

Economic Impacts of Deregulating Retail Trading Hours on Queensland's economy

Professor Henry Ergas

Green Square Associates

March 2014



Letter of Transmittal

Trevor Evans
Executive Director
National Retail Association
via email: t.evans@nra.net.au

Dear Trevor,

Please find herewith our Final Report on the economic impacts of deregulating retail trading hours in Queensland.

We look forward to your comments and further discussion.

Yours sincerely

A handwritten signature in black ink, appearing to be 'H. Ergas', written over the printed name.

Professor Henry Ergas

18 March 2014

Table of Contents

Letter of Transmittal	i
Executive Summary	1
Our Findings.....	2
Our Recommendation	3
1 Introduction	4
1.1 What we have been asked to do	4
2 Background – Current State of Play in Queensland	5
2.1 Recent demographic change in Queensland	6
2.2 Retail trading arrangements in Queensland	6
3 The case for and against retail trading hours’ regulation	10
3.1 A basic consumer-household framework	10
3.2 Some common arguments for deregulation.....	11
3.2.1 Increased customer choice and convenience	11
3.2.2 Changing social and cultural norms	13
3.2.3 Importance of retail employment to certain workers	15
3.2.4 Reduce regulatory/administrative complexity (within Queensland)	19
3.2.5 Harmonisation with other states	19
3.2.6 Lower prices from increased competition	20
3.2.7 Better capital productivity	21
3.2.8 Enhancing the attractiveness of Queensland and its regions.....	21
3.2.9 Lowering Travel Costs	21
3.3 Some common arguments to maintain regulation	22
3.3.1 Increased trading will cause monopolies in retailing.....	22
3.4 Summing up	23
4 What do the consumer surveys say?	25
4.1 Introduction – we’ve done this before	25
4.2 What have the Reviews and Inquiries said?	26
4.3 What has been the experience? Evidence from changes to retail trading hours	28
5 Impacts on Small Retail Businesses	30
5.1 Definition of small retail businesses	30
5.2 Potential impacts on small retail businesses	30

5.2.1	Relationship between small retail businesses and large anchor tenants.....	30
5.2.2	Could deregulation kill the small retail shop?	32
5.3	Impacts on convenience stores	35
5.3.1	The economics of the convenience store	35
6	Methodology	37
6.1	First impact – less choice and convenience reduces wellbeing.....	37
6.2	Second impact – convenience store shopping lowers real incomes	38
6.3	Third impact – lower capital productivity raises retail prices.....	39
6.4	Overall Welfare Effect.....	41
6.5	Modelling approach.....	42
6.5.1	First impact	42
6.5.2	Second and third impacts	43
6.5.3	Distribution of GSP gains by hour	43
6.5.4	Distribution of GSP gains by region.....	43
7	Results	45
7.1	Convenience impacts	45
7.2	Real income and capital productivity impacts	45
7.3	Combined results	45
7.4	Distribution of the gains by hour	46
	References	47
	Appendix A Consumer Surveys – a summary	48
	Appendix B – Model of the Convenience Value of Extended Shopping Hours, the distribution of the gains	53
	Basic Approach	53
	Simulations of the Model	54
	Appendix C Price survey of essential items.....	56
	Appendix D Authors CVs.....	57

Executive Summary

In many areas of life, the laws and regulations that govern us can fall behind changing cultural norms. Probably most often, this natural conservative bias in the law protects the community from sudden and frequent shifts in the rules and regulations that we've become accustomed to and that help us organise much of our daily lives. This conservative bias, rightly, places the onus squarely on 'progress' to prove that it is better than the 'status quo' before the community is prepared to accept change.

The arguments for further deregulation of retail trading hours in Queensland rest not only on economic efficiency grounds but also in terms of current cultural standards, and these reflect a profound and permanent shift in consumer preferences and attitudes among Queenslanders both newly arrived and born and bred. Consumers are voting with their feet and their laptops, shopping online at all hours of the day and night and, where allowed under the law, shopping in-store on weekends right up until closing time, on public holidays, and in the early morning and evening outside standard Monday to Friday work hours.

Since the 1970s, the international trend *towards* more freedom for consumers and shop owners has been stark, both in Australian jurisdictions (notably Victoria, NSW and the territories) and other western countries, including Canada, Britain and large parts of Western Europe. In China, there are no significant restrictions on retail trading. And the United States generally places little or no restrictions on store opening hours, other than for alcohol sales in some states and on three culturally significant holidays being Easter, Christmas and Thanksgiving.

In summary, a Queenslanders travelling interstate or overseas is very likely to discover a more liberal retail trading environment than at home, and a visitor or migrant to Queensland is very likely to find a more restrictive retail trading environment to that which they are used to.

Since 1981, 711,000 migrants have come to Queensland from overseas, and 812,000 migrants have come to Queensland from interstate. Probably over 90% of these migrants have come from jurisdictions with more liberal retail trading hours than Queensland.

There has been significant retail trading hours' reform in Queensland in recent years, most notably allowing Thursday evening and Saturday morning shopping from the early 1980s, and then other weeknight and Sunday trading from the mid-1990s. These reforms remain in place as shoppers have voted with their feet embracing more convenient shopping times.

There has also been some deregulation in tourist areas over the past two decades, particularly on the Gold Coast and in Townsville and Cairns. However, these steps forward have been haphazard in application and piecemeal giving rise to a complex maze of rules and regulations that impact on consumer welfare, the regulatory burden, and efficient and fair competition between retailers.

Despite these incremental reforms, there remain large welfare losses in terms of inconvenience and higher prices for those consumers where it best suits to shop outside of current standard allowed trading hours. As the Productivity Commission noted in its 2011 inquiry into the Economic Structure and Performance of the Australian Retail Industry, *'When given the freedom to do so, consumers actually shift their shopping patterns towards the deregulated trading hours'*.

The changed shopping habits of Queenslanders is clearly demonstrated in the data and outlined in this report. There are several factors involved, but the overarching reason is that Queensland is no longer a homogenous society. Working hours have become more variable over recent decades and female labour force participation is high, reducing the available time that someone in the household can do the weekly grocery shop. Further, religiosity and the significance of Sunday as “the Lord’s Day” have declined. Where other states and territories have fully adjusted to these changes, Queensland has not. Those migrating to Queensland almost certainly come from a jurisdiction that offers more convenient shopping hours.

Our Findings

We show in our report that the current trading hours’ restrictions in Queensland have placed an additional and unnecessary cost of living pressure on Queenslanders, both in the form of the higher prices paid at convenience stores for essential household goods such as bread and milk, and less consumer convenience as a result of preferred shops not being open at preferred times. These costs are not borne in the southern states and territories to the extent that they are in Queensland.

The results of our theoretical and empirical analysis strongly indicate that there would be an ongoing net benefit to the Queensland community from full retail trading hours deregulation compared with maintaining the status quo.

In terms of our modelling, we focussed on three, of several identified, potential benefits to Queensland households and consumers.

The first and second benefits relate to customers being able to access lower prices for essential grocery items outside of restricted hours if those restrictions are relaxed. We estimated this benefit to be \$253 million each year in terms of increased Gross State Product (GSP) compared to a base case of no change to current retail trading hours’ arrangements. In addition, there are likely to be net employment benefits of over 3,000 full-time equivalent jobs (across the whole economy) as a result of freeing up the Queensland retail sector.

The third benefit related to increased convenience to consumers of allowing their preferred shops to open at their preferred times. We estimated this benefit to be \$187 million per year.

The total annual net benefits to the Queensland community from full retail trading hours deregulation, therefore, are valued at \$440 million in 2014.

Table 1 (below) illustrates the geographical breakdown of the total annual \$440 million in net benefits. Most of the gains accrue to SEQ, which accounts for both 70% of Queensland’s population and Gross State Product. The estimated benefit from lower prices was slightly higher than the estimated convenience benefits. The estimated improvement to GSP is in the ballpark of previous estimates, including that commissioned by the Queensland Competition Authority in 2012-13.

Table 1 Distribution of the benefits of extending retail trading hours, SEQ v RoQ

Benefits from further deregulation (Annual)	South-East Queensland \$m	Rest of Queensland \$m	Total Queensland \$m
Net benefit to Gross State Product	177	76	253
Welfare benefit from increased convenience	131	56	187
Total annual benefits	308	132	440

Source: GSC estimates.

Our theoretical modelling indicates that the distribution of those gains in terms of additional opening hours is heavily weighted towards the next few (or marginal) additional opening hours. For instance, based on current shopping patterns, it is likely that three-quarters of the economic and welfare gains are achievable by extending trading hours by just two hours per day. However, by extending trading hours, shopping patterns will adjust so that further benefits would be achievable by further deregulation. Given the administrative costs of incremental change, in our view full deregulation would be the least cost option and provide the greatest net benefits to the Queensland community.

We consider these estimates to be a lower-bound of the potential benefits because there are several other potential benefits that we have not considered.

For example, we expect that there would be a benefit to workers from an expansion of the ‘after-hours’ labour market. This is because there would be workers in the economy that prefer to work these hours (for example, university students). Also, there is an additional benefit of the higher wages paid (that is, penalty rates).

Another example of a potential benefit not estimated in this study relates to the expected significant reduction in the costs of customer congestion at peak times as a result of extended trading hours. We found strong evidence from sales data supplied by Coles that deregulation would both spread and flatten peak sales periods leading to time savings for customers. These time savings were not estimated, monetised and included in the study’s findings.

Our Recommendation

Our recommendation is for full deregulation of retail trading hours in Queensland.

Our recommendation for full deregulation is based on the results of our economic modelling, findings from previous deregulation episodes in Queensland, as well as based on the observation that full deregulation in other states and territories has not resulted in economic or social calamity.

A second-best approach would be to stage trading hours’ deregulation. The greatest consumer welfare gains lie in extending the narrowest band of trading hours on weekends and, to a lesser extent, marginally extending weeknight shopping hours. For instance, extending shopping hours to midnight on weeknights and 9pm on Saturday and Sunday (with a uniform opening time of 7am) in SEQ will provide large welfare gains to the community. Our theoretical economic modelling shows that over three-quarters of the welfare gains are derived from the first additional 3 shopping hours. This is partly because the largest costs of restrictive trading hours are literally in the first minutes after the shops shut when people have made a wasted trip to the supermarket that has just shut their doors. Further, by geography, the greatest benefits lie in the State’s south-east so it makes sense to begin the final leg of this three decade reform journey in the south-east.

A second-best but politically feasible approach would be to further extend weeknight trading to midnight and Saturday and Sunday trading to 9pm in SEQ. Related to this, we also recommend that Saturday and Sunday opening hours be aligned, say to 7am, to reduce the costs of confusion among consumers.

1 Introduction

With around 70 different retail zones across the state, retail trading restrictions in Queensland are extraordinarily complex for a jurisdiction with barely four and a half million residents. This complex web of red tape is particularly costly to comply with for franchise businesses. The trading restrictions also reduce consumer choice and significantly increase prices for basic goods such as bread and milk (generally by two to three times supermarket prices). In addition, these restrictions, when taken together, have a material effect on employment opportunities, particularly for young casual workers keen to secure a number of shifts per week.

1.1 What we have been asked to do

Green Square Consulting (GSC) has been asked by the National Retailers Association to undertake a study into the impacts of deregulating retail trading hours on the Queensland economy.

The study consists of the following broad components:

- An overview of the laws, regulations and codes governing retail trading hours in Queensland.
- A discussion of the broad economic case for deregulating retail trading hours, noting major developments in Queensland and other jurisdictions in the last two decades.
- Partial equilibrium theoretical modelling, which will be used to inform our analysis of the welfare effects of retail trading hour restrictions and the welfare gains from deregulation. The modelling would take into account the fact that household preferences for shopping goods are likely to vary in unpredictable ways over the course of a day or week, that regulation places important constraints on households and retailers, and that deregulation would relax these constraints.
- An empirical analysis of the effects in other jurisdictions of relaxing retail trading hour restrictions on retail turnover, economic activity, welfare, and other indicators such as employment. This section would use publicly available data from the Australia Bureau of Statistics and other sources such as consumer surveys.
- An estimate of the economic effects of deregulation on Queensland, including the potential impact on GSP and employment.

2 Background – Current State of Play in Queensland

Since the 1970s when retail trading hours' reform began, Queensland has lagged behind other States and Territories in relaxing trading hours restrictions. For instance, the eastern Australian jurisdictions of NSW, Victoria, Tasmania and the ACT have almost fully deregulated retail trading hours with widespread community support. Western Australia and South Australia are the only other Australian jurisdictions with highly restrictive trading hours, although even in WA reforms are now underway.

Currently, there are relatively few retail trading restrictions applying in NSW, Victoria and Tasmania, with rules applying on about 4-5 major public holidays (covering the Christmas and Easter periods and Anzac Day). The Northern Territory and the ACT have fully deregulated trading hours and retailers can choose to trade whenever they want, including all public holidays. In contrast, Queensland, Western Australia and South Australia retain more restrictive retail trading environments (see Table 2.1 below).

The current situation in Queensland seems to be a curious anomaly given the high rates of migration from southern, deregulated, states as well as from overseas where trading hours (particularly in Asia) are fully deregulated and, hence, consumer expectations would be for a similar level of choice and convenience. That said, Queensland is a geographically large and diverse state and there remains opposition from some interest groups in the community and (possibly) in some parts of regional Queensland, to fully deregulating retail trading hours.

Restrictions on retail trading have principally been put in place with the objective of preserving dominant cultural traditions (e.g. observance of the Sabbath, Christian holidays and Anzac Day) and to limit shop employees working outside of standard work hours. Many of these arguments have their underpinnings in the trade union and socialist movements that today do not represent the proportion of the population that they once did.

A large number of western countries have historically imposed limitations on shop opening hours for these and other reasons since the early 20th century. However, there has been a clear trend towards retail trading liberalisation over the past thirty years, recognising changing consumer patterns such as the widespread and increasing uptake of online shopping, and the economic benefits of deregulation. This has also (generally) been the case in Australia where States have responsibility for regulating shop trading hours. In Australia's major Asian trading partners China, Japan and South Korea, and in the United States, trading hours are, generally, fully deregulated.

In North America, Western Europe and New Zealand, the restrictions on Sunday trading have been progressively removed, particularly from the 1990s onwards. New Zealand banned trading on Saturday and Sunday completely between 1945 and 1980, before moving to near full liberalisation of shop opening hours by 1990. Shops may open at any time, with the exception of Good Friday, Easter Sunday, Christmas Day and before 1.00pm on Anzac Day. However, some shops can open on these restricted days if they sell certain goods or provide certain services or are located in tourist resorts such as Queenstown (PC 2011).

2.1 Recent demographic change in Queensland

Migration, both from interstate and overseas, has long been a dominant source of population growth in Queensland (see Chart 1). Migration to Queensland has averaged close to 60,000 people annually over the past decade, compared to natural net increases in the State's population of about 32,500 per year.

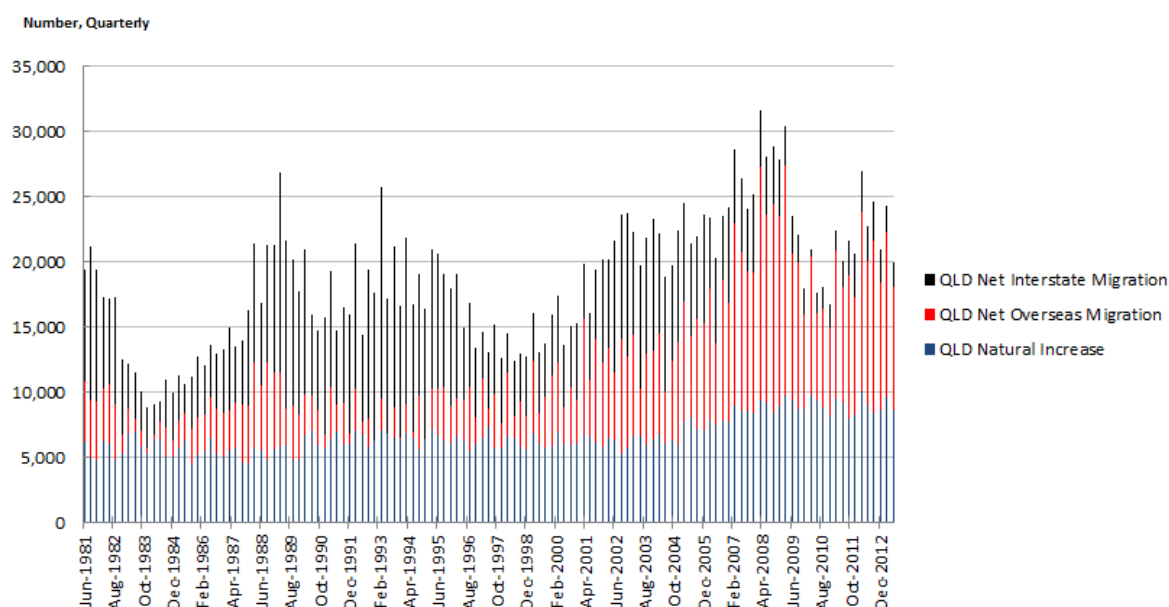
These migration-driven demographic changes bring a range of economic benefits to the state, including greater levels of consumer demand, new sources of labour and a larger tax base. They also introduce fresh ideas and cosmopolitan attitudes — in a sense, helping promote a more open and dynamic economy.

While a state's ability to continue attracting migrants from interstate and overseas is underpinned by the strength of its economy and the capacity of new residents to secure employment, broader lifestyle aspects are also pivotal. In this respect, the longstanding influx of new migrants effectively changes expectations towards policy settings which promote urban vibrancy and lifestyle.

This has important implications for Queensland's retail trading restrictions, which risk being perceived as staid and archaic by an increasing section of the community who have benefitted from a deregulated retail environment in other jurisdictions.

Since 1981, 711,000 migrants have come to Queensland from overseas, and 812,000 migrants have come to Queensland from interstate. Probably over 90% of these migrants have come from jurisdictions with more liberal retail trading hours than Queensland.

Chart 1: Migration patterns in Queensland



Source: ABS 3101.0 Australian Demographic Statistics.

2.2 Retail trading arrangements in Queensland

In Queensland retail trading is regulated through various instruments:

- the Trading (Allowable Hours) Act 1990

- the Trading (Allowable Hours) Regulation 2004
- various trading hours orders made by the Queensland Industrial Relations Commission.

Under the statutory framework, the Commission can decide trading hours in excess of the minimum allowable hours following an application by relevant organisations. In making its decision, the Commission takes into account issues such as locality, the needs of the tourism industry and the interests of the public, consumers and business. The Commission has approved trading on Sundays and certain public holidays in a number of areas in Queensland.

Generally, the minimum allowable trading hours throughout Queensland are:

- 8.00 am to 9.00 pm Monday to Friday
- 8.00 am to 5.00 pm Saturdays

Different extended trading hours also apply, for instance on Sunday and public holidays, in prescribed areas and for specific (exempted) retail businesses (see Table 1. below).

In an overall sense, the regulations governing retail trading hours in Queensland are cumbersome, discriminatory and complex. Indeed, a major issue with imposing restrictions on trading hours, especially to the extent which Queensland presently does, is that they necessarily require the rules to be codified, whether in legislation and/or regulation. This typically requires provisions covering the type of shops, their size (however this may be classified), where they are located, when and where specific restrictions apply, and any other special circumstances or exemptions. To prescribe such factors, the Queensland retail trading statute (not including subordinate legislation and QIRC determinations) currently stands at 56 pages.

Further, since October 2009, there have been around 100 separate notifications by the QIRC on retail trading matters in Queensland. This includes formal notifications on special trading allowances for trade shows, to prescribe extended trading hours for the Christmas period, to adjust decision-making procedures in the aftermath of the Queensland floods in December 2010 and January 2011, and to correct various administrative errors.

Some key aspects of the Queensland retail trading restrictions are set out in Table 1. As illustrated, a stark feature of the regulatory regime is its complexity. Importantly, these retail restrictions add to the overall stock of regulation affecting businesses in Queensland increasing compliance costs. They raise particular issues where businesses cut across sectors or have more complex structures — potentially undermining commercial features which can be a major driver of operating efficiencies and competitive advantage.

The regulations are also more restrictive in smaller centres in Queensland. And these are precisely those areas where retail options and price competition tend to be more limited, further limiting options for consumers.

Perhaps just as importantly, retail restrictions add to a perception of quaintness. One where boutique cottage retailers are afforded special regulatory protections designed to preserve an old-fashioned 'high street' retailing culture. From this perspective it is hard to imagine such regulations forming part of a modern, outward looking and confident economy.

Table 2.1 Key features of Queensland's retail trading framework

	Details				Issues
<p><i>A patchwork of geographic boundaries</i></p> <p>Additional trading hour allowances are prescribed for various geographic areas throughout Queensland</p> <p>NOTE: Online retail trading is available to almost the entire Queensland population and includes just-in-time grocery shopping delivery services from the large grocery chains.</p>		Sunday	Certain public holidays	Total non-core hours	<p>There are a large number of specific retail zones across Queensland. Among other things, this is a complex regulatory landscape which has the potential to generate boundary anomalies between areas.</p> <p>There are somewhat arbitrary distinctions across retail zones such as where areas have equal overall trading hour allowances but with specified earlier opening and closing times.</p>
	South East Queensland	9 am - 6 pm	9 am - 6 pm	18	
	New Farm	7 am - 9 pm	7 am - 9 pm	28	
	Broader regional Queensland*	9 am - 6 pm	8.30 am - 5.30 pm	18	
	Townsville and Thuringowa	11 am - 6 pm	8.30 am - 5.30 pm	16	
	Yeppoon	10.30 am - 5.30 pm	8.30 am - 5.30 pm	16	
	Tourist and seaside resorts	NA	8.30 am - 5.30 pm	9 (public hols.)	
	Port Douglas supermarkets	7 am - 6 pm	7 am - 6 pm	22	
	Gold Coast supermarkets	8 am - 8 pm	8 am - 8 pm	24	
	Cairns CBD supermarkets	9 am - 9 pm	8.30 am - 5.30 pm	21	
	*Includes: Cairns, Townsville tourist area, Mossman and Port Douglas tourist area, Whitsunday tourist area, Fraser Coast, Moranbah, Cooloolo Cove, Rockhampton, Toowoomba, Mackay, Innisfail, Emerald, Tablelands, Gladstone, Bundaberg, Gympie, Bioela				
<p><i>Restrictions discriminate against certain businesses and are anti-competitive</i></p> <p>Different retailers are covered by or excluded from the trading restrictions</p>	<p>Independent retailers and shops classified as exempt have less restricted or totally unrestricted trading hours. All other businesses are covered by the relevant trading restrictions. There are around 37 exempted businesses including shops for:</p> <ul style="list-style-type: none"> • antiques and art • books, newsagents • bread, cake, pastry • chemist • delicatessen and fish • fruit and vegetable • funeral director • hair and beauty salon • licensed bottleshops • plant nursery • pawnbroker • restaurant, café • service station • motor vehicle spares • sporting goods • tobacconists • veterinary supplies 				<p>Restrictions favour certain (generally smaller) retailers at the expense of others.</p> <p>They can reduce economic efficiency by constraining consumer choice and distorting activity away from general retailers.</p>

	Details	Issues
<p><i>Restrictions need to be established each year</i></p> <p>Retail trading restrictions apply on prescribed days, which vary each year depending on calendar alignments</p>	<p>Non-exempt shops cannot trade on certain public holidays: Good Friday, 25 April (Anzac Day), Labour Day and 25 December. In addition:</p> <ul style="list-style-type: none"> • non-exempt shops in South-East Queensland must close on Easter Sunday • special extended trading hour arrangements apply leading up to Christmas • different extended trading hour arrangements apply over the Easter period 	<p>Restrictions and special extensions need to be designated each year adding to administrative and compliance costs.</p> <p>Public holiday trading restrictions are unevenly applied across businesses and geographic regions, entrenching economic inefficiencies and discriminating against certain businesses and consumers.</p>

3 The case for and against retail trading hours' regulation

This chapter reviews the arguments for and against retail trading hours' regulation.

We note that many of the arguments for deregulation have been previously accepted by the Queensland Parliament and the Queensland community more generally. Queensland in 2014 is much closer to full trading hours deregulation than it is to the maximum regulation that applied between the Second World War and the early 1970s. Because of this trend, the arguments against further deregulation have become significantly weaker over time, particularly since there has been no discernable community preference to move back towards more regulation throughout the whole 30-year reform process.

Building on this discussion, the next chapter reviews the survey evidence and experience from previous extensions of retail trading hours both in Queensland and other Australian jurisdictions.

3.1 A basic consumer-household framework

For many people shopping is an enjoyable activity. Shopping for goods or services that we know will give us utility (like food, clothes or a haircut) can be pleasurable. Indeed, many shopping precincts, such as the large suburban shopping malls, have positioned themselves as entertainment hubs, mixing retail outlets with pleasant spaces for socialising and dining.

That said, for many people shopping (for instance grocery shopping) can quickly become a chore because of its regularity and sameness. While it is probably fair to say that shopping is hardly in the same league as going to the dentist, many of us shop out of sheer necessity rather than choice, particularly for groceries and other essentials.

All shoppers value their time. An hour doing the groceries takes time away from doing other activities that we might value more highly. In this sense, 'going shopping' can be considered part of the household production process — that is, it is one of many activities which are vital for an effectively functioning household. If getting the weekly groceries onto the kitchen bench could take less time, there would be an obvious welfare gain to households, especially the household member lumped with 'doing the groceries'. For example, a household may decide to purchase groceries online and have them delivered to their door for a relatively low cost, say \$10-\$15, thus freeing up in net terms, say 45 minutes, to undertake any other activity that they might value more than shopping. For many busy households, this is a good deal. Another example might be a person making an online purchase late on a Thursday night (possibly in one's pyjamas after the kids have *finally* gone to bed), thus freeing up their Saturday morning for more pleasurable activities.

These examples show how households can 'time shift' the shopping task. This is entirely analogous to the benefits afforded by deregulated retail trading hours. Both are about giving consumers more choice and flexibility about how they shop.

Keeping the above basic framework in mind, any restriction to retail trading hours acts to limit the convenience of shopping for consumers and, therefore, impacts on consumers' ability to manage their day to maximise their own welfare. In chapter 5 we develop this idea into an economic model to measure the welfare costs to households of restricted retail trading hours.

The next section sets out the main economic arguments for further deregulation of retail trading hours in Queensland. The final section of this chapter sets out, and then rebuts, the main arguments presented for maintaining the *status quo*.

3.2 Some common arguments for deregulation

The current retail trading regulations in Queensland impose restrictions on competition and consumer choice. Prescribed shop trading hours prevent sellers from trading at the times they consider appropriate. They also include provisions that discriminate between sellers on the basis of their location, size or product sold.

There are strong economic arguments for deregulating shop trading hours and the economic gains for the community are, potentially, large. Certainly, many of the economic benefits from relaxing regulatory restrictions are recognised in the current patchwork regime, where less restrictive arrangements apply in larger, tourism-intensive and seemingly more vibrant regions of the state.

Furthermore, Queensland has previously implemented a number of trading hours' extensions, such as evening and weekend trading, with demonstrated widespread community support (see discussion of consumer survey evidence in chapter 4).

This section outlines the main economic arguments for deregulating retail trading restrictions in Queensland.

3.2.1 Increased customer choice and convenience

People value convenience because it saves time and time is precious because it is strictly limited.

One important aspect of convenience is that a customer's preferred store is actually open when the customer prefers to go shopping. Since people cannot perfectly plan their day, they may often not know exactly when they will need to go shopping. Hence consumers place a value on a store being open for extended hours¹. In other words, extended trading hours provides a form of insurance against unpredictable events that can occur in a typical consumer's day (like needing to work late when you had planned to go shopping, or running out of toilet paper). Extending trading hours increases the value of this option or insurance because it increases convenience. Moreover, the increase in value from extended hours is likely to be highest for those individuals or households who are time poor.

Appreciating by how much people value convenience can be seen by examining previous extensions of retail trading hours' in Queensland. For example, in Queensland the *Trading Hours Act 1990* was amended in 1994 to allow non-exempt shops to open between 8am and 9pm Monday to Friday, and 8am to 5pm on Saturday, except on Public Holidays. This significant amendment in effect allowed late night trading on all weeknights rather than on only the Thursday (suburbs) or Friday (CBD) and extended Saturday afternoon trading to 5pm.

Kiel and Haberkern (1997) estimated the impacts of the 1994 reforms to Queensland retail trading hours using data collected from Coles, Woolworths and Franklins by individual store.

¹ This is commonly known in economics and finance language as an 'option value'.

The store data was analysed to determine the proportion of trade in terms of sales and number of customers occurring in the new trading hours². The proportion of daily supermarket sales made in the new allowable trading hours is shown in the left-hand chart of Table 3.1 (taken from the Kiel and Haberkern 1997 study). The daily figures describe the percentage of the total day's sales made in the new hours of trading and provides a breakdown for the South East Queensland metropolitan area (including Brisbane, Ipswich, the Sunshine Coast and the Gold Coast) ("Metro") and the rest of Queensland ("Country").

In SEQ, excluding Thursday, where extended trading hours already existed, the take-up by customers of the new available hours is significant. On average, not including Thursdays, about one in five dollars spent occurred in the new trading hours.

In country areas, the new hours of trading provided an additional five hours of Saturday trading (four hours in Cairns and Townsville), hence the high proportion (45%) of sales made in the new hours, compared to the extra one hour in the metropolitan area. The strong usage of extended trading on Saturdays illustrates the benefit to the consumer living in the regions where making a trip to the supermarket on a Saturday has become much easier to fit into people's schedules, especially when extensive driving is involved (Kiel and Haberkern, 1997).

The right-hand chart in Table 3.1 shows daily average customer numbers. In one week, on average, about 514,000 customer visits were made to the state's major supermarkets in the extended trading hours. These visits represented 15% of total customer visitation of 3.4 million per week (Kiel and Haberkern, 1997).

The study concluded that substantial numbers of Queenslanders demonstrated a preference for the new hours over times previously available. For instance, 69% of customers shopping after 5:30pm (339,000 of 492,000 per week) throughout Queensland were shopping on the new nights of trading (ie Monday, Tuesday, Wednesday, Friday in areas which previously had Thursday late trading).

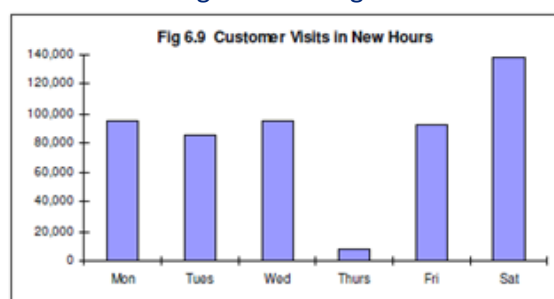
In summary, the various analyses of data pertaining to the 1994 change in trading hours indicated that a significant amount of trade was now conducted in the new hours. Further, there was no change in prices in Queensland relative to the rest of Australia (Kiel and Haberkern, 1997).

Table 3.1 Take-up of new trading hours in Queensland following 1990s deregulation

Table 6.5 Supermarket sales in new trading hours			
	Metro	Country	Total
Monday	20%	17%	19%
Tuesday	19%	17%	18%
Wednesday	20%	18%	20%
Thursday	1%	1%	1%
Friday	18%	17%	17%
Saturday	16%	45%	25%
Total week	14%	18%	15%

Source: Coles Myer, Woolworths, Franklins.

Original Source: Kiel and Haberken (1997).



Source: Coles Myer, Woolworths, Franklins.

² Having had two years to adjust to the extension of trading hours available to retailers after May 1994, new patterns of shopping behaviour were considered to have become well established in the community.

3.2.2 Changing social and cultural norms

Maintaining restricted retail trading hours fixed in the face of changing social and cultural circumstances can act to make unchanged retail trading hours (i.e. the status quo), *in effect*, more restrictive and more costly to the consumer.

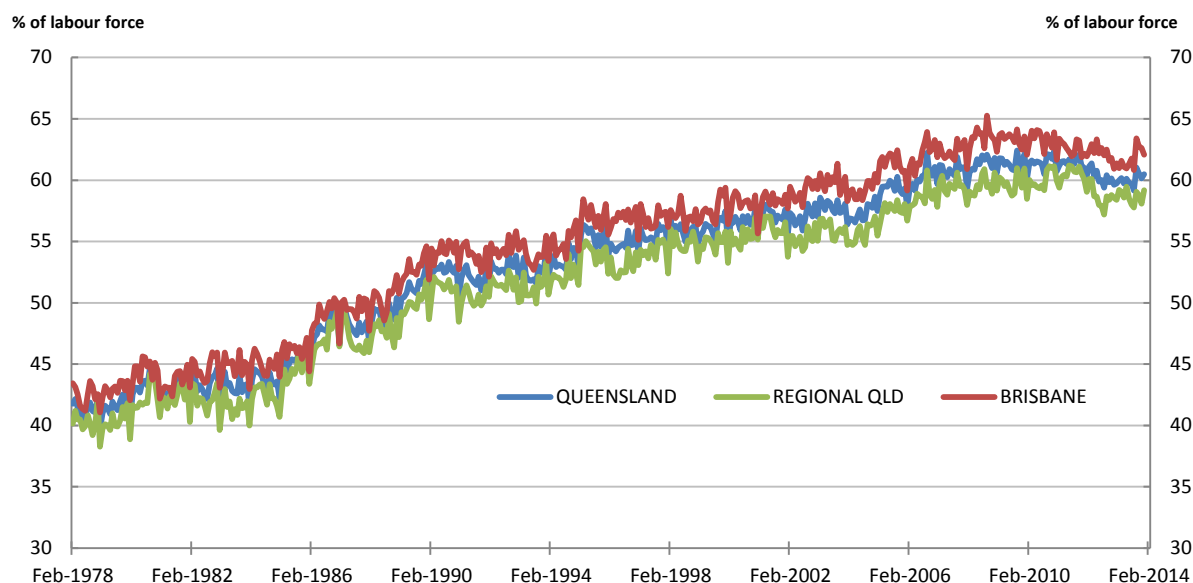
Community pressure to relax trading hours' restrictions through the 1980s and 1990s was driven by changing social and work patterns such as rising female labour force participation and, consequently, an increasing number of dual income households; longer work hours for a significant section of the community; an increase in single parent households; and a reduction in religious obligations on Sunday. These changes meant that it became more difficult for households to undertake shopping duties within those highly restricted times or it opened up times where the shops were not open to take advantage of that new available time (such as on Sunday).

A more recent trend has been the near ubiquitous availability of internet access at speeds that allow for convenient online shopping, including online grocery shopping. Online shopping now represents 5-10% of all retail trade in Queensland and its share is rising rapidly as Queenslanders find ways to get around the increasingly arcane laws governing retail trade in Queensland³.

Higher female labour force participation has reduced the amount of time (and inclination) for the 'traditional' female household production (shopping) role during daylight hours on weekdays. Around 60% of Queensland women between 15-64 years are now in the labour force and, hence, would most likely appreciate the availability of shopping hours outside of traditional work hours. Chart 3.1 (below) illustrates the trend in Queensland female labour force participation over the past four decades. Female participation has risen from just over 40% in the late 1970s, when trading hours' reform began in most Australian jurisdictions, to over 60% today. The figures are consistently 2-4% higher in Brisbane where a larger and more diverse labour market has provided more opportunities for women wishing to enter the workforce.

³ PwC and Frost and Sullivan Global Retail and Consumer report (2012).

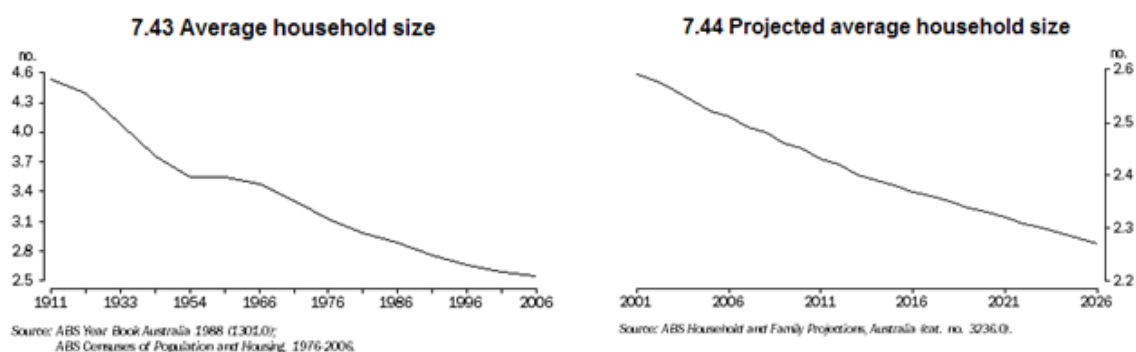
Chart 3.1 Female Labour Force Participation in Queensland, 1978-2014



Source: 6291.0.55.001 Labour Force, Australia, Detailed - Electronic Delivery, Table 2.

Another social change affecting the suitability of retail trading hours has been the consistent decline in average household size over the past century. Chart 3.2 shows that in 1911 the average household size in Australia was 4½ persons. But by 2014, the estimated average household size is slightly less than 2½ persons. This has an impact on how easy it might be for one member of the household to do the shopping on behalf of all other members. In larger households, the ‘traditional’ role of the wife as homemaker might make sense in terms of the overall cost of household production versus foregone household income. However, given the diversity of Queensland households today, it would be very difficult for some combinations (e.g. single person shift worker or working couple with children) to organise the weekly shopping trip within highly restricted trading hours.

Chart 3.2 Average Household Size (LHS) and Projected Average Household Size (RHS)



Source: 1301.0 - Year Book Australia, 2009–10. **Note:** The scales on the two charts are different.

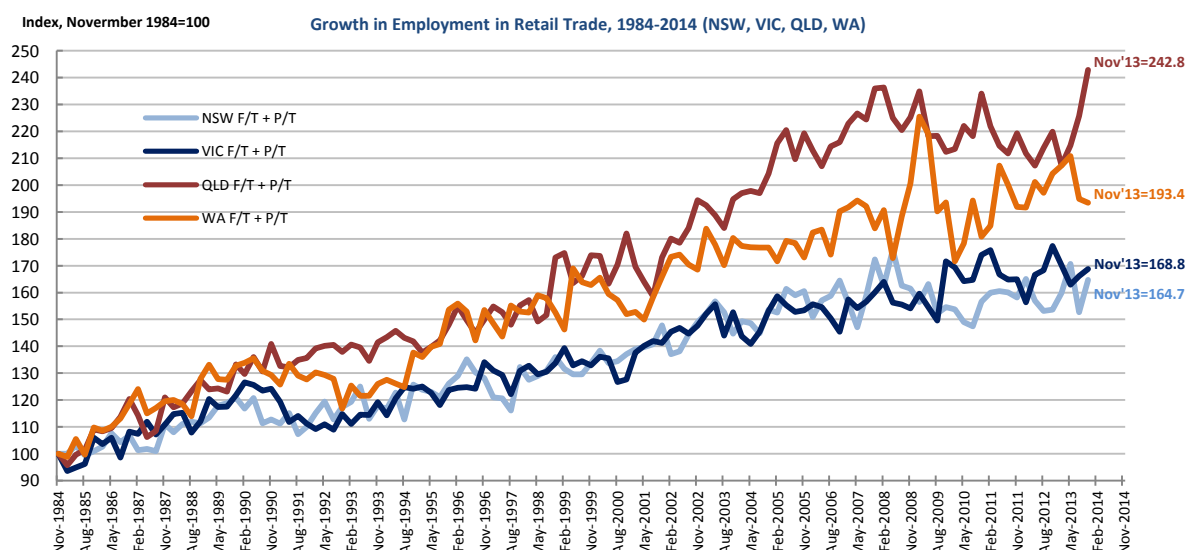
3.2.3 Importance of retail employment to certain workers

The retail sector is a significant employer, accounting for 11% of total employment in Australia⁴. The sector is also a major employer of part-time and casual workers who are likely to value additional shifts highly because of their relatively low base pay. According to the ABS, 18% of all part-time workers in Australia are in the retail industry. These workers are particularly likely to value shifts that carry penalty rates, such as on weekends and public holidays. Full deregulation provides greater options for casual workers to juggle work and study, and earn more money. This point was noted by the ACTU in its submission to the PC Retail Inquiry (PC, 2011).

Chart 3.3 (below) shows that the main driver of retail employment growth since 1984 has been population and, hence, consumption growth, with Queensland and Western Australia growing faster than the other two of the 'Big4' states NSW and Victoria.

It is difficult to disentangle population and economic growth from regulatory changes in terms of the drivers of retail employment growth. GSC examined retail employment growth in the decades before and after the significant 1994 deregulation that, in effect, allowed late night trading on all weeknights and extended Saturday afternoon trading to 5pm. We found that, in the decade prior to 1994, retail employment in Queensland grew by 37.7%, whereas retail employment grew by 56.6% in the decade following the 1994 changes – a significant difference. Moreover, population growth (a proxy for consumption growth) was, in fact, *higher* in the preceding decade (26%) compared with the subsequent decade (21%). Therefore, we can confidently rule out that the difference in retail employment was caused by increased consumption (in turn caused by a faster population growth rate). This would suggest that the regulatory changes of 1994 had at least some positive effect on retail employment growth in Queensland.

Chart 3.3 Growth in Employment in Retail Trade, 1984-2014 (NSW, VIC, QLD, WA)



There is strong economic reasoning (that backs up the observations and analyses made above) to show that restricted trading hours imposes real costs on some workers whose preference is to work

⁴ ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, Table 05 Employed Persons by State and Industry.

at times the government restricts. Regulations restricting trading hours impose costs on those employees in the retail industry who either prefer to work outside of the regulated trading hours or are indifferent (that is, relaxed and comfortable) to working outside of these times due to the penalty rates available to them at these times. Indeed, there would be workers who would choose to work weeknights, at weekends or on public holidays irrespective of whether there are higher wage rates because it suits their preferences for work, study, and leisure times. Box 1 (below) presents the theoretical economic framework for considering the effects of retail trading hours' deregulation on the labour market.

Box 1: Labour Market effects of Retail Trading Hours Deregulation

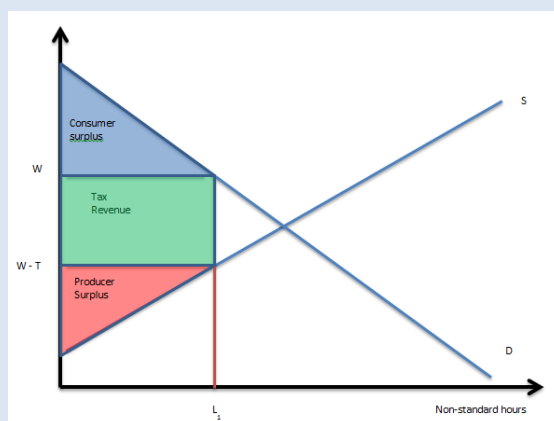
Retail trading hours' restrictions can, theoretically, impact on the labour market in a number of ways. In a large and deep labour market, such as in SEQ, the supply of willing labour for 'after-hours' shifts would be sufficient to meet the increased demand for labour that resulted from deregulation. This conclusion is based on the fact that fully deregulating current trading hours represents only a marginal increase in overall shopping hours (assuming current shopping patterns where very little shopping would be undertaken between midnight and 6am even if shops were allowed to trade through those hours).

The ban on shops opening in non-standard hours is equivalent to a prohibitive tax on the supply of extended shopping hour services. The cost is not only borne by consumers and retailers, but also by workers who prefer to work in non-standard hours or would prefer to work more shifts. A typical worker with these preferences may be a student or someone working a second job.

Allowing shops to choose their opening hours is like lowering the tax, permitting mutually beneficial trade, with gains to suppliers and consumers. Figure 1 illustrates the market for extended shopping hour labour services – simplifying by assuming all employees earn the same wage per hour and pay the same tax. Permitting extended-hours trading is equivalent to a cut in the prohibitive tax on weekend employment in shops, to a lower level (T in the diagram). The tax wedge in labour markets is large – most employees on a marginal income tax rate of 30 per cent, consumption and payroll taxes also add to the tax wedge on labour supply.

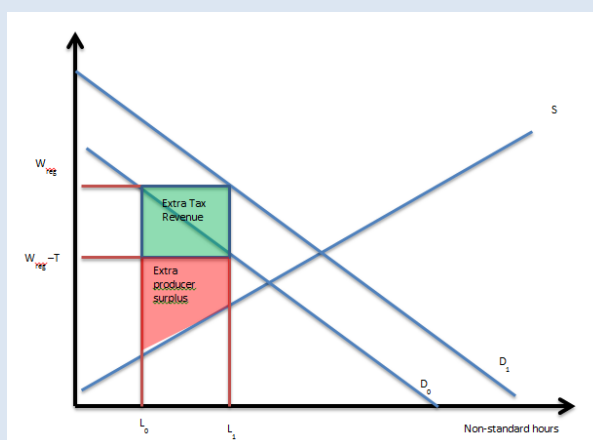
If weekend trading is permitted, employment of weekend labour in retailing increases from 0 to L_1 . There is a benefit to the demanders of labour (ultimately the consumers who buy the services that labour produces), a benefit to labour suppliers and increased tax revenue from the taxes paid by weekend workers. That is, there is an increase in consumer surplus, producer surplus and tax revenue.

Wage payments are WL_1 . They are a transfer from employers to employees and are not all cost to society. A portion of wage payments accrues to the government as extra tax revenue and the after-tax wage payments ($W - T$ per hour) that workers receive overstates the cost of their labour (by the red area of producer surplus). Part of wages goes as a rent to workers. The size of this rent depends on the elasticity of labour supply (the slope of the supply curve). It is larger the more inelastic the supply curve.



Box 1 (continued): Labour Market effects of Retail Trading Hours Deregulation

Figure 2 looks at the weekend and after-hours employment market when the wage is set above the market clearing level (at W_{reg} per hour).



Deregulation of shopping hours would increase the demand for weekend labour, shifting the demand curve from D_0 to D_1 . The result would be more people employed at the regulated wage. The government gains increased revenue (the green area) and the employees gain the red area as increased producer surplus on the extra hours worked. Those willing to work weekends at low wages will gain the most. The high wage means there is a gain even if the supply of weekend labour were elastic.

Deregulation of shopping hours would shift demand and supply curves in related markets, changing prices in those markets and creating gains and losses from pecuniary externalities. In undistorted markets, these cancel out and there are no efficiency effects (although there are gainers and losers, which affect political opposition to deregulation).

For example, deregulation of shopping hours may reduce the demand for retail employment in traditional hours. Those employees for whom higher weekend wages do not compensate for the loss of high valued leisure time would lose – either being forced to shift hours worked to weekends or choosing not to work weekends. But their losses would be relatively small because the supply of labour for regular employment hours is likely to be elastic and rents small. There is no shortage of people willing to work standard hours and alternative jobs during standard hours are plentiful.

If the related markets are distorted, by taxes, externalities or monopoly power, then shifts in supply and demand in related markets affects welfare. For example, taxes on employment mean the increase in weekend labour demand boosts government tax revenue. But there is an offsetting fall in tax revenue when labour demand falls in related markets. Which is likely to be bigger?

In theory, the effect of deregulation on employment is ambiguous. The number of people and total hours of employment outside standard times would increase, but those employed during regular hours may well fall. If the full purchase price (money price plus time cost) of retail goods falls, the total volume of retail trade would increase, which would tend to increase total employment and wages in the retail sector and complementary sections of the economy. As we show elsewhere in this report, the increase in convenience from further deregulation could be significant.

3.2.4 Reduce regulatory/administrative complexity (within Queensland)

As noted above, with over 70 different retail zones Queensland's retail trading restrictions are complex and cumbersome to administer.

Under Queensland law, the Queensland Industrial Relations Commission has the jurisdiction to decide trading hours in excess of the minimum allowable hours. Retail businesses or other organisations may apply to the Commission for an extension of trading hours in a particular locality or state-wide. The Commission in making its decision may consider issues such as locality, the needs of the tourist industry and the interests of the public, consumers and business. This has led to over 80 different trading hours zones in Queensland.

For many retailers — especially larger businesses which operate multiple sites across regions — retail trading restrictions directly add to the costs they face. Trading restrictions and the way they are administered mean that additional resources are required to ensure rules (and any changes) are complied with. It also means that retailers face extra operational constraints, impeding their ability to maximise available efficiencies and deliver market-focused services.

The recent announcement that Woolworths will open a 24/7 store on Federal Government land at Brisbane airport, avoiding Queensland's trading hours restrictions, clearly illustrates some of these issues. It shows that retailers will go to considerable lengths (legally) to circumvent these restrictions. It is entirely likely that other sites, perhaps more conveniently located to residents, would have been available for such a development. To the extent that this is the case, the restrictions have effectively added to project costs and represent a sub-optimal outcome for the community.

In its submission to the Productivity Commission Woolworths argued that:

"There [are] ... significant compliance and operational costs involved for retailers interpreting and implementing the patchwork of inconsistent trading hours and public holiday laws across Australia. As an example, the additional administration tasks involved in preparing stores for the 2010 Christmas trading period (including setting staff and delivery rostering and making changes to store processes etc) have been estimated to cost Woolworths supermarkets alone approximately \$3.4 million". (PC, 2011. sub. 110, p. 10)

3.2.5 Harmonisation with other states

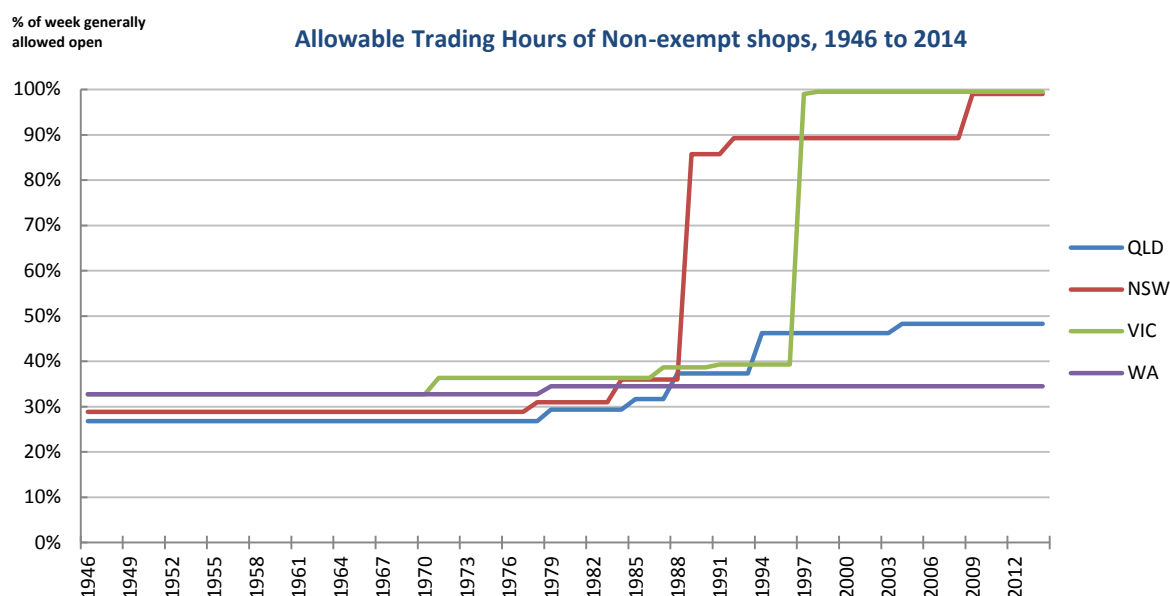
Much policy debate over the last decade, including microeconomic reforms being pursued by COAG, has centred on reducing the regulatory differences between states and delivering the Seamless National Economy. A clear focus has been on lowering the overall regulatory burden for businesses and workers operating across borders.

Queensland's retail trading restrictions form an obvious point of regulatory differentiation along the east coast. This would not matter if the misalignment was in Queensland's favour. However, as Chart 3.4 (below) illustrates, the regulatory arrangements are not in Queensland's favour.

Certainly, the strong level of interstate migration to Queensland over the past two decades illustrates the importance of meaningful regulatory harmonisation. With workers being increasingly mobile there is a need to, not only make Queensland more attractive, but to reduce the

inconvenience faced by new residents who typically take a liberal retail trading environment for granted.

Chart 3.4 Allowable trading hours of the 'Big4' States, 1946-2014



Source: Various State Retail Regulations and Haberkern and Kiel (1994 and 1997).

3.2.6 Lower prices from increased competition

Allowing more stores to open longer hours is likely to increase the intensity of competition, lowering prices and eroding margins currently enjoyed by convenience stores which at the moment are permitted a monopoly privilege to open during those hours.

As noted above, retail trading restrictions intentionally reduce consumers' choice on when and where to shop. While this imposes added inconvenience to shoppers who may often be required to adjust the scheduling of day to fit in with restricted shop opening hours, there are also more direct costs.

By reducing choice, consumers who need to make essential purchases such as bread and milk outside of legislated trading hours are forced to shop at exempted outlets. These are typically smaller shops like convenience stores where prices for necessities and other everyday items are almost always higher than those charged at large grocery chains.

Much of this is not unexpected. Smaller stores lack economies of scale and have business models based on smaller volumes and higher margins. They tend to be open longer hours and located in highly accessible areas where shoppers willingly pay a premium for this added convenience.

The issue in terms of the prevailing regulatory framework is not these underlying cost factors with smaller retailers but that consumers are not afforded the choice to use alternatives during certain parts of the week. For those consumers who have less flexibility to shop during legislated opening times such as shift workers, busy parents etc, the retail trading restrictions mean that they are effectively forced to pay more for essential purchases when it is by no means certain that they would choose to pay the premium for the convenience of the 'local corner shop'.

3.2.7 Better capital productivity

Restricted trading hours directly leads to idle capital (the refrigerators must stay on for example) and queuing at closing times, which reduces business productivity not to mention annoying the customer. The best way to benefit from the economies of scale provided by a firm's capital is to ensure it is fully utilised. Bennett (1981) argues that one way of achieving this is to maintain as even flow of retail services as possible. The current trading hours' regime in Queensland works against this by causing peaks and troughs in the demand for retail services.

Of course, the situation was much worse before seven day trading was allowed. Shops closed on Sundays meant that retailers could not manage their stocks properly, especially perishable goods like fruit and vegetables. Stock is wasted or sold below cost on Saturdays to get rid of stock that won't last until Monday morning (Tanguay et al. 1995).

3.2.8 Enhancing the attractiveness of Queensland and its regions

A major aspect dictating the attractiveness of a city or region concerns its various 'lifestyle' features. These features are broad in scope but generally cover the availability of entertainment and cultural options, natural attractions such as parks and beaches, the level of public safety, as well as the ease in which people can manage the 'daily grind' (public transport, commuting times etc).

Policy measures which target these areas are thus central to ensuring regions and cities remain attractive places for current and prospective residents and visitors.

In terms of the retail sector, regional areas clearly have fewer options than cities and larger centres. However, they are still subject to the more restrictive trading arrangements. This can play a role in reducing the overall vibrancy of an area and making it less liveable to new workers.

While it is fair that liberalising trading restrictions is not going to turn a small Queensland town into Hong Kong, the key point is that the restrictive arrangements act as a policy barrier to incremental improvements that larger cities do not face.

3.2.9 Lowering Travel Costs

All store-based shopping involves travel-time costs. Time is valuable to all people even the unemployed or student, and precious to those with busy lives.

Trading hours' restrictions can have the unintended effect of increasing shopping travel times and, therefore, the overall cost of shopping to households. This is because of Queensland's patchwork of inconsistent closing hours for similar types of shops. The QIRC has allowed certain supermarkets to open in 'tourist' or 'high density' areas. When the local supermarket is closed, a consumer may elect to bypass the local (open) convenience store and drive a greater distance (taking more time) to the supermarket that is open to take advantage of the lower prices on offer.

There is strong evidence supporting this point in the Coles shopping data that we have reviewed. Figure 1 illustrates travel-time shopping data for the suburb of New Farm⁵. The figure shows that customers will travel to Coles New Farm when their own local Coles is shut but New Farm remains open as it is in a 'high density' area.

⁵ The data is collated from customer Fly-Buys information.

Source: Coles confidential data (supplied).

3.3 Some common arguments to maintain regulation

Despite 30 years of, albeit slow, reform towards unrestricted trading hours (apart from our most sacred of days), there is still a strong belief among some that 'letting the market rip' will mean the large supermarkets 'smashing' the small independent retailers.

This view is based on a number of arguments:

- increased trading hours will reduce the number of small businesses
- increased trading hours are not wanted by consumers
- increased trading hours will increase unemployment
- increased trading hours will increase prices
- increased trading hours will cause monopolies in retailing

We have rebutted the first four arguments in the sections above. This section will deal with the final common argument to maintain regulation.

3.3.1 Increased trading will cause monopolies in retailing

The primary goal of economic policy should be to promote economic efficiency. Efficiency can be usually best achieved by allowing competition. Fierce competition in retail markets promotes better use of capital, higher productivity and, ultimately, lower prices for consumers. These lower prices effectively increase consumers' real income – we can buy more for the same amount of money.

The argument that increased trading hours' for large supermarkets will cause monopolies in retailing rests on a flawed understanding of the retail market, particularly the beneficial relationship between large and small retailers. It also assumes fails to acknowledge the benefits of lower prices that large supermarket chains achieve via economies of scope and scale. Finally, the argument does not appreciate that while a market may be dominated by a few large players, the existence of a number of small players *even if they do not account for a significant market share* as well as the threat of entry from new supermarkets, is enough to keep prices low.

There is also the important aspect of the relationship between large and small retailers, especially in relation to the suburban shopping mall where most store-based retail shopping takes place. Take store-based grocery retailing. Customers are interested in a range of shopping conveniences, such as: opening hours, location, price, quality of stock sold, range of stock and in-store services. Any given retail store supplies a particular bundle of these attributes creating a format or 'valence'. Competition in grocery retailing has an important geographic or spatial dimension, which interacts with a number of other elements that differentiate stores' valences.

Large grocery stores act as 'anchor tenants' in suburban shopping malls because they generate positive externalities (or benefits) for other stores. Shopping centre owners "internalise" and organise these externalities, reflecting them in the rents they charge to tenants. Thus, speciality stores are commonly found in the same shopping centre as major supermarket chains. Far from being potentially 'smashed' by the large retailers gorging on extended trading hours, the speciality store benefits from the increased foot traffic caused by the presence of the anchor tenant. Thus, speciality retail stores are likely to locate close to major supermarkets.

Major supermarkets also co-locate, relying on valence characteristics to compete in addition to price competition. As a result, the major supermarkets do not exercise monopoly power, rather the opposite, as they cannot materially increase price above competitive levels without facing loss of sales to either their major rival barely metres away or their smaller rivals, even if those rivals are located less centrally than they are.

A further point is that the lower the prices at the larger supermarkets, the higher the offsetting travel cost that would need to be saved by shopping at a local small store for that store to be viable. Thus, the fiercer is the competition between the co-located large grocery stores, the further away a small grocery store would need to locate in equilibrium. The resulting market configuration gives large market share but little market power and low prices to the large centrally located stores but small market shares, comparatively more market power and higher prices to the fringe of small grocery stores.

3.4 Summing up

Restrictions on shop trading hours have a number of objectives, including the opportunity for some small businesses to trade without competition from larger retailers and to reduce the need for retail employees to work outside 'traditional' working hours. The discussion above has demonstrated that both of these arguments are flawed and quite dated. The sky has not fallen in as trading hours have been progressively liberalised in Queensland and other states over the past 30 years.

While consumers are often ignored in public policy debates, which generally focus on the 'industry' or 'worker', in the age of home-based internet shopping, the preferences of consumers can no longer be ignored.

Changes in social patterns, for instance the growing participation of women in the workforce and the growth of both dual income and single-parent households, have forced state and territory governments to deregulate retail trading hours. These days, with many more part-time workers who fit employment around study, child care and other responsibilities, as well as newly arrived migrants willing to work any day to get ahead, the pool of people freely choosing to work on Saturdays and Sundays, later at night and on public holidays is much greater.

It is hardly likely that these trends will reverse, as they have made our country richer both in economic and social terms.

In summary, the arguments for increased or fully deregulated retail trading hours are numerous and the economic gains are, potentially, large. The benefits could include:

- Increased consumer choice and convenience, including meeting the needs and expectations of changing consumer and household preferences
- Lower prices for many basic necessities such as bread and milk
- Increased retail sales and higher retail employment
- Logistical benefits for suppliers
- Better use of the fixed stock of retail industry capital
- Removal of anti-competitive and distorting regulations, which can grossly distort retail activity and the location of stores
- Attracting skilled migrants to areas where the demand for workers is high (such as in regional Queensland)

4 What do the consumer surveys say?

4.1 Introduction – we’ve done this before

Consumer attitudes across Australia have largely demonstrated longstanding and widespread support of deregulated retail trading hours. Extended retail trading has consistently been viewed as promoting greater consumer choice and flexibility, and reflecting the realities of modern family lifestyles and work patterns.

Indeed, such preferences can be seen in the way in which consumers have energetically taken up shopping options outside of ‘traditional’ hours in places where retailing trading restrictions have been lifted (see chapter 3).

Recent consumer surveys undertaken by QUT Business School for the National Retail Association also demonstrate consumers’ preferences for greater retail trading liberalisation in Queensland. These surveys, which were conducted in 2011, show that shoppers in both inner city Brisbane (New Farm) and regional centres (Gympie) perceive strong welfare benefits from relaxing restrictions and, notably, that retail liberalisation would not harm the community.

Some key aspects of these surveys are summarised below.

New Farm consumer survey (September 2011)

Consumers were surveyed on their attitudes on a proposed extension of the trading hours of Coles New Farm. In total, 304 respondents participated in the survey.

- Overall, there was strong support of the proposed extension of trading hours on Saturday, Sunday and public holiday evenings at Coles New Farm, with 75% of respondents favouring longer trading allowances. Around 14% opposed any retail trading extension and 11% were unsure.
- Survey results indicated relatively similar support across different groups of workers. The highest percentage of support was from casual workers (79% of casual employees favoured the proposal), compared to people working full-time (75%), part-time (76%) and not working (72.5%).
- Respondents from shared households showed more support (86%) than couples without children at home (77%), people living alone (71%) and couples with children at home (65%). Single parents with children at home showed the lowest level of support (50%). There was little difference in support or otherwise between males and females.
- By far, the largest reason for supporting longer retail trading was customer convenience (52%). This was followed by lifestyle advantages (7%) and to be in line with other capital cities (4%).

Gympie consumer survey (December 2011)

Consumers were surveyed on their attitudes towards proposed Sunday trading and limited holiday trading at the shopping centres in Gympie. In total, 314 respondents participated in the survey.

- Overall, there was clear support for the proposed extension of retail trading hours in Gympie. About 64% of respondents favoured the longer trading allowances, with 33% opposing any changes and 3% indicating they were unsure.
- Around 87% of respondents agreed that Gympie should have the same choice of shopping hours as South East Queensland.
- The highest percentage of supporters was from part-time workers, with 80% of those respondents supporting the proposal. In contrast, the lowest percentage of support was from non-working respondents where only 53% favoured the proposal.
- Similar to the New Farm survey, convenience was cited as the major reason for support (55%) followed by lifestyle considerations (36%).
- The most cited reasons for opposing the proposal was that 'it is unnecessary' (26%) and 'it will disadvantage smaller businesses' (21%).

Further details of the consumer surveys are at Appendix A.

4.2 What have the Reviews and Inquiries said?

Over the past two to three decades, there have been a number of reviews and inquiries into retail trading both at the state and Commonwealth level. These include:

- Western Australia (2005)
- Queensland (early-2000s)
- Tasmania (early-2000s)
- ACT (mid-2000s)
- National Competition Council (2002)
- Productivity Commission (2011)

The results of these surveys provide an insight into community desires about when people want to shop and perhaps a rejection of governments continuing to have a role in determining how, when and where people shop. For instance, research commissioned by the Retail Traders' Association of Western Australia in December 2001 asked if shopping centres were to open seven days a week, which would be respondents' preferred day to shop for personal items, 20 per cent indicated Sunday, second only to Saturday (29 per cent) (RTAWA 2003).

Queensland was due to review the retail trading restrictions in the late 1990s under the National Competition Policy. The Queensland Government, by agreeing to the Competition Principles Agreement under the NCP, avoided a required NCP Review by arguing to the NCC that the QIRC was "independent" and, therefore, would make good decisions in the public interest.

Gradually, via the QIRC process, over the 2000s Queensland relaxed its trading restrictions to allow more trading when people wanted it.

A general focus of the reviews, as borne out in the direction of industry reform, was to test many producers' assertions on economic harm to the industry and the availability of welfare benefits to consumers. Box 1 sets out why many of these arguments are so well entrenched.

Box 2: A 'producer framework' versus a 'consumer framework' — which is better?

The 'producer framework' is a short-hand description of a way of thinking that focusses on the producer. This framework is common among politicians for several reasons.

- First, the benefits and costs of public policy tend to be more visible in terms of their effects on producers than consumers. For instance, restricting competition among retailers on weekends benefits small retailers (a highly visible benefit), but costs consumers in terms of higher prices and lower convenience (but these, albeit high, costs are spread widely and are not as visible).
- Second, politicians often think in terms of 'jobs created' or 'jobs saved' and do not consider the opportunity cost of policy changes. For instance, the job saved at the convenience store is more visible than the foregone job not created at the major supermarkets.
- Third, producers tend to have more political power and are able to marshal resources to defend their patch or gain further concessions or subsidies for their industry at taxpayer expense. Again, benefits to the industry are often highly concentrated and, therefore, highly visible, but the costs are dispersed over the whole population (i.e. the consumer).

The consumer framework has many policy advantages because it focusses on economy-wide welfare as measured by individuals and households. In this sense, it can ultimately lead to less industry welfare, greater market competition, higher productivity and lower prices — each of which are key aspects to promoting economic efficiency and higher long term living standards.

In a free market, where particular businesses are not granted monopoly power, then:

The real bosses, in the capitalist system of market economy, are the consumers. They, by their buying and by their abstention from buying, decide who should own the capital and run the plants. They determine what should be produced and in what quantity and quality. Their attitudes result either in profit or in loss for the enterpriser. They make poor men rich and rich men poor. They are no easy bosses. They are full of whims and fancies, changeable and unpredictable. They do not care a whit for past merit. As soon as something is offered to them that they like better or that is cheaper, they desert their old purveyors. With them nothing counts more than their own satisfaction. They bother neither about the vested interests of capitalists nor about the fate of the workers who lose their jobs if, as consumers, they no longer buy what they used to buy.

Source: *Bureaucracy* by Ludwig von Mises, sourced at <http://mises.org/etexts/mises/bureaucracy/section1.asp>

Productivity Commission Inquiry

In February 2011, the Assistant Treasurer Shorten requested that the Productivity Commission (the Commission) undertake an inquiry into the economic structure and performance of the Australian retail industry. In particular, the Commission was asked to examine:

1. *The current structure, performance and efficiency of the retail sector and impediments to its contribution to the Australian economy;*
2. *The drivers of structural change in the retail industry, including globalisation, increasing household and business access to the digital economy, cost structures of the domestic retail industry, employment structure, the exchange rate and structural change driven by the resources boom (PC 2011).*

The Commission was also asked to consider the difficult issue of tax arrangements relating to online retail trade (i.e. the appropriate GST threshold level).

The Commission found that the retail industry comprised almost 140,000 retail businesses in Australia, and accounted for 4.1 per cent of GDP and 10.7 per cent of employment. In relation to retail trading hours, the Commission recommended that:

“Retail trading hours should be fully deregulated in all states (including on public holidays).”
(Recommendation 10.1)

In support of this recommendation, the Commission found that:

“Consistently high small business participation rates of around 90 per cent in both regulated and deregulated states and territories suggests that trading hours have little influence over the level of market participation by small retail businesses. In Australia, deregulation of trading hours does not appear to have had a deleterious effect on the viability of small retail businesses.”

In its submission to the Commissions 2005 Review of NCP, Woolworths argued that:

High Volume, low margin retailers like Woolworths generally bring improved convenience and range to consumers, as well as lower prices for consumer goods. The combination of these factors and the flow-on effects of lower prices highlight the contribution such retailers have made, and can continue make, to productivity and therefore economic growth. Given the large contribution efficient retailing brings to Australia's economic performance and consumer welfare more generally, Woolworths supports the continued review and reform of existing anti-competitive retail legislation, in the context of NCP.

In a similar vein, the NCC (2002), in its assessment of restrictions on competition, concluded that:

"Prescribed shop trading hours discriminate amongst sellers on the basis of location, size or product and prevent them from trading, and consumers from shopping, at the times they consider appropriate. Such regulations are out of step with social and demographic characteristics of modern economies where many people reside in two income households and desire flexibility in where and when they make their purchases of goods and services."

4.3 What has been the experience? Evidence from changes to retail trading hours

Over the past two to three decades a number of Australian jurisdictions, including Queensland, have deregulated retail trading hours with no discernible *ex post* community-wide protest (the sky didn't fall in), but with notable improvements in retail sector performance.

For instance, in Victoria retail employment grew by nearly 7,000 jobs in the 12 months following deregulation of shop trading hours in 1996 while over the same period retail employment fell nationally by 2.4%⁶.

⁶ It should be noted that while jobs growth is not an end in itself — indeed employment is a *cost* of business — these outcomes indicate an improvement in the overall health of the sector. Most importantly, it counters the argument that the retail industry would suffer should deregulation occur.

Similarly in Queensland, the first wave of deregulation in the early 1980s brought significant economic and social benefits to Queensland shoppers and workers when Thursday night and Saturday morning shopping was allowed. These benefits were self-evident as shoppers voted with their feet filling supermarkets outside of standard work hours on Thursday nights and, especially, Saturday morning. The next major reform was allowing permanent Sunday trading in 1989, which was a result of the success of Sunday trading during World Expo 88. Again, the evidence of economic and social benefits was the clear switch from weekday to weekend shopping and the lack of any significant or sustained protest from the Queensland public.

5 Impacts on Small Retail Businesses

This chapter examines the potential costs and benefits of the current retail trading hours' restrictions on small retail businesses in Queensland. As well as presenting new material, this chapter draws on material presented in the previous chapter that is relevant to small retail businesses.

5.1 Definition of small retail businesses

In general, by 'small retail business' we are referring to all store-based⁷ non-grocery retail businesses.

Defining by exclusion, we mean:

- Retail businesses other than Coles, Woolworths, IGA and similar (that is, other than large grocery chains); and
- Retail businesses other than K-Mart, Target, BigW, Myer/Grace Brothers, David Jones and similar department stores.

Defining by inclusion, we mean:

- Convenience stores that are licensed to operate outside of the restricted trading hours, such as 7-11, Night Owl and similar; and
- Retail stores in large suburban shopping malls (such as clothing stores, electronic stores, hairdressers and similar) that are subject to retail trading hours restrictions; and
- Retail stores on 'high streets' (that is, stores not located in suburban shopping malls) that are subject to retail trading hours restrictions; and
- Food retailers, such as in food-courts in suburban shopping malls, that are subject to retail trading hours restrictions.

5.2 Potential impacts on small retail businesses

In chapter 3 we canvassed the main potential impacts of removing the restrictions on retail trading hours from the perspective of the consumer. In this chapter we bring together the arguments relevant to store-based small retail businesses. That is, the discussion in this chapter is focussed on the producer rather than the consumer. We also include here an assessment of the potential costs to the owners of convenience stores of increased competition with large grocery stores.

5.2.1 Relationship between small retail businesses and large anchor tenants

Thousands of store-based retail businesses in Queensland operate in the large suburban shopping malls or are purposefully otherwise located near a large supermarket or retail chain acting as an 'anchor-tenant' (for example along Gympie Rd adjacent to Chermside Shopping Centre or Moggill and Station roads adjacent to Indooroopilly Shopping Centre).

Far from acting as menacing competitors, large supermarkets and merchandise retailers act as anchor tenants providing spillover foot traffic for smaller businesses. These agglomeration effects

⁷ That is, the retail business has a physical (not solely internet) presence and is, therefore, affected by retail trading hours' regulations.

are significant – by definition, since these businesses elect to pay relatively high rents in Westfield or Centro Malls or on streets close by, rather than locate away from these large stores (see Box 2).

Large anchor tenants rely on these other retail stores, including the food retailers that give life and variety to the food-courts, to enhance the grocery and merchandise shopping experience. An air-conditioned shopping mall can provide a great day out because of the variety of goods and services on offer.

Hence, restricting the hours that large grocery stores can operate, effectively restricts the hours that smaller co-located retail stores can operate, as they are governed by rules agreed to by all tenants (subject to the trading hours restrictions) and set in place by the landlord under contract.

Box 2: Patterns of competition in retail and the impact of restricting trading hours

Retail stores offering similar products and services face countervailing pressures, first to locate apart, as this would reduce competition, allowing higher prices and hence increased profits, but also to locate as close as possible to the most attractive customers, as getting more custom also increases profits.

Customers are interested in a range of shopping conveniences, such as: opening hours, location, price, quality of stock sold, range of stock and in-store services. Any given retail store supplies a particular bundle of these attributes creating a format or 'valence'. When similar firms, such as large grocery stores, compete, customer considerations of valence weaken price competition, and hence the strategic benefits of separation, and thus firms seek to locate together.

There are two broad forces at work in the choice of retail store location.

First, creating inter-store distance allows the store to set higher prices (the price effect). Separation between stores means that customers relatively closer to a given store will prefer to shop at that store in order to avoid the travel costs of shopping at a more distant store. Second, if one store is in a location where demand is high, locating close to it makes it easier to gain attractive customers that otherwise would go to the competitor's store (the demand or 'foot traffic' effect).

The price effect is the force that causes stores to spatially separate. However, the greater the relative importance of valence differences between stores, the weaker will be the price effect and hence the weaker the incentive to seek local market power. Thus for significantly large valence sensitivity, the demand effect, the incentive to attract marginal customers on average by moving toward a competitor, dominates and stores choose to locate where demand is maximized, which leads to co-location (because total demand for each store is maximized in the middle of a geographic market). This is approximately what we observe through the co-location of Coles and Woolworths supermarkets in shopping centres.

This tendency to co-location is likely to be accentuated by the ability of large supermarkets to generate externalities for other stores. More specifically, customers who have decided to visit a supermarket can optimise their travel and time-use costs by also undertaking other activities located adjacent to a supermarket, including buying other goods and services.

However, if the large anchor tenants were restricted from trading in hours that consumers prefer, then all retail stores suffer because of the reduced foot traffic. The agglomeration benefits are thus muted, causing a negative impact on all co-locating retail stores.

Source: Ergas (2013) [Patterns of Competition in the Retail Grocery market](#).

5.2.2 Could deregulation kill the small retail shop?

The above discussion made the point that there is a beneficial symbiotic relationship between large and small retailers, especially at and nearby the suburban shopping mall. It therefore seems obvious that extending retail trading hours for one group will, in net terms, benefit rather than harm the other group.

Geographic separation between large and small grocery stores does not confer significant market power on large grocery stores for a number of reasons. Most obviously in those cases where the large stores are co-located, or located with specialty stores, there are other geographically close competitors to the large grocery store. These include the speciality stores. However, even in the absence of these other competitors, a single large grocery store will be disciplined by its fringe of small grocery stores because (contrary to the simple geographic story in which consumers only shop at a single store), large and small grocery stores in reality share a large number of customers.

For example, customers who buy a large trolley of groceries from a large grocery store also frequent their local small grocery store for so-called “top up shops”. Holding inventories of groceries at home is expensive and infeasible for perishable or bulky items. When replacing a small number of such items, typically during the working week, convenience and time cost are more significant than the small total saving that might be made at a large grocery store. This can and does cause customers to shop at their local small grocery store despite the higher prices.⁸

These top-up shops mean that for large grocery stores their customers are *already* visiting their smaller competitors. If the large grocery stores were to undertake a significant and non-transitory increase in prices above the competitive level, a potentially high proportion of their customers would have the opportunity to observe the prices at both the large and small store and would naturally substitute some of their purchases to the now relatively cheaper small stores as part of their existing top-up shops. Furthermore, bulk grocery shopping with inventory holding becomes less attractive as the prices at the large grocery stores rise, leading to increased attractiveness of the top-up shop. Consumers would take time to learn these differences, but many of them can do so without having to incur travel costs because they *already* visit the appropriate locations.

In other words, even going by the conventional thinking in which independents serve top-up sales, while the larger supermarkets serve for the weekly shop, there will be considerable ease of substitution, at the margin, between these differing types of outlets:

- First, because customers shop at both, so observe prices at both, and can readily change the proportion of shopping they undertake at each; and
- Second, because customers are in any event located close to the independent stores, and hence can substitute to them without incurring material transport costs.

The question of whether increased trading hours might reduce the number of small businesses was addressed statistically by Kiel and Haberken (1994). This study did not find a statistical relationship (either contemporaneous or delayed) between shop opening hours and the number of retail establishments.

Another way to look at this is to consider the overall health of the small business retail sector between regulated and less regulated and unregulated jurisdictions.

⁸ On average, in 2009, each large grocery store in Australia had 3.3 small competitors within 5 km.

In its Inquiry into the Economic Structure and Performance of the Australian Retail Industry, the Productivity Commission noted that the ratio of small retail businesses to total retail businesses is very similar across Australian jurisdictions, regardless of whether they are ‘partially deregulated’ (Victoria and Tasmania), ‘lightly regulated’ (NSW) or ‘regulated’ (QLD, WA and SA). The PC cited ABS data that showed the average proportion of small businesses as a share of all retail businesses was 90% in deregulated or lightly regulated jurisdictions, whereas the average in the regulated jurisdiction was 91% (see PC 2011, Box 10.10, reproduced below). The PC concludes that:

“Consistently high small business participation rates of around 90 per cent in both regulated and deregulated states and territories suggest that trading hours have little influence over the level of market participation by small retail businesses. In Australia, deregulation of trading hours does not appear to have had a deleterious effect on the viability of small retail businesses”. (PC 2011, p.309).

Box 10.10 Small retail businesses as a proportion of the retail industry

- Deregulated — ACT (87.6%) and Northern Territory (85.1%)
- Partially deregulated — Victoria (92.7%) and Tasmania (93.0%)
- Lightly regulated — New South Wales (93.4%)
- Regulated — Queensland (91.1%), Western Australia (89.6%) and South Australia (92.2%).

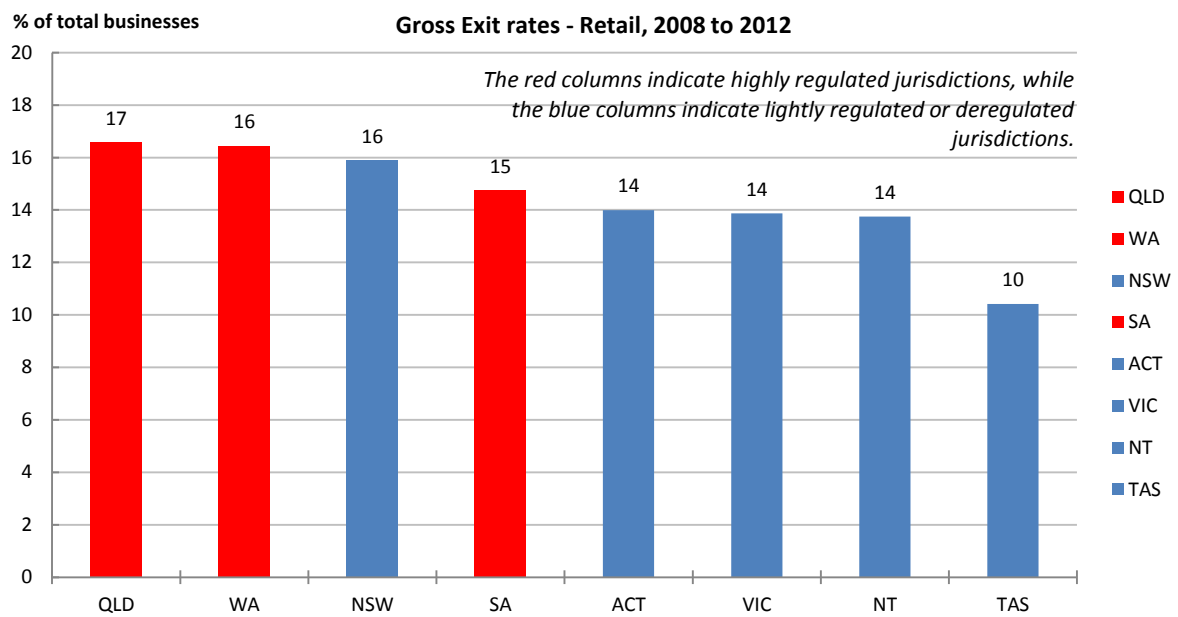
Small retail businesses are defined as those businesses that employ less than twenty people or are non-employing.

Source: ABS (Counts of Australian Businesses, year ending 2008-09, Cat. no. 8155.0).

As part of this study, GSC has examined more recent ABS data on retail businesses entry and exit rates between 2008 and 2012. We found that the proposition that small retail businesses are less protected in less regulated jurisdictions is not substantiated by the data.

Table 4.1 (below) illustrates the gross exit rates for retail businesses across Australian jurisdictions between 2008 and 2012. For example, in Queensland 17% of businesses that were in operation at the beginning of 2008 were no longer in operation at the end of 2012. The highly regulated jurisdictions of Queensland (17%), Western Australia (16%) and South Australia (15%) were all in the top four jurisdictions for gross exit rates, indicating that the regulatory environment did not protect small businesses from the natural market forces of creative destruction.

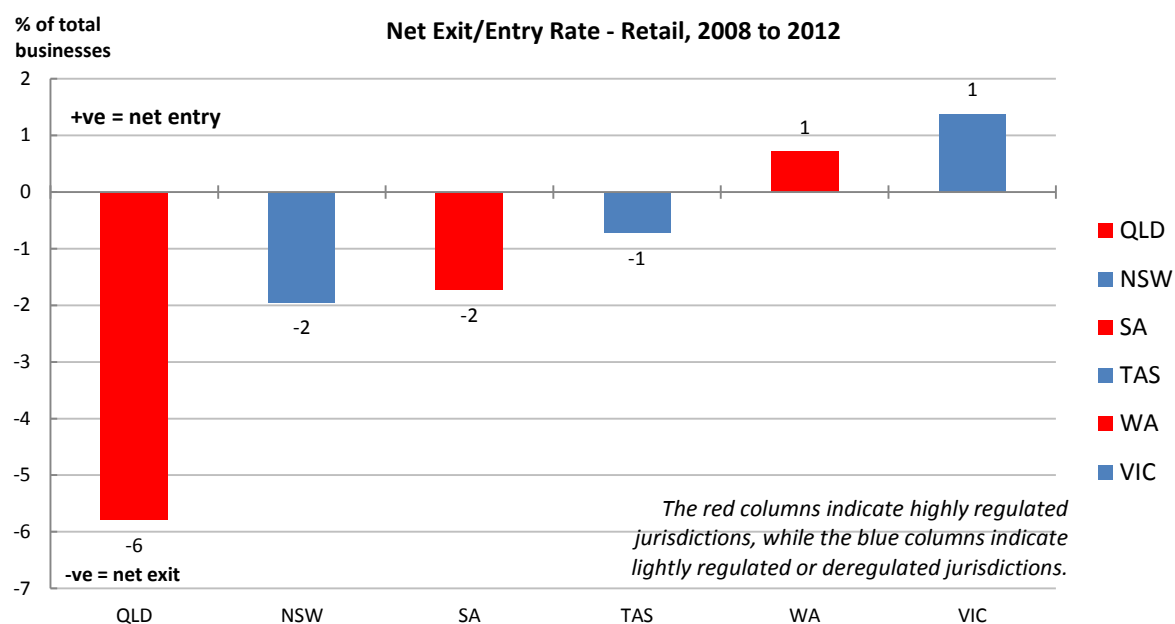
Table 5.1 Comparison of Gross Exit Rates, Retail (2008-2012)



Source: ABS 81650, *Counts of Australian Businesses, including Entries and Exits, Jun 2008 to Jun 2012*.

We also examined the net exit/entry rates to check whether the regulatory environment promoted higher levels of business entry. Table 4.2 shows that, again, Queensland has the 'worst performance' with a net exit rate of almost minus 6%. However, the data do not show a clear correlation between the extent of retail trading hours regulation and net exit/entry rates.

Table 5.2 Comparison of Net Exit/Entry Rates, Retail (2008-2012)



Source: ABS 81650, *Counts of Australian Businesses, including Entries and Exits, Jun 2008 to Jun 2012*. **Note:** Data for NT (+34%) and ACT (-18%) have been excluded because of volatility, caused by a smaller stock of retail businesses.

5.3 Impacts on convenience stores

5.3.1 The economics of the convenience store

First, consider the convenience store in an unprotected market, that is, without retail trading hours' restrictions on the large supermarkets. The convenience store operates with lower fixed costs (for example, because they use less space and have lower wage overheads) but higher marginal costs (because they cannot fully claim the economies of scale of larger stores) than the large supermarket. This type of format, which can only provide a smaller variety than would a larger outlet, requires higher prices to be profitable on smaller turnover than would be experienced at a large grocery store. Were it the case that price and variety were the only in-store differences between small and large grocery stores, such a smaller store would be uncompetitive when located next to a large supermarket. Thus, a smaller store will choose to locate away from the co-located large supermarkets, towards the fringe of the geographic market in order to offer lower transport costs to a local subset of customers who will hence be willing to pay its higher prices.

Next, consider the convenience store as above but now enjoying the legislated monopoly rights of 'after-hours' trade. In this scenario, the convenience store is able to capture monopoly rents (that is, excess profits) because of the lack of competition at the restricted times. Further, the convenience store is able to locate near to the large supermarket without the threat of competition in the 'after-hours' market.

While the locational advantage is economically beneficial (see discussion at Box 2), the opening hours advantage is not because it lowers real incomes by raising prices unnecessarily. These higher prices provide convenience stores with super profits (or 'rents' in economic language). These rents are protected to the extent that local government planning laws prevent the establishment of rival convenience stores within the same location. It is worth noting that because wages are set by

Award, the benefits of these excess rents largely accrues to the owners of the stores rather than the workers, who would earn no more or less than their counterparts at the large grocery retailers.

Although, clearly, the potential 'losers' from removing the restriction on retail trading hours are the convenience stores that rely on and are protected by those restrictions, one should have little sympathy for industries or businesses that are unfairly protected by government legislation.

Further relaxing of the trading hours' restrictions in Queensland will inevitably cause some adjustments to the structure of ownership and the workforce in the retail industry. In terms of the workforce, our modelling (see chapter 6) shows that further deregulation will increase the total number of employed workers in the retail industry. And given the strict award structure of wages, we conclude that workers will be no worse off from the change, other than the transitional costs of finding new employment in retail if their convenience store shuts down or reduces staff hours. In terms of the owners of convenience stores, there can be little sympathy for businesses that have enjoyed super-profits for many decades as a result of these regulations. Owners that have been around a long time will be way ahead of any adjustment costs they might incur as a result of deregulation.

One important point here is that, in terms of the path to full deregulation, Queensland has already come most of the way with, firstly, Thursday night and Saturday morning shopping and then weeknight (till 9pm) and weekend shopping (till 5/6pm) as well as the many exemptions for tourist and high-density areas. In other words, most of any structural adjustment to the convenience store market that was going to occur has already occurred. This is by no means a 'big bang' microeconomic reform, rather it is the finalisation of a series of positive incremental steps.

6 Methodology

Conceptually, we have attempted to capture three of the main impacts of restricted retail trading hours on Queensland retail consumers and on the broader Queensland economy. While the three impacts that we focus on are certainly not exhaustive in terms of measuring the total cost to the community from restricting shopping hours for certain retailers, in our view they cover the main welfare and broader economic impacts of this particular regulatory burden⁹.

6.1 First impact – less choice and convenience reduces wellbeing

The first impact relates to the reduction in choice and convenience from the regulatory restriction on retail trading hours.

Clearly, reducing a consumer's choice and convenience reduces consumer welfare. By 'welfare', economists mean any impact to an individual's wellbeing (or happiness), whether that impact is directly measurable in monetary terms or not¹⁰. This approach could be thought of as a 'bottom-up' estimate of the costs to consumers of reduced shopping choice and convenience. This impact includes not only restricted grocery shopping but all restricted retail shopping – such as clothes stores, white goods and electronic goods shopping. This approach simply focusses on inconvenience and, therefore, does not measure the monetary cost of higher prices paid for groceries at convenience stores, which is separately measured in the second approach.

The essence of the first approach comes from the observation that consumers care not only about the prices of retail goods but also the quality of retail service provision. In other words, consumers value how convenient it is to purchase goods and services and the range offered to them. If the shops are shut and the consumer wants or needs something immediately, it is not very convenient.

Opening a store for longer hours is a form of increased service quality or increased convenience (see for example, Hirshleifer et al (2005); Tanguay et al (1995); Morrison and Newman (1983); Bennett (1983)). The strong growth in internet shopping in recent years is a notable example of the demonstrated welfare benefits of more convenient shopping. For despite not being able to access goods immediately, the internet shopper nonetheless will purchase goods online because they believe that the goods are easier to search for and find online than by traditional shopping methods. And home delivery is a quite straightforward matter to organise and can be rapid.

In this framework, the full 'consumer welfare price' of a retail good to the consumer is the money price paid to the retailer, plus the inconvenience cost that is incurred by the consumer when they shop. Consumers naturally value longer trading hours because of convenience – stores that are open for longer hours allow consumers to better arrange their day and shop when the opportunity cost or value of their time is lower. Consider a shift worker for example, whose value of time does not match someone who works 9-5.

Longer trading hours reduce the cost of unexpected events arising during the course of a day that might delay a planned shopping time. For example, if a Brisbane consumer has planned a full

⁹ See discussion in chapter 2 and Table 2.1 for a more complete discussion of the effects of restricted retail trading hours.

¹⁰ Economists will try to 'monetise' all costs and benefits of particular regulations or policy changes in order to arrive at a net impact described in monetary terms. Often, this is easier said than done.

Saturday that included grocery shopping towards the end of the day, say from 4pm to 5pm, but 'something came up' during the day that set back our consumer for one hour, then grocery shopping would miss out (at least at the cheapest grocery-shopping option). This would obviously represent a real cost to the consumer, even if the consumer chose to pick up the essentials at a higher cost 'convenience store'. However, if retail trading hours on Saturday extended into the evening, then the 'inconvenience cost' to the consumer (from the shops being closed) would be significantly lower (see Box 2 below).

Thus, even if the pattern of shopping as a result of deregulation remains largely unchanged, the consumer will value the option of better being able to shuffle around their day with longer trading hours.

From the retailer's point of view, restricted shopping hours prevent the offering of a higher quality service i.e. greater convenience in the form of longer opening hours. Thus, with trading restrictions, the full price paid by consumers is higher, and the quantity of retail goods demanded by consumers is lower than it otherwise would be.

Box 2: Shopping – pleasure or pain?

Conceptually, shopping is an activity which is both an input into household production and has some consumption value in its own right. Consumers have preferences over shopping times, and incur schedule costs in rearranging the sequencing of activities - for example, they can control some schedule elements less than others (e.g. school pickup times, office hours).

Restrictions on trading hours increase the costs of undertaking other household activities. Constraints on shopping hours increase shopping costs, with some of those costs being incurred in the form of potentially inefficient schedule rearrangement costs (for example, it would make more sense to go from activity A to activity B and then shopping, but instead a consumer undertakes A, then shopping, then activity B). The quantum of utility loss is the loss relative to the unconstrained or less-constrained case.

Another important component of convenience is that a store is actually open when consumers want to go shopping. But ex ante, consumers may not know exactly when they will need to go shopping. Hence, consumers will also place an option value on additional flexibility and retail establishments being open for longer hours. This option value is explored in Appendix B.

6.2 Second impact – convenience store shopping lowers real incomes

The second impact estimates the costs to consumers in terms of reduced household income from the higher prices paid for basic grocery items at convenience stores, which enjoy a competitive advantage being allowed to open longer hours.

It is well known that convenience stores, which enjoy more liberal opening hours (see discussion at Chapter 2), generally charge a significant premium on stocked grocery items such as bread, milk and toiletries compared to the large retail chains. The main reason is that these convenience stores have a degree of market power when the large grocery chains are enforced to close such as on Saturday and Sunday evenings and early mornings. This market power allows convenience stores to charge a higher margin on basic grocery items. A second reason is that in some areas the local convenience store is closer to the consumer than the local shopping centre and, for some people, the value of the

time saved by shopping at the convenience store is worth more than the price premium paid. Because of these advantages, the lower capital productivity of convenience stores (caused by lower turnover and higher fixed costs per unit of goods sold) causes higher costs overall and, hence, higher prices.

GSC modelled the impact of these higher prices in terms of a reduction in real incomes (since the higher prices effectively mean a smaller household budget). Based on a survey conducted by GSC (discussed further below), we have estimated an average premium paid by consumers on a basket of 'essentials' that would be purchased in a convenience store. The results of this modelling were then passed onto Deloitte, which calculated an economy-wide impact on GSP and employment from these higher prices.

6.3 Third impact – lower capital productivity raises retail prices

The third impact relates to the difference in capital productivity between restricted and unrestricted retail stores. There is a potential improvement in capital productivity via lower prices from deregulating retail trading hours because retailers, particularly the major grocery retailers, are limited in their ability to keep unit costs as low as possible because of the trading hours restrictions. The main reason why capital productivity is likely to improve with the removal of trading restrictions is because lowering and spreading customer congestion peaks that occur just before enforced closing times will reduce average costs and, hence, increase profits and, in a competitive market, lead to lower prices.

There are other reasons why capital productivity might improve. Complying with restricted retail trading hours regulations is costly for affected firms, particularly if restrictions vary arbitrarily during different times of the year and across store locations within the same state as they do in Queensland.

In summary, currently constricted retailers will be most likely able to lower unit costs by:

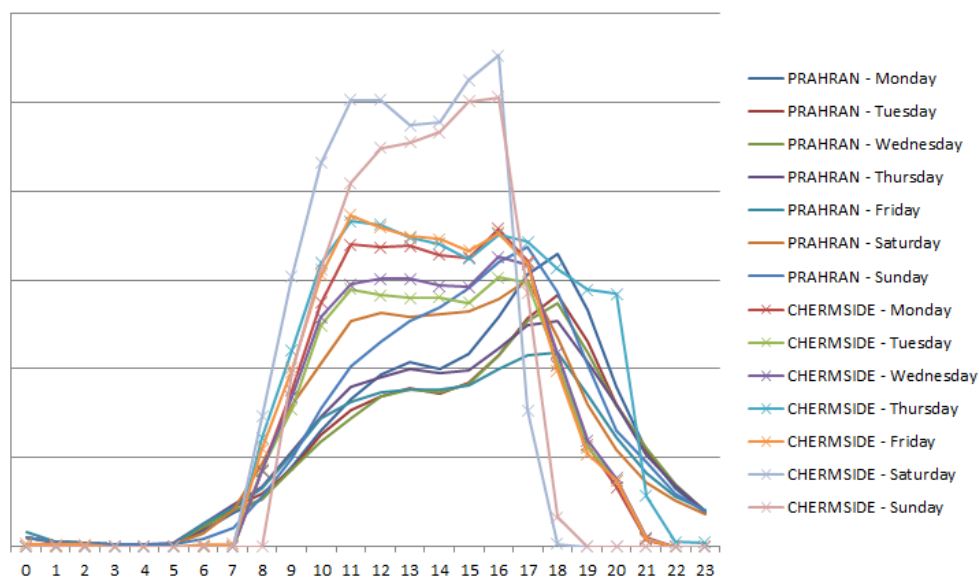
- (i) spreading fixed capital costs such as rent, refrigeration, lighting and car park facilities over longer trading hours;
- (ii) gaining more flexibility over staff rostering;
- (iii) implementing more efficient logistical arrangements; and
- (iv) reducing queuing at peak times (generally occurring just before enforced closing times). As a result, customer volumes are likely to increase with longer opening times, further lowering unit costs.

In this third approach, we focus on potential changes to capital productivity for the large grocery retailers most impacted by restricted trading hours (items (i), (iii) and (iv) from the above list). There is a strong *ex ante* argument that capital productivity would improve as a result of deregulation (points made above and discussed in chapter 3). And there is strong evidence in relation to congestion/queuing problems faced by the major retailers within 1 hour of closing time, and particularly in the minutes leading up to closing time on weekends.

The charts below illustrate hourly grocery sales data that have been supplied by Coles from a selection of its national chain of stores. To illustrate the congestion point, we have chosen two stores of similar size from Queensland and Victoria (that is, from different states of regulation).

The chart shows hourly sales data at Coles Chermside, a large suburban store in Brisbane that is impacted by trading hour constraints and at Coles Prahran, a large suburban store in Melbourne not impacted by trading hour restrictions (other than on significant public holidays such as ANZAC Day and Christmas Day). The difference in the pattern of shopping between the two stores is immediately obvious. Overall, the hourly sales peak at Prahran is lower and flatter than Chermside – reflecting the longer availability of shopping hours at the Victorian store. The only exception to this pattern is Thursday evening shopping at Coles Chermside, reflecting a strong customer preference for after-standard-work-hours shopping. The pattern is indicative of other Coles stores in restricted and unrestricted jurisdictions and implies better use of fixed capital in stores with deregulated trading hours as fixed costs are spread more evenly and costly peaks are eliminated.

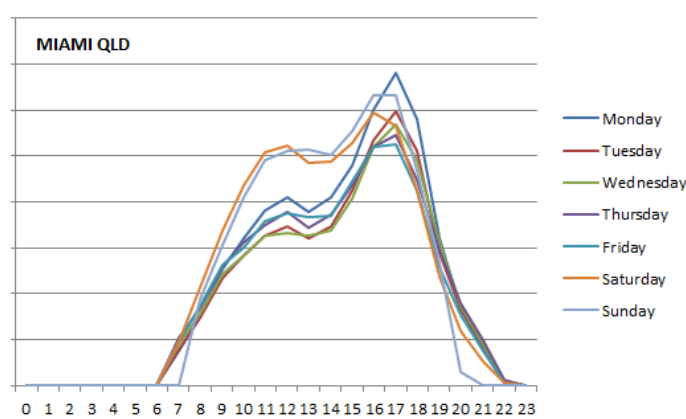
Chart 6.1 Coles hourly sales data, Prahran Victoria



Source: Coles.

Even when comparing Queensland stores that have more liberal trading hours because they are in tourist areas, there is a stark difference in the daily peaks. For example, comparing the Miami store on the Gold Coast to the Chermside store in Brisbane, you can see that Miami doesn't suffer from the sudden cessation of sales on Saturday and Sunday trading when the doors are forced to shut, which congests shoppers into a narrower trading band, which means longer queues at Coles, Woolworths and the other retailers forced to close at the same time (see chart below).

Chart 6.2 Coles hourly sales data, Miami Queensland



Source: Coles.

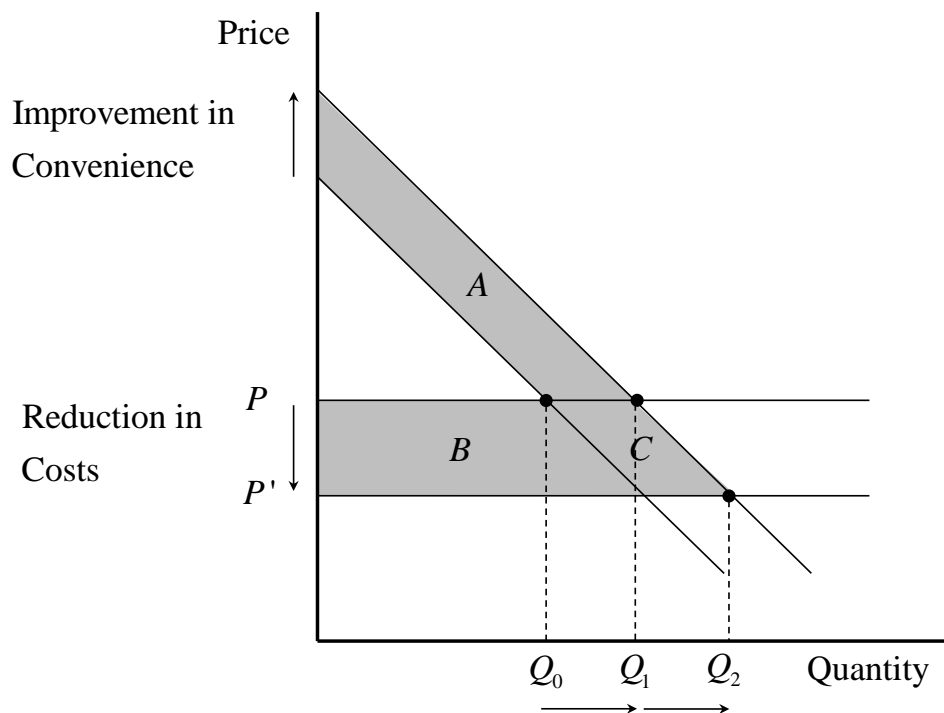
Based on the above sales patterns and on (confidentially supplied) Coles sales data per square metre of floor space across regulated and unregulated jurisdictions, GSC determined that a reasonable (but conservative) assumption for an improvement in capital productivity would be 5%. This translates into a 3% reduction in prices compared with the current base case based on industry capital-labour shares. This 3% was added to the 37% price premium to create a 40% 'tax wedge' that was used by Deloitte to model the second and third impacts.

6.4 Overall Welfare Effect

Conceptually, then, both convenience costs and money prices are likely to fall if trading hour's restrictions are removed.

The overall welfare effect of deregulation is the sum of the three effects described above and is illustrated in the figure below. In the figure, the consumer price is initially P and the consumer consumes Q_0 . Following deregulation convenience increases, and there is an upward shift in the demand curve as consumers gain from this greater convenience. There is a welfare gain of A . Deregulation may also reduce unit costs – which is the sum of the second and third impacts, leading to a reduction in prices from P to P' . This results in a further welfare gain of $B+C$. The overall welfare effect is $A+B+C$, the sum of the two effects.

Figure 1 Welfare impacts of deregulating retail trading hours



Source: Green Square Associates.

6.5 Modelling approach

In terms of quantifying the identified theoretical impacts using economic modelling, the three approaches discussed are, at least conceptually, additive, since they do not overlap (see figure above).

6.5.1 First impact

Green Square Consulting (GSC) undertook economic modelling to measure the potential magnitude of the first impact. Based on existing surveys of the number of times households shop per week, GSC made a number of conservative assumptions about how many times a household might be inconvenienced (or 'caught short') by having to rearrange their plans because the shops they wanted to go to had already shut.

Our core assumptions were as follows:

- Each Queensland household is 'caught short' once per month or twelve times per year.
 - This includes when households choose to shop at convenience stores because they are aware that the major retailers, their true preference, are already closed for the day.
- The inconvenience cost, measured in time, is 30 minutes per event.
- The monetary cost of this inconvenience is valued at one-half of the median household income converted into an hourly rate. This is a standard approach in the literature and based on willingness-to-pay surveys.
 - To clarify, if the median household income converted into an hourly rate was \$20 per hour, and the time inconvenienced was 30 minutes, then the monetary cost of the inconvenience would be $0.5 * \$20 * 30 \text{ minutes (i.e. 0.5 of one hour)} = \5 .

- Data has been sourced from the 2011 Census and inflated to \$2014.

6.5.2 Second and third impacts

The second (reduction in real income) and third (reduction in capital productivity) impacts are measured in terms of a potential increase in Gross State Product (GSP).

To estimate the reduction in the real household budget, GSC used the Australian Bureau of Statistics 2009-10 Household Expenditure Survey to estimate the average value of household expenditure on the impacted 'essentials' goods and services such as bread and milk and toiletries. We then engaged the services of Deloitte Access Economics to undertake the modelling to measure the impacts on GSP and employment of removing the restrictions in terms of the second and third impacts.

The Deloitte Access Economics Regional General Equilibrium Model (DAE-RGEM) is a large scale, dynamic, multi-region, multi-commodity computable general equilibrium model of the individual states, Australian and world economy. The model allows project analysis in a single, robust, integrated economic framework, projecting changes in macroeconomic aggregates such as Gross State Product (GSP), employment and household consumption.

Specifically, GSC undertook a survey of grocery prices to measure the difference in the prices of a basket of 'essential' items that an inconvenienced shopper might buy from a 'convenience store' in the event that the major retailers were closed. The result, based on two small comparative surveys undertaken by GSC in August and November 2013 was a median premium of 37% for the same bundle of 'essentials'. The basket of essentials was derived from the Australian Bureau of Statistics 2009-10 Household Expenditure Survey (see Appendix C for list of 'essentials' and survey details).

Based on a review of confidential Coles data in relation to capital productivity (measured by sales per square metre of floor space), we then added a very conservative further 3 percentage points to this wedge to reflect the potential to lower prices further at the large retailers with deregulated trading hours.

As a result of these findings, GSC then specified the 'shock' to be modelled was to be a 40% price premium on essentials. We calculated the total annual value of this premium to be \$236 million. Deloitte used this figure in its modelling by specifying a 'tax wedge' in its base case and removing that tax wedge in its 'deregulation' case. The 'tax wedge' approach is a standard way to simulate the effects of an inefficient regulation and the effects of its removal.

6.5.3 Distribution of GSP gains by hour

GSC also modelled the distribution of the potential GSP gains based on the theoretical model set out in Appendix B and discussed above. The essence of this modelling was the observation that most of the gains from trading hours deregulation would likely occur in the hours immediately after currently-enforced closing times and immediately before currently enforced opening times. The benefits would then decline rapidly as trading hours were further extending into hours where most people would normally be sleeping.

6.5.4 Distribution of GSP gains by region

GSC used regional GSP and population data produced by Queensland Treasury's Office of Economic and Statistical Research and the ABS to provide an estimate of the geographic distribution of the GSP

gains from further deregulation. Our analysis has been also informed by the current regulations in SEQ (overall, slightly less regulated) than in regional Queensland (slightly more regulated).

Specifically, we have been asked to examine the distribution of the GSP gains between SEQ and the rest of Queensland. We have defined SEQ as per the SEQ Regional Planning Area, being the 11 local governments situated in the south-east, as follows:

- Brisbane City Council
- Gold Coast City Council
- Redland Shire Council
- Logan Shire Council
- Ipswich City Council
- Moreton Bay Regional Council
- Sunshine Coast Regional Council
- Somerset Regional Council
- Lockyer Valley Regional Council
- Scenic Rim Regional Council
- Toowoomba City Council

Based on ABS data¹¹, we have estimated the population of the SEQ region to be 3.2 million of 4.6 million or about 70% of Queensland's total population of 4.6 million.

Based on OESR estimates of Gross Regional Product, SEQ accounts for 71% of total Gross State Product.

However, this is not to conclude that 70% of the GSP gains would accrue to SEQ with the remainder accruing to the Rest of Queensland (RoQ). This is because SEQ has a slightly more liberal retail trading hours regime because of concessions granted over time by the QIRC. While we did not attempt to further refine the distribution by looking at store-by-store closing times across the state, the 70% benefit accruing to SEQ can be thought of as an upper-bound in terms of the split between SEQ and RoQ.

¹¹ ABS (3218.0) *Regional Population Growth, Australia*.

7 Results

We undertook two approaches to measuring the costs of restricted trading hours in Queensland. The first approach related to the impact of further deregulation on GSP. The second approach recognises the fact that GDP/GSP-type measures do not 'pick-up' all welfare effects of policy changes. One of those types of effects is related to convenience and time saved.

7.1 Convenience impacts

We estimate that the monetary value of the inconvenience cost to be \$187 million (2014) each year, increasing at the growth in earnings (which is about 4% per year). This is based on each of Queensland's 1.8 million households being inconvenienced once per month (or twelve times per year) in terms of having to shop at a higher-priced convenience store than at their preferred store.

7.2 Real income and capital productivity impacts

GSC engaged Deloitte Access Economics to simulate the potential impacts of changing retail trading hours in Queensland using its highly-regarded and widely-used computable general equilibrium model.

Green Square Consulting specified the parameters of the model (see discussion at chapter 5).

The results are presented in Table 1. The impact on GSP in 2014 is \$253 million, which is a considerable impact for a potential single regulatory change. Further, there is a potential increase in employment (across all sectors of the economy) of 3,109 jobs in 2014 as a result of the effective increase in real household income.

Table 7.1: Macroeconomic Impacts

Deviation from Base Scenario	2013	2014	2015	2016	2017	2018	2019	2020
Gross State Product (\$million)	246	253	257	259	260	258	256	253
Gross State Product (%)	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07
Employment (FTE)	3,173	3,109	3,054	3,001	2,948	2,896	2,844	2,791
Employment (%)	0.13	0.12	0.12	0.11	0.11	0.11	0.10	0.10
Real Household consumption (\$million)	313	308	304	300	296	292	288	283

7.3 Combined results

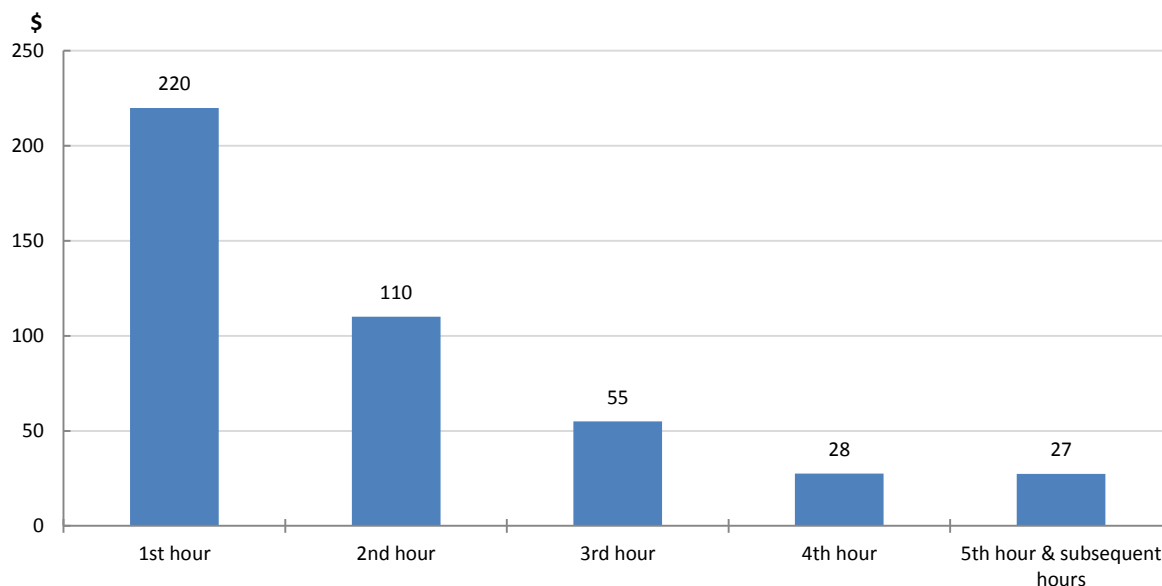
Conceptually, the results presented above are additive although when added the number does not reflect solely the potential increase in GSP. Rather, the two numbers combined represent the total welfare effect of deregulating retail trading hours in Queensland.

The total economic impact in 2014 is, therefore, \$440 million. Retail trading hours regulations represent a considerable regulatory burden and should therefore be a high priority for review by the Office of Best Practice Regulation.

7.4 Distribution of the gains by hour

Our theoretical model indicates that the distribution of the gains is concentrated in the first three additional opening hours – whether that is in the morning or evening¹².

Chart 7.1 Distribution of the annual gains from deregulated retail trading hours



7.5 Distribution of the gains by region

GSC used regional GSP and population data produced by Queensland Treasury's Office of Economic and Statistical Research and the ABS to provide an estimate of the geographic distribution of the GSP gains from further deregulation. Our analysis has been also informed by the current regulations in SEQ (overall, slightly less regulated) than in regional Queensland (slightly more regulated).

Specifically, we have been asked to examine the distribution of the GSP gains between SEQ and the rest of Queensland. We have defined SEQ as per the SEQ Regional Planning Area, being the 11 local governments situated in the south-east.

We estimated that SEQ comprises roughly 70% of the State's population and Gross State Product.

Based on this estimate, Table 7.2 provides the following geographic breakdown of the distribution of the benefits from further deregulating retail trading hours in Queensland.

Table 7.2 Distribution of the benefits of extending retail trading hours, SEQ v RoQ

Benefits from further deregulation (Annual)	South-East Queensland \$m	Rest of Queensland \$m	Total Queensland \$m
Net Benefit to Gross State Product	177	76	253
Welfare Benefit from increased convenience	131	56	187
Total Benefit	308	132	440

Source: Green Square Associates estimates.

¹² We did not separately model the effects of opening an extra hour in the morning versus the evening.

References

Bennett, R. (1983) "Regulation of Services: Retail Trading Hours," Working Paper, Bureau of Industry Economics, Canberra.

Hirshleifer, J., Glazer, A. and Hirshleifer, D. (2005) *Price Theory and Applications*, 7th edition, New York: Cambridge University Press.

Kiel, G. and Haberkern, G. (1994), *The Impact of the Deregulation of Retail Trading Hours in Australia*, Marketshare Pty Ltd, Review commissioned by Coles Myer Ltd.

Kiel, G. and Haberkern, G. (1997), *Sunday Trading for South-East Queensland*, A Review of the Economic Issues, submission to the Queensland Industrial Relations Commission.

Morrison, S. and Newman, R. (1983) "Hours of Operation Restrictions and Competition Among Retail Firms," *Economic Inquiry*, 21: 107-114.

Productivity Commission (2011), *Economic Structure and Performance of the Australian Retail Industry*, Report no. 56, Canberra.

Tanguay, G. et al (1995) "Shopping Hours and Price Levels in the Retailing Industry: A Theoretical and Empirical Analysis," *Economic Inquiry*, 33: 516-524.

Appendix A Consumer Surveys – a summary

This appendix sets out the main findings of recent consumer surveys undertaken in New Farm and Gympie regarding modest proposals to regulate retail trading regulation in these areas.

New Farm consumer survey

The survey was prepared by QUT Business School for the National Retail Association and presents findings on consumer attitudes towards their proposal for extended trading hours at Coles New Farm. The survey was conducted over the two weekends between 3 September and 11 September 2011 at the New Farm Shopping Precinct. In total, 304 respondents participated in the survey.

Key survey findings:

Chart A1: Overall attitude towards extended trading hours at Coles New Farm

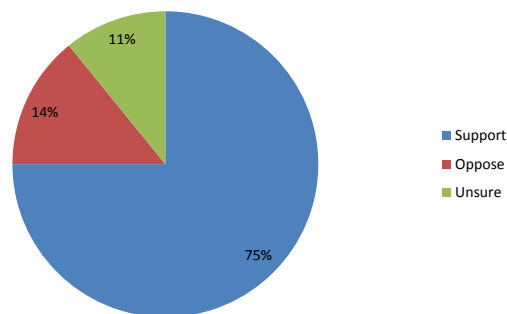


Chart A2: Attitude towards proposal by gender

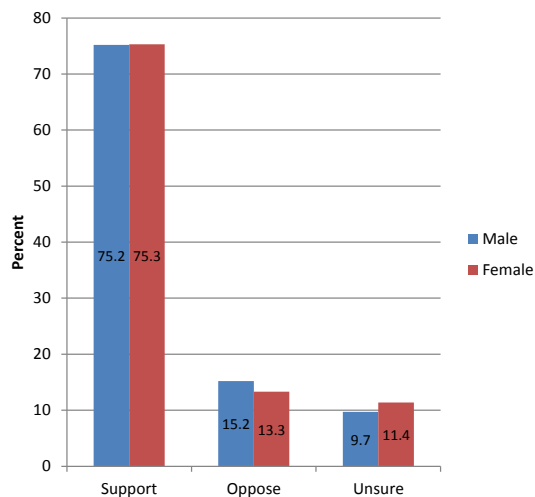


Chart A3: Attitude by work schedule

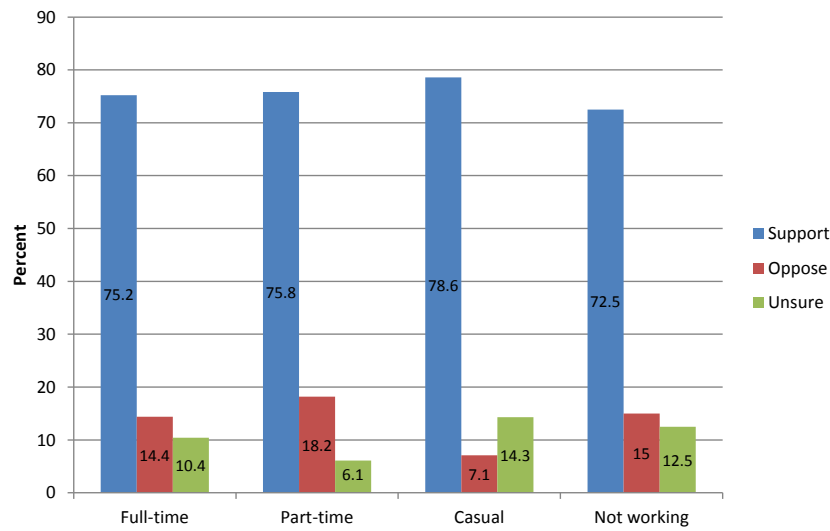


Chart A4: Attitude by type of household

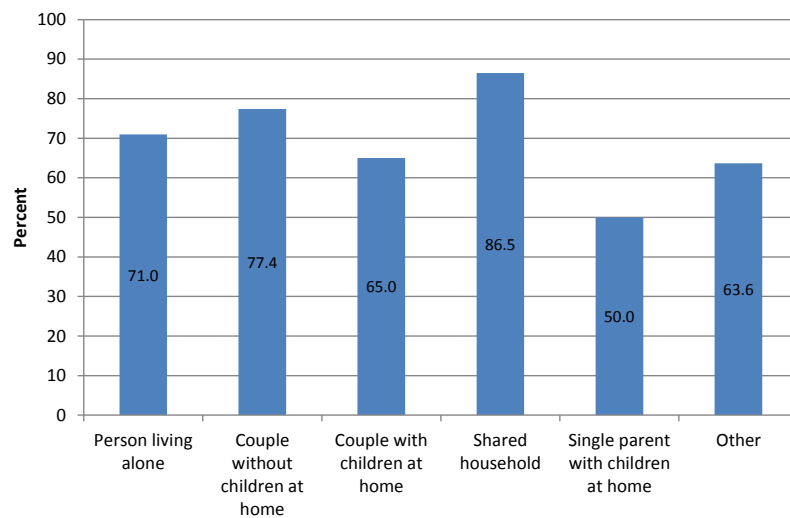


Chart A5: Reasons for supporting proposal

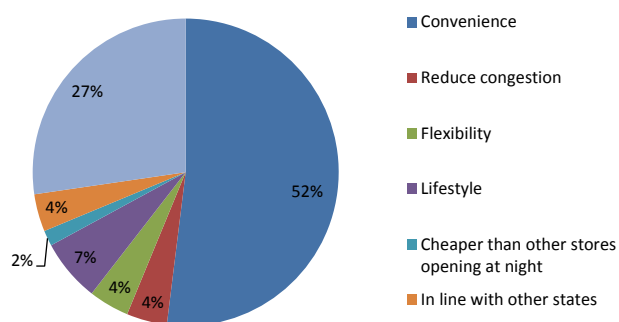
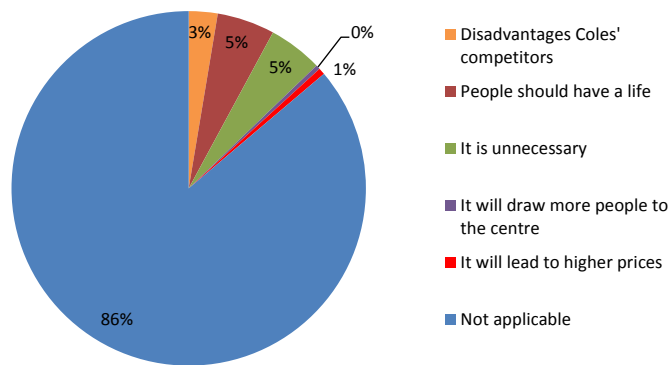


Chart A6: Reasons for opposing proposal



Gympie consumer survey

The survey was prepared by QUT Business School for the National Retail Association and presents findings on consumer attitudes towards their proposal for Sunday and limited holiday trading at shopping centres in Gympie. The survey was conducted over the weekend of 17-18 December 2011 and the Saturdays on 14 January 2011 and 21 January 2011 at Goldfield Shopping Centre and Centro Shopping Centre in Gympie. In total, 314 respondents participated in the survey.

Key survey findings:

Chart A7: Attitude towards Sunday and limited holiday trading at shopping centres in Gympie

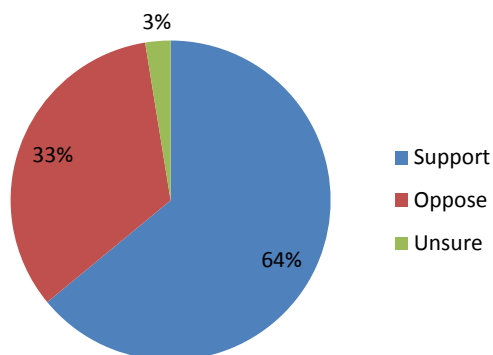


Chart A8: Attitude towards proposal by gender

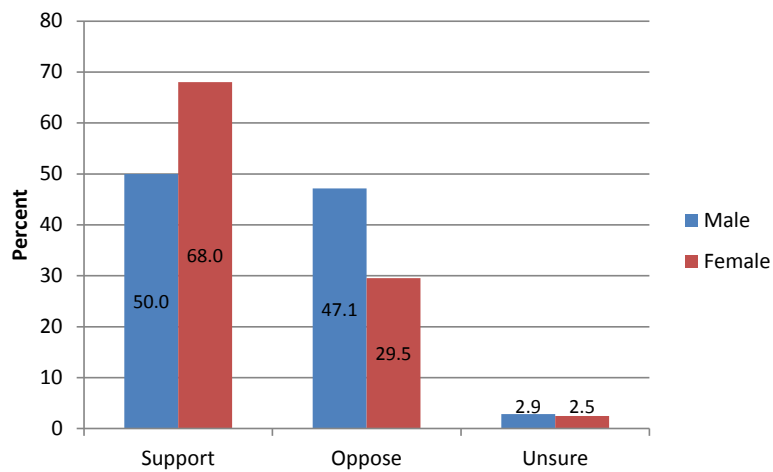


Chart A9: Attitude by work schedule

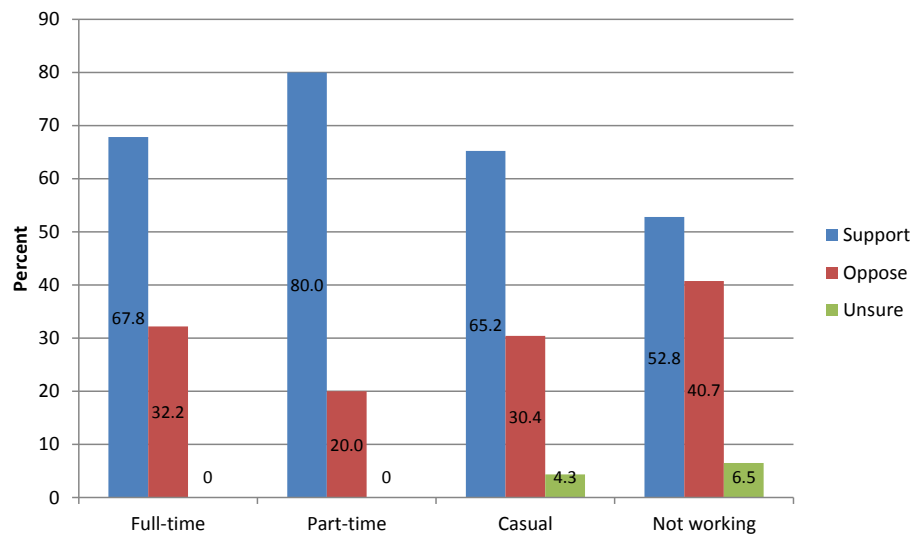


Chart A10: Attitude by age group

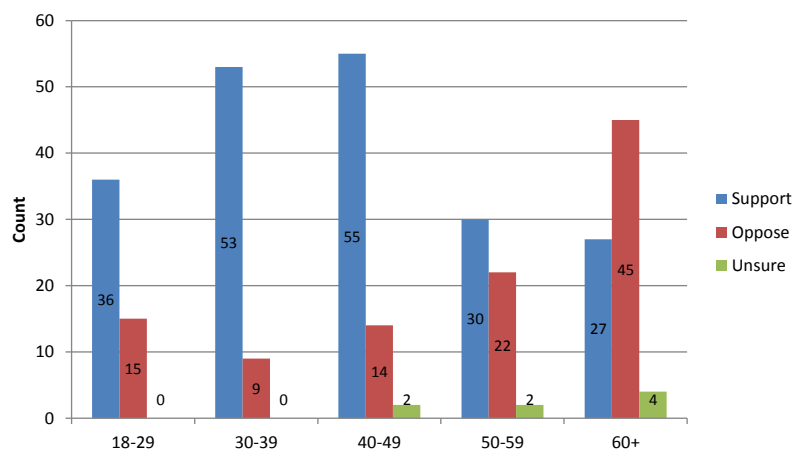


Chart A11: Attitude by type of household

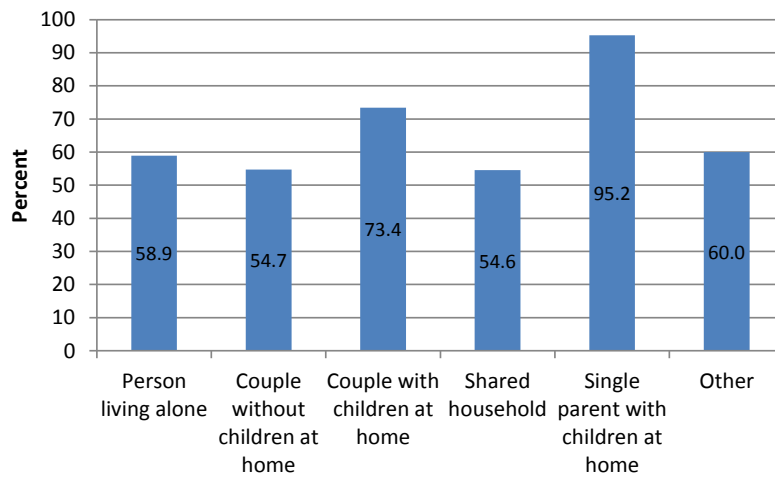


Chart A12: Reasons for supporting proposal

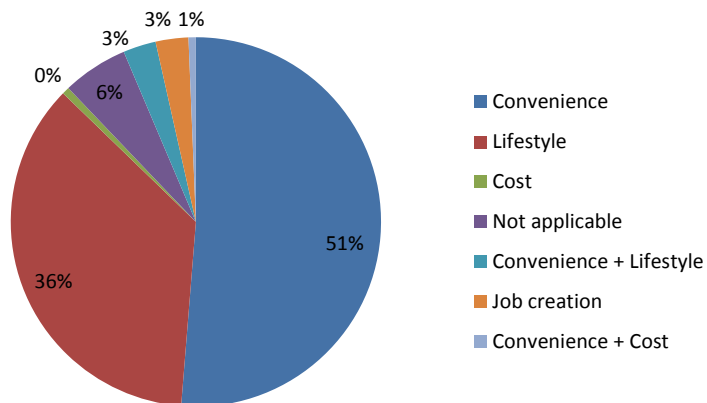
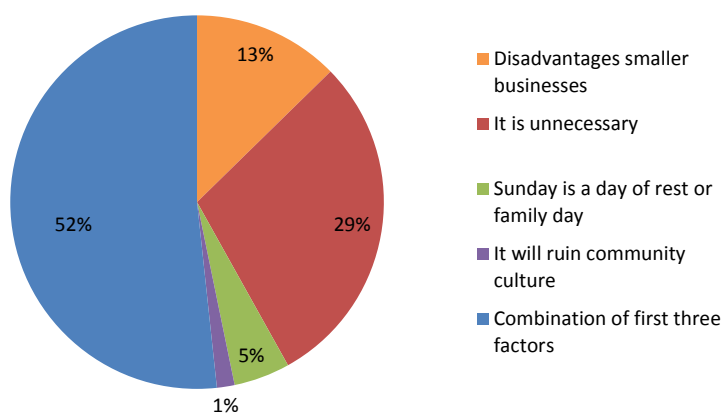


Chart A13: Reasons for opposing proposal



Appendix B – Model of the Convenience Value of Extended Shopping Hours, the distribution of the gains

This appendix outlines a model of the convenience value of extended shopping hours.

Basic Approach

Consumers of retail services value convenience. One important component of convenience is that a store is actually open when consumers want to go shopping. But ex ante, consumers may not know exactly when they will need to go shopping. Hence consumers place an option value on a store being open for extended hours.

The analysis below develops a simple model which can be used to quantify this value. In the model, there is a representative consumer who experiences random, uninsurable preference shocks throughout the day. For convenience, we assume that shocks arrive at evenly spaced periods (this could be modified without affecting the main qualitative features of the results). The consumer can shop at most once during the day. There is an option value that is attached to being shop later in the day, when a larger preference shock may arrive. The uninsurable nature of the shocks means that consumers place a positive value on a store being open for longer hours. Extending trading hours increases the value of this option.

Formal Model

Assume that there are T possible shopping periods (eg hours in a day that a store is open). Assume that the consumer shops at most once a day in any one of these periods. In each period t of the day, the consumer draws S_t from some underlying distribution. The distribution may change over time. The realised value of S_t in period t is the value to the consumer of going shopping in that particular period. We assume that there is no discounting.

If the consumer goes shopping, he purchases one unit of a good at a known price of p .

Let V_t be the maximum expected utility that is achievable when the consumer has drawn a realised value of S_t and there are t periods remaining in a day. Then the consumer's Bellman equation is:

$$V_t(S_t) = \max \{S_t - p, \mathbf{E}[V_{t-1}(S_{t-1})]\}$$

This says that the value of receiving the shock S_t is either the value of going shopping in that period, or the expected value of waiting until the next period, when another preference shock is realised.

The optimal decision rule is to shop when the realisation of the shock is sufficiently large i.e. when $S_t > p + \mathbf{E}(V_{t-1}(S_{t-1}))$.

Since the consumer has a finite horizon, this model can be solved by backward induction in the following way. Consider the final period. By definition, in this period all stores have shut and the consumer is no longer able to go shopping. Let V_0 be the reservation utility of not being able to shop at all. In the second last period, we therefore have

$$V_1(S_1) = \max \{S_0 - p, V_0\}$$

Hence:

$$\begin{aligned} \mathbf{E}[V_1(S_1)] &= \mathbf{E}[\max \{S_0 - p, V_0\}] \\ &= \Pr(S_0 > V_0 + p) \times \mathbf{E}(S_0 - p \mid S_0 - p > V_0) + \Pr(S_0 - p < V_0) V_0 \\ &= \int_{V_0+p}^{\infty} (S_0 - p) dF(S_0) + V_0 \int_0^{V_0+p} dF(S_0) \\ &= V_0 + \int_{V_0+p}^{\infty} (S_0 - p - V_0) dF(S_0) \end{aligned}$$

Similarly, for any period t , we have:

$$\begin{aligned} \mathbf{E}[V_t(S_t)] &= \mathbf{E}[\max \{S_t - p, \mathbf{E}[V_{t-1}(S_{t-1})]\}] \\ &= \mathbf{E}[V_{t-1}(S_{t-1})] + \int_{\mathbf{E}[V_{t-1}(S_{t-1})]+p}^{\infty} (S_t - p - \mathbf{E}[V_{t-1}(S_{t-1})]) dF(S_{t-1}) \end{aligned}$$

Since $S_t - p - \mathbf{E}[V_{t-1}(S_{t-1})] > 0$ whenever $S_t > \mathbf{E}[V_{t-1}(S_{t-1})] + p$, we have that:

$$\mathbf{E}[V_t(S_t)] > \mathbf{E}[V_{t-1}(S_{t-1})]$$

This states that an increase in shopping hours increases the consumer's expected utility. The reason is that allowing a store to remain open for an additional hour gives the consumer the option of shopping in the event that they experience a particularly large preference shock later in the day.

If shopping hours are extended from (say) 12 to 15 hours, the increase in expected utility can be quantified in a straightforward way, as:

$$\mathbf{E}[V_{15}] - \mathbf{E}[V_{12}]$$

When shocks are independently and identically distributed, the expected value function is concave in the number of shopping hours – the incremental value of opening additional hours declines as hours are extended.

Hence, the value of deregulated shopping hours for consumers who can only shop after work will be relatively high compared to the additional value to those who are already shop who at any time of the day.

Simulations of the Model

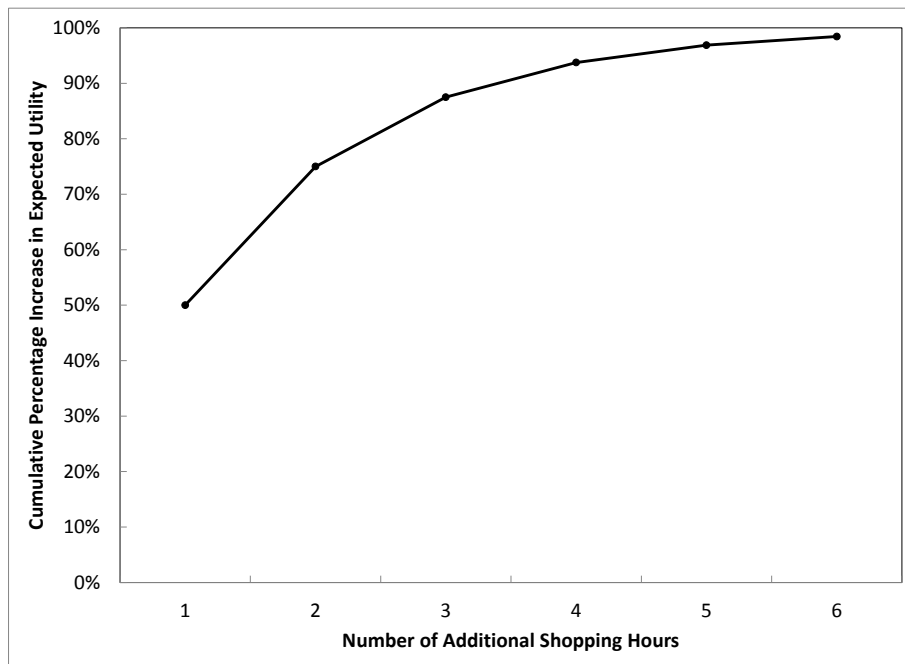
Uniform Distribution

Suppose that preference shocks are distributed according to the uniform distribution between zero and 1, and that the consumer's reservation utility is normalised to zero. We consider the value of extended shopping hours to a full time worker, who would otherwise have only 1 hour in which to shop (from 5pm to 6pm). Under these assumptions it is straightforward to calculate the increase in the consumer's expected utility. The welfare gains are shown in Figure xx below. Under these

assumptions, extending retail shopping hours from 6pm to midnight brings about substantial cumulative welfare gains of nearly 100 per cent for a full time worker. Due to the concavity of the expected value function, most of the welfare gains (88 per cent) - come from extending shopping hours from 6pm to 9pm.

The results for part time workers and non-workers are positive, but much smaller than this, reflecting the fact that convenience and extended hours are likely to be valued more highly by those who face severe time constraints due to work or other commitments.

Figure B1: Increase in Expected Utility from an Extension of Shopping Hours - Full Time Worker.



Appendix C Price survey of essential items

GSA undertook a survey of grocery prices to measure the difference in the prices of a basket of 'essential' items that an inconvenienced shopper might buy from a 'convenience store' in the event that the major retailers were closed. The result, based on two small comparative surveys undertaken by GSA in August and November 2013 in Brisbane was a median premium of 37% for the same bundle of 'essentials'. The basket of essentials was derived from the Australian Bureau of Statistics 2009-10 Household Expenditure Survey (see Table C1 below).

Table C1 Convenience Store Price Survey

Brisbane:	HES spend (supermarket prices by assumption)	Per shopping trip spend (@ 3 shops per week by assumption)	Convenience Store premium (37% by survey result)
Bread	\$ 6.79	\$ 2.26	\$ 3.17
Cereal	\$ 2.60	\$ 0.87	\$ 1.21
Eggs	\$ 1.57	\$ 0.52	\$ 0.73
Milk	\$ 7.19	\$ 2.40	\$ 3.36
Margarine	\$ 0.52	\$ 0.17	\$ 0.24
Bananas	\$ 1.70	\$ 0.57	\$ 0.79
Sugar	\$ 0.31	\$ 0.10	\$ 0.14
Chocolate	\$ 3.60	\$ 1.20	\$ 1.68
Soft drink	\$ 7.18	\$ 2.39	\$ 3.35
Non-prescribed pain medicine	\$ 0.87	\$ 0.29	\$ 0.41
Toilet Paper	\$ 5.00	\$ 1.67	\$ 2.33
Total 'Essentials'	\$ 37.33	\$ 12.44	\$ 17.42

Source: Household Expenditure Survey and GSA Shopping Survey.

Appendix D Authors CVs

Professor Henry Ergas

Professor Henry Ergas is widely recognised as one of Australia's leading public policy economists and his views are sought by Australia's largest companies and institutions as well as by governments. Professor Ergas is currently advising the Federal Government across a number of policy issues, most notably the Strategic Review of the NBN.

He is the inaugural Professor of Infrastructure Economics at the SMART Infrastructure Facility at the University of Wollongong where he leads the economic, regulatory and public policy research program. He takes a special interest in the development and application of cost-benefit analysis and in the analysis of pricing and investment decisions in regulated infrastructure industries. He has published extensively on infrastructure regulation and cost-benefit analysis.

Henry held a range of leading positions at the OECD before returning to Australia in the mid-1990s. He chaired the Australian Intellectual Property and Competition Review Committee for the Australian Government in 1999-2000 and was a member of the Prime Minister's Export Infrastructure Task Force in 2005 and the Defence Industry Policy Review in 2006.

As well as his work at the OECD, Henry's career includes appointments with the National University of Singapore, the Kennedy School of Government at Harvard University, the Centre for Research in Network Economics and Communications at the University of Auckland, Monash University and at the Ecole Nationale de la Statistique et de l'Administration Economique in Paris. Henry is a Lay Member of the New Zealand High Court, a member of the Deakin Policy Forum and a member of the Australian Urban Research Infrastructure Network (AURIN) Expert Lens Group 6 (Energy and water supply and consumption).

Joe Branigan

Joe Branigan is a Senior Research Fellow at the SMART Infrastructure Facility at the University of Wollongong.

Joe has 15 years' experience as an economist, working in government (at the Productivity Commission and the Federal Treasury) and as a consultant. He is a former regulator at the Queensland Competition Authority and former economic advisor to the American Ambassador to Australia. Joe's specialisation is in regulatory and infrastructure economics. He has researched and written extensively on 'red and green tape' in the resources industry and in relation to monopoly public infrastructure such as roads, electricity, water and rail assets. Joe recently wrote a monograph (with Professor Henry Ergas) on the regulatory challenges facing the resources industry – *Rebooting the Boom: Unfinished Business on the Supply Side*.

Joe has an honours degree in economics from the University of Queensland and has completed postgraduate short-courses in macroeconomics and law at the ANU. He has also successfully completed an Executive Management and Leadership course at the Melbourne Business School. He is currently enrolled in the Master of Public Policy postgraduate degree at the Crawford School (ANU).

Dr Alex Robson

Educational Qualifications

PhD (Economics) University of California, Irvine USA, 2001

MA (Economics) University of California, Irvine USA, 2000

BA (Economics, First Class Honours), James Cook University, Queensland 1994

Overview of professional experience

Alex has 15 years' experience as an academic economist, consultant and senior ministerial advisor. He is widely published and his work is widely cited across the fields of public finance, taxation, energy, health, law and economics (regulation), infrastructure and climate change policy.

After being awarded his PhD in Economics from the University of California, Alex was a lecturer at the School of Economics at the ANU for 7 years. He then took a position as senior economic advisor to the Federal Leader of the Opposition (Turnbull) before moving into full-time consulting. Alex is currently a senior lecturer at Griffith University in Brisbane, a Director at Deloitte Access Economics and an independent consultant with Green Square Consulting.

Alex's contribution to this study was to design the theoretical model to measure the impacts on convenience of further deregulating retail trading hours.

Dr Mark Harrison

Educational Qualifications

PhD (Economics) University of Chicago 1992

MA (Economics) University of Chicago 1987

B Economics (First class honours) Australian National University 1982

Overview of professional experience

Mark has over 30 years' experience as an academic economist and consultant. He taught applied and intermediate microeconomics, public economics, law and economics, and the economics of education at the ANU and has published research, undertaken consultancies, and provided training programmes in these fields.

Mark is a Senior Research Fellow at the SMART Infrastructure Facility at the University of Wollongong, lectures at the ANU and an Associate with Green Square Consulting.

Mark's contribution to this study was in relation to showing the theoretical the impacts of retail trading hours' deregulation on the after-hours labour market.