2011b). The diminishing rate of growth reflects saturation with the technology, as well as factors potentially inhibiting its growth, such as limited broadband access.

Figure 5.1

ONLINE RETAIL INDUSTRY — SHARE OF THE AUSTRALIAN ECONOMY



Source: IBISWorld 2011b, p. 11.

As a share of the retail industry, online retail Australia is lagging in comparison to other developed countries. Southern Cross equities estimate online retail accounts for 4 per cent of total retail in Australia, which is significantly lower than the estimates of 10.5 per cent for the United Kingdom and 7 per cent for the United States (PC, 2011).

One reason for this lower penetration of online retail in Australia is that compared to overseas counterparts, Australia's traditional bricks-and-mortar retailers have been slow to develop their own shopping websites and provide value-added online offerings. Iain Nairn, chief executive of domestic retailer Witchery, notes that "Australian retailers are about 15 years behind their overseas counterparts in embracing digital innovation." (Herald Sun 2011).

The slow uptake of e-commerce by domestic retailers is due to a variety of factors — such as concerns about product cannibalisation between sales channels, impacts on pricing models, complexity in establishing new business models, updating logistics and implementing new marketing and advertising strategies. A lack of "digital innovation" amongst larger retailers is also contributing to the weak uptake of ecommerce, as observed by Katherine Milesi, Deloitte partner and online retail expert (Lindhe 2011a).

To maintain their competitive edge, however, it is imperative that domestic retailers establish an online presence, and some retailers have already begun to do so. Most recently, Harvey Norman announced that it will launch a centralised online store in the middle of this year (Ramli and Smith 2011), while Myer, JB Hi-Fi, Woolworths and Big W are either in the process of establishing or consolidating their online presence.

Going online enables businesses to offer more products and compete with overseas online retailers that offer a greater variety of goods at lower prices. For local retailer Witchery, its online stores are a substantial contributor of growth (Lindhe 2011a). Chief executive Iain Nairn said that he was surprised local retailers are not fully capitalising on the opportunities provided by e-tailing: "To me, it defied logic because the country is so geographically spread. It made sense for companies to be online and have a greater reach" (Lindhe 2011b).

International

The rise of online shopping is not a recent phenomenon. An article in *The Economist*, *Are you being served?* (2006) explored the evolution of the shopping experience. Elsewhere, such as America, Japan and China, online retailing is growing in popularity. The analysis below provides online retailing snapshots in America, Japan and China.

- **America:** an article in *The Economist*, *Bleak Friday* (2009), quoted research by Forrester, noting that "online sales grew by 13 per cent in 2008 to over \$141 billion and are predicted to grow by 11 per cent in 2009". This contrasts with retail sales, which grew 1 per cent in 2008. Major department stores, such as Saks and Macy's, noted the positive impacts of establishing an online presence. In the nine months to October 2009, online sales increased by 9 per cent, while stores sales fell by 19 per cent. Macy's noted that "every dollar a consumer spends online with Macy's leads to \$5.70 in spending at a store within ten days, because consumers learn about other products online and come into stores to look them over before buying them". As such, the author noted that it makes sense that "The most obvious response to the growth of e-tailing is for conventional retailers to redouble their own efforts online".

- **Japan:** despite a slow economy and sluggish retail sales, e-commerce is one area in Japan which is “bucking the trend” (The Economist 2010a). E-commerce revenues are growing at 17 per cent since 2005, and are predicted to grow at nearly 10 per cent a year for the next five years. Rakuten, an online company similar to eBay, employs a “shopping mall strategy” which enables businesses to set up “digital shopfronts” and process payments. Japan has a population of 130 million — and around 90 million shop online.
- **China:** in China, e-tailing growth is spurred by cheap delivery and high property rents. According to Nielsen, a consumer-research firm, “two-thirds of Chinese households with internet connections bought an everyday item online in the past six months, and half of all wired households with babies have bought nappies or formula online.” (The Economist 2010b). Additionally, discounts in online stores are substantially greater compared to other countries.

The fact that Australia is so far behind in the take up of online retail presents a significant opportunity, the following section looks at some demographic and technological factors that can further drive this opportunity.

5.2 Demographic, social and economic drivers

The uptake of online shopping in Australia will continue to increase as a result of demographic and social factors, and with further improvements to technology and safety. This section discusses areas which, while once a potential barrier to the uptake of online shopping, have become or will soon be key enablers. As internet access, computer literacy, payment methods and safety continue to improve, through Government initiatives such as those announced on 31 May 2011 in the National Digital Economy Strategy, through new and safer payment mechanisms and enhanced fraud and security technology, significant opportunities emerge which cannot be ignored by traditional retail.

Increased internet access

Increased access to and familiarity with the internet is a major driver of online shopping. According to the ABS, 72 per cent of Australian households have access to the internet, and 62 per cent of households to broadband. The uptake of home internet has been rapidly increasing, and broadband connections in particular are expected to rise with the National Broadband Network (ABS 2009). Additionally, 50 per cent of Australians have mobile internet on devices such as smartphones and tablet computers, further boosting the potential for online shopping (AC Nielsen 2011).

This wider access to higher speed internet is crucial to data-rich browsing, including online shopping. This is especially so in light of reports that 23 per cent of US consumers who were dissatisfied and 18 per cent of those who abandoned e-commerce transactions did so due to slow websites (Forrester Consulting 2009), indicating consumer demand is stifled by insufficient technologies.

Business access to internet is also expanding, with 90 per cent of businesses reporting internet access in mid-2009, 75 per cent receiving orders over the internet and 36 per cent making orders (ABS 2010b). Businesses more likely to have an internet presence tend to be larger and provide services to other businesses sectors, such as professional services, media and telecommunications and financial services (ABS 2010b; Access Economics 2010). This facilitates easier transactions and supply chain management, and potentially reduces costs for companies.

Demographic factors and consumer literacy

Younger population groups tend to be more familiar with the internet, with those aged 25-44 comprising up to 75 per cent of internet users and being most active in ecommerce (Access Economics 2010; ACMA 2010). While those aged 18-24 are driving demand for technological products, particularly music, 15-17 year olds high internet use does not translate to high engagement in e-commerce. This exception likely stems from limited incomes and little access credit facilities in this age bracket. (Access Economics 2010).

Consumer literacy is another key driver of demand for online retailing. With the internet firmly established in homes, workplaces and community facilities, more people than ever have access to and are likely to engage in online transactions. Moreover, those who try it out are likely to gain general confidence from positive shopping experiences, and over time, as tech-savvy generations move up the age groupings, the overall population overall will increasingly become open to online shopping. (IBISWorld 2011b)

Consumer income, lifestyles and education

Both internet access and consumer literacy grow with income. Real household disposable income has risen by 3.8 per cent per annum over the past five years, however the Global Financial Crisis impacted employment and income growth, resulting in the consumer goods market shrinking by 1 per cent in 2008-09 (IBISWorld 2011a). Nonetheless, the overall growth in incomes underpins spending in both traditional and online goods. Fluctuations in consumer sentiment, which is heavily linked to real disposable income, has also affected retail spending.

While income levels generally drive consumer demand, 'time-poor but cash-rich' consumers are driving the trend towards online shopping (IBISWorld 2011). A survey by the Australian Communications and Media Authority (ACMA 2010) found that 88 per cent of people with a household income of \$150 000 per annum had made an internet purchase, compared with 48 per cent with household income under \$25 000. These figures reflect the demands of dual-income households who face strong work-life demands, enhancing their uptake of faster and more convenient shopping methods (IBISWorld 2011b). They are also more likely to be able to afford fast internet access and should be more technology-literate.

Higher incomes are also linked with employment and higher education, and employed people, or people with higher than average education are also more likely to have made an internet purchase (ACMA 2010). In the survey, around 74 per cent of employed people had made online purchases, compared to 62 per cent of the unemployed and 46 per cent of retirees, while 83 per cent of postgraduates and 75 per cent of undergraduates had made an online purchase, compared to only half of those without higher-secondary qualifications (ACMA 2010).

Safer and more efficient transactions

Another key driver of online retailing is the increased safety and efficiency of online transactions. Consumers place great emphasis on sellers' reputations, trust and quality of services, with 86 per cent of consumers only willing to shop from trusted websites (Colmar Brunton 2011, in Marketing Mag 2011; IBISWorld 2011b). This aligns with global trends, with 60 per cent of consumers tending to favour returning to the same site to make online purchases (AC Nielsen 2009).

Alongside increasing consumer literacy, technological advances improving security and efficiency have contributed to the growth in online shopping. Faster and more secure payment systems, greater efficiency in delivery and resolution of refunds are making consumers more comfortable with internet shopping (IBISWorld 2011b). There has also been strong growth in comparison websites enabling opinions to be aired about product quality, timeliness and other aspects affecting retailers' reputations (IBISWorld 2011b). These concerns about reputation lead to 32 per cent of consumers globally relying on recommendations and 26 per cent on online reviews before they make purchases (AC Nielsen 2008).

Functioning online markets, rely on secure online payment systems for their efficiency and long-term survival. In the absence of a safe payment mechanisms, people will be reluctant to undertake secure online transactions. Indeed, efficient payment systems are 'critical to the functioning of a modern monetary economy' (Greenspan, cited in Li et al. 2006 cited in ACG 2007, p. 27) and the markets within it.

A variety of mechanisms have been developed and continually improved to provide safer and more reliable payment options to improve the safety and efficiency of online transactions.

Third-party services

Third party payment systems are a popular way to connect buyers and sellers to interact without sharing sensitive personal information. PayPal is a particularly popular third party service, which is available worldwide. Paypal enables online transactions worldwide without buyers and sellers sharing personal financial details. It allows users to pay with a number of payment systems, including credit cards, debit cards, and bank accounts, and electronically transfers funds to vendors. PayPal has operated in Australia for 6 years, and in that time has grown to having 3.5 million users and 30 000 businesses, with its volume of transactions growing 5 fold over this period (PayPal 2010).

PayPal also has a Buyer Protection Program to protect eBay users, with up to \$20 000 receivable for eligible transactions (eBay 2011, PayPal 2011). Indeed, PayPal is recommended by eBay and the Australian Government website (www.staysmartonline.gov.au) as a payment mechanism to reduce the possibility of online fraud (ACG 2008).

Safeguards against fraud and identity theft

Research by ACMA (2010) finds that consumers themselves commonly undertake a number of security precautions when purchasing online, including only buying from reputable or known sites (94 per cent), using security software (93 per cent), and only buying from sites that encrypt payment data (77 per cent). 26 per cent have a separate credit for online purchases, and 19 per cent prefer PayPal as a payment method.

Consumers' own initiatives are boosted by safeguards and protection provided by others involved in financial transactions. Many banks offer fraud protection on their credit cards, and eBay and PayPal, in addition to their internal policies, processes and procedures designed to assist detect and reduce fraud, each work closely with law enforcement and regulatory agencies to assist investigations and prevent fraud (PC 2011; eBay 2010).

Overall, however, online transacting is highly dependent on reputation and the availability of information. Thus, consumer awareness and education plays a major role in consumer protection, with a variety of government and private websites offering safety information for consumers. These include the website www.staysmartonline.gov.au — the Government's primary mechanism to disseminate consumer safety information relating to use of the internet, and eBay's online Security Centre, which offers eBay users tips on general computer security and on identifying and reducing online fraud (ACG 2008; 2007). This availability of information, together with eBay's Feedback system (see more detail on this below) and the high uptake of PayPal by buyers is thus a likely contributor to low rates of fraud on eBay (Cohen 2002 and eBay 2007k, cited in ACG 2007).

Consumer protection legislation and agencies

Australian online retailers are subject to the same consumer protection legislation as conventional retailers, including the new *Australian Consumer Law* (ACL) (Schedule 2 of the *Competition and Consumer Act 2010*) that commenced on 1 January 2011. The ACL establishes a set of consumer guarantees about the supply of goods and services, including guarantees regarding the description of goods, safety, quality, fitness for purpose, and reasonable supply times, as well as unfair practices (ACL Part 3-1, Part 3-2; PC 2011).

The ACL also protects consumers against conduct engaged in outside Australia by online retailers who are bodies corporate incorporated or carrying on business in Australia, Australian citizens or persons ordinarily resident within Australia. While it may be difficult to prosecute overseas suppliers, the Australian Competition and Consumer Commission has successfully brought several actions against overseas-based suppliers regarding, for example, misleading and deceptive conduct (PC 2011), representing tangible levels of protection for Australian consumers. Furthermore, there is international cooperation and formal agreements regarding consumer safety, fraud and other safety threats that operate trans-nationally, improving the strength of regulatory agencies (PC 2011).

Alongside consumer protection legislation, there are also specific laws to address internet-related issues. These include the *Electronic Transactions Act 1999*, which recognises the legitimacy of electronic forms of communication when discharging obligations under Commonwealth law (such as requirements to provide signatures, or information in writing), and the *Broadcasting Service Act 1992* which established the Australian Broadcasting Authority (now merged into the Australian Communications and Media Authority) and conferred to it responsibility for regulating internet content (IBISWorld 2011b; *Electronic Transaction Act 1999* s4).

Furthermore, agencies such as the Australian Federal Police specifically target electronic crime including high-tech crime and internet frauds and scams, and often work in cooperation with other organisations such as eBay (Australian Federal Police 2011; eBay 2010).

Exclusive distribution agreements in particular have the potential to significantly harm small business and consumers by restricting competition. Although there is controversy regarding the measurement of consumer harm, there is widespread recognition of increased prices and reduced choice that result where exclusive distribution agreements are anticompetitive (Abbott and Wright 2008; Allens Arthur Robinson 2004).

Exclusive distribution agreements have been flagged by sellers on eBay.com.au as a key restraint on trade that is having a negative impact on business. In the recent Online Business Index launched on March 21 2011, survey results regarding restraints included:

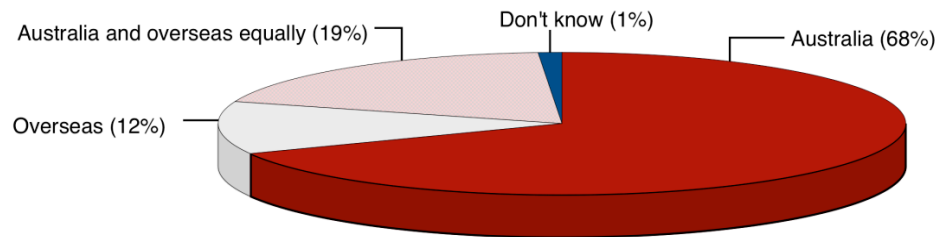
- 78 per cent of respondents noted that manufacturers had attempted to restrict online sales;
- 28 per cent of respondents had found suppliers imposing conditions on online sales; and
- 25 per cent of respondents had found suppliers attempting to control the price of online sales of their goods (eBay 2011b).

Clearly, these results indicate an important role for the ACCC in monitoring dealings between suppliers and manufacturers and online sellers.

Preferences to buy from domestic online retailers

Around 80 per cent of Australian online shopping is done through Australian websites, that is sites with an .au URL (Forrester Consulting 2010). 23 per cent of consumers only shop from Australian websites, and 68 per cent prefer to buy from Australian websites (Leading Edge Research 2010; ACMA 2010).

Figure 5.2

CONSUMER PREFERENCES TO SHOP USING AUSTRALIAN WEBSITES

Source: ACMA 2010, p. 20.

Both the Leading Edge Research (2010) and ACMA (2010) surveys find that consumers are concerned about quality and after-sales service, including refunds and returns, as well as perceived faster and cheaper shipping available in Australia. Reasons given for shopping locally by Leading Edge Research (2010) respondents include a belief that it is 'safer to buy in Australia' (33 per cent), worries about fraud from overseas websites (30 per cent), after-sales service (24 per cent) and delivery concerns (23 per cent). There are similar responses to the ACMA (2010) survey, which finds that 24 per cent of consumers want to support local industry, 23 per cent did not trust overseas websites, and 27 per cent preferred local online stores for accessibility and ease of returns.

These figures suggest a clear market opportunity for domestic retailers — both online and offline — to meet Australian consumers' desire for online shopping and their preference to buy from domestic retailers.

5.3 Opportunities for multi-channel retail

The internet's power to reduce search costs helps it to meet consumers' needs for research and information gathering, however many consumers combine this with the advantages of traditional stores. An estimated 50 per cent of Australians use the internet — including retail websites, online review and social media — to research before purchasing products in store (Sands and Ferraro 2010), while a US trend likely to be reflected in Australia is that over half of consumers purchase goods online but collect them in store (Forrester Consulting 2009).

This combination of online and traditional methods reflects the trend towards 'multi-channel' retailing which positively impacts perceived shopping value and satisfaction by enabling consumers to interact with retailers and obtain product information through avenues including traditional stores, websites and even social media (ACRS 2010). Surveyed businesses that have an eBay store use 2.4 sales channels on average in 2011 (down from 2.5 in 2010), with half of sellers having their own website and one third a traditional retail store (eBay 2011b; eBay 2010). The benefits of reaching many consumers through multi-channelling is reflected in 23 per cent of sales coming from websites (for those who have a website) and 35 per cent of sales from traditional stores (for those with traditional stores) (eBay 2010).

Increased sales channels expand opportunities for consumers to interact with stores, providing greater product exposure and improving shopping experiences (ACRS 2010). For example, the consumers can purchase a range of Apple electronic products online after viewing them in retail stores. Apple's physical store is a focal point for sales, product workshops and special events that enhance consumer's knowledge and experience of Apple products. Apple benefits from restricting the costs of bricks and mortar retailing to 10 stores in Australia whilst selling across Australia.

Chapter 6

The appropriateness of the current low value threshold

The \$1000 low value import threshold is appropriate, and currently has a lower purchasing power than when implemented. Any reductions in this threshold will significantly impact upon small business and consumers; introduce significant regulatory and administrative burdens; and create a significant barrier to international trade.

6.1 Outline

This chapter analyses the current low value import threshold of \$1000, in light of recent debate that argues for the threshold to be reduced to the pre 2005 level of \$250.

Retailers have argued strongly for a reduction or removal of the threshold with National Retail Association director Gary Black noting:

This price [of the current threshold] will result from GST lost, from duties and tariffs foregone, from customs fees and charges foregone...

From job losses, payroll tax revenue reductions, and the cost to the economy of inevitable business failures. (The Australian, 2011)

The current level of the low value import threshold is appropriate for a number of reasons, including:

- preserving the real value of the threshold;
- promotion of openness to trade;
- lowering the administrative burden;
- the impact on small business; and
- the impact on consumers.

Further, in the following chapter it is demonstrated using a computable general equilibrium model that a reduction in the GST free threshold would have a negative impact on employment, eroding a significant proportion of the benefits which online retail generates.

6.2 Why the current GST low value import threshold is appropriate

The real value of the import threshold

In 1976, the low value import threshold was set at \$250. Imported items with a value less than this threshold were not subject to sales tax. Following the transition to the new tax system in 2000, the threshold was unchanged for GST purposes.

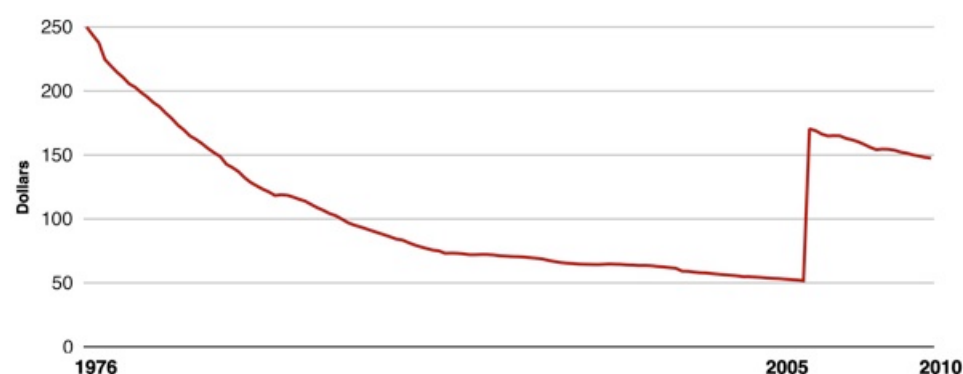
In 1986, the low value import threshold was changed to \$1,000 for goods carried by Australia Post, as a way to reduce the administrative burden on Customs and Australia Post and to reduce processing times (ASGA 2010).

In 2005, the threshold was increased to \$1000 for goods which were not sent through Australia Post to align these thresholds (ASGA 2010).

Figure 6.1 shows the path of the low value import threshold over time. A key message from this figure is that in real terms, the current import threshold is significantly lower than it was in 1976. Further, it can be shown that in real terms, a \$250 import threshold would mean that the current level would be less than a fifth of the 1976 level.

Figure 6.1

THE REAL VALUE OF THE LOW VALUE THRESHOLD (IN 1976 DOLLARS)



Source: Allen Consulting Group analysis of eBay data, 2011

Trade Openness

A reduction in the GST low-value threshold to \$250 would impose a significant restraint on trade, not only from the GST, but from the costs — both financial and temporal — of the ‘formal entry’ process.

An imported good that undergoes the formal entry process, dependent on whether the process is undertaken on-line or manually, incurs a customs fee of \$40.20 or \$65.75 (PWC 2009). Under the current threshold an item on the threshold value of \$1000, can face an effective fee of between 4 and 6.6 per cent of its value at customs.

If the low value import threshold was reduced to \$250, an item entering at this threshold value could face a tariff like charge of between 16.1 and 26.3 per cent. As a reference point, this is largely similar to the tariff barriers imposed on foreign automotive imports in the mid-1990s (ABS 2005).

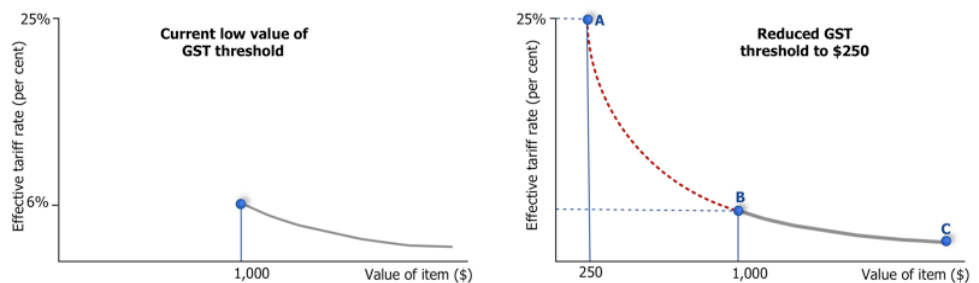
This is not the only restraint on trade that such a policy would introduce. The formal entry process is a time consuming one. Consultations with industry suggest that Customs average processing time for a formal entry is approximately 10 days. To expedite this process, the services of a customs broker could be engaged which would add to the entry costs by around \$65 (PWC 2009). Effectively, the importer could be facing an import cost of over 50 per cent of the value of the good when this is added, which is largely similar to the tariff barriers granted to the automotive industry at their peak in the mid-1980s (ABS 2005).

Using only the manual entry charge, figure 6.2 shows the change in the effective tariff that would accrue to imports from the \$250 to \$1,000 range. In the first panel, we see a case where the formal entry fee of around \$65 is imposed on goods exceeding \$1,000 in value. As such, the ‘effective tariff’ imposed on goods at the \$1,000 level is around 6 per cent. As the value of the good increases, the effective tariff falls, such that for an item worth \$2,000 an effective tariff of 3 per cent is faced.

The second panel reflects the ‘effective tariff’ where the threshold is reduced to \$250. The formal entry fee of \$60 would now apply for goods from this value and the red dotted line represents the proportional effective tariff for goods that are newly subject to the process.

Figure 6.2

EFFECTIVE TARIFF RATES BEFORE AND AFTER A CHANGE IN THE GST LOW VALUE IMPORT THRESHOLD



Source: Allen Consulting Group analysis of eBay data, 2011

Administrative Burden

The initial increase in the GST free threshold for items sent through Australia Post in 1986 was due to the significant administrative burden that the lower threshold imposed on both Customs and Australia Post (ASGA 2010).

In the past 25 years since this increase in the threshold, two factors have conspired to make the administrative burden of a return to the \$250 threshold even more administratively burdensome. These are:

- CPI increases which have seen the real value of the \$250 threshold reduce by more than half; and
- the increasing ability of individuals to import goods from overseas, using channels such as eBay.

Accordingly, it would appear that the administrative burden can only have increased since the 1986 review, and any changes would only lead to increased delay for all importers thus negatively impacting the economy.

Small sellers — and the GST non-issue

For GST purposes, a small seller has turnover of less than \$75,000 (ATO, 2011). These sellers do not have to register for, or pay GST.

The tax system operates such that even where GST is payable on an import due to it being over the current low value import threshold, the small business would obtain a GST refund for this import and there would be no additional GST collections by the Federal Government.

So for GST registered businesses there would be no additional GST collected by the Commonwealth, yet there would be other impacts on small business, whether above or below the threshold. The majority of businesses that have taken advantage of online retail are small to medium businesses who have a more flexible business model. Therefore, any change to the GST threshold will create an undue administrative burden on small to medium businesses with little to no resulting financial benefit to the Government or the economy.

The overwhelming majority of sellers on eBay are small, with turnover of less than \$75,000. The proportion of goods sold by these small sellers is still relatively high but is gradually getting smaller as larger retailers start to get more involved in online retail. As competition for sales online heats up over the next 12 – 24 months the small to medium businesses should not also have to face increased administrative burdens from the Government through a decrease in the GST threshold.

Chapter 7

Infrastructure as an enabler of growth

High postage costs, relative to overseas are a potential impediment to growth and at worst could result in some ecommerce leaking overseas. Accordingly, eBay argues that government should invest in infrastructure that facilitates affordable, tracked shipping.

7.1 Consumer demand is driven by (and limited by) shipping

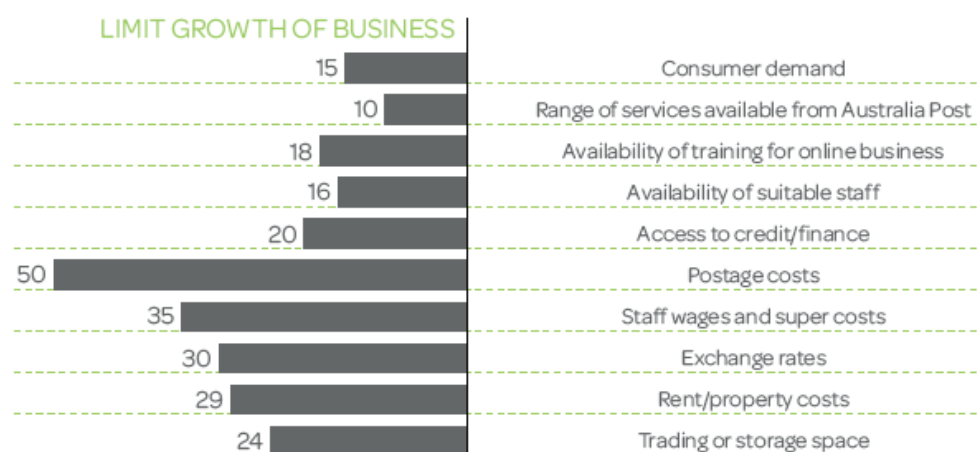
eBay's data suggests a global shift in customer expectations towards the standard of a tracked, easy and affordable shipping experience with ecommerce transactions. This shift in expectations is now making its way to Australian shores with many global sites delivering free fully tracked items to local addresses within three business days.

7.2 Shipping costs are high relative to overseas

Shipping costs are seen by the ecommerce industry as being the key factor that limits their growth. According to an Online Business Index (OBI) survey of online businesses - 50 per cent of these businesses are concerned about the impacts of postage costs on their business.

Figure 7.1

FACTORS LIMITING THE GROWTH OF ECOMMERCE BUSINESSES



Source: Online Business Index, 2011

Figure 7.1 shows that the high costs of postage dwarf the other concerns voiced by the industry.

Data comparing the costs to post an item from New Zealand to Sydney as opposed to Melbourne to Sydney was provided by eBay.com.au to support this argument about the high cost of shipping and is summarised in Table 7.1.

Table 7.1

AUCKLAND OR MELBOURNE? THE COST OF POSTING COMMON ITEMS TO SYDNEY

| Item | Size (cm) | Weight (kg) | Melbourne (AUD) | Auckland (AUD) |
|-------|-------------------|-------------|-----------------|----------------|
| DVD | 19.5 x 13.5 x 1.5 | 0.08 | 4.75 | 4.08 |
| Shoes | 29.5 x 18 x 9.5 | 1 | 10.95 | 10.48 |

Source: Allen Consulting Group Analysis of eBay data, 2011

Table 7.1 demonstrates that international freight, from New Zealand is cheaper in the cases of two of the most popular items sold on eBay.com.au. This is an issue which impacts domestic sellers competitiveness and increases costs to consumers.

Data from eBay websites in Australia, the United Kingdom and the United States was used to examine this issue in more detail. Twenty products were randomly selected of differing values, sizes and classes and the shipping cost as a proportion of the cost of the item was noted based on the following criteria:

- the item was located in the country covered by the website (i.e. for eBay Australia, the item was located in Australia);
- the shipping cost was for domestic consumers;
- the item was being sold at a fixed “buy it now” price;
- care was taken with items offering free postage (i.e. if one iPod was selling for \$219 plus shipping of \$10, and another iPod was selling for \$229 with free shipping, the item with free shipping was excluded); and
- each product was sampled five times.

Comparing Australian data with U.S. and U.K. data in Table 7.2 reveals that shipping costs, as a percentage of total cost in Australia are significantly higher — around 50 per cent higher than in the UK and around 70 per cent higher than the US.

Table 7.2

SHIPPING COSTS AS A PERCENTAGE OF TOTAL TRANSACTION VALUE — WEIGHTED AVERAGE OF SELECTED ITEMS

| Location | Percentage of total transaction value |
|----------------|---------------------------------------|
| Australia | 2.7 |
| United States | 1.5 |
| United Kingdom | 1.7 |

Source: Allen Consulting Group Analysis, 2011

The percentages are related to the selection of items. Some items in the sample had postage costs of more than 10 per cent of the cost of the item — such as the book ‘Freakonomics’ and ‘Chanel no 5’ perfume.

This sample is not exhaustive, but does demonstrate some interesting trends that point to a lack of competitive affordable alternative shipping options in Australia.

7.3 Tracked shipping to enhance competitiveness

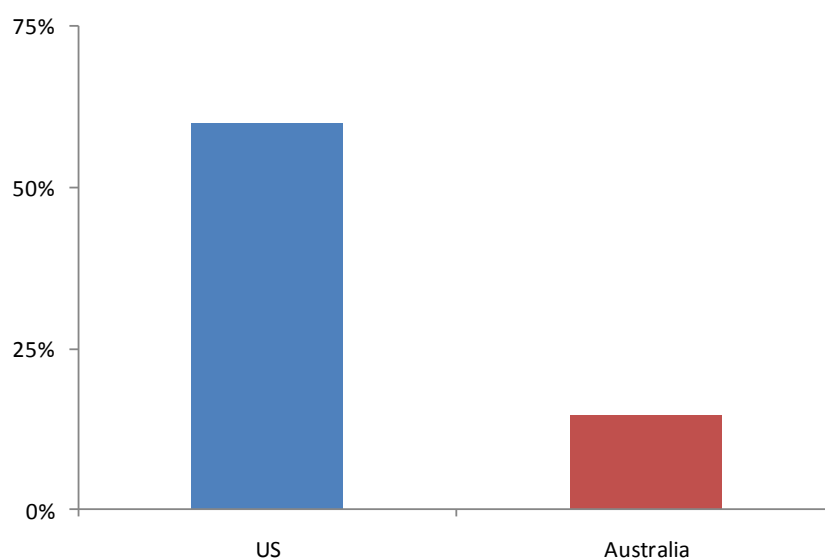
Tracked shipping is a key driver of buyer confidence in online shopping. Buyers who purchase products that are shipped with tracking numbers have more confidence when the item will arrive, and are reassured of the item location after the purchase is made.

Reviewing comparative data on percentage of transactions with tracking numbers between Australia and other countries highlights a significant gap vs. other global ecommerce markets. This highlights the opportunity to provide more affordable, tracked options in the Australian postage marketplace.

Investment by shipping providers to create scalable infrastructure to enable cheaper shipping could do much for international competitiveness. Government policies that assist shipping providers would be welcome.

Figure 7.2

PROPORTION OF TRACKED SHIPPING — AUSTRALIA AND THE UNITED STATES



Source: Allen Consulting Group, 2011

7.4 eBay seller research

Positively, there are indications that Australian shipping providers are adapting to support ecommerce. For example, Australia Post recently launched a Click and Send service and worked with eBay to release eBay branded fixed price satchels. (OBI, 2011).

A recent study commissioned by eBay.com.au to gauge the views of its sellers towards current shipping arrangements available in Australia was undertaken by Stokes Mischewski (2011).

Those surveyed highlighted problems with shipping in several key areas, being:

- price — the cost of shipping for domestic sellers to post items both within Australia and internationally;
- bulky items - the lack of available postage services for these item types;
- tracking — the lack of availability and accuracy of tracking; and
- pick up — the inflexibility of picking up arrangements for items.

7.5 Summary

There are some key challenges facing the domestic shipping services providers that don't face those in the United Kingdom or New Zealand, and are less significant in the United States. Chief amongst those is geography. It is acknowledged that Australia is a large, sparsely populated country and it is not easy to offer postage and parcel services across the whole of Australia. However, given the large and growing role of ecommerce in the economy, and the significantly higher costs of postage in Australia, eBay argues that investment in shipping infrastructure is needed. This will enable ecommerce to evolve, compete and grow and that this investment will bring significant benefits to the retail sector and the economy more broadly.

Chapter 8

CGE Analysis — the impact of lowering the GST low value import threshold

Lowering the GST low value import threshold would have a significant negative impact on employment and output. CGE analysis indicates that over 300 jobs would be lost to the Australian economy through lowering this threshold.

8.1 Summary

In a report for eBay in 2007, the Allen Consulting Group used a Computable General Equilibrium (CGE) framework to estimate the economic impact of eBay.com.au. Essentially, using conservative estimates of the price competition impacts of online shopping, an effect of around 0.2 per cent growth in real GDP was estimated.

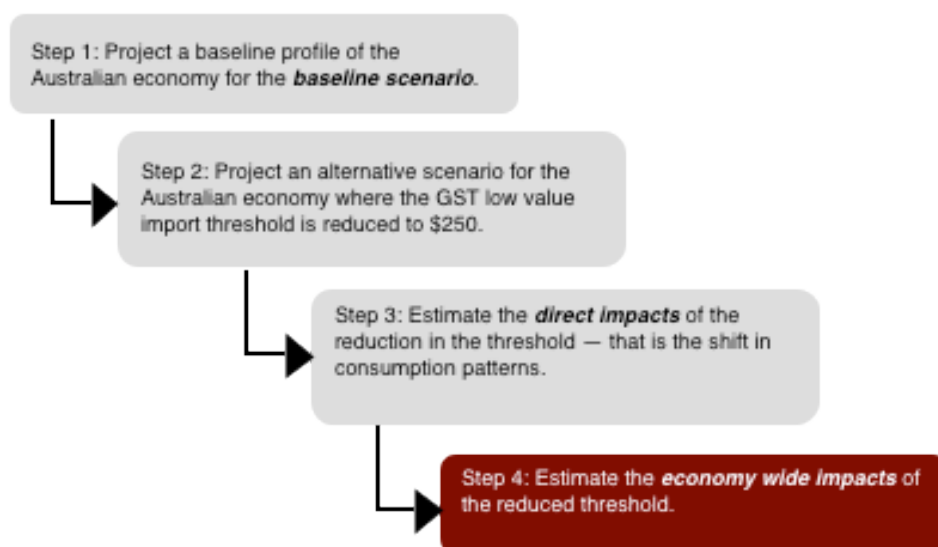
In this report, using a similar approach, we analyse the impact of lowering the GST low value import threshold from the current value of \$1,000 to \$250, the level that it was set at originally in 1976. Large Australian retailers such as Gerry Harvey have advocated this move, largely due to the perception that domestic consumers having access to GST free imports costs jobs.

This chapter presents a framework in which we can test the hypothesis that lowering the GST low value threshold is good for jobs and good for the economy. The framework that we use is a computable general equilibrium (CGE) model.

8.2 Modelling framework

This chapter sets out the Allen Consulting Group's methodology in estimating the economy-wide impacts of the reduction in the GST low value threshold. Figure 8.1 sets out the modelling framework for the analysis.

Figure 8.1

MODELLING FRAMEWORK

Source: Allen Consulting Group analysis, 2011.

8.3 Modelling scenarios

Two scenarios were set up in estimating the economic impacts of the change in the low value import threshold (Step 1 and Step 2 in Figure 8.1).

- *Baseline scenario*: this scenario shows what is expected to happen under the current business-as-usual scenario where the \$1,000 low value import threshold is in operation.
- *Reduced low value import threshold scenario*: this scenario refers to a case where the low value import threshold is reduced to \$250.

The modelling does not examine the cost of the GST, rather only the impost of the customs charge and its impact on prices.

8.4 Estimating the direct impact of the reduced threshold

In step 3 of the modelling framework, it is necessary to estimate the direct impact of reducing the low-value import threshold.

The Federal Treasury estimated the GST foregone from the low value import threshold at around \$460 Million, but potentially up to \$610. Accordingly, valuing imports that could be covered by this at around \$4.60 Billion is a starting point for the analysis.

Of this \$4.6 Billion that could be brought into the GST system through the reduction in threshold, only those imports between \$250 and \$1,000 would be brought into the net, and extra collections would apply only to consumers and small business for GST purposes. Using data provided by eBay, the proportion of goods imported with a value between \$250 and \$1,000 is approximately 23 per cent, using this proportion for the entire industry means that around \$1 Billion worth of imports would be subject to the formal entry process under the lower threshold.

eBay data suggests that the average value of these items is around \$440. As such, around 230,000 additional items would be subject to the formal entry charge, paying between \$100 Million and \$150 Million in import duty.

A simulation is run on the imports of the commodity “Other Manufacturing,” such that \$100 Million in import duty is raised.

8.5 The MMRF model

The economy-wide impacts of reducing the GST low value import threshold were estimated using a Computable General Equilibrium (CGE) model of the Australian economy, the Monash Multi Regional Forecasting (MMRF) Model. Note that CGE models are different from and more conservative than multiplier analysis. Whilst both are based on the ABS input-output tables, CGE analysis will be by definition more conservative in modelling exercises such as this as:

- CGE modelling imposes supply side constraints — labour and capital are finite.
- CGE models drive price responses — both input prices and output prices can vary.

Box 8.1 provides a brief description of the MMRF model. Appendix A provides a detailed write-up on the MMRF model.

Box 8.1

THE MMRF MODEL

The MMRF is a multi-sector dynamic CGE model of the Australian economy, covering the six states and two territories. It models each region as an economy in its own right, with region-specific prices, region-specific consumers, region-specific industries, and so on. Importantly, the ACT is separately identified in the model.

The MMRF contains 58 industrial sectors, which produce 63 commodities. The sectoral details allow the economic contribution of the low value import threshold to be allocated appropriately in the model. Specifically, the bulk of low value imports are captured under the ‘Other manufacturing’ sector.

The MMRF model is a high-level representation of the Australian economy, facilitating measurement of the wider effects of changes in economic activity in key industries and regions. To the extent that economic activity is interlinked, the MMRF model captures any indirect effects that arise from direct measures. In this instance, the direct impact of reducing of the low value import threshold is an increase on import taxes on the ‘Other manufacturing’ sector. The MMRF captures the flow-on impacts of this reduction in output from the ‘Other services’ sector to upstream and downstream sectors.

Importantly, the MMRF model is widely known and has been used for a wide range of policy studies. The Productivity Commission used the model to examine the potential benefits of the National Reform Agenda, and the Commonwealth Treasury used a version of the MMRF to produce the 2008 report, *Australia’s Low Pollution Future*, which was a companion report to the Climate Change White Paper. The MMRF model has therefore demonstrated its ability to estimate economy-wide impacts of industry or policy changes.

Key assumptions

At the national level, the consumer’s real wage rate is expected to remain unchanged from its baseline forecast level, while employment is adjust according to changes in the demand of the sectors. The capital stock is expected to remain unchanged.

These are consistent with the classic short-run assumption where wages and capital are fixed. Policy changes would have a greater impact on employment as producers adjust their labour needs in view of changes in the demand of their products.

Further, allowing employment to change be it positively or negatively allows us to test the Harvey hypothesis.

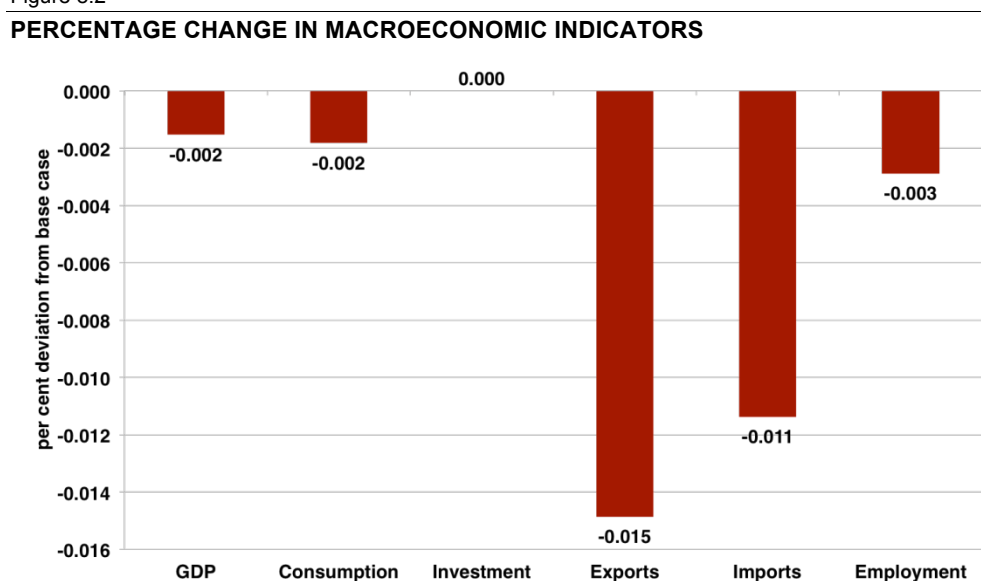
Source: Allen Consulting Group, 2011.

The MMRF model is a high-level representation of the Australian economy, facilitating measurement of the wider effects of changes in economic activity in key industries and regions. To the extent that economic activity is interlinked, the MMRF model captures any indirect effects that arise from direct measures. In this instance, the direct impact of reducing the low value import threshold is an increase in the import tax on the import of the Other Manufacturing sector such that \$100 Million is raised. The MMRF captures the flow-on impacts of this reduction in output from the 'Other Manufacturing' sector to upstream and downstream sectors.

8.6 Model results

The results from the model are given below. The macroeconomic results are presented in Figure 8.2.

Figure 8.2



Source: Allen Consulting Group Analysis, 2011

The results in Figure 8.2 show the percentage changes in GDP and employment. For relatively minor changes such as these, this is not a logical interpretation of these macroeconomic numbers.

Table 8.1

KEY MACROECONOMIC INDICATORS - LEVELS

| Indicator | Change |
|--------------------------|--------|
| GDP (\$ million) | -20 |
| Consumption (\$ million) | -13 |
| Employment (Jobs) | -318 |

Source: Allen Consulting Group Analysis

The impact on GDP and consumption is significant, with a decline of around \$20 million in GDP and \$13 million in consumption, which is a good measure of economic welfare.

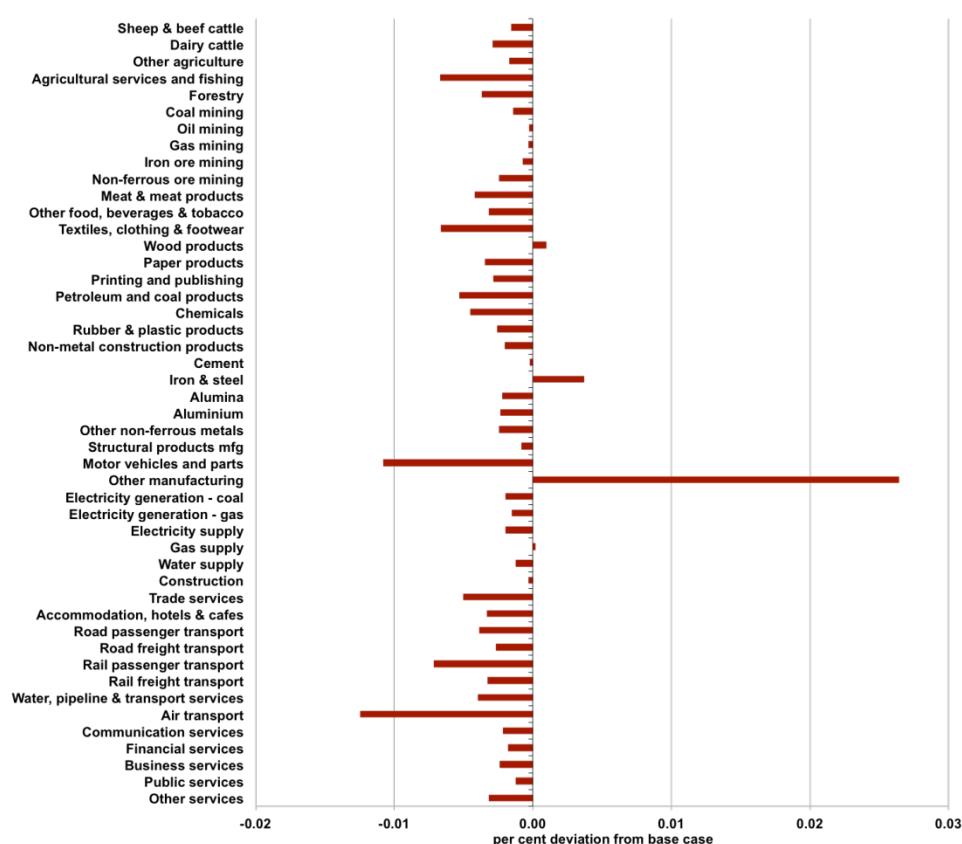
We do not find the significant positive impact on employment that would support the hypothesis that reducing the low value import threshold would be good for employment. Instead there is evidence of a slight negative impact on employment.

The output impact of this can be shown at an industry level in Figure 8.3. It is clear that as the reduction in the low value import threshold would act like a tariff, that there would be an increase in output for the ‘protected’ industry — not retail — but other manufacturing. Most other industries (including retail) would see a decline in their output, there are minor increases in the output of wood products and iron and steel which probably is reflective of their significant use as inputs into manufacturing.

Other manufacturing inputs such as motor vehicles suffer. Potentially, this is due to the absorption of labour and capital into other manufacturing to fulfil the new domestic demand for output from this sector. These factors flow out of industries which utilise similar labour, such as motor vehicles and textiles, clothing and footwear.

Figure 8.3

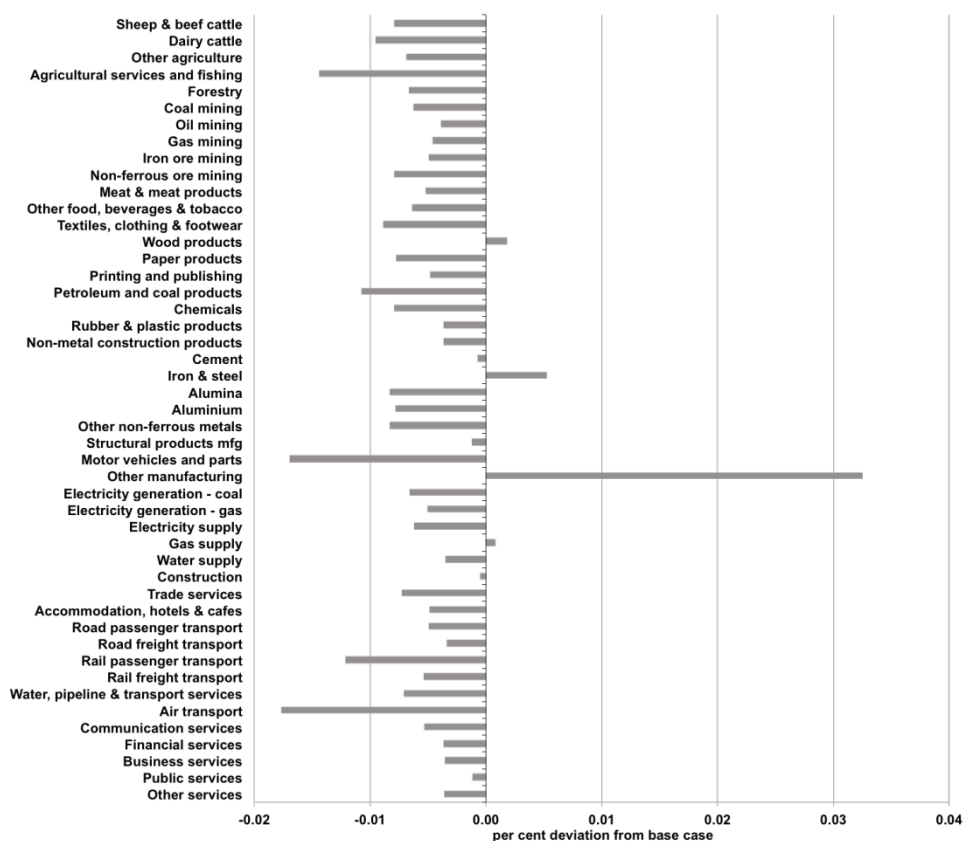
PERCENTAGE CHANGES IN OUTPUT — INDUSTRY LEVEL



Source: Allen Consulting Group analysis, 2011

The decline in these industries' outputs leads to a reduction in their demand for labour (see Figure 8.4). The impacts on employment are almost identical to the output impacts.

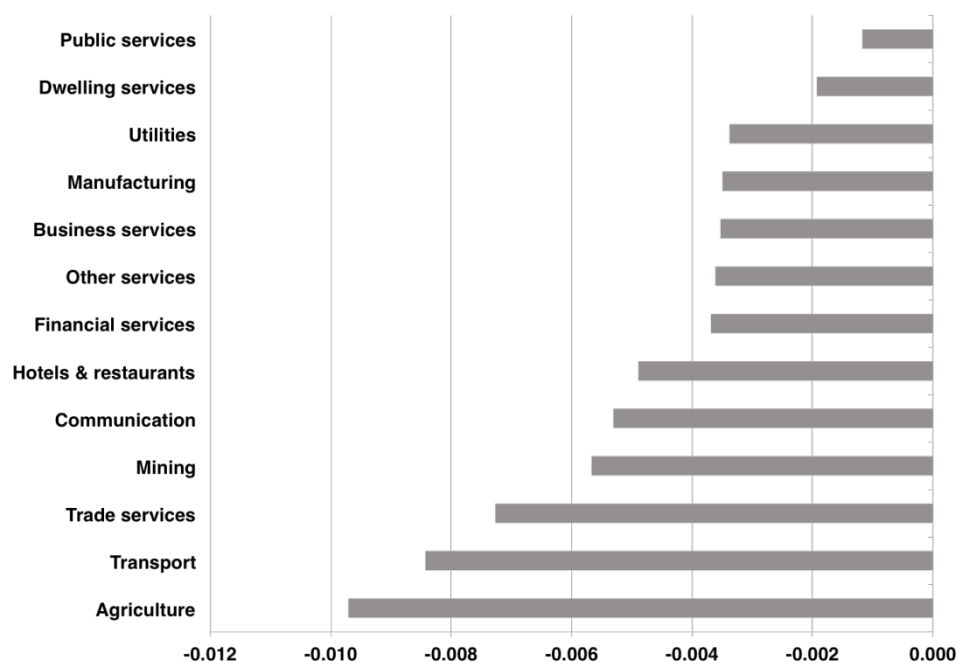
Figure 8.4

PERCENTAGE CHANGES IN EMPLOYMENT — INDUSTRY LEVEL

Source: Allen Consulting Group analysis, 2011

Although it is apparent that one sector of manufacturing benefits from this tariff increase, the overall impact on manufacturing jobs is negative when we aggregate output in Figure 8.5.

Figure 8.5

AGGREGATED EMPLOYMENT IMPACTS

Source: Allen Consulting Group analysis, 2011

Using a CGE modelling analysis, we can reject the assertion that a reduction in the GST low value import threshold would be good for jobs.

By increasing the cost of imports, there would be marginal substitution away from imports to domestic production in the protected sector — in this case other manufacturing. However, there would be an offsetting income effect — consumers paying more for imports of one sector substitute out of other sectors. This effect and the decline in other industries dominates the increase in other manufacturing and the economy as a whole shrinks and jobs are shed in aggregate.

Chapter 9

Conclusion and recommendations

This paper demonstrates the importance of online retail to the consumers, business (particularly small business) and the economy and makes two recommendations based on the importance of enabling, rather than stifling the benefits of online retail. These are:

- *There is no case to reduce the GST low value import threshold.*
- *There is a case to examine restrictive trade practices imposed on online retail — such as exclusive distribution agreements.*
- *There is a case to enable the growth of online retail through investments in shipping infrastructure.*

The online retail industry makes a significant contribution to national welfare and on aggregate is good for growth and hence jobs. eBay.com.au alone is an important part of the Australian economy, providing a growing ‘many to many’ online retail service that connects millions of buyers and sellers each month. eBay.com.au offers unique advantages to consumers and small business, but also offers an online sales channel for existing larger businesses.

- Online retail offers low prices, usually significantly lower than 10 per cent below RRP in traditional retail outlets and has significant economic advantages to Australians, especially those in regional Australia.
- It is a myth that online retailing is bad for employment. Although a structural shift from traditional retail to online retail will cause some friction, online retail creates other jobs, and ACG modelling has demonstrated that there is no evidence to suggest that there is a loss of jobs overall.

Any moves to slow down the uptake of online retail would punish consumers, particularly those in regional areas who rely disproportionately on online retail to provide them with broader product ranges at more competitive prices than offered through traditional retail. In addition, consumers would subsequently pay higher prices. One such move would be to reduce the GST low value import threshold. A key recommendation of this submission is that there is no case for a reduction in the GST low value import threshold.

- Any change would have a significant negative impact on small businesses through an increased administrative burden that would arise from reducing the threshold.
- The purchasing power of the current GST low value threshold is already significantly below its original level. It appears that the incremental increase in revenue to the Government that the changes would create, is vastly outweighed by the negative impact the compliance requirements would cause to Customs, together with consumers and businesses affected.

- Revising the threshold will not make traditional retail competitive with online retail, traditional retail needs to address the real reasons which it is not cost and price competitive through infrastructure and productivity improvements and through embracing online, traditional retail also needs to potentially revise its distribution models and mark up expectations so that Australian prices are competitive with overseas prices.

Instead of creating further barriers to ecommerce in Australia, a nation that is already significantly lagging behind in terms of online retail in comparison to the UK and the US, it would be beneficial to create further enablers. There is a gulf between postage costs, and tracked shipping in Australia and overseas which requires investment in infrastructure, which would benefit the economy far more than removing the GST threshold.

Appendix A

The MMRF Model

A.1 The MMRF model

The Monash Multi-Regional Forecasting (MMRF) model is a Computable General Equilibrium (CGE) model of Australia's regional economies developed by the Centre of Policy Studies (CoPS) at Monash University (CoPS, 2008). It is a model of the entire Australian economy and it captures the interactions between different regions and sectors. For a detailed description of the theoretical structure of the model see Peter et. al. 1996.

The MMRF model is used for a wide range of policy studies, including the analysis of state tax reforms and the potential benefits of the National Reform Agenda. More recently, the Department of the Treasury and the *Garnaut Climate Change Review* applied the MMRF model to the national climate change modelling to assess the impacts of the proposed CPRS on the Australian economy.

This chapter provides an overview of the MMRF model, detailing its modelling capabilities, core structure and economic principles.

A.2 Introduction to the MMRF model

The MMRF is a dynamic model of the Australian economy that models the behaviour of economic agents within each of Australia's eight states and territories. Each region is modelled as an economy in its own right, with region-specific commodities, prices and industries. The model contains explicit representations of intra-regional, inter-regional and international trade flows.

Each sector produces capital that is specific to the region in which it is located. In each region, there is a single representative household and a regional government. At the national level, the Commonwealth Government is also represented. Finally, the rest of the world is represented as a single agent, whose behaviour is driven by regional international exports and imports. The regions are linked through inter-regional trade, labour and capital mobility, and the taxing and spending of the federal government.

A.3 The database

There are many versions of the MMRF model. The version of MMRF used for this project provides a representation of the Australian economy as it was in 2005-06.

The model allows for joint production — where one industry can produce a number of different commodities. Specifically, the model contains 58 industrial sectors, which produce 63 commodities. The industries and their related commodities are detailed in Table A.1 and Table A.2 respectively.

Table A.1

MMRF: INDUSTRIES

| Industry | |
|--|--|
| Agriculture, Forestry and fishing | 30. Motor vehicles and parts |
| 1. Sheep and beef cattle (high emissions) | 31. Other manufacturing |
| 2. Dairy cattle | Utilities |
| 3. Other livestock (low emissions) | 32. Electricity generation: Coal |
| 4. Broadacre agriculture except for animal | 33. Electricity generation: Gas |
| 5. Other agriculture | 34. Electricity generation: Oil products |
| 6. Agricultural services and fishing | 35. Electricity generation: Nuclear |
| 7. Forestry | 36. Electricity generation: Hydro |
| Mining | 37. Electricity generation: Other |
| 8. Coal mining | 38. Electricity supply |
| 9. Oil mining | 39. Gas supply |
| 10. Gas mining | 40. Water supply |
| 11. Iron ore mining | Services |
| 12. Non-ferrous ore mining | 41. Construction services |
| 13. Other mining | 42. Trade services |
| Manufacturing | 51. Financial services |
| 14. Meat and meat products | 52. Business services |
| 15. Other food, beverages and tobacco | 53. Dwelling services |
| 16. Textiles, clothing and footwear | 54. Public services |
| 17. Wood products | 50. Communication services |
| 18. Paper products | 43. Accommodation, hotels and cafes |
| 19. Printing and publishing | 55. Other services |
| 20. Petroleum and coal products | 56. Private transport services |
| 21. Chemicals | 57. Private electricity equipment services |
| 22. Rubber and plastic products | 58. Private heating services |
| 23. Non-metal construction products | Transport |
| 24. Cement | 44. Road passenger transport |
| 25. Iron and steel | 45. Road freight transport |
| 26. Alumina | 46. Rail passenger transport |
| 27. Aluminium | 47. Rail freight transport |
| 28. Other non-ferrous metals | 48. Water, pipeline and transport services |
| 29. Metal products | 49. Air transport |

Source: CoPS, MMRF database.

Table A.2

MMRF: COMMODITIES

| Commodities | |
|--|--|
| 1. Sheep and beef cattle (high emissions) | 33. Other non-ferrous metals |
| 2. Dairy cattle | 34. Metal products |
| 3. Other livestock (low emissions) | 35. Motor vehicles and parts |
| 4. Broadacre agriculture except for animal | 36. Other manufacturing |
| 5. Bio fuel | 37. Electricity generation: Coal |
| 6. Other agriculture | 38. Electricity generation: Gas |
| 7. Agricultural services and fishing | 39. Electricity generation: Oil products |
| 8. Forestry | 40. Electricity generation: Nuclear |
| 9. Coal mining | 41. Electricity generation: Hydro |
| 10. Oil mining | 42. Electricity generation: Other |
| 11. Gas mining | 43. Electricity supply |
| 12. Iron ore mining | 44. Gas supply |
| 13. Non-ferrous ore mining | 45. Water supply |
| 14. Other mining | 46. Construction services |
| 15. Meat and meat products | 47. Trade services |
| 16. Other food, beverages and tobacco | 48. Accommodation, hotels and cafes |
| 17. Textiles, clothing and footwear | 49. Road passenger transport |
| 18. Wood products | 50. Road freight transport |
| 19. Paper products | 51. Rail passenger transport |
| 20. Printing and publishing | 52. Rail freight transport |
| 21. Petrol | 53. Water, pipeline and transport services |
| 22. Diesel | 54. Air transport |
| 23. LPG | 55. Communication services |
| 24. Aviation fuel | 56. Financial services |
| 25. Petroleum and coal products nec | 57. Business services |
| 26. Chemicals | 58. Dwelling services |
| 27. Rubber and plastic products | 59. Public services |
| 28. Non-metal construction products | 60. Other services |
| 29. Cement | 61. Private transport services |
| 30. Iron and steel | 62. Private electricity equipment services |
| 31. Alumina | 63. Private heating services |
| 32. Aluminium | — |

Source: CoPS, MMRF database.

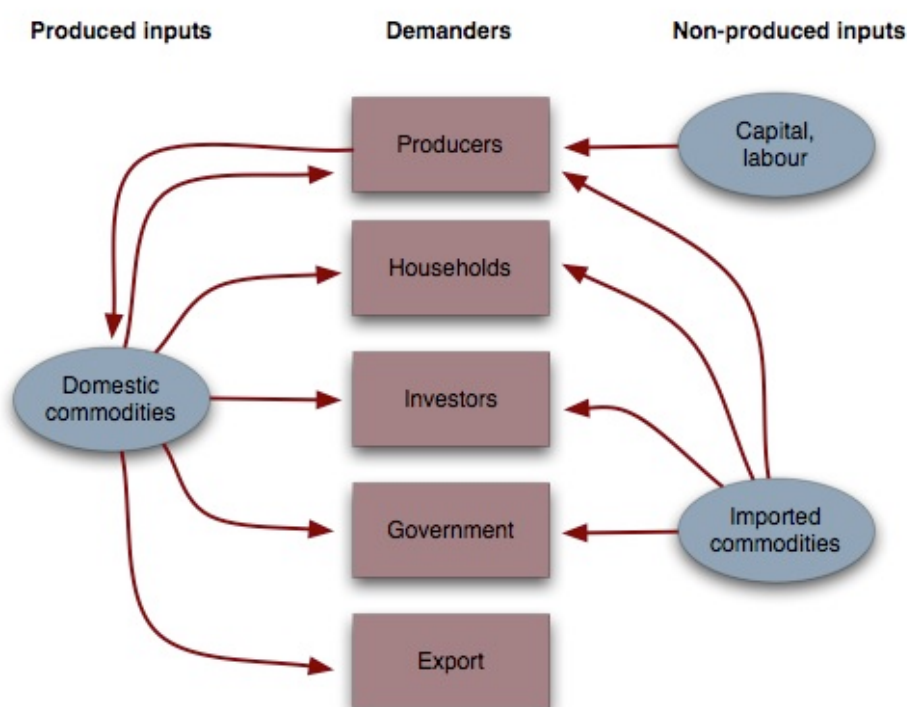
The MMRF database is comprised of detailed input-output tables for each state and territory as well as a set of government fiscal accounts. Each of the eight input-output tables details the core cost structure of each region specific industry and how each industry in each state economy is linked to other industries within that state and other states. Further, they show the flow of goods through the economy and the final demands of the principal economic agents.

A.4 Structure of the model

The core structure of the MMRF model is illustrated in Figure A.1. Producers use primary factors (labour, land and capital), region specific intermediate goods, and imports to produce domestic commodities. Domestic commodities and imported commodities flow to households, investors, and governments. In addition a proportion of domestic commodities flow to foreigners as exports. As well as demand schedules, the MMRF model has a detailed government budget and a set of regional labour markets.

Figure A.1

STRUCTURE OF THE MMRF MODEL



Source: Allen Consulting Group analysis, 2010, adapted from Monash.

The MMRF model is built on the core assumptions of neoclassical economics. Consumers aim to maximise utility within a fixed budget constraint, while firms select the mix of inputs that minimises costs for their level of output. This optimising behaviour determines the regional supplies and demands of commodities and the demand for primary factors within the model. Labour supply at the national level is governed by demographic factors and national capital supply is determined by rates of return. Both labour and capital can cross regional borders such that each region's stock of productive resources reflects relative employment opportunities and relative rates of return.

Assumptions regarding the economic behaviour of agents together with detailed input-output tables for each of the eight regions are linked by mathematical equations. This allows for second round impacts or feedback responses to be accounted for in the modelling framework. For instance, it allows for price response adjustments across all industries and factors. In this way, the results detail the actual effect of a change on the entire economy, not just within the region or industry that is directly affected. This allows a more sophisticated insight into policy analysis than is possible from partial equilibrium analysis or input-output analysis.

The model is driven by the assumption of competitive markets. That is, all markets clear and there exists equality between the producer's price and marginal cost for each sector in each region (all markets clear with the exception of the labour market). The purchasers price and producers price differs by the size of any government taxes and associated margins. All government taxes are levied as ad valorem sales taxes on commodities. Margins are additional costs associated with transport or retail trade required for market transactions.

Aggregate demand

Demand for goods from households, investors, governments and foreigners together comprise aggregate demand as represented in the equation below.

$$Y = C + I + G + (X - M)$$

Where:

- Y is aggregate demand;
- C is household consumption;
- I is investment;
- G is government spending;
- X is exports; and
- M is imports.

The components of aggregated demand and how they are represented within the model are discussed below.

Household demand

There exists a utility maximising representative household in each of the eight regions. Households consume bundles of goods from either domestically produced or imported commodities. Domestically consumed goods are a combination of goods from the eight regions. Total household demand is disaggregated into essential goods and luxury goods, as represented in the equation below.

$$X_i = X_i^{Sub} + X_i^{Lux}$$

Where:

- X_i is total household demand;
- X_i^{Sub} is essential consumption; and
- X_i^{Lux} is luxury consumption.

In MMRF it is assumed that a household will first purchase all essential goods before purchasing any luxury goods such that disposable income for luxury goods is a function of total income and the summed value of essential consumption.

$$Y^{Lux} = Y - \sum P_i X_i^{Sub}$$

Where:

- Y^{Lux} is income for luxury goods;
- Y is total disposable income
- P_i is price of good i; and
- X_i^{Sub} is quantity of essential good X.

MMRF assumes a non-homothetic utility function (MMRF applies a Klein-Rubin utility function), which allows both income and relative prices to affect consumption.

Capital creation

Investors in each regional sector combine inputs to generate capital. Investors are limited to the technology set that is available for production in that regional sector. Rates of return are used as a signal for capital investment or disinvestment.

Government demands

There are nine governments represented in MMRF — the eight regional governments and a federal government — each demanding commodities. Government demands are either imposed on the model or determined endogenously by setting government expenditure rules. For example, government expenditure could be linked to aggregate consumption.

Foreign demand

Most exports can be categorised as either traditional exports, non-traditional exports or tourism exports. Demand for traditional exports is characterised by a downward sloping demand curve and associated assumptions regarding foreigners' preferences for Australian goods. Each regional sector has an associated export market, which faces a downward sloping foreign demand curve. It is assumed that the foreign demand schedules are specific to the regional sector; as such movement in world prices can differ across different regions.

The demand for non-traditional export goods is driven by the average price of the collective non-traditional export bundle. In the MMRF database, non-traditional exports account for two per cent of total national exports and include: electricity generation, gas and water, construction, trade services, rail transport and dwellings.

Within MMRF, it is assumed that the tourism sectors — hotels and cafes, road transport, air transport and other services — do not face their own individual demand schedules. Rather, foreigners purchase a holiday bundle, the quantity of which is determined by the average price of the tourism goods.

Demands for inputs used in production

Producers in each region utilise primary factors — land, labour and capital — intermediate goods and imported goods to produce domestic commodities. Producers are assumed to choose the mix of inputs that minimises costs for a given level of production. The MMRF model assumes a multi-stage nested structure of production. At the first stage the optimal combination of region specific intermediate goods and the optimal combination of occupational specific labour is selected. At the second stage, producers make decisions regarding the optimal combination of the three primary factors and the combination of imported and domestically sourced goods. Finally, producers combine primary inputs and intermediate goods to produce a level of output at minimum cost.

A.5 Government finances

MMRF contains a set of equations detailing government revenues and government expenditures for each government. Government revenues are comprised of income taxes, sales taxes, excise taxes, taxes on interregional trade and receipts from government assets. Government expenditures include — as detailed above — expenditure on commodities as well as transfer payments to households. In addition, for the Federal government there is a set of equations describing fiscal transfers to the states.

A.6 MMRF dynamics

There are two main types of inter-temporal links incorporated into MMRF: physical capital accumulation and lagged adjustment processes.

Physical capital accumulation

It is assumed that investment undertaken in year t becomes operational at the start of year $t+1$. Thus, given a starting point value for capital in $t=0$, and with a mechanism for explaining investment through time, the model can be used to trace out the time paths of industry capital stocks.

Capital stock in industry i in state/territory s in year $t+1$ is determined by the equation below.

$$K_{i,s}(t+1) = (1 - DEP_{i,s}) * K_{i,s}(t) + INV_{i,s}(t)$$

Where:

- $K_{i,s}(t)$ is the quantity of capital available in industry i located in state/territory s at the start of year t ;
- $INV_{i,s}(t)$ is the quantity of new capital created through investment for industry i in state/territory s during year t ; and
- $DEP_{i,s}$ is the rate of capital depreciation in industry i , treated as a fixed parameter.

Investment in industry i in state/territory s in year t is explained via a mechanism that relates investment to expected rates of return. The expected rate of return in year t can be specified in a variety of ways. In MMRF two possibilities are allowed: static expectations and forward-looking model-consistent expectations. Under static expectations, it is assumed that investors take account only of current rentals and asset prices when forming current expectations about rates of return. Under rational expectations the expected rate of return is set equal to the present value in year t of investing \$1 in industry i in state/territory s , taking account of both the rental earnings and depreciated asset value of this investment in year $t+1$ as calculated in the model.

Lagged adjustment processes

One lagged adjustment process is included in MMRF. This relates to the operation of the labour market in year-to-year simulations.

In comparative static analysis, one of the following two assumptions is made about the national real wage rate and national employment:

- the national real wage rate adjusts so that any policy shock has no effect on aggregate employment; or
- the national real wage rate is unaffected by the shock and employment adjusts.

MMRF's treatment of the labour market allows for a third, intermediate position, in which real wages can be sticky in the short-run but flexible in the long run and employment can be flexible in the short-run but sticky in the long run. For year-to-year simulations, it is assumed that the deviation in the national real wage rate increases through time in proportion to the deviation in aggregate employment from its baseline-forecast level. The coefficient of adjustment is chosen so that the employment effects of a shock are largely eliminated after about ten years. This is consistent with macroeconomic modelling in which the Non Accelerating Inflation Rate of Unemployment (NAIRU) is exogenous.

A.7 Closure assumptions of MMRF

In MMRF, there are more endogenous variables than the number of equations. For the model to generate a solution, the number of endogenous variables must match the number of equations. Hence, some endogenous variables are set to be exogenous to ensure the number of endogenous variables matches the number of equations.

The desired economic environment/assumption for the policy scenario determines the choice of exogenous variables. These choices are also known as the closure assumptions. The most common closure assumptions are the long run, short-run economic closure and fiscal closure.

Short-run closure

In the short-run, the economy is less able to respond to policy changes, as prices and wages are sticky (or fixed). Labour market (in terms of employment) is flexible and unemployment rate can be above or under its natural rate. Capital stock is fixed in the short-run, and investment responds to changes in rates of return.

Long run closure

The key elements of a typical long run economic environment are:

- At the national level, long run employment is determined by demographic factors (birth and death rates, the level of international migration, etc.). Additionally, the unemployment rate reverts to its natural rate or NAIRU in the long run. Therefore, the national employment figure is fixed. However, labour is perfectly mobile across industry and states, thus there can be changes in industry and state employment.
- Labour market adjusts via changes in real wages.
- Capital stock in each industry adjusts to equilibrate its expected and actual rates of return on capital. The baseline expected rates of return are determined by values in the MMRF database. Industries' demands for investment goods are linked by an exogenous investment/capital ratio to changes in their capital stock.
- Nominal household consumption in each region is a constant share of post-tax household disposable income.

Fiscal closure

The role of government also plays a part in determining the impacts of a simulation. A typical fiscal closure will have the following assumptions:

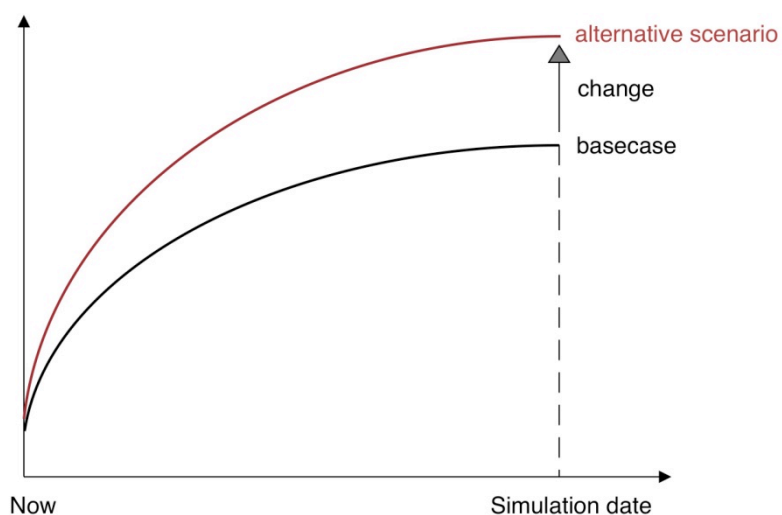
- real government consumption (Commonwealth and States) is fixed; and
- government budget balances (Commonwealth and States) are fixed, via changes in the fiscal item 'Government transfers to households'.

A.8 Interpretation of MMRF simulations

The MMRF can be solved in comparative static or recursive dynamic modes. Comparative static modelling shows the effect of a policy shock only. That is, it answers 'what happens when this happens?' without stating the adjustment process.

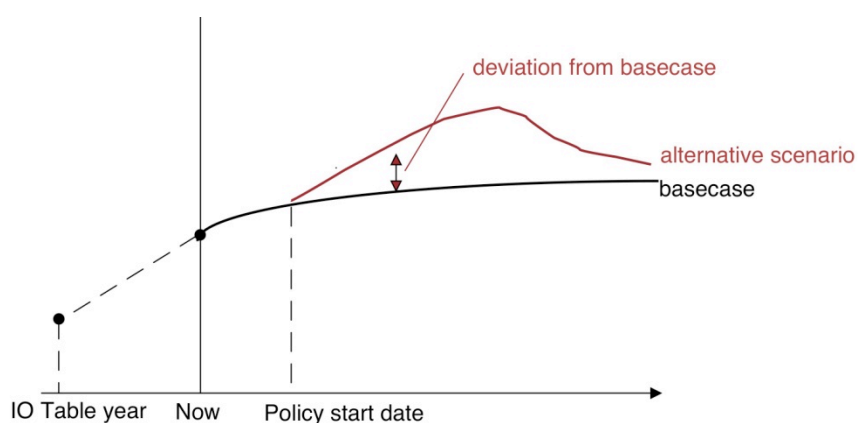
A dynamic CGE model would provide answers on the forecast structure of the economy under the baseline and the alternative case. It provides an explicit baseline over time against which the impact of a policy change can be compared. The model could incorporate more up to date data and the timing and policy paths are clear.

Figure A.2

COMPARATIVE STATIC INTERPRETATION OF RESULTS

Source: Allen Consulting Group analysis, 2010.

Figure A.3

DYNAMIC INTERPRETATION OF RESULTS

Source: Allen Consulting Group analysis, 2010.

References

Abbot, AF and Wright, DJ 2008, 'Antitrust Analysis of Tying Arrangements and Exclusive Dealing', *George Mason Law & Economics Research Paper No. 08-37*, <<http://ssrn.com/abstract=1145529>>, Accessed 13 May 2011.

ABS — see Australian Bureau of Statistics

ABC — see Australian Broadcasting Service

AC Nielsen 2011, 'Nielsen's state of the online market: evolution or revolution?' Media Release, 9 March, Sydney, <<http://au.nielsen.com/site/documents/NielsenAustralianOnlineConsumersReportMediaRelease.pdf>>, Accessed 11 March 2011.

AC Nielsen 2010, *Global Trends in Online Shopping: A Nielsen Global Consumer Report*, New York, <<http://www.nielsen.com/us/en/insights/reports-downloads/2010/Global-Trends-in-Online-Shopping-Nielsen-Consumer-Report.html>>, Accessed 11 March 2011.

AC Nielsen 2008, *Trends in Online Shopping: A Global Nielsen Consumer Report*, New York, <id.nielsen.com/news/documents/GlobalOnlineShoppingReportFeb08.pdf>, Accessed 8 March 2011.

Access Economics 2010, *Household E-Commerce Activity and Trends in Australia*, commissioned by the Department of Broadband, Communications and the Digital Economy, Canberra.

ACMA — see Australian Communications and Media Authority

ACRS — see Australian Centre for Retail Studies

AFR — see Australian Financial Review

Allen Consulting Group 2007, *I got it on eBay! The economic impact of eBay in Australia*, commissioned by eBay Australia & New Zealand Pty Ltd, Sydney.

Allen Consulting Group 2008, *PayPal and the 'no surcharge' rule: Why regulation by the RBA is not needed*, commissioned by PayPal Australia Pty Ltd.

Allens Arthur Robinson 2004, *Focus: Competition Law: Exclusive dealing in the spotlight*, April, <<http://www.aar.com.au/pubs/comp/foclapr04.htm>>, Accessed 13 May 2011.

ASGA — see Australian Sporting Goods Association

ATO — see Australian Tax Office

Australian Broadcasting Corporation 2011, *Book stores struggle as online sales rise*, 18 February, 7:30 Report transcript, <<http://www.abc.net.au/7.30/content/2011/s3143075.htm>>, Accessed 13 May 2011.

Australian Bureau of Statistics 2011, *Analysis of Total Retail Trade in Australia, Jan 2011*, cat. no. 8501.0, AusInfo, Canberra.

Australian Bureau of Statistics 2010a, *Australian Industry, 2008-09*, ABS cat. no. 8155.0, AusInfo, Canberra.

Australian Bureau of Statistics 2010b, *Summary of IT Use and Innovation in Australian Business, 2008-09*, cat. no. 8166.0, AusInfo, Canberra.

Australian Bureau of Statistics 2009, *Household Use of Information Technology, Australia, 2008-09*, cat. no. 8146.0, AusInfo, Canberra.

Australian Bureau of Statistics 2006, *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, cat. no. 1292.0, Canberra.

Australian Bureau of Statistics 2005, *Impact of Customs and ABS changes on import statistics from October 2005*, <www.abs.gov.au>, Accessed 30 March 2011.

Australian Centre for Retail Studies 2010, *Multichannel Retailing: Value, Optimisation and Segmentation Report 2010*, ACRS Secondary Research Report: Executive Summary, Melbourne, <<http://www.buseco.monash.edu.au/centres/acrs/research/multichannel-report-exec-summary.pdf>>, Accessed 11 March 2010.

Australian Communications and Media Authority 2010, *Australia in the digital economy — consumer engagement with e-commerce*, Canberra, <http://www.acma.gov.au/webwr/_assets/main/lib310665/aust_in_digital_economy-consumer_engagement_with_e-commerce.pdf>, Accessed 8 March 2011.

Australian Communications and Media Authority 2008, *Media and communications in Australian families: No. 3 — Access to the internet, broadband and mobile phones in family households*, Canberra, <www.acma.gov.au/mediareports>, Accessed 8 March 2011.

Australian Federal Police 2011, *Technology Enabled Crime page*, <<http://www.afp.gov.au/policing/e-crime.aspx>>, Accessed 5 April 2011.

Australian Financial Review 2011, 'Retailers' sob story lacking the basic facts', 8 January.

Australian Sporting Goods Association 2010, *Research paper on the low value importation threshold*, <http://www.fairimportsalliance.org.au/Portals/0/ASGA_Research_Paper.pdf>, Accessed 25 March 2011.

Australian Tax Office 2011, <www.ato.gov.au>, Accessed 39 March 2011.

Carruthers F 2011, 'Retailers up ante on GST', *Australian Financial Review*, 04 January.

Collier K 2011, 'Shopping online 'unAustralian,' says Gerry Harvey', *Courier Mail*, 06 Jan, <<http://www.couriermail.com.au/business/shopping-online-unaustralian-says-gerry-harvey/story-e6freqmx-1225982751040>>, Accessed 25 March 2011.

Keane, Bernard (2011) Online retailing: the great Australian guage, at crikey.com.au, accessed 28 May, 2011

Keane, Bernard (2011) Australians being gauged by high local prices by bricks and mortar outles, at crikey.com.au, accessed 28 May, 2011

Deals Direct 2011, *About us — Our history*,
<<http://www.dealsdirect.com.au/page/?p=about-us>>, Accessed 2 May 2011.

Department of Foreign Affairs and Trade (DFAT) 2010, *Trade at a Glance 2010*, Commonwealth of Australia, Canberra

eBay 2011a, 'eBay Marketplaces: Quarterly Fast Facts as of February 11, 2011', February 18.

eBay 2011b, *Online Business Index: Survey of Australian ecommerce businesses*, March,
<http://media.ebay.com.au/Resource/13/Docs/OBI2_FINAL_ONLINE_LR.pdf>,
Accessed 29 April 2011.

eBay 2011c, *Business Centre Overview*, <<http://pages.ebay.com.au/education/learn-to-sell-business.html>>, Accessed 29 April 2011.

eBay 2011d, *About PayPal Buyer Protection*,
<<http://pages.ebay.com.au/help/buy/paypal-buyer-protection.html#paypal>>,
Accessed 6 April 2011.

eBay 2010a, *Online Business Index: Survey of Australian ecommerce businesses*,
<http://media.ebay.com.au/Resource/13/Docs/OBI_March_2010_FINAL.pdf>,
Accessed 8 March 2011.

eBay 2010b, *Inside the eBuyers mind: Understanding the response and behaviour of online shoppers to advertising*, < <http://www.slideshare.net/bsaintorens/understanding-the-behaviour-and-response-of-online-shoppers-to-advertising-1417545>>, Accessed 2 June 2011.

Forrester Consulting 2010, *The Business of Australian Online Retail*, in 'ecommerce Secure Insight report,' commissioned by PayPal, <<https://www.paypal-education.com.au/media/ecommerce-secure-insight-report.pdf>>, Accessed 8 March 2011.

Forrester Consulting 2009, *ecommerce Web Site Performance Today: an updated look at consumer reaction to a poor online shopping experience*, 17 August, commissioned by Akamai Technologies Incorporated,
<<http://www.scribd.com/doc/50109180/Forrester-Consulting-ecommerce-Web-Site-Performance-Today>>, Accessed 11 March 2011.

Freebairn P 2010, 'Savvy shoppers beat a retreat', *Australian Financial Review*, 03 December.

Frost and Sullivan 2010, '\$12 Billion Australian Consumer ecommerce Market Underdeveloped and Lags US and UK by Three Years,' 20 July
<<http://www.frost.com>>, Accessed 8 March 2011.

IBISWorld 2011a, *Technological Revolution: The industry benefits from an explosion of new products*, IBISWorld Industry Report G5000: Consumer Goods Retail in Australia, January, IBISWorld Pty Ltd.

IBISWorld 2011b, *A click away: Time-poor, cash-rich shoppers are driving the industry forward*, IBISWorld Industry Report X0004: Online Shopping and Mail-Order Houses in Australia, January, IBISWorld Pty Ltd.

Johnston A, Porter S, Cobbold T and Dolamore R 2000, *Productivity in Australia's Wholesale and Retail Trade*, Productivity Commission Staff Research Paper, Canberra.

Kodak Corporation 2011, *History of Kodak*, <<http://wwwau.kodak.com:80/global/en/corp/historyOfKodak/historyIntro.jhtml?pq-path=2217/2687>>, Accessed 4 April 2011.

Leading Edge Research 2010, in *ecommerce Secure Insight report*, commissioned by PayPal, <<https://www.paypal-education.com.au/media/ecommerce-secure-insight-report.pdf>>, Accessed 8 March 2011.

MacGibbon A 2010, *Staying safe online*, in *ecommerce Secure Insight report*, commissioned by PayPal, <<https://www.paypal-education.com.au/media/ecommerce-secure-insight-report.pdf>>, Accessed 8 March 2011.

McKinsey Global Institute 2010, *Internet matters: The Net's sweeping impact on growth, jobs and prosperity*, May 2011

Marketing Mag 2011, 'Australian retailers must get wise to online or perish, says research firm,' 8 March, <<http://www.marketingmag.com.au/articles/news/4845/australian-retailers-must-get-wise-to-online-or-perish-says-research-firm/>>, Accessed 9 March 2011.

Mitchell S 2010, 'Shoppers demand counter intelligence', *Australian Financial Review*, 9 September.

Mortimer D 2008, *Winning in World Markets: Meeting the competitive challenge of the new global economy: Review of Export Policies and Programs*, Commonwealth of Australia, Canberra.

Nelson A 2011, 'Retailers adrift in a red ocean', *Australian Financial Review*, 10 February.

Nielsen 2011, *Nielsen Netview report*, January 2011.

OECD — see Organisation for Economic Cooperation and Development

Organisation for Economic Cooperation and Development 2011, *Society at a Glance — OECD Social Indicators*, OECD, Paris, France, <www.oecd.org/els/social/indicators/SAG>, Accessed 13 May 2011.

Organisation for Economic Cooperation and Development 2010, *OECD Employment Outlook*, OECD, Paris, France, <www.oecd.org/employment/outlook>, Accessed 13 May 2011.

Organisation for Economic Cooperation and Development 2004, *ICT, E-business and SMEs*, Paris, France.

Organisation for Economic Cooperation and Development 1999, *The Economic and Social Impact of Electronic Commerce: Preliminary Findings and Research Agenda*, Paris, France.

PayPal 2011, *PayPal Buyer Protection Policy and Buyer Complaint Policy*, <https://cms.paypal.com/au/cgi-bin/marketingweb?cmd=_render-content&content_ID=ua/BuyerProtComp_full&locale.x=en_AU>, Accessed 6 April 2011.

PayPal 2010, *ecommerce Secure Insight report*, <<https://www.paypal-education.com.au/media/ecommerce-secure-insight-report.pdf>>, Accessed 8 March 2011.

PC — see Productivity Commission

Perset K 2010, *The Economic and Social Role of Internet Intermediaries*, OECD Digital Economy Papers, No. 171, Paris, France.

Petre D 2011, 'Satisfaction guaranteed', *Australian Financial Review* (AFR), 25 February.

Productivity Commission 2011, *Economic Structure and Performance of the Australian Retail Industry*, Issues Paper, March.

Productivity Commission 2009, *Restrictions on the Parallel Importation of Books*, Research Report, Canberra.

PricewaterhouseCoopers 2009, *Review of the low value importation threshold*, commissioned by Conference of Asia Pacific Express Carriers (Australia) Limited, <http://www.taxboard.gov.au/content/reviews_and_consultations/GST_to_cross_border_transactions/submissions/Conference_of_Asia_Pacific_Express_Couriers_&_PWC.pdf>, Accessed 30 March 2011.

PWC — see PricewaterhouseCoopers

Sands S and Ferraro C 2010, *2010 Consumer Trends Report*, Australian Centre for Research Studies, Monash University, <<http://www.salmat.com.au/content/documents/news-insights/2010-consumer-trends-report.pdf>>, Accessed 14 March 2011.

Sharkey, D 2011a, Managing Director, eBay, 'Online Business Index speech', pers. comm., 21 March.

Sharkey, D 2011b, Managing Director, eBay, 'Online Retail Forum Speech', pers. comm., 18 February.

Shoes of Prey 2010, 'A Shoes of Prey Store?' Shoes of Prey Blog, 29 August, <<http://www.22michaels.com/2010/08/shoes-of-prey-store.html>>, Accessed 21 March 2011.

Sibillín A 2011, 'Stop whining Gerry... it's called competition', *Australian Financial Review*, 8 January.

SMH — see Sydney Morning Herald

Speedy B 2011, 'It's the workers who have most to lose, says Solomon Lew', *The Australian*, 6 Jan, <<http://www.theaustralian.com.au/business/industry-sectors/its-the-workers-who-have-most-to-lose-says-solomon-lew/story-e6frg9h6-1225982652963>>, Accessed 25 March 2011.

Stayner R and McNeill J 2003, *Changing Business Realities? The Implications of E-commerce Technologies for Rural Non-Farm Businesses*, commissioned by the Australian Business Foundation, Sydney.

Steger, J and Cowan, P 2011, 'Borders demise not just down to net, says booksellers, *Sydney Morning Herald*, 19 February 2011.

Stokes Mischewski (2011) *eBay Shipping initiatives research*, March 2011.

Sydney Morning Herald 2011, 'Booksellers' bust a "tragedy": Conroy', *Sydney Morning Herald*, 18 February, <<http://www.smh.com.au/business/booksellers-bust-a-tragedy-conroy-20110218-1az54.html>>, Accessed 25 March 2011.

The Australian 2011, 'Retail war on GST sales grows', January 9, <<http://www.theaustralian.com.au/news/breaking-news/retail-war-on-online-gst-sales-grows/story-fn3dxity-1225984546521>>, Accessed 4 April 2011.

Walsh L 2011, 'Retailers fight trend to internet,' *Sunday Mail (South Australia)*, 3 January 2011, <http://www.adelaidenow.com.au/ipad/retailers-fight-trend-to-internet/story-fn6t2xlc-1225980825797>>, Accessed 8 March 2011.

Woolford C and Bowley A, 'Is it an Online Christmas?', *What's In Store?* Issue 33, December 2010.

Wrigley N and Lowe M 2010, *The Globalization of Trade in Retail Services*, commissioned by the OECD Trade Policy Linkages and Services Division for the OECD Experts Meeting on Distribution Services, Paris, France.