Senate Economics Legislation Committee
Inquiry into the price of petrol in Australia

ACCC Submission

July 2006

Contents

Summary

The overall level of petrol prices in Australia has been high over the past year.[1] Record high prices have been recorded in many places. These prices have been driven largely by movements in international petrol prices. Furthermore, there has been significant volatility in daily petrol prices in the major metropolitan cities. These reflect the existence of regular price cycles. These movements have significant implications for motorists.

This submission aims to provide information on several issues in the petroleum industry to explain the recent movements in petrol prices, both at the overall level and as a result of price cycles in the major metropolitan cities.

Recent movements in petrol prices

Over the period 2005–06 petrol prices were quite unstable.

Average monthly petrol prices in the **five major metropolitan cities** (i.e. Sydney, Melbourne, Brisbane, Adelaide and Perth) increased by around 18 cents per litre (cpl) between July 2005 and September 2005, and then decreased between September 2005 and December 2005 by around 16 cpl. They increased in January 2006 by around 6 cpl and decreased slightly in February 2006. Between February 2006 and June 2006 average monthly petrol prices increased by around 18 cpl.

Similar movements occurred in average monthly petrol prices in the smaller capital cities (Canberra, Hobart and Darwin) and in country towns in 2005-06.

Average monthly petrol prices for the average of the **smaller capital cities** increased by around 19 cpl between July 2005 and September 2005, and then decreased by around 14 cpl between September 2005 and December 2005. Between December 2005 and June 2006 average monthly petrol prices increased by around 23 cpl.

Average monthly petrol prices for the average of 110 **regional and country towns** across Australia increased by around 19 cpl between July 2005 and September 2005. Between September 2005 and December 2005 they decreased by around 14 cpl and between December 2005 and June 2006 average monthly petrol prices increased by around 21 cpl.

Over the past five years petrol prices have increased substantially. In July 2001 the average monthly petrol price in the five major metropolitan cities was around 83 cpl. By June 2006 the average monthly petrol in those cities had increased to around 135 cpl. This represents an increase of over 60 per cent.

[1] All references to petrol in this submission, unless otherwise noted, relate to regular unleaded petrol.

Structure of the petroleum industry

The petroleum industry in Australia has undergone significant changes at all levels.

At the **refinery** level, domestic refining capacity has fallen. This is principally due to production stopping at the Mobil refinery at Port Stanvac in South Australia. It has also been influenced by the Australian Government's fuel standards, which have been progressively introduced from January 2002. Australia has been importing more refined petrol at the same time as the supply position in the Asia–Pacific region is becoming increasingly tight.

At the **wholesale and distribution** level, legislated terminal gate price arrangements have been introduced in Victoria and Western Australia, the number of distributors has continued to decline and distribution efficiency has improved. The Australian Government's proposed downstream petroleum reform package includes a national terminal gate price scheme.

At the **retail** level the rationalisation of service station sites, which has been occurring over many years, has continued. The nature of petrol retailing is changing with the move to larger sites with more facilities and the introduction of the supermarket chains.

Determinants of petrol prices in Australia

Petrol prices in Australia are determined by a combination of factors. These can broadly be categorised into underlying factors and locally specific factors.

Underlying factors are those that are the key determinants of the overall level of petrol prices and are common across all locations. These include: the price of Singapore refined petrol, the Australian/US dollar exchange rate, Australian Government fuel standards, excise and the GST.

Locally specific factors are those that vary in influence depending on the precise location. These include: state government subsidies, state government policies, price cycles and the level of competition in local markets (which is determined by a range of considerations).

The analysis indicates that the international price for refined petrol is the key determinant of the overall level of petrol prices in Australia. This price is determined by supply and demand factors, outside the control of Australian regulators and governments.

Price cycles

Petrol prices in the larger metropolitan cities tend to move in cycles. The causes of price cycles are complex and appear to be influenced by many factors. These include:

- competition among petrol retailers for market share
- changes in demand on different days of the week

- provision of price support by the refiner/marketers to their franchisees
- different wholesale prices offered to petrol retailers;
- short-term excess product at refineries
- possible anti-competitive practices (such as price fixing).

The influence of these factors may vary between locations and over time.

The Australian Competition and Consumer Commission (ACCC) considers that consumers overall may benefit from petrol price cycles. As a result, the ACCC has a petrol price cycle website (which was established in November 2002) that provides information for consumers on how to take advantage of petrol price cycles in the five largest metropolitan cities.

City–country differential

The difference in petrol prices between city and country areas is a concern for many motorists in regional and rural areas.

Country prices are generally higher than city prices, with locally specific factors being the main contributor to this difference. Movements in petrol prices in country areas tend to lag behind movements in city prices. This is because in country areas petrol stocks are replenished less frequently by wholesalers and retailers due to the generally lower volume of sales in the country.

In 2005–06 the city–country differential varied substantially between the states and Northern Territory. It ranged from a low of –1.5 cpl in Tasmania to a high of 9.6 cpl in Western Australia.

Role of the Australian and Competition and Consumer Commission

The ACCC—and before it was established in 1995, the Prices Surveillance Authority and the Trade Practices Commission—has had a long involvement in the petroleum industry. This includes prices surveillance, informal price monitoring, education and enforcement of the *Trade Practices Act 1974* (TPA).

Price monitoring

The ACCC currently monitors petrol prices informally. It monitors:

- the retail prices of petrol, diesel and automotive liquefied petroleum gas in the capital cities and around 110 country towns
- international crude oil and refined petrol prices

- published terminal gate prices of the oil companies and some independents
- the city–country retail price differential.

This price monitoring is used to provide information to consumers—through its publications and on the website—and to assist in the ACCC's role in administering the TPA. It also helps the ACCC prepare analyses and reports for the Australian Government and Parliament.

Before 1 August 1998 petrol prices were included in the prices surveillance provisions of the *Prices Surveillance Act 1983* (which in 2004 were largely incorporated into the TPA). Under these arrangements the ACCC used to establish the maximum wholesale prices for petrol of the major oil companies and establish freight differentials.

The Australian Government deregulated petrol prices from 1 August 1998 because the arrangements were considered to be having an adverse effect on the retail petrol market. It considered that in the capital cities the maximum endorsed wholesale price acted as a target for prices at the end of a discount cycle and, in the country, the maximum endorsed wholesale price acted as a price floor underwriting the price paid by country consumers.

Enforcement of the TPA

The ACCC is responsible for administering the TPA. As a part of this role it has investigated allegations of price fixing, predatory pricing and other anti-competitive activities in the petroleum industry. It has also considered proposed mergers in the petroleum industry and third line forcing notifications for the petrol shopper docket schemes.

Petrol retailers who get together to fix their prices are breaking the law. The ACCC has taken action in the courts in the past against service station operators and oil companies for price fixing.

In March 2005 financial penalties of $23.3 million were ordered by the Federal Court for price fixing conduct in the Ballarat petrol market, and in June 2005 the Federal Court made declarations based on admissions of price fixing conduct involving two service stations in the Brisbane area.

There have been claims made in recent times that there is 'price gouging' and 'profiteering' occurring with petrol prices. These are not concepts that are used in the TPA. However, to make claims of 'price gouging' and 'profiteering' requires a notion of the appropriate level of prices and profits and an assessment that current prices and profits are significantly above that appropriate level.

The claims of 'price gouging' and 'profiteering' have been raised in the context of the high refiner margin (ie the difference between the price of Singapore refined petrol and the price of Tapis crude oil) in recent times. However, changes in the refiner margin are due to movements in the international prices of crude oil and refined petrol, which reflect underlying demand and supply factors.

The Australian Government's downstream petroleum reform package envisages a further role for the ACCC in the petroleum industry. The package includes an Oilcode mandated under the TPA. This would make the ACCC responsible for administering and enforcing the Oilcode.

1 Introduction

1.1 Background

On 22 June 2006 the Senate passed a motion that the Senate Economics Legislation Committee inquire into the price of petrol in Australia, with particular reference to:

- the relationship between the landed price of crude oil, refining costs, the wholesale price and the retail price of petrol
- regional differences in the retail price of petrol
- variations in the retail price of petrol at particular times
- the industry's integrated structure
- any other related matters.

The Committee is to report by 9 October 2006.

1.2 Previous ACCC publications on the petrol industry

Over the past five years the ACCC has prepared various reports and publications on petrol pricing and the petrol industry. These include:

- *Reducing fuel price variability*, December 2001 (subsequently referred to as the 2001 variability report)
- *Terminal gate pricing arrangements in Australia and other fuel pricing arrangements in Western Australia*, December 2002 (subsequently referred to as the 2002 terminal gate pricing report)
- *Assessing shopper docket petrol discounts and acquisitions in the petrol and grocery sectors*, February 2004 (subsequently referred to as the 2004 shopper docket report)
- *Understanding petrol pricing in Australia—answers to some frequently asked questions,* August 2005.

Furthermore, the ACCC provides information on petrol price cycles in Sydney, Melbourne, Brisbane, Adelaide and Perth on its website, as well as information on petrol issues and links to other petrol-related websites.

This submission draws on some of the material in these publications and updates the analysis as appropriate.

ACCC publications on petrol pricing and petrol industry issues are listed in Appendix 1.

1.3 Scope of this submission

This submission is structured as follows:

Section 2 provides data on retail petrol price movements.

Section 3 outlines the structure of the petroleum industry and identifies significant recent changes.

Section 4 explains the factors that determine petrol prices in Australia and examines recent changes in the major underlying factors.

Section 5 discusses petrol price cycles in the major metropolitan cities and examines price movements around public holidays.

Section 6 looks at the differential between city and country petrol prices.

Section 7 outlines the role of the ACCC in the petrol industry.

Appendix 1 provides a list of ACCC publications on petrol pricing and petrol industry issues.

Appendix 2 analyses petrol price cycles in the five major metropolitan cities over the period 1 January 2006 to 30 June 2006.

2 Recent movements in petrol prices

2.1 Price movements in 2005–06

Retail petrol prices in Australia were particularly volatile in 2005–06.

2.1.1 Five largest metropolitan cities

Chart 2.1 shows movements in average monthly petrol prices over the period July 2005 to June 2006 for the average of the five largest metropolitan cities (ie Sydney, Melbourne, Brisbane, Adelaide and Perth).

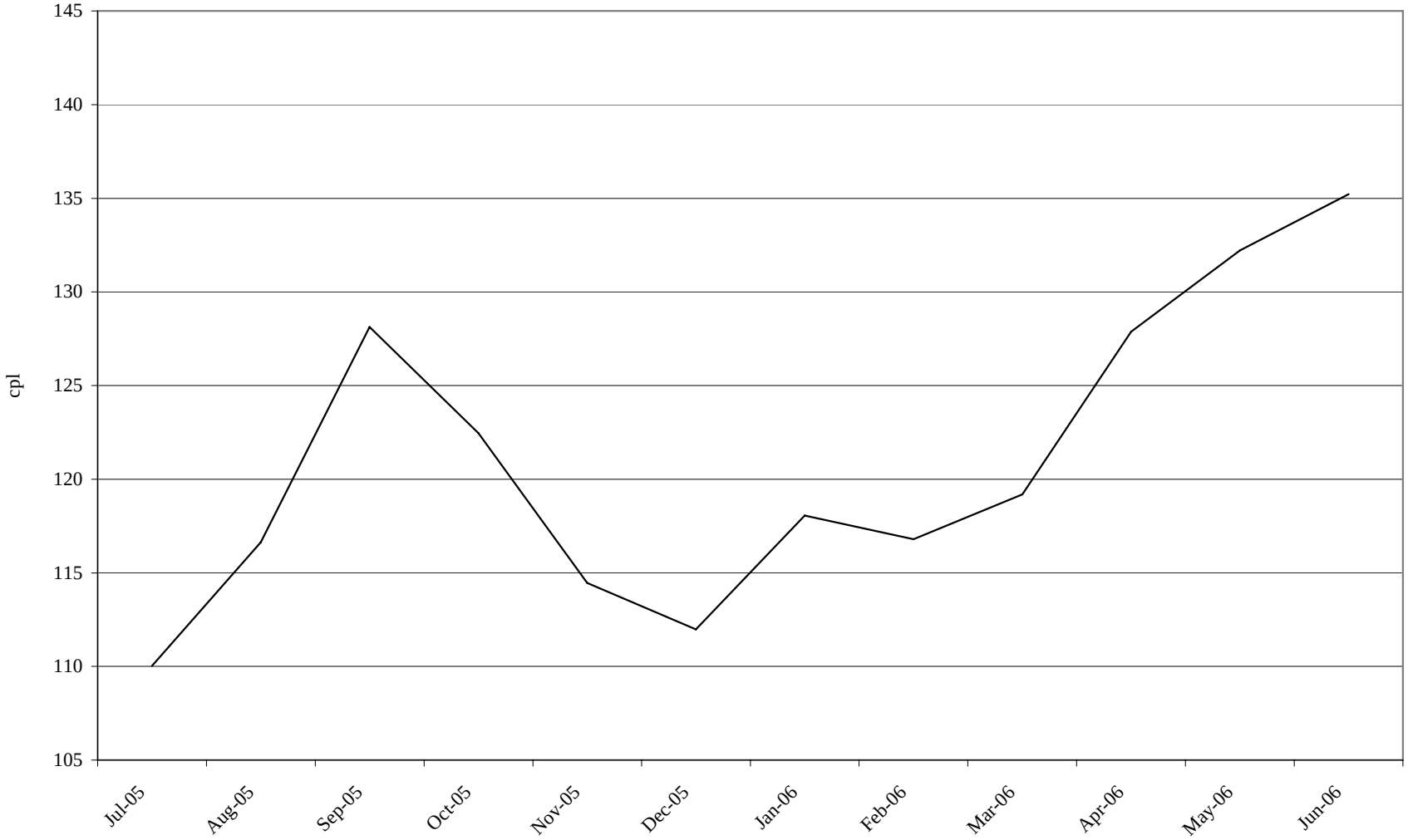
Prices in the five largest metropolitan cities can vary significantly over a week, whereas prices in country towns are often more stable. Use of monthly price data smooths out the effect of price cycles in the major metropolitan cities and is a more appropriate method of comparison than daily or weekly data. [2]

Chart 2.1 shows that:

- average monthly prices increased from 110.0 cpl in July 2005 to 128.1 cpl in September 2005—an increase of 18.1 cpl
- average monthly prices then declined over the next three months to 112.0 cpl in December 2005—a decrease of 16.1 cpl
- average monthly prices increased in January 2006 to 118.1 cpl and declined in February 2006 to 116.8 cpl
- since then prices steadily increased reaching a peak of 135.2 cpl in June 2006. The increase in prices between February 2006 and June 2006 was 18.4 cpl.

[2] The ACCC receives daily average retail unleaded petrol price data for all capital cities and around 110 country towns from Informed Sources Pty Ltd (Informed Sources). Monthly averages for the three categories in charts 2.1 to 2.3 have been derived by determining the monthly average for each city/town in each category and then determining the average of all cities/towns in each category. Note that the data in this section is based on Informed Sources data, whereas the data in section 6 is based on FUELtrac data.

Chart 2.1 Five largest metropolitan cities—average monthly retail prices—July 2005 to June 2006



Source: ACCC and Informed Sources

2.1.2 Canberra, Darwin and Hobart

Chart 2.2 shows movements in average monthly petrol prices over the period July 2005 to June 2006 for the average of the smaller capital cities (ie Canberra, Hobart and Darwin).

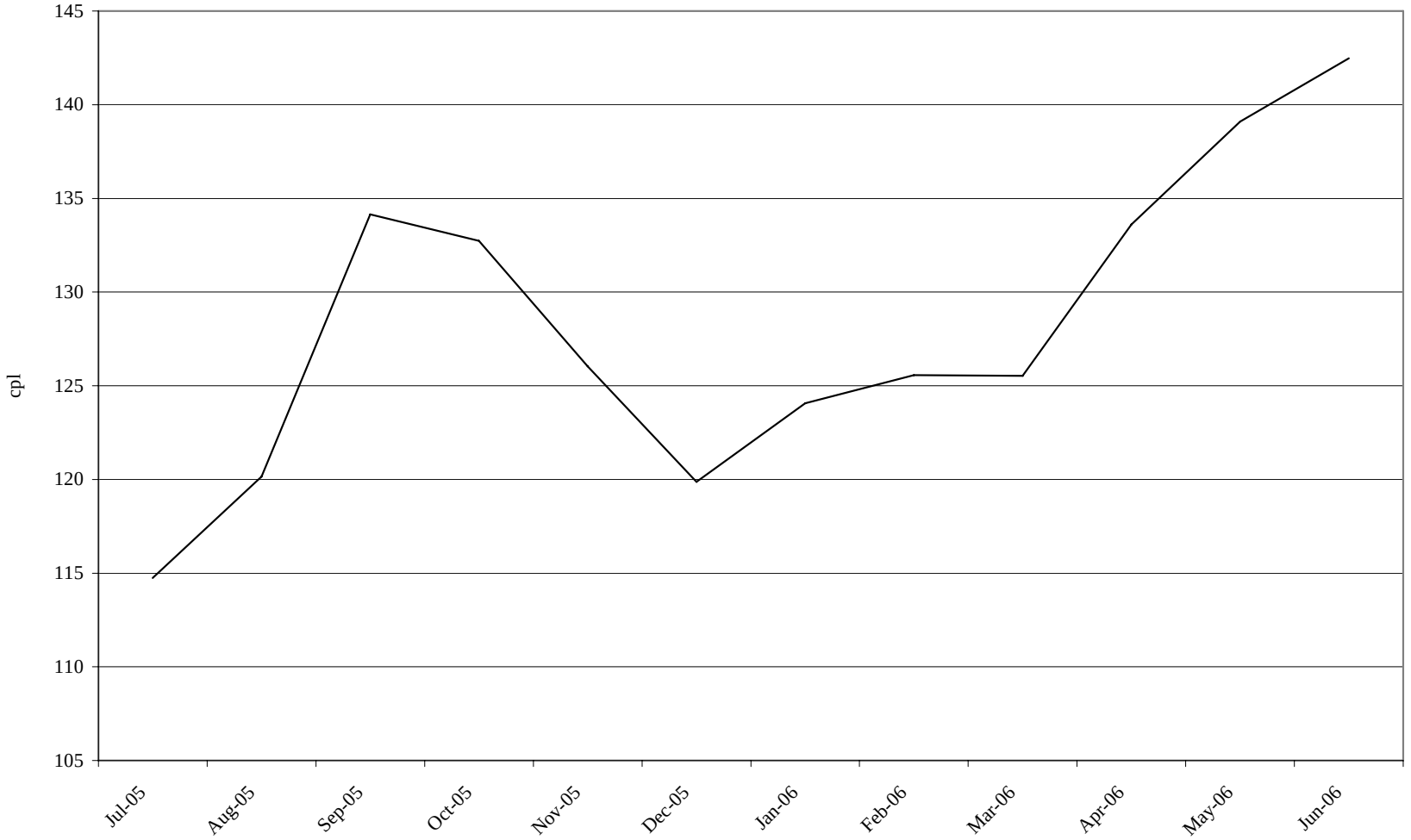
It shows that:

- average monthly prices increased from 114.7 cpl in July 2005 to 134.1 cpl in September 2005—an increase of 19.4 cpl

- average monthly prices then declined over the next three months to 119.9 cpl in December 2005—a decrease of 14.2 cpl

- after that average monthly prices increased to a peak of 142.5 cpl in June 2006—an increase of 22.6 cpl.

Chart 2.2 Canberra, Darwin and Hobart—average monthly retail prices—July 2005 to June 2006



Source: ACCC and Informed Sources

2.1.3 Country towns

Chart 2.3 shows movements in average monthly petrol prices over the period July 2005 to June 2006 for the average of 110 regional and country towns across Australia.

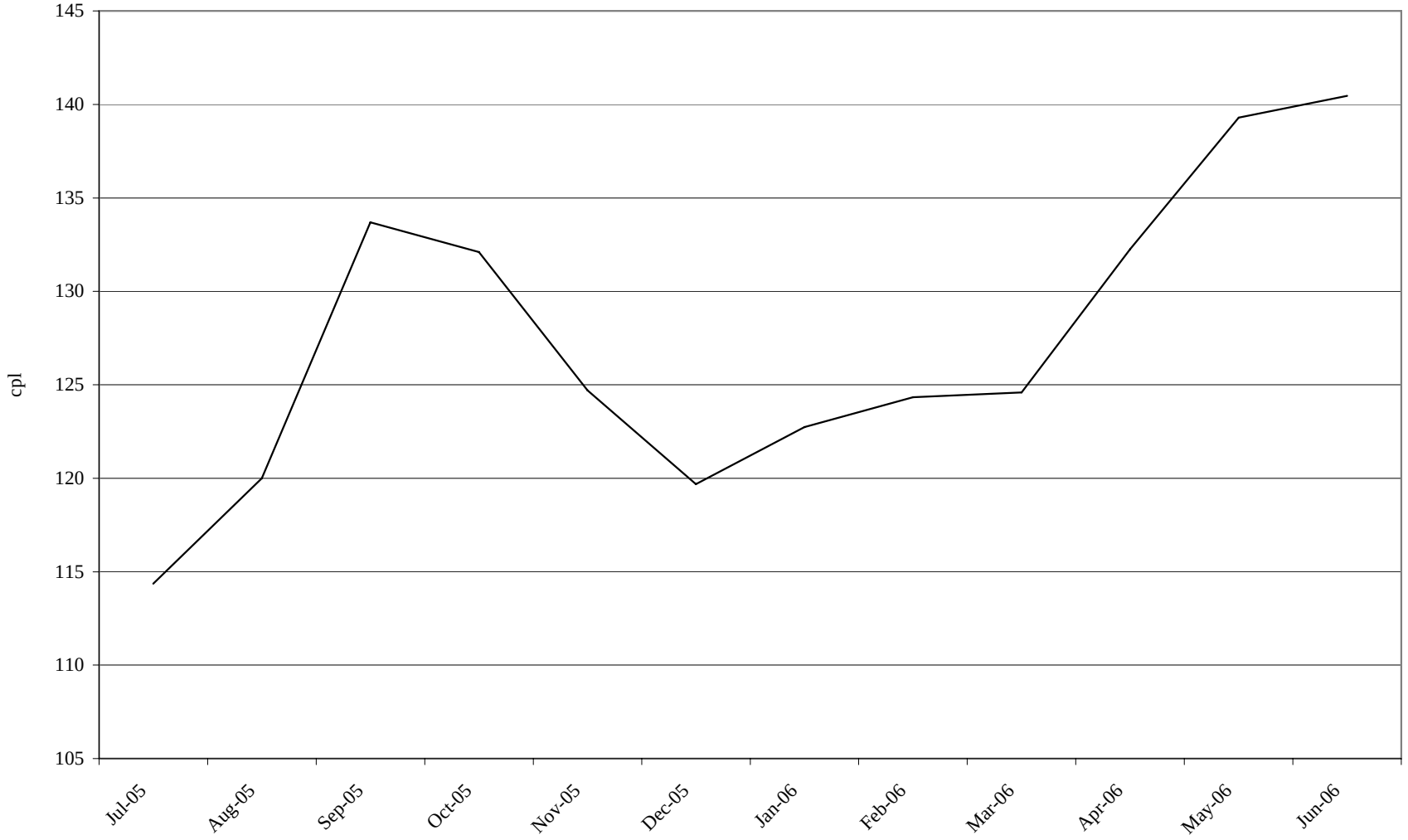
Chart 2.3 shows that:

- average monthly prices increased from 114.4 cpl in July 2005 to 133.7 cpl in September 2005—an increase of 19.3 cpl

- average monthly prices then declined over the next three months to 119.7 cpl in December 2005—a decrease of 14.0 cpl

- after that average monthly prices increased to a peak of 140.5 cpl in June 2006—an increase of 20.8 cpl.

Chart 2.3 Country towns—average monthly retail prices—July 2005 to June 2006



Source: ACCC and Informed Sources

2.2 Longer term price movements

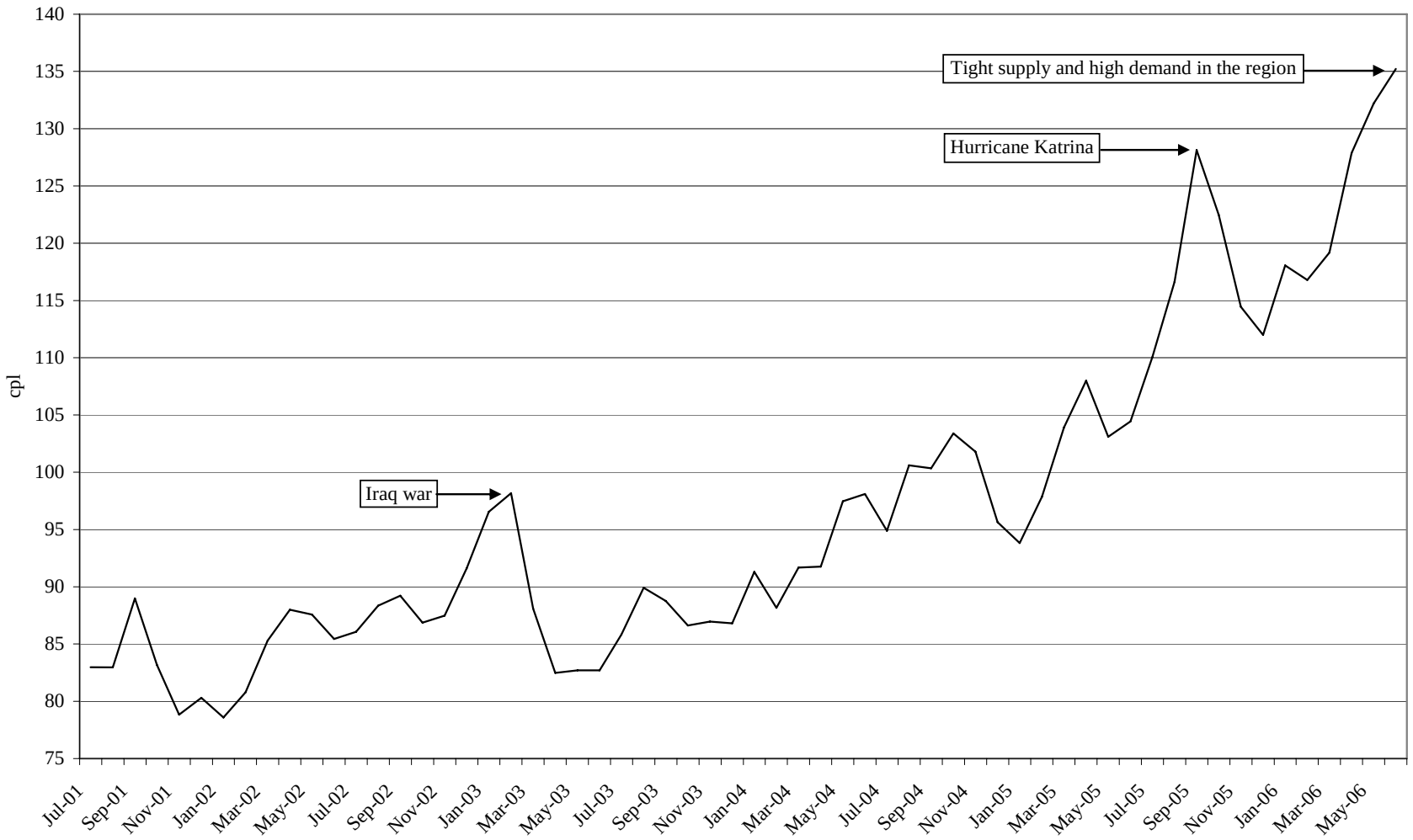
Chart 2.4 shows movements in average monthly petrol prices in the five largest metropolitan cities between July 2001 and June 2006.

The chart shows the following:

- For the first three years of the five-year period, petrol prices were broadly stable. They generally moved within a band between 78.0 cpl and 90.0 cpl.
    - The spike in prices in February and March 2003 can be attributed to the war in Iraq.
- Since around January 2004 petrol prices have been trending upwards.
    - The spike in September 2005 can be attributed to the impact of Hurricane Katrina.
- The first month in which petrol prices were over $1.00 per litre was August 2004. [3]
- Petrol prices have been consistently over $1.00 per litre since March 2005.
    - In September and October 2005 and April 2006 petrol prices were over $1.20 per litre.
    - In May and June 2006 they were over $1.30 per litre.
        - This reflects the high international benchmark price for refined petrol (resulting from tight supply and increasing demand in the Asia-Pacific region).

[3] Note that there are subsidies provided by state governments in two of the five cities included in this category. The Queensland Government provides a subsidy of 8.354 cpl (which has a price effect of around 9.2 cpl once the GST is included) at the retail level and the Victorian Government provides a subsidy of 0.429 cpl (which has a price effect of around 0.47 cpl once the GST is included) at the wholesale level.

Chart 2.4 Five largest metropolitan cities—average monthly retail prices—July 2001 to June 2006



Source: ACCC and Informed Sources

3 Structure of the petroleum industry

3.1 Introduction

The petroleum industry operates at three broad levels: refining, wholesale and retail. These elements of the industry are outlined in more detail in this section.

3.2 Refining and imports

3.2.1 Refining

There are four integrated refiners/marketers operating refineries in Australia.[4] These are: BP, Caltex, Mobil and Shell. BP, Caltex and Shell operate two refineries each and Mobil operates one. The refineries are distributed across the mainland states. The total capacity of the seven refineries is 42 970 million litres per annum and they produce petrol, diesel, jet fuel, fuel oil, liquefied petroleum gas, lube oils, bitumen and other products.

In 2004-05 Australian refineries produced 17 668 million litres of petrol. This represented around 41 per cent of the total output from Australian refineries. Australian motorists consumed 19 876 million litres of petrol in 2004–05.

The location and capacity of the refineries in Australia are shown in table 3.1.

Most of the refineries in Australia were generally constructed in the 1950s and 1960s and are old by international standards. They are also relatively small. The combined capacity of the seven refineries in Australia is less than the capacity of some individual refineries in the Asia–Pacific region. For example, the SK Corporation refinery in South Korea has an annual capacity of 47 415 million litres per annum.

Refining capacity in Australia has declined over recent years. In 2003 the total annual refining capacity was 50 750 million litres.[5] Between 2003 and 2005 refining capacity in Australia reduced by around 15 per cent. This decline has been due to the 'mothballing' of Mobil's Port Stanvac refinery in South Australia and a reduction in capacity at other refineries as they re-configure to meet the Australian fuel standards progressively introduced from January 2002.[6]

---

[4] This section draws on material in Australian Institute of Petroleum, *Downstream Petroleum 2005*, and Department of Industry, Tourism and Resources, *Petrol—frequently asked questions (June 2006 edition*), available on the Department's website.

[5] Australian Institute of Petroleum, *Downstream Petroleum 2003*, p. 5. The data is provided in terms of barrels per day. It has been converted into million litres per annum.

[6] Fuel standards are discussed in section 3.2.3.

Table 3.1 Location and capacity of Australian refineries

Company	Location	Annual capacity
		Million litres
BP	Bulwer Island, Brisbane, QLD	5 100
BP	Kwinana, WA	8 030
Caltex	Lytton, Brisbane, QLD	6 110
Caltex	Kurnell, Sydney, NSW	7 210
Mobil	Altona, Melbourne, VIC	4 640
Shell	Clyde, Sydney, NSW	4 980
Shell	Geelong, VIC	6 900
Total		42 970

Source: Australian Institute of Petroleum, 2005

On 1 July 2003, Mobil ceased production at its Port Stanvac refinery in South Australia (which had a capacity of 4 520 million litres per annum). When it announced the closure of Port Stanvac, Mobil commented that the Adelaide refinery was one of the smallest refineries in the Asia–Pacific region and under the current market conditions could not compete with the much larger regional refineries that can produce petroleum products at a lower cost. However, Mobil proposed to maintain the refinery in a condition that would allow a restart should viable operations be sustainable in the future.[7]

Crude oil

In 2004–05 around 65 per cent of the crude oil used in Australian refineries was imported. The main sources of imports were Vietnam, Malaysia, Indonesia, Saudi Arabia, the United Arab Emirates, Papua New Guinea and Brunei. Imports from these countries represented 88 per cent of total imports of crude oil.

Although Australia has substantial crude oil production, it tends not to be the type of crude oil needed to produce the product mix of Australian refineries. Australian crude oil tends to be lighter and sweeter than most world crude oils which leads to generally higher prices for Australian crude oil.

Different crude oils have different inherent yields of products and therefore refineries will use the types of crude oil that closely matches the range of products they produce. Australian crude oil does not exactly match the refined products demanded in Australia, which requires heavier crude oils for some products.

While Australian refineries could be re-configured to use Australian crude oil, this would be inefficient in that it would lead to higher costs of production and lower output. It would also put Australian refineries at a competitive disadvantage compared with refineries in the Asia–Pacific region.

[7] Mobil media release, *Adelaide Refinery*, 8 April 2003.

3.2.2 Imports and exports

The recent reduction in Australian refining capacity has meant that existing demand for petrol cannot be met solely from domestic production.

In 2004–05 3 166 million litres of petrol was imported into Australia.[8] The major source of imports was Singapore (2 754 million litres, which represented 87 per cent of total imports). Imports represented 16 per cent of total petrol consumption in Australia in 2004–05.

The level of imports has been growing. In 2002–03 imports were around 1 686 million litres, which represented around 9 per cent of total petrol consumption.[9]

Some of the imported product is supplied to northern and north–western areas of Australia, where domestic refineries are generally unable to competitively supply product.

The refiner/marketers and some independent operators import fuel into Australia. Most imports are by the refiner/marketers. Independent importers in the past have included Trafigura in New South Wales and Victoria, Gull in Western Australia and Neumann Petroleum in Queensland. However, they are not regular importers and they source most of their product from the refiner/marketers in Australia.

In 2004–05, 771 million litres of petrol were exported. The major destination was New Zealand (732 million litres, which represented 95 per cent of total exports).

3.2.3 Fuel standards

In 2001 the Australian Government announced new fuel standards for Australia, which were progressively introduced between January 2002 and January 2006.[10] The standards included limits on the amount of olefins, methyl tertiary-butyl ether (MTBE), sulphur, aromatics and benzine in petrol.

These fuel standards were largely based on the European 'Euro 3' specification, with one major exception. Under Euro 3 the amount of MTBE in petrol can be up to 15 per cent, whereas the Australian fuel standards allowed for 1.0 per cent. The hybrid nature of the Australian fuel standards makes it more difficult to obtain supplies, as it is not readily available from many refineries in the region.

---

[8] The amount of net imports of petrol into Australia is not equal to the difference between Australian refinery production and total consumption in Australia because of the existence of stocks.

[9] Department of Industry, Tourism and Resources, *Petrol— frequently asked questions (November 2003 edition*), p. 10, cited in ACCC, 2004 shopper docket report, p. 13.

[10] Media release, Senator the Hon Robert Hill, Minister for the Environment and Heritage, *New fuel quality standards to put the brake on car pollution*, 8 May 2001; and media release, Senator the Hon Robert Hill, Minister for the Environment and Heritage, *Hill announces national fuel standards*, 15 July 2001.

Some states had taken an individual approach to fuel standards and introduced their own fuel standards ahead of the Australian Government. These were: Western Australia (in January 2000), Queensland (in July 2000) and South Australia (in March 2001). Each state introduced differing standards, which restricted their ability to import fuel, both from overseas and from other states.

Since the beginning of January 2006, the Australian Government standards are generally common to all states, with the exception of Western Australia (which has tighter limits on the amount of MTBE permitted in petrol—only 0.1 per cent).

The ACCC has had discussions with market participants on the cumulative impact of the tighter Australian fuel standards since 2002. They have indicated that this would account for around 2.0 to 3.0 cpl in higher wholesale petrol prices. It is likely that this would have a similar impact on retail petrol prices.

In 2004 the Australian Government announced new fuel standards to apply beyond 2006. These essentially limit the amount of sulphur in premium unleaded petrol.[11]

The introduction of the fuel standards from 2002 have required domestic refineries to make significant investment to comply with the new standards. The Australian Institute of Petroleum estimates that the total investment required by the industry to implement the Australian Government's cleaner fuels programme will exceed $2.0 billion.[12]

Independent importers were also affected as supplies of fuel that met the tighter Australian fuel standards from refineries in the Asia–Pacific region that are not linked to the refiner/marketers in Australia became more difficult to obtain. As a result, some customers of the independent importers in Australia chose instead to buy fuel from the local refiner/marketers.

3.2.4 Buy/sell arrangements

Before July 2002 there were refinery exchange agreements between the four refiner/marketers in Australia, under which they guaranteed supplies of petroleum product to the other refiner/marketers in the locations where they did not have refinery capacity. These arrangements were primarily articulated in volumes, although there were apparently payments between the companies to reflect the different fuel standards among the states.

In July 2002 these arrangements were replaced by buy/sell arrangements, under which the oil companies charge each other commercial prices for fuel. These prices are based on international petrol prices. This means that, other than in those states where they have a refinery, the refiner/marketers are paying the international price for refined petrol. Conversely, in those states where they have a refinery, the refiner/marketers are receiving the international price for refined petrol.

---

[11] Media release, Minister for the Environment and Heritage, Senator the Hon. Ian Campbell, *Cleaner fuels: cleaner air and a healthier Australia*, 22 July 2004.

[12] Australian Institute of Petroleum 2005, p. 3.

3.2.5 Recent demand and supply issues in the region

In the late 1990s and early 2000s there was an over-supply of petrol in the Asia–Pacific region. This was due to an expansion of refinery capacity in the region. These refineries focussed on diesel production. As a result, there was the availability of cheap petrol for imports into Australia. The independent sector in Australia took advantage of this opportunity to import fuel. With an alternative supply of fuel to that of the local refiner/marketers the independent wholesalers and retailers had some countervailing power in the purchase of their fuel from refiner/marketers.

In the past couple of years demand for petroleum products has increased substantially from countries experiencing strong growth in the region, such as China and India. This has progressively taken up much of the surplus capacity in refined petroleum products and the refineries in the region have been operating closer to full capacity. As a result any unexpected supply disruptions and localised increases in demand have a greater impact on refined petrol prices and refiner margins than in the past.

The demand and supply situation in the region is expected to be tight at least in the medium term. A study conducted by Asia–Pacific Economic Cooperation suggested that by 2006 there was likely to be a shortfall of petrol in the Asia–Pacific region.[13]

3.3 Wholesale

The refiner/marketers also operate at the wholesale level and have equity in distributor operations. Some independent operators—such as Liberty, United, Gull and Neumann Petroleum—also operate at the wholesale level. These independent operators obtain their fuel either from the refiner/marketers or from imports. The independent importer Trafigura is also involved in wholesaling fuel in some states.

The refiner/marketers tend to supply fuel in metropolitan areas directly from the terminal. They also maintain equity interests in distributors that supply regional markets.

Distributors are mainly active outside the metropolitan areas. Distributors typically operate a central storage depot with satellite depots and a fleet of trucks. The Australian Petroleum Agents and Distributors Association noted that distributors handle around 16 billion litres of petroleum products (or about 37 per cent of the total industry volume).[14] Distributors handle around 75 per cent of all the sales in country areas. Distribution is from some 600 terminals/depots in capital cities, country towns, and the outback, often including airports at those locations.[15]

---

[13] Asia-Pacific Economic Cooperation, *Final Report: Clean Transportation Fuels Supply Security Study*, EWG02/2001T, available on the Department of Industry, Tourism and Resources website.

[14] This includes the full range of petroleum products and not just petrol.

[15] Australian Petroleum Agents and Distributors Association, *Membership profile*, APADA website http://www.apada.com.au, retrieved 17 July 2006.

There are currently around 130 distributors in Australia. This number has declined significantly over recent years. There were 7 000 distributors in 1970, about 400 in 1996 and about 140 in 2002. Achievement of economies in supply (such as reduced transport costs from the use of higher volume trucks and lower handling costs through more direct deliveries from storage terminals) and improved logistics (matching supply and demand) have contributed to the declining number of distributors.

The number of distributors in Australia is expected to further decline with continuing rationalisation throughout the supply chain and among retail sites.

3.4 Retail

3.4.1 Industry structure

The petrol retailing industry is made up of four broad categories, which have different market structures and operations:[16]

Refiner/marketers

The refiner/marketers (i.e. BP, Caltex, Mobil, and Shell) own and operate their own sites, have commission agent sites, and market their fuel through single or multi-franchise operations.

- The company owned and operated sites tend to be high turnover sites, including those in the inner-metropolitan areas. At these sites the refiner/marketer determines the price.

- There are also commission agency sites, which are managed by an individual on behalf of the refiner/marketer, and compensation is generally in the form of a commission (generally expressed in cents per litre) based on the quantity of products sold. These may include some franchise operations. At these sites the refiner/marketer also determines the price.

    - The *Petroleum Retail Marketing Act Sites Act 1980* (Sites Act) limits the number of sites that can be owned and operated by BP, Caltex, Mobil and Shell either directly or on a commission agency basis.

- Franchise operators rent a site, or a number of sites, owned by a refiner/marketer and operate under a franchise agreement. While the franchisee determines the price, the refiner/marketer may influence the price through the provision of price support.

Branded independent operators and distributor-owned sites

Branded independent operators tend to own their own site but retail the fuel of one of the four refiner/marketer brands. There are also distributor-owned sites that do this.

---

[16] This draws on information in Parliament of the Commonwealth of Australia, House of Representatives, *Petroleum Retail Legislation Repeal Bill 2006, Explanatory Memorandum,* circulated by authority of the Hon. Ian Macfarlane, MP, Minister for Industry, Tourism and Resources, p. 5.

- Branded independent operator sites tend to be mainly in rural and regional areas. Fuel is generally supplied on a contractual basis from the refiner/marketer. The price of fuel is determined by the operator.

- Distributor-owned sites are run by a local fuel distributor, some of which are owned or part-owned by the refiner/marketers and others which, like branded independent operators, use their own site and equipment and have a brand and supply agreement with a refiner/marketer. These tend to be mainly in rural and regional areas.

Supermarkets

Supermarket chains operate sites which have shopper docket discount schemes linked to grocery sales at their supermarkets.

- These are the Coles Express and Caltex/Woolworths joint venture sites

- Prices at these sites are determined by Coles Express and Woolworths

- The supermarket operations are discussed in more detail in section 3.4.4.

Independent operators selling their own brands

These range from the large independent chains to small one to two site operations.

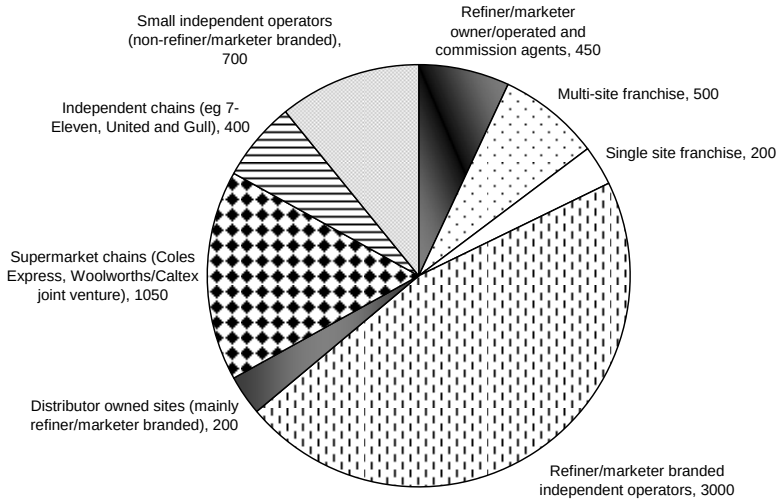
- Independent chains (such as 7-Eleven, United and Gull) generally buy fuel in bulk from local refiner/marketers and sell it through their company-owned sites. Sites are generally operated on a commission agency basis.

- The smaller independent operators tend to use their own site, equipment and brand name and buy fuel on an ad hoc or contractual basis from local refiner/marketers or importers.

In 2005 the Department of Industry, Tourism and Resources estimated that there were around 6 500 service stations in Australia. A breakdown of the sites falling into the categories noted above is shown in chart 3.1.[17]

[17] *Petroleum Retail Legislation Repeal Bill 2006, Explanatory Memorandum*, p. 6. The data in the chart has been adjusted by the ACCC.

Chart 3.1 Distribution of business structures in the retail petroleum market



Source: ACCC and the Department of Industry, Tourism and Resources

It can be seen that:

- The refiner/marketers had 450 directly owned and operated sites and commission agent sites. There were 700 franchise operations, covering single site and multi-site franchises. These 1 150 sites represented around 18 per cent of the total number of sites (i.e. 6 500 sites).

- The largest category of sites was branded independent sites, with 3,000 sites (or around 46 per cent of the total). There were 200 distributor-owned sites, which represented 3 per cent of the total.

- There are 1 050 supermarket sites, about 16 per cent of the total.[18]

- The independent sector had around 17 per cent of the total number of sites. The independent chains accounted for 400 sites and the smaller independents totalled 700 sites.

[18] As at July 2006 the supermarkets had around 1 100 sites. See section 3.4.4.

3.4.2 Market share

In terms of market share by volume, the latest publicly available data is presented in the April 2006 report of the Queensland Legislative Assembly inquiry into petrol pricing in Queensland. [19]

It noted that the five major competitors—Coles Express-Shell, Woolworths/Caltex, Caltex by itself, BP and Mobil—have roughly equal market shares in the order of 15 to 20 per cent each. The remainder of the market is other brands, which would include independent brands.

3.4.3 Retail sites and rationalisation

There are currently around 6 500 retail sites in Australia. There has been continual rationalisation of retail sites in Australia over the past 30 years. In 1970 there were 20 000 sites, in 1980 12 500 sites and in 2000 8 000 sites. Service station rationalisation has been a feature of most developed countries over recent decades.

While rationalisation of service stations has occurred for many reasons, changes in underlying supply and demand factors in the petroleum market have been important contributors.

On the **supply** side lower operating costs have been achieved through the development of high volume service stations, the use of self-service technology, and the availability of complimentary goods and services (such as the sale of convenience goods) with petrol. Another development on the supply side has been the entrance of large independent chains into the market, convenience stores, and more lately supermarkets, providing greater competition.

At the same time, the **demand** facing service stations has changed with the different driving pattern of motorists due to the development of highways and major arterial roads to accommodate higher traffic volumes, consumers' desires for longer shopping hours and more convenient arrangements in the purchasing of goods and services (such as the inclusion of ATM machines at service stations). The small service station with one or two pumps is being replaced by more modern sites with multiple pumps, a shop and other facilities, which are generally located on major thoroughfares.

A further factor has been changes in Commonwealth and state regulations. For example, the introduction of the Sites Act in 1980 limited the number of sites that could be owned and operated directly by the refiner/marketers. This may have encouraged a move by some refiner/marketers to change their marketing strategies. For example, there was a move by some of the refiner/marketers to sell more fuel through multi-site franchises and on commission agency arrangements. It may also have assisted in the expansion of independent retailers into the market because the Sites Act did not apply to them.

---

[19] Legislative Assembly of Queensland, *Inquiry into petrol pricing in Queensland*, April 2006, p. 10. This was based on information provided by Caltex.

Further rationalisation in service station numbers is likely as the industry continues to respond to the above forces.

3.4.4 Supermarkets

The entry of the supermarkets into petrol retailing has been the most significant change in the industry over the past few years. The ACCC's 2004 shopper docket report noted the convergence of grocery and petrol retailing.[20]

Coles Express

In May 2003 Coles and Shell announced their proposed alliance whereby Coles would take over the management of Shell's core franchise network across Australia. In July 2003 the ACCC found that the arrangements between Shell and Coles would not be likely to result in a substantial lessening of competition in relevant markets.[21]

Coles Express began in Victoria in July 2003 and progressively rolled out the network throughout Australia. The roll-out was completed in mid-March 2004. Coles Express currently has around 600 service station sites[22] and has publicly stated that the network will not grow much larger than this.[23]

Woolworths/Caltex joint venture

The first Australian supermarket to enter petrol retailing was Woolworths, began operating in 1996. Before 2003, when Woolworths entered into the joint venture with Caltex, Woolworths was able to rapidly expand its operations to around 290 sites operated on a stand-alone basis. In just eight years, Woolworths gained around 10 per cent of the retail petroleum market by volume. Its rapid growth was facilitated by the availability of imports by independent wholesalers, development of new sites and the purchase of sites from Liberty Oil.[24]

In August 2003 Woolworths and Caltex announced that they were proposing to enter into a joint venture for the retailing of motor fuel through up to 450 petrol retail sites. Longer term arrangements (involving up to 500 sites) were announced in March 2004.

---

[20] Pages 34–37.

[21] ACCC media release, *ACCC not to oppose proposed alliance between Coles Myer and Shell*, 2 July 2003.

[22] Coles Myer Ltd news release, *Coles Myer 2006 third quarter sales up 4.9%*, 23 May 2006, p. 4.

[23] Simon Evans, 'Express petrol returns delight Fletcher', *Australian Financial Review*, 23 September 2004, p. 17, noted: "The Coles Express petrol station footprint will not grow much larger than about 600 outlets, with only incremental expansion planned as extra supermarkets are built. "Largely, the footprint is in place to do what we want to do," Mr Fletcher said."

[24] ACCC 2004 shopper docket report, p. 35.

As at 18 July 2006 there were 491 joint venture sites (comprising 360 Woolworths sites and 131 Woolworths/Caltex sites).[25]

There are a range of estimates for the market share of the supermarket operations. However, it is often not made clear what these estimates cover, and there is some confusion about issues such as fuel coverage (ie whether the estimates is for all fuels or only petrol), the scope of the operations covered (ie whether the estimate includes only the supermarket operated sites or the non-supermarket aligned Shell and Caltex sites) and location (ie whether the estimate is for metropolitan sites only or nation-wide).

On the basis of information available to the ACCC, the combined market share of the national retail petrol market of Coles Express and the Woolworths/Caltex joint venture is estimated to be in the region of around 40 per cent.

Effect of the supermarkets on the retail petroleum industry

The ACCC has been actively monitoring developments in the retail petrol and grocery sectors since it released its shopper docket report in February 2004 and will continue to do so.

Prices

As a result of the introduction into petroleum retailing of Coles Express and the Woolworths/Caltex joint venture in 2003 and 2004, there have been lower petrol prices for consumers.

The ACCC examined retail prices in the five largest metropolitan cities over similar periods before and after Coles Express began operating in those cities. Relative to an independent benchmark (i.e. the ACCC's import parity indicator, which reflects movements in the Singapore price for refined petrol and the Australian/US dollar exchange rate), petrol prices were lower after the entry of Coles Express and the Woolworths/Caltex joint venture into the retail petrol market. The extent to which prices were lower varied with cities and time. It ranged from around 0.5 cpl to over 3.0 cpl.[26]

Other discount schemes

Since February 2004, and as at 30 June 2006, more than 500 shopper docket notifications have been lodged with the ACCC covering over 1000 service stations. The majority of these notifications involve localised arrangements with independently owned major branded sites or independent fuel retailers. While these schemes initially focussed on the two major supermarket chains they have also involved other retailers

---

[25] Woolworths Limited news release, *Full year sales results 52 weeks to 25th June 2006*, 18 July 2006, p. 3. Note that these site numbers (which are the latest available) are slightly higher than the numbers in chart 3.1, which is based on 2004 and 2005 data.

[26] As there are factors that influence the import parity indicator in the short term (such as changes in freight costs) and other factors may influence the retail price of petrol in specific locations (such as local competitive conditions and supply and demand factors), it is not possible to conclude that the entire fall in retail prices was a result of the entry of the supermarkets.

such as Metcash/IGA group, Foodland group, Dimmeys department stores and the Servo Saver scheme.

The ACCC has also received several notifications involving fuel discount arrangements that are alternatives to the shopper docket schemes. For example, these arrangements may provide consumers with a discount on fuel when they use credit card or telecommunication services.

The ACCC understands that the shopper docket discount schemes are considered by the supermarket chains to be promotional and marketing tools, similar to existing programmes such as the Fly Buys scheme. It may be that the costs of the shopper docket discount schemes provided to petrol consumers represent a substitution of promotional expenditure by the grocery division of the supermarket chain.

The use of shopper dockets by motorists has increased significantly. A 2005 survey found that 73 per cent of motorists used shopper dockets. This compared with only 25 per cent of motorists in 1999. Of the 73 per cent that used shopper dockets, the survey found that those that used the dockets 'every or most times they buy petrol' had doubled in the past two years. The survey concluded that 'this dramatic surge in docket use is further evidence of the ongoing popularity and marketing success of these discount schemes'.[27]

The number and variety of discount schemes notified to the ACCC since the release of the 2004 shopper docket report reflects a 'culture of discounting' with competitive responses being made by competitors to attract and retain custom.

[27] Australian Automobile Association, *Motorists' Attitudes – 2005 ANOP National Survey*, March 2005, p. 6.

4 Determinants of petrol prices

4.1 Introduction

The factors that determine petrol prices in Australia can be broadly divided into two categories: underlying factors and locally specific factors.

- Underlying factors are those that are the main determinants of the overall level of petrol prices and are common across all locations

- Locally specific factors are those that vary in influence depending upon the precise location.

This section describes these two types of factors in turn. It then outlines how these elements contribute to wholesale and retail prices in Australia. Finally, it looks at recent movements in the key underlying factors.

4.2 Underlying factors

The underlying factors that determine petrol prices in Australia are outlined below.

4.2.1 Singapore refined petrol price

Since 1990 petrol prices in Australia have been based on the refined petrol price in Singapore. Specifically, the benchmark is the spot price of Singapore Mogas 95 Unleaded, which is the average daily price of unleaded petrol of this grade traded in Singapore.

Petrol prices in Australia are not based on local production costs. This is because refined petrol is an internationally traded commodity. If the price of refined petrol in Australia was lower than the international price, domestic refiners would have an incentive to export refined petrol overseas, which could lead to shortages of petrol in Australia. If the price of refined petrol was higher in Australia than overseas, refiners would have an incentive to import refined petrol rather than produce it in Australia.

As noted earlier in section 3.2.2, around 16 per cent of petrol used in Australia is currently imported, and domestic refiners and wholesalers have to pay the international price for this petrol.

Moreover, under the current buy/sell arrangements between the refiner/marketers in Australia, in those states in which a refiner/marketer does not have a refinery, the price at which it buys petrol from the local refiner/marketer is based on an import parity price.

The price in Singapore is used as the benchmark for Australian prices because Singapore is the closest major refining and marketing centre to Australia. It is the most

likely source of imported petrol into Australia and is the biggest refiner in the Asia-Pacific region.

The benchmark is the price of international refined petrol rather than the price of crude oil because Australian refiners have to compete with refiners in the region in marketing refined petrol in Australia and Asia. Furthermore, it is refined petrol rather than crude oil that motorists use in their vehicles.

The principle of import parity pricing was used by the ACCC when petrol prices were regulated at the wholesale level to determine the maximum wholesale price of petrol. Since deregulation of petrol prices on 1 August 1998 the oil majors have continued to price petrol on the basis of import parity.

Crude oil

Crude oil is the major input into the production of refined petrol. The relevant benchmark price for Australia is Tapis crude oil, which comes from Malaysia.

More common benchmarks for crude oil prices often quoted in the media are West Texas Intermediate crude oil and Brent crude oil. These are the general benchmark prices for crude oil prices in the United States and Europe respectively.

Refiner margin

The difference between the price of Singapore Mogas 95 Unleaded and the price of Tapis crude oil is often known as the refiner margin. The refiner margin is generally positive but there have been times (most recently at the beginning of 2006) when the refiner margin has been negative.

Different supply and demand influences on crude oil and refined petrol

While the prices of crude oil and refined petrol have tended to move in a broadly similar manner, they may be influenced by different demand and supply influences, especially over the short term.

For example, crude oil prices will reflect concerns about supply shortages (reflecting circumstances in oil producing countries such as Nigeria and Iran) as well as increasing demand from refineries. Refined petrol prices will reflect the price of crude oil, but also factors such as refinery shutdowns (which may be planned ones during annual refinery maintenance or unplanned such as when American refineries were shutdown by Hurricane Katrina in September 2005), and increases in demand for particular products from the refineries. Over-supply in the crude oil or refined petrol markets will lower prices. This occurred in early 2006 when China started to export refined petrol products.

4.2.2 Australian/US dollar exchange rate

Since the price of refined petrol is expressed in US dollars, the price in Australia will change with movements in the Australian/US dollar exchange rate, regardless of whether the petrol is imported or locally produced.

If the value of the Australian dollar relative to the US dollar increases, everything else being equal, the price of refined petrol for Australians will decrease. Conversely, if the

value of the Australian dollar relative to the US dollar decreases, the price of refined petrol for Australians will increase.

4.2.3 Australian Government fuel standards

As noted in section 3.2.3, the Australian Government introduced new fuel standards for Australia in 2002, which were progressively introduced between January 2002 and January 2006. To the extent that the petrol used in Australian vehicles is of a higher standard, a premium needs to be added to the base Singapore Mogas 95 Unleaded price.

4.2.4 Excise and the GST

Excise is currently levied on petrol by the Australian Government on a cents per litre basis. The current level of excise is 38.143 cpl for unleaded petrol.

The rate of excise has remained unchanged since March 2001 when the Australian Government cut the rate of excise by 1.5 cpl and abolished the half-yearly indexation of fuel excise in line with movements in the consumer price index.

Furthermore, like most products, petrol is subject to a 10 per cent GST.

4.2.5 Key underlying influences

As the level of excise is constant and Australian fuel standards rarely change, the key underlying influences on the overall level of domestic petrol prices are movements in the Singapore price for refined petrol and the Australian/US dollar exchange rate.

There is generally a time lag of around one to two weeks between changes in these prices and price changes at petrol bowsers. This is due to the averaging formula used by refiners in Australia and the frequency of changes to terminal gate prices.[28] This lag is generally longer in country areas because petrol stocks are replenished less often by wholesalers and retailers, due to the generally lower volume of sales.

4.3 Locally specific factors

There are a range of factors that influence petrol prices at the local level. These are outlined below.

4.3.1 State government subsidies

Some state governments provide subsidies—at either the wholesale or retail level—which lower the effective price of petrol to consumers.

At the **wholesale** level, the Victorian Government provides a subsidy of 0.429 cents per litre.

[28] See section 4.4.1.

At the **retail** level:

- the Queensland Government provides a subsidy of 8.354 cpl
- the Tasmanian Government provides a subsidy of 1.956 cpl
- the Northern Territory Government provides a subsidy of 1.10 cpl
- the New South Wales Government provides a subsidy to parts of the state:
    - There are five zones and the subsidy ranges from 1.67 cpl to 8.35 cpl. The highest subsidy is paid in the zone closest to the border with Queensland
    - In the rest of the state (which includes Sydney) no subsidy is provided
- the South Australian Government also provides a subsidy to parts of the state:
    - There are two zones that receive a subsidy. It ranges from 0.82 cpl to 3.33 cpl
    - In the rest of the state (which includes Adelaide) no subsidy is provided.

There are no subsidies provided in Western Australia or the Australian Capital Territory.

4.3.2 State government policies

The Victorian and Western Australian Governments have arrangements that influence petrol prices at the wholesale and retail levels.[29]

Victoria

In 2001 the Victorian Government introduced legislated terminal gate pricing arrangements, the main elements of which include:

- the determination of terminal gate prices in Victoria is outlined in a specified formula
- terminal gate prices must be publicly available and may only change once in 24 hours
- contracts should be based on terminal gate prices
- there are no constraints on discounting off the terminal gate price.

[29] ACCC views on the arrangements in Victoria and Western Australia are outlined in the ACCC 2002 terminal gate pricing report.

Western Australia

In 1999 the Western Australian Government legislated for state-specific fuel standards, which came into effect in two stages on 1 January 2000 and 1 January 2001.

These standards were broadly comparable with the fuel standards introduced by the Australian Government progressively from 1 January 2002, with one exception. The standard for the amount of MTBE in petrol is much more stringent in Western Australia.[30] As a result, the terminal gate price in Western Australia includes a premium to reflect the fact that the fuel standards are higher in Western Australia than in the rest of Australia.

In 2001 Western Australia introduced a number of fuel pricing arrangements, one of which was the 24-hour rule. Under this rule, fuel retailers are required to fix their prices for 24 hours and to inform the Department of Consumer and Employment Protection of these prices (which are made publicly available on its FuelWatch website).

In December 2002 the Western Australian Government replaced the terminal gate pricing arrangements that had been introduced in April 2001 (and which had not worked as intended) with ones similar to those of Victoria.

4.3.3 Price cycles

Petrol prices in the largest metropolitan cities and areas close to them often move in cycles. These cycles contribute significantly to the volatility of petrol prices during the course of a week.

Price cycles are considered in more detail in section 5.

4.3.4 Level of competition in local markets

The level of competition in local markets is determined by many factors and the interactions between them.

Population

- In general, locations with a small population are likely to have fewer service stations, and therefore less competition.

- Furthermore, higher margins (and therefore retail prices) may be required at service stations in locations with a small population to make them viable. As turnover and volume are likely to be higher at service stations in locations with a large population, the margin per litre of petrol sold (and therefore retail price) can be lower.

Geographical location

- The further away a location is from a terminal, the greater will be freight costs.

---

[30] See section 3.2.3.

- Moreover, those locations close to major highways will tend to have service station sites with higher volume petrol and shop sales, than those in out of the way locations. Such sites are able to operate on lower margins.

The number of wholesale suppliers

- In general there will be more competition in the supply of petrol to retailers where there are more wholesale suppliers in a market.

The point of supply

- This relates to whether the supplies are sourced directly from the terminal or through distributors. Where there is direct delivery of petrol from the terminal the cost of supply is generally lower. Where distributors supply petrol from storage depots in regional areas there is double handling of petrol and therefore higher costs in supply.

Whether petrol is bought on a contract or non-contract basis

- In general, the refiner/marketers supply petrol on term contracts at lower prices than for spot purchases at the terminal.

The volume and frequency of purchases

- Customers who buy petrol in greater volume and more frequently have greater ability to negotiate discounts off the terminal gate price.

The extent to which discounts are provided

- Discounts may be provided at both the wholesale and retail level. At the wholesale level, there may be a discount off the terminal gate price due to large volume purchases.

- At the retail level, discounts may be provided through price support arrangements provided to franchisees.

- Discounts can also be provided at the retail level as a result of shopper docket arrangements and other loyalty schemes, or as a promotional tool when a service station begins operations in a particular location.

- Some wholesalers and retailers are better able to compete against their competitors because of the larger discounts they receive from their suppliers.

Freight and distribution costs

- As noted earlier, the further away a location is from a terminal, the higher the freight costs. Caltex estimates that freight is typically 1.5 to 3.0 cpl greater for country than city delivery.[31]

---

[31] Caltex, *Petrol pricing—the plain facts*, Caltex website http://www.caltex.com.au, retrieved 17 July 2006.

- These costs are also influenced by double handling of product and the degree of competition in the distribution of petrol.

The level of price support provided by the oil companies

- In general only franchisees of refiner/marketers tend to receive price support from their franchisors. The level of price support is dependent on the level of competition in specific locations.

The scope of the retailers' business operations

- Service stations have become more dependent on revenue from other goods and services (such as shop sales and car washes) at service station sites.

- At times petrol may be sold as a loss leader to attract sale of goods and services that generally have higher profit margins.

- Those service stations without ancillary goods and services may have higher petrol prices to make a sufficient profit.

The types of retailers

- A retailer could be an oil company, an independent operator or a supermarket site and the forms of operation vary. The ability of a service station to compete depends to some extent on the nature of its operations and the business relationship with the supplier of its petrol.

- Furthermore, different types of retailers have different strategies for attracting customers, which can influence the level of competition in a particular location.

- For example, the oil majors tend to promote their brand and the quality of their petrol, whereas the competitive element of some of the independent chains is their lower prices. The supermarket chains rely, in part, on their shopper docket arrangements to attract customers.

The number of retailers

- Many retailers in a location may mean more competition and lower prices. Fewer retailers may mean less competition and higher prices.

- However, it may be that the number of retailers in a location is such that the volume sold at each location is low and therefore prices have to be higher at each site to generate sufficient profit. Reducing the number of retail sites might then lead to greater sales volume per site and therefore the ability to lower prices.

The margins set by retailers

- The margins set by retailers are dependent on factors such as the volume of sales, the ability to retail other goods and services besides petrol, and the level of competition in the specific location.

The profile of customers

- This includes whether customers are primarily locals or people passing through.
- A service station on a highway may be able to charge higher prices to passing traffic, while local consumers may buy petrol at service stations off the main thoroughfare.
- However, the service station on the highway may have considerably higher sales volumes and could therefore lower margins (and therefore prices) below those at a low-volume high-margin site.
- Some local consumers may choose to buy petrol at a particular local service station to support their local economy/community.

Possible anti-competitive practices

- This includes activities such as price fixing.
- In locations where anti-competitive practices may be occurring, retail prices are likely to be higher than otherwise.

The influence of these factors can vary considerably between locations, resulting in substantial differences in prices.

It is not surprising therefore that there are considerable variations in petrol prices across locations, including differences between city and country prices.

4.4 Determinants of terminal gate prices

The terminal gate price is a wholesale price and is the price available to anyone turning up with a truck at a fuel terminal provided fuel is available.

The terminal gate prices of the oil companies are primarily influenced by the underlying factors noted in section 4.2. The methodology used by the oil companies to determine their terminal gate prices is broadly the same as that used by the ACCC to determine maximum endorsed wholesale prices before 1 August 1998.

4.4.1 Terminal gate price

Essentially the terminal gate price is determined as follows:

- Rolling average of daily Singapore spot prices of Mogas 95 Unleaded
- *plus* notional fuel quality premium[32]
- *plus* rolling average of daily Australian/US dollar exchange rates

[32] This will be higher in Western Australia, as a result of their higher fuel standards.

- *plus* freight costs, provision for insurance and loss and wharfage charges[33]

- *plus* margin to cover terminalling costs and profit

- *plus* excise and the GST.

There are some differences between the methods used by the oil companies to determine terminal gate prices. For example:

- some companies use a seven-day rolling average of the Singapore Mogas 95 Unleaded price and the Australian/US dollar exchange rate, whereas others use five-day rolling averages. A rolling average is used to smooth out the effect of daily variations in underlying factors on domestic petrol prices

- some companies vary their terminal gate prices on a daily basis, whereas others change them on a twice-weekly basis.

Differences in terminal gate prices between locations will generally reflect differences in assessed freight and wharfage costs in particular locations and different oil company margins.[34] Differences in terminal gate prices in the same location will generally reflect different methods for determining the terminal gate price, different terminalling margins and costs, and competitive considerations.

The oil companies publish their terminal gate prices on a daily basis on the internet. They are required to do so under the Victorian and Western Australian terminal gate pricing arrangements and do so voluntarily in the other states.

4.4.2 Purchases at the terminal gate price

While the oil companies publish their terminal gate prices daily on the internet, it is not clear how many sales are made at the published terminal gate price. Some oil companies have said that many of their sales are at their terminal gate price. Others have said that there are few sales at the terminal gate price.[35]

There are many factors that may influence whether purchase of petrol is made at the terminal gate price including:

- whether purchase of petrol is on a spot or contract basis

- the amount of petrol bought and the duration of the contract

---

[33] The first four items are often known as the 'landed price'.

[34] Note that in Victoria there is a subsidy of 0.429 cpl provided at the wholesale level and in Western Australia there is a higher fuel quality premium.

[35] See the various comments from oil company representatives in Commonwealth of Australia, Official Committee Hansard, Senate Economics Legislation Committee, Petroleum Retail Legislation Repeal Bill 2006, Wednesday, 19 April 2006, Sydney.

- the extent to which the seller is prepared to discount off the terminal gate price
- the sellers' business relationship with the buyer—for example, franchisees may buy at prices higher than the published terminal gate price but they may receive price support.

However, the published terminal gate prices provide a benchmark price for the industry. At the basic level, anyone turning up with a truck at the terminal can buy petrol on a spot basis at the terminal gate price provided petrol is available and they can meet necessary conditions.

4.5 Determinants of retail prices

4.5.1 Retail prices

Retail petrol prices in Australia will tend to reflect terminal gate prices plus associated costs (such as branding and transport) plus a profit margin. At any particular location, they will also be influenced by many of the locally specific factors outlined in section 4.3.

Given that petrol prices can be volatile on a daily basis—particularly in the larger metropolitan cities—it is more appropriate to generally assess movements in prices on a weekly or monthly basis.

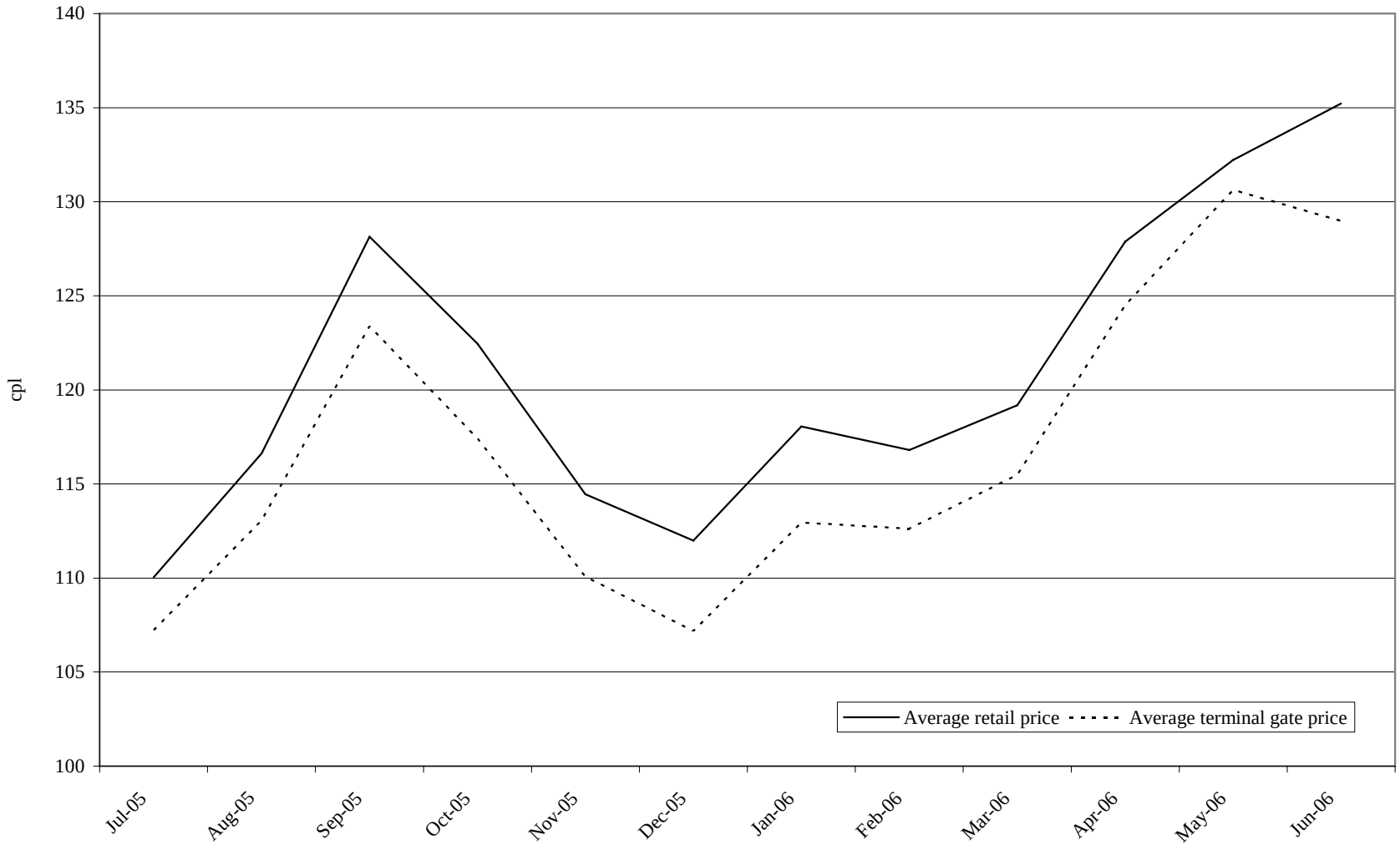
4.5.2 Terminal gate prices and retail prices

Average retail petrol prices tend to follow terminal gate prices. This is clear from chart 4.1, which shows monthly average retail petrol prices in the five largest metropolitan cities and the average of the terminal gate prices in those five cities.

Analysis of average terminal gate prices and average retail petrol prices over the past few years indicates that the difference between the two has not changed materially.

In 2005–06 the difference between the average retail petrol prices in the five largest metropolitan cities and the average terminal gate prices in those five cities was 4.3 cpl. In 2004–05 it was 3.7 cpl and in 2003–04 it was 4.2 cpl.

Chart 4.1 Five largest metropolitan cities—average monthly retail prices and terminal gate prices—July 2005 to June 2006



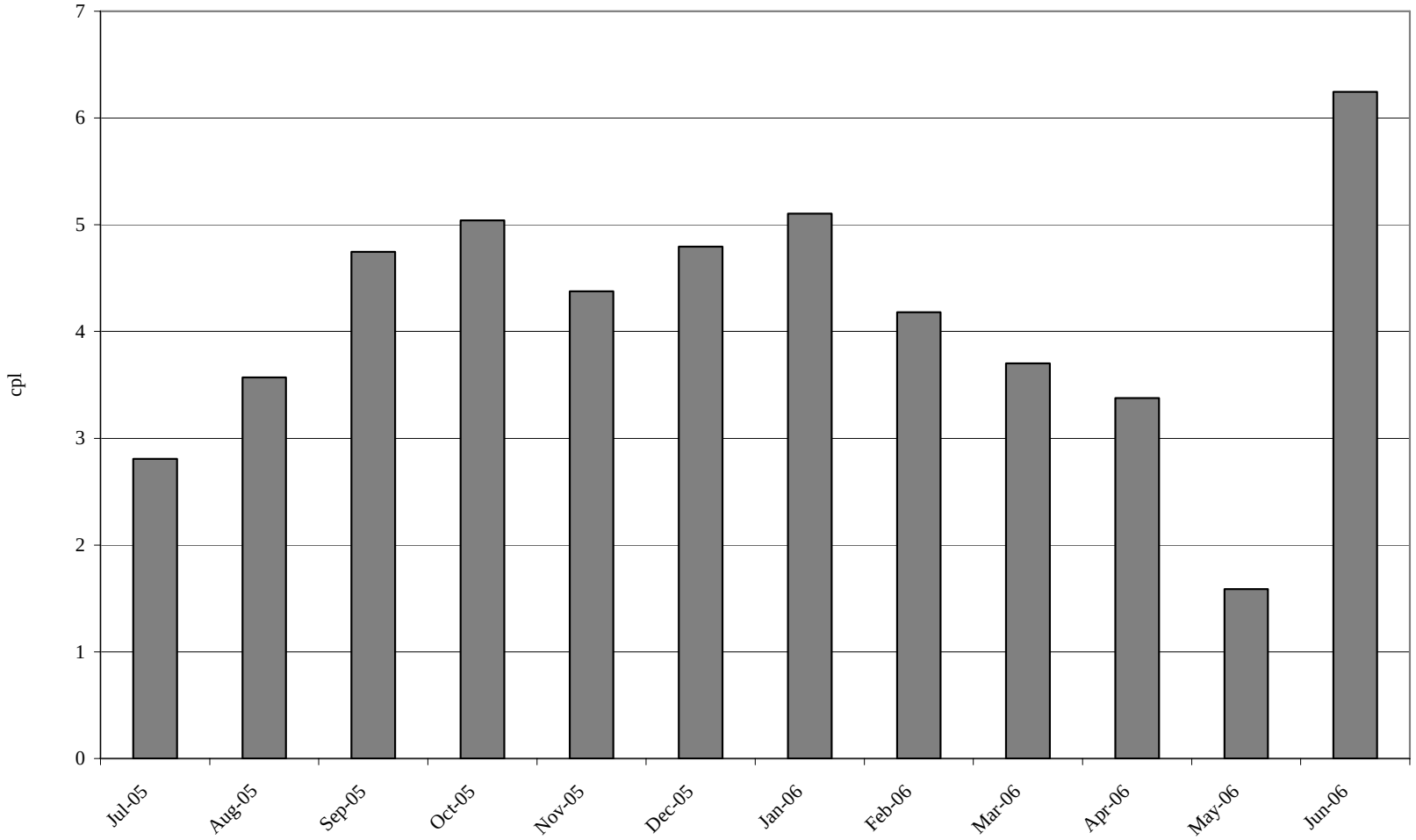
Source: ACCC, Informed Sources, BP, Caltex, Mobil, Shell, Trafigura and the WA Department of Consumer and Employment Protection

However, the monthly differential between average retail petrol prices and average terminal gate prices can vary. This can be seen for the months of May and June 2006 in chart 4.1.

It is shown more clearly in chart 4.2, which shows the monthly differential between average retail petrol prices in the five largest metropolitan cities and the average terminal gate prices in those five cities in 2005–06.

It can be seen that the monthly differential ranged from a low of 1.6 cpl in May 2006 to a high of 6.2 cpl in June 2006. However, the differential over the year was mainly in a band of around 3.5 cpl to 5.0 cpl. The differential in May 2006 was significantly lower than the average margin over the year of 4.3 cpl and it may be that retailers were recovering margins in June 2006.

Chart 4.2 Five largest metropolitan cities—average monthly differential between retail prices and terminal gate prices—July 2005 to June 2006



Source: ACCC, Informed Sources, BP, Caltex, Mobil, Shell, Trafigura and the WA Department of Consumer and Employment Protection

4.6 Recent movements in the key underlying factors

Over recent times there have been significant movements in the key underlying factors that determine the overall level of petrol prices in Australia.

4.6.1 Movements over the past five years

Tapis crude oil and Singapore Mogas 95 Unleaded

Chart 4.3 shows monthly average prices for Tapis crude oil and Singapore Mogas 95 Unleaded in US dollars per barrel between July 2001 and June 2006.

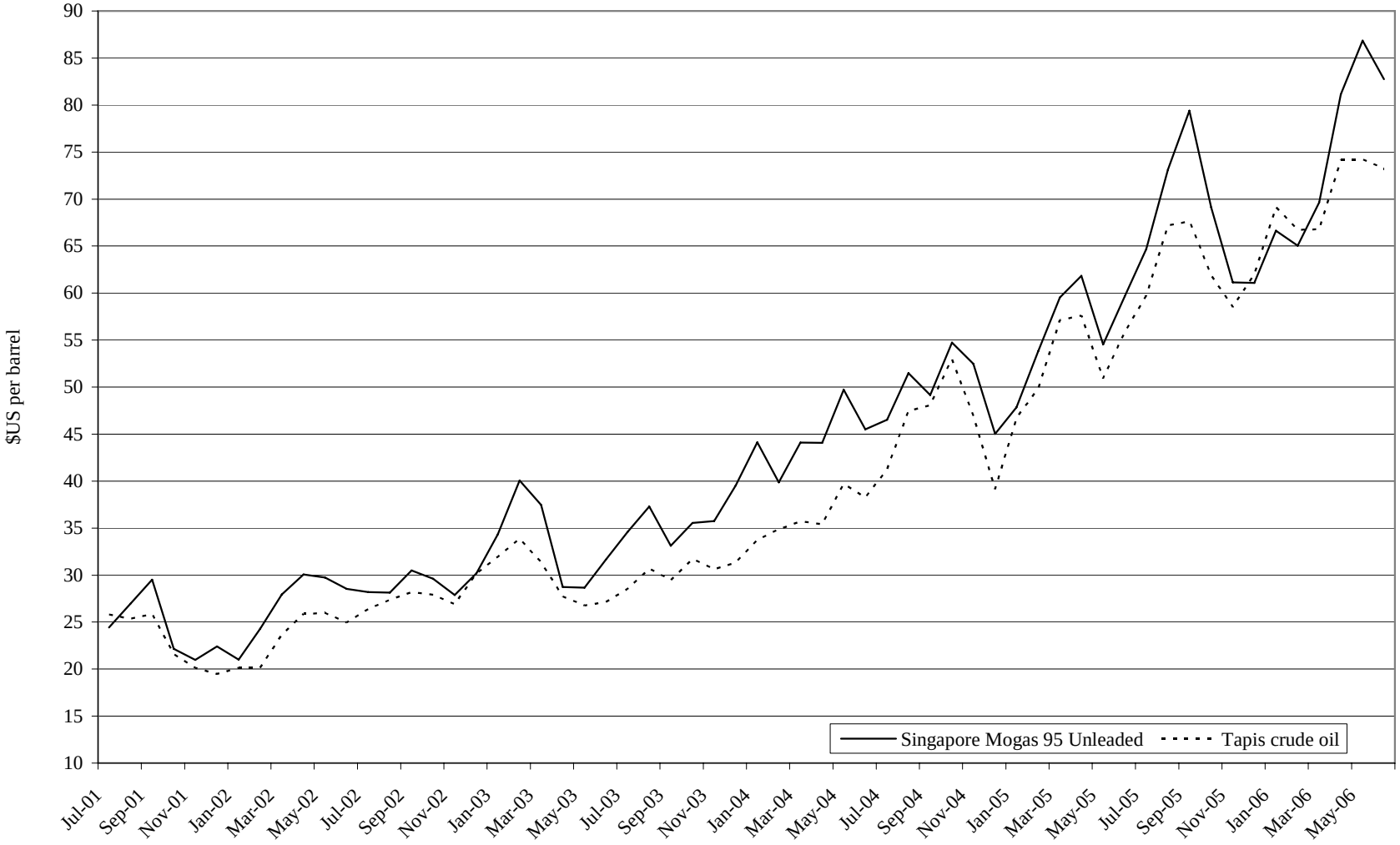
It can be seen that monthly average:

- Tapis crude oil prices increased from around US$25 per barrel in July 2001 to around US$75 per barrel in June 2006. This is an increase of around 200 per cent over the five years

- Singapore Mogas 95 Unleaded prices increased from around US$25 per barrel in July 2001 to around US$85 per barrel in June 2006. This is an increase of around 240 per cent over the five years

- Singapore Mogas 95 Unleaded prices tended to move in a broadly similar way to monthly average Tapis crude oil prices. However, there were periods when they have diverged significantly, for example, in September 2005 after the effect of Hurricane Katrina on some refineries in the United States.

Chart 4.3 Singapore Mogas 95 Unleaded and Tapis crude oil—average monthly price—July 2001 to June 2006



Source: ACCC and Platts, energy information division of McGraw-Hill, Inc.

Refiner margin

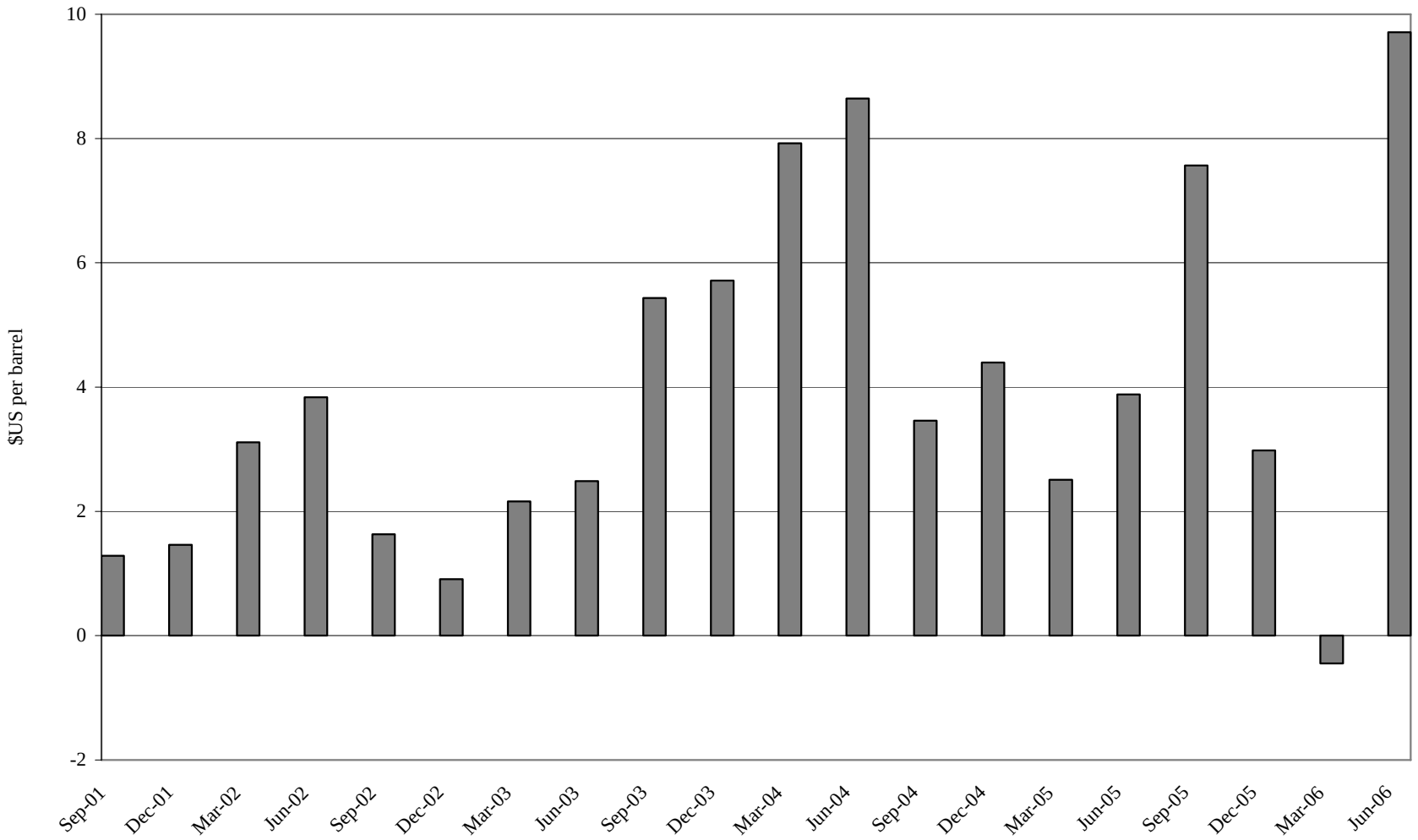
Chart 4.4 shows the refiner margin (i.e. the difference between the price of Singapore Mogas 95 Unleaded and the price of Tapis crude oil) on a quarterly basis between July 2001 and June 2006.

It can be seen that the refiner margin was quite volatile over the period, ranging from a high of around US$10.0 per barrel in the June quarter 2006 to a low of negative US$0.5 per barrel in the March quarter 2006.

There have been negative weekly or monthly margins on a number of occasions over the five-year period.

Some of the higher refiner margins towards the end of the period may reflect the tighter supply of refined petrol in the Asia–Pacific region and increases in demand in several countries (particularly China and India).

Chart 4.4 Refiner margin—average quarterly— September quarter 2001 to June quarter 2006



Source: ACCC and Platts, energy information division of McGraw-Hill, Inc.

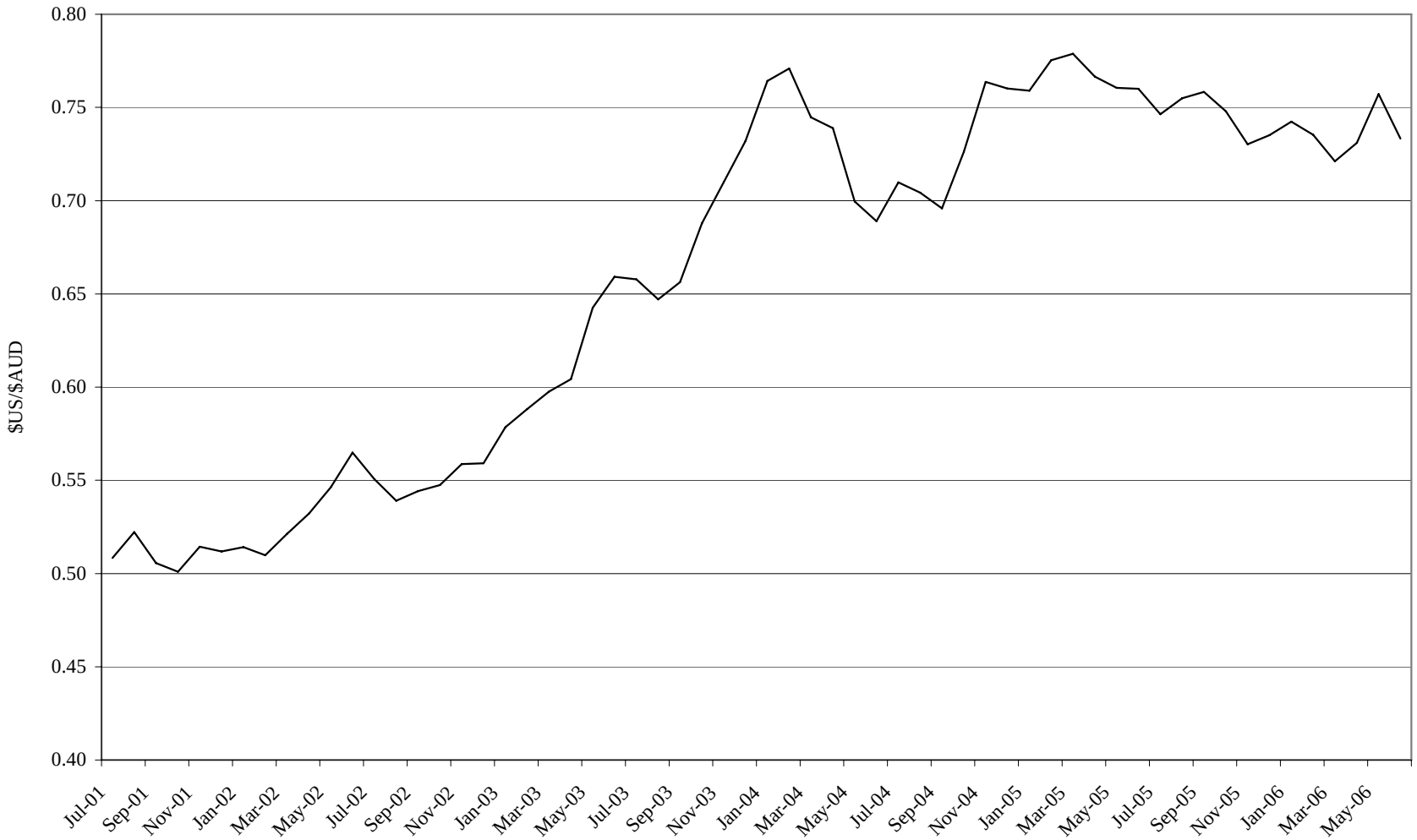
Australian/US dollar exchange rate

Chart 4.5 shows the monthly average Australian/US dollar exchange rate between July 2001 and June 2006.

It can be seen that the exchange rate appreciated significantly over this period—from one Australian dollar being worth around US 51 cents in July 2001 to being worth around US 73 cents in June 2006.

The appreciation in the exchange rate would have tempered the effect of the increase in Singapore Mogas 95 Unleaded prices on domestic petrol prices over this period.

Chart 4.5 Australian/US dollar exchange rate—average monthly—July 2001 to June 2006



Source: ACCC and Commonwealth Bank

4.6.2 Movements in 2005–06

Movements in the key underlying factors were particularly unstable in 2005–06.

Tapis crude oil and Singapore Mogas 95 Unleaded

Chart 4.6 shows monthly average prices for Tapis crude oil and Singapore Mogas 95 Unleaded in US dollars per barrel between July 2005 and June 2006.

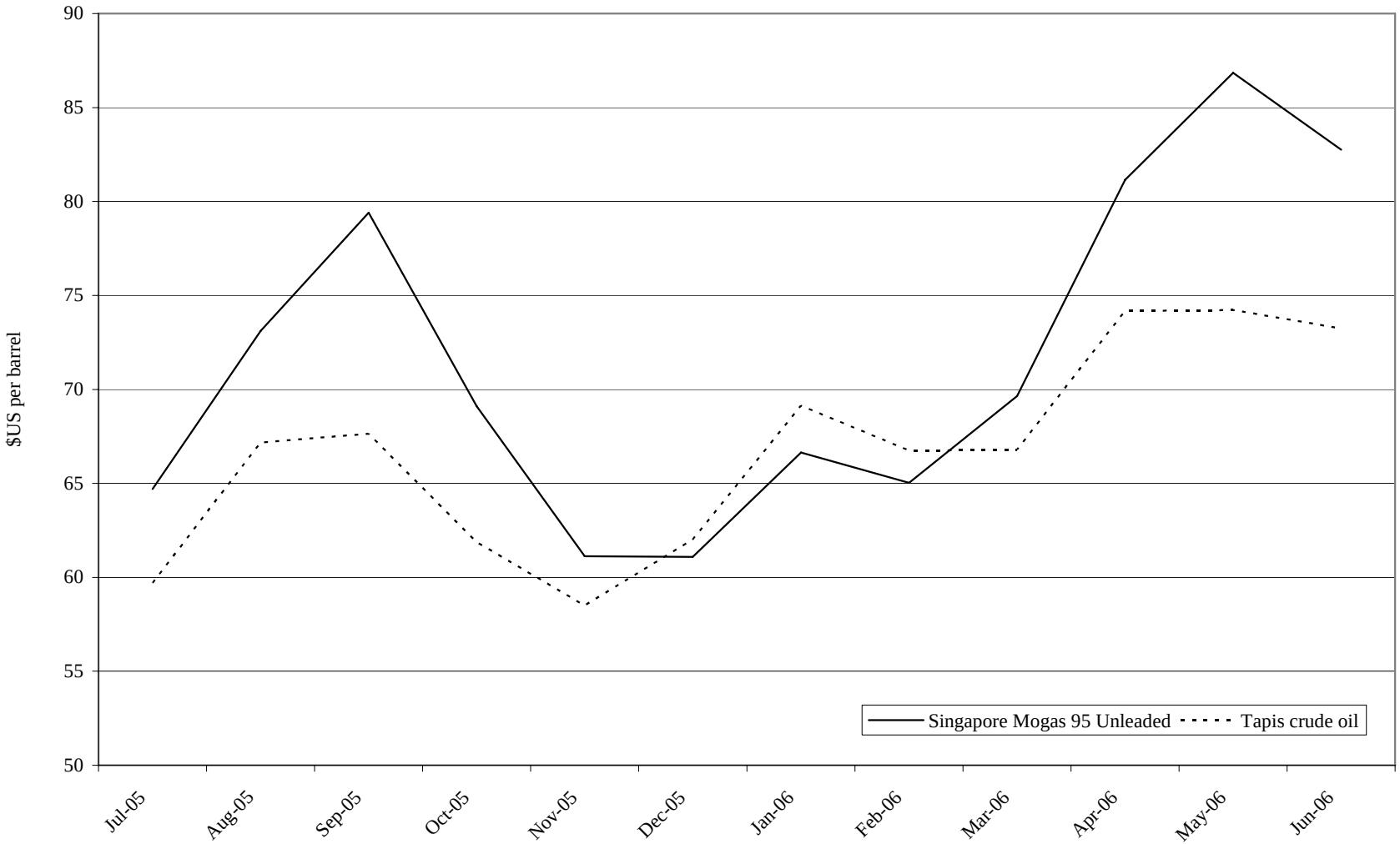
It can be seen that:

- Monthly average Tapis crude oil prices ranged from a low of around US$60 per barrel (in November 2005) to a high of around US$75 per barrel (in April and May 2006)

- Monthly average Singapore Mogas 95 Unleaded prices ranged from a low of around US$60 per barrel (in November and December 2005) to a high of around US$85 per barrel (in May 2006)

- The monthly refiner margin was negative from December 2005 to February 2006.

Chart 4.6 Singapore Mogas 95 Unleaded and Tapis crude oil—average monthly prices—July 2005 to June 2006



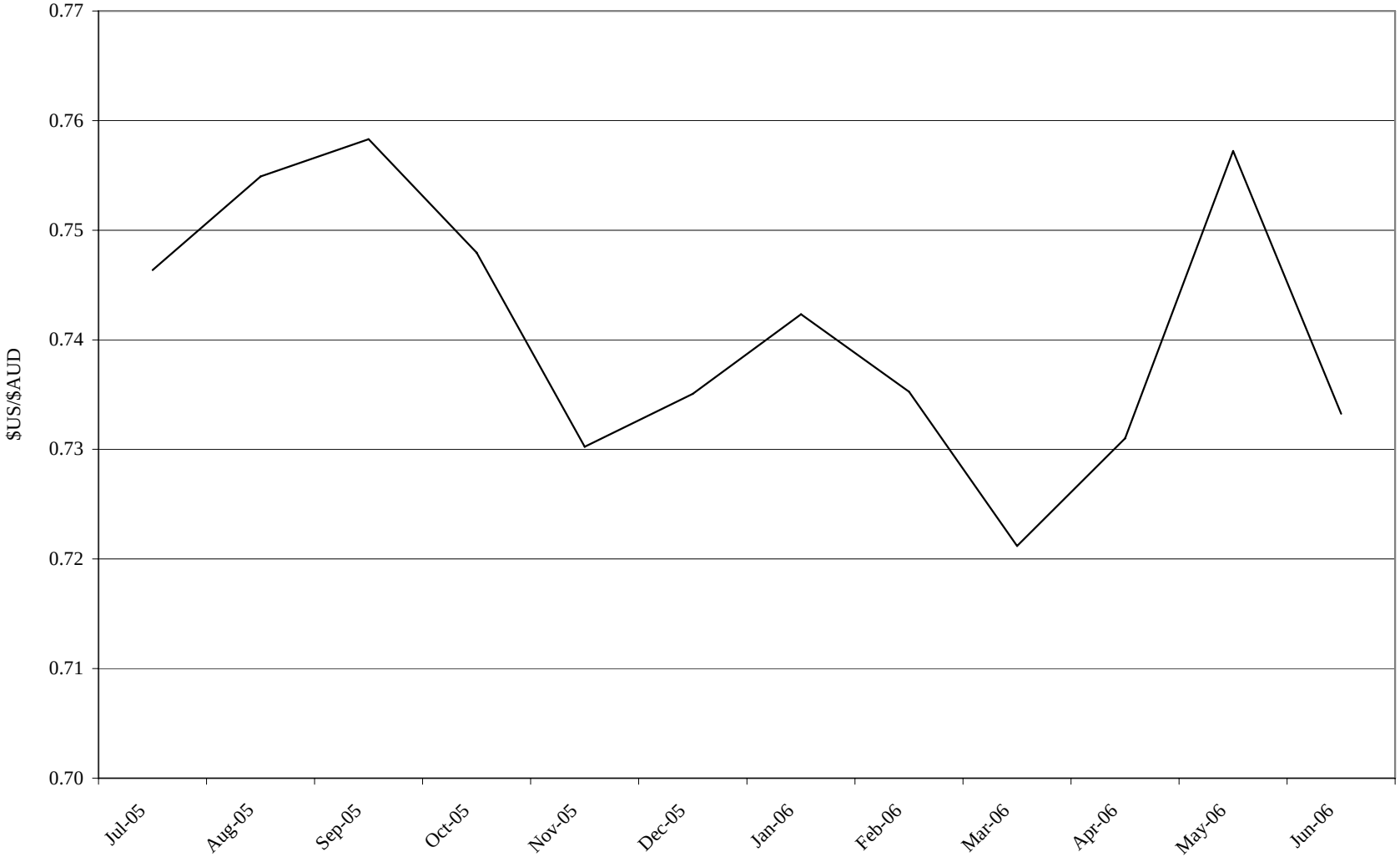
Source: ACCC and Platts, energy information division of McGraw-Hill, Inc.

Australian/US dollar exchange rate

Chart 4.7 shows the monthly average Australian/US dollar exchange rate between July 2005 and June 2006.

It can be seen that the value of the Australian dollar ranged between US 72 cents and US 76 cents during the period. However it was trending down for most of the year.

Chart 4.7 Australian/ US dollar exchange rate—average monthly—July 2005 to June 2006



Source: ACCC and Commonwealth Bank

4.7 Recent movements in the key underlying factors and Australian petrol prices

4.7.1 Key underlying factors

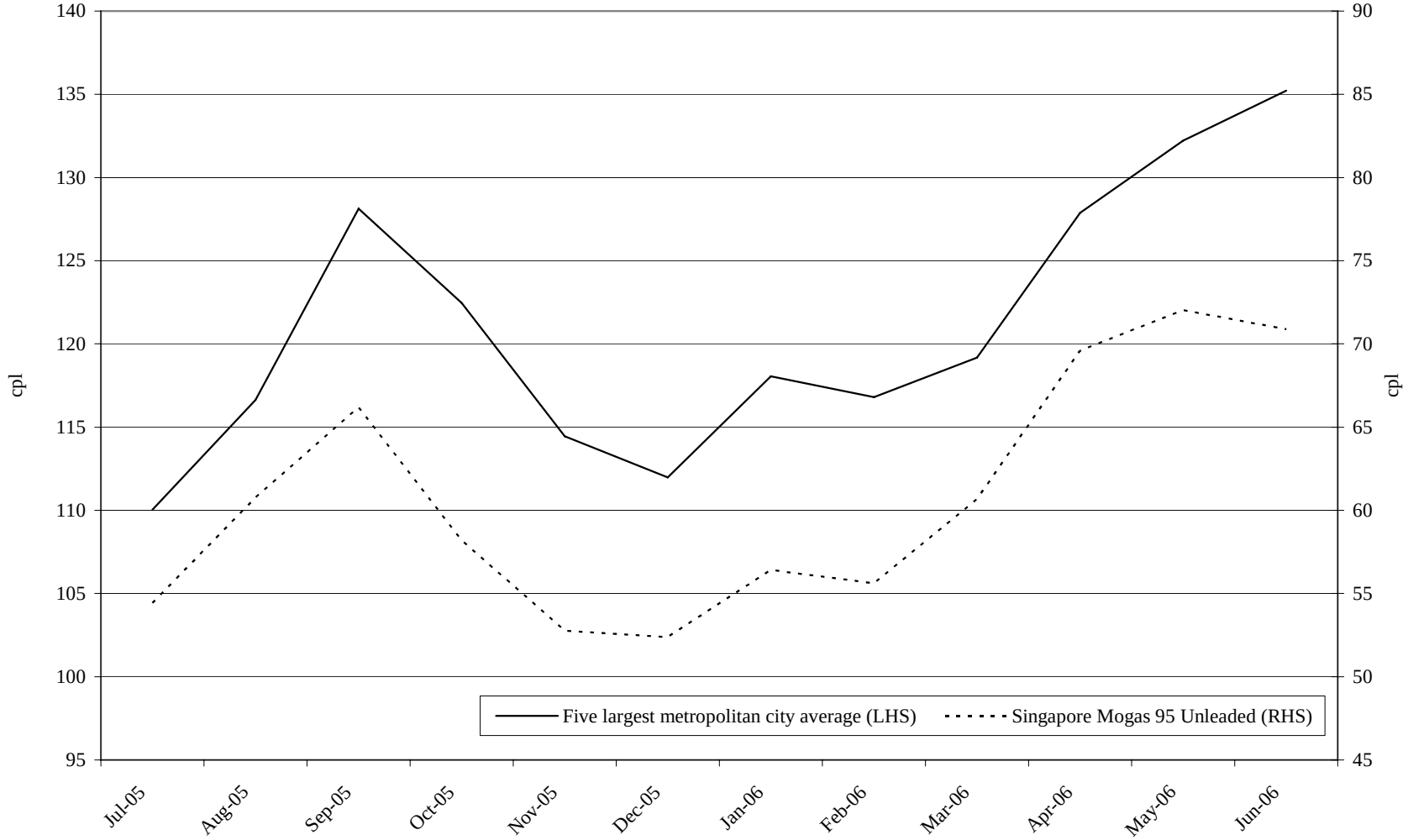
Movements in the overall level of Australian petrol prices are largely driven by movements in the key underlying factors, that is, changes in the price of Singapore Mogas 95 Unleaded and the Australian/US dollar exchange rate.

This is clearly apparent from chart 4.8 which shows monthly average retail petrol prices across the five largest metropolitan cities and monthly average Singapore Mogas 95 Unleaded prices in Australian cents per litre.

The difference between monthly average retail petrol prices across the five largest metropolitan cities and monthly average Singapore Mogas 95 Unleaded prices will vary over the year (such as during June 2006 and April 2006).

However, over the year as whole, movements in domestic petrol prices tend to follow the movements in international petrol prices.

Chart 4.8 Five largest metropolitan cities and Singapore Mogas 95 Unleaded—average monthly prices—July 2005 to June 2006



Source: ACCC, Informed Sources and Platts, energy information division of McGraw-Hill, Inc.

5 Variations in retail petrol prices

5.1 Introduction

As noted in section 4.3.3, petrol prices in the major metropolitan cities tend to move in cycles. This section examines those price cycles. It also considers the issue of petrol price increases around public holidays.

The ACCC undertook a study of petrol price cycles and options to limit them in its 2001 variability report. This section draws on some of the material in that report and updates the data analysis.

5.2 Nature of petrol prices

Petrol has a number of characteristics which appear to make it susceptible to price volatility.

- Regular unleaded petrol is generally a very similar product, with limited brand loyalty.[36] Therefore, competition is based primarily on price. For the individual retailer, there is an incentive to discount prices to attract sales from competitors when demand is low.

- The price of petrol is highly visible, as it is prominently displayed on price boards at service stations. Petrol prices are more visible than the price of most other products. Therefore, there is greater incentive to discount when demand declines.

- The refiner/marketers and other retailers receive comprehensive up-to-date information on their competitors' petrol prices at regular intervals during the day, which means they can quickly respond to price movements (both up and down).

- Service stations with shops attached may have lower petrol prices to attract customers who may then buy other products with a greater profit margin.

- The demand for petrol (and therefore prices) varies over the week, generally peaking around the end of the week.

5.3 Incidence of price cycles

Volatility in retail petrol prices is generally confined to the major metropolitan cities and areas close by. The price cycles in these areas are fairly regular and frequent. Prices tend to have a sawtooth pattern, that is, prices increase rapidly over a short period and then steadily decrease.

Movements in average daily retail prices for petrol in the five major metropolitan cities in the three-month period 1 April to 30 June 2006 are shown in charts 5.1 to 5.5.

---

[36] This is mainly the case for regular unleaded petrol, which represents the majority of petrol sales. However, petrol retailers have attempted to differentiate their premium grades of petrol.

Movements in average daily retail prices for petrol in the smaller capital cities—Canberra, Darwin and Hobart—in the same period are shown in charts 5.6 to 5.8.

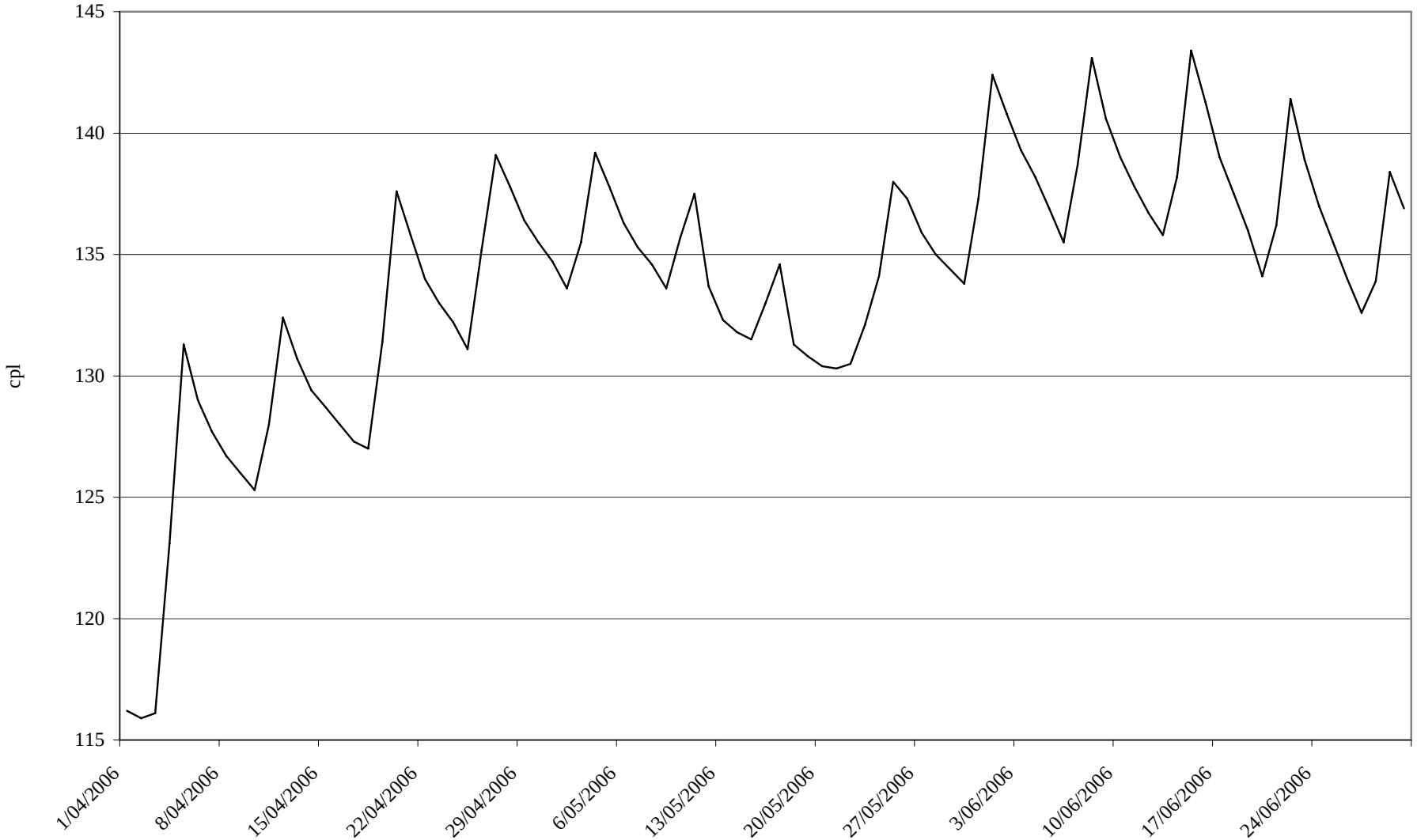
Movements in average daily retail prices for petrol in a couple of country towns—Tamworth in New South Wales and Broome in Western Australia—in the same period are shown in charts 5.9 and 5.10. These towns have been chosen as examples of general price movements in country towns.

It is clear from the charts that:

- regular price cycles predominantly occur in the five major metropolitan cities[37]
    - over the three-month period, there were twelve price cycles in Sydney, Brisbane and Adelaide, ten price cycles in Melbourne and seven price cycles in Perth
- there were some price cycles in Canberra, but they were not regular
- there were no regular price cycles in Darwin, Hobart, Tamworth or Broome.

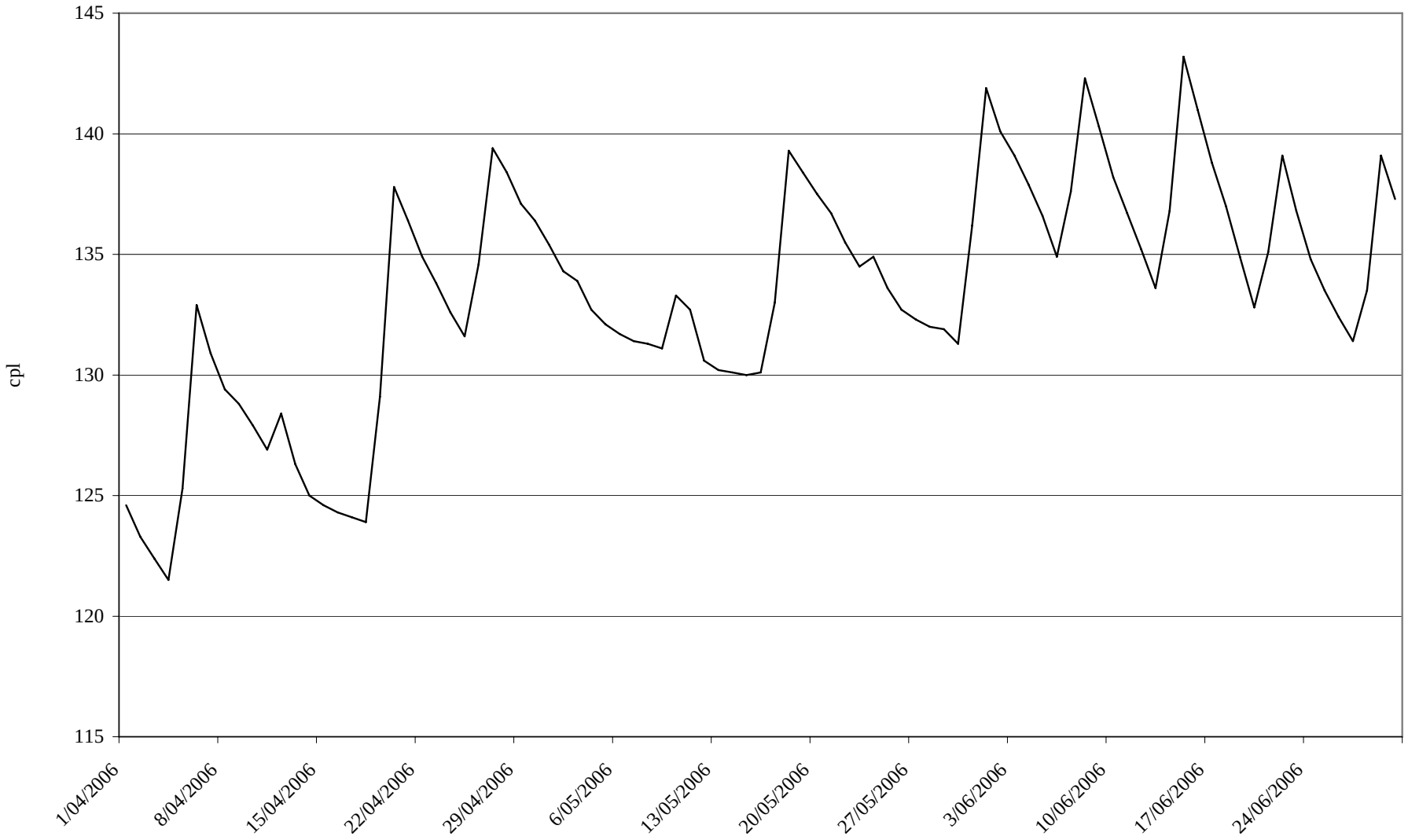
[37] A price cycle is defined in section 5.5.

Chart 5.1 Sydney—average daily retail prices—1 April to 30 June 2006



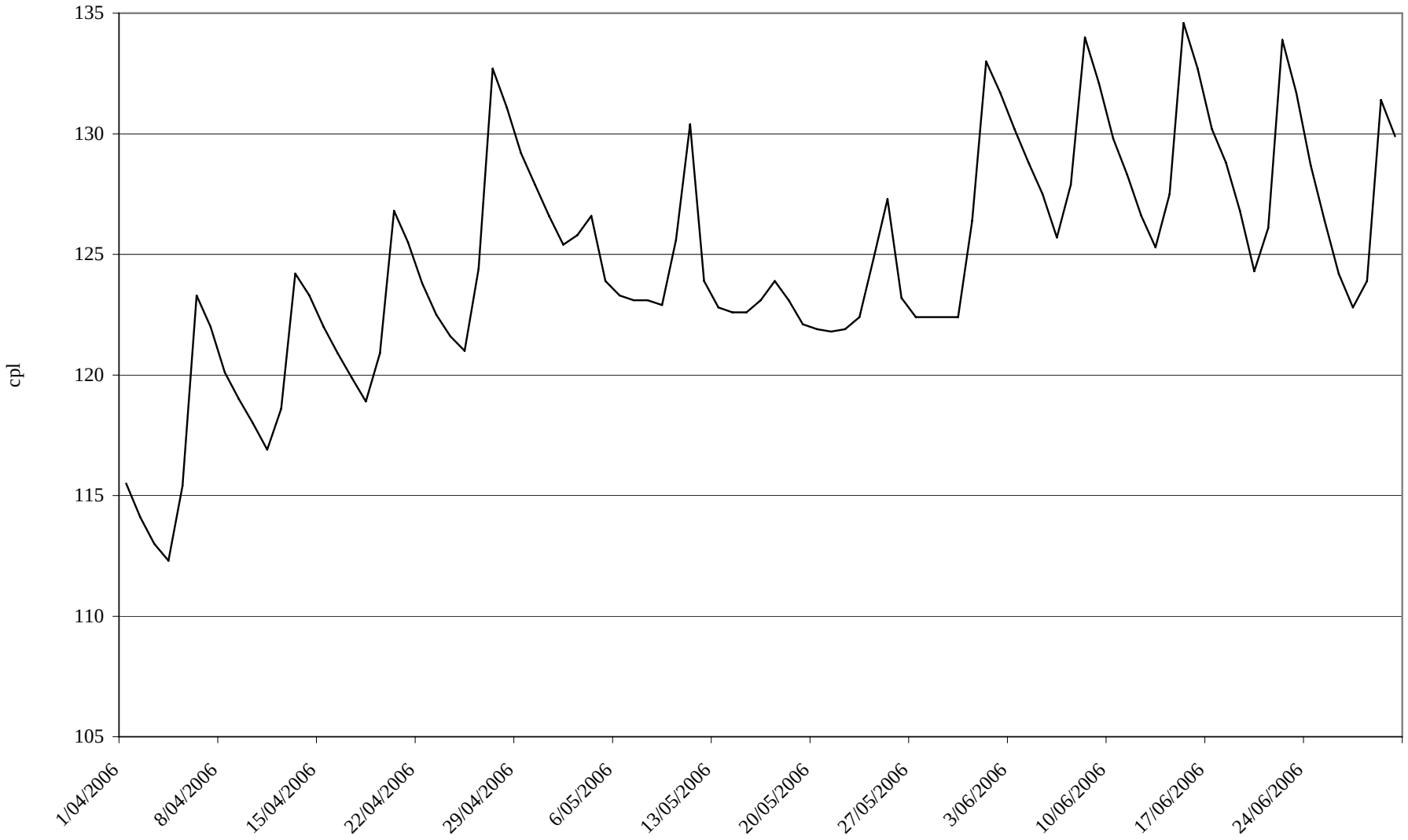
Source: ACCC and Informed Sources

Chart 5.2 Melbourne—average daily retail prices—1 April to 30 June 2006



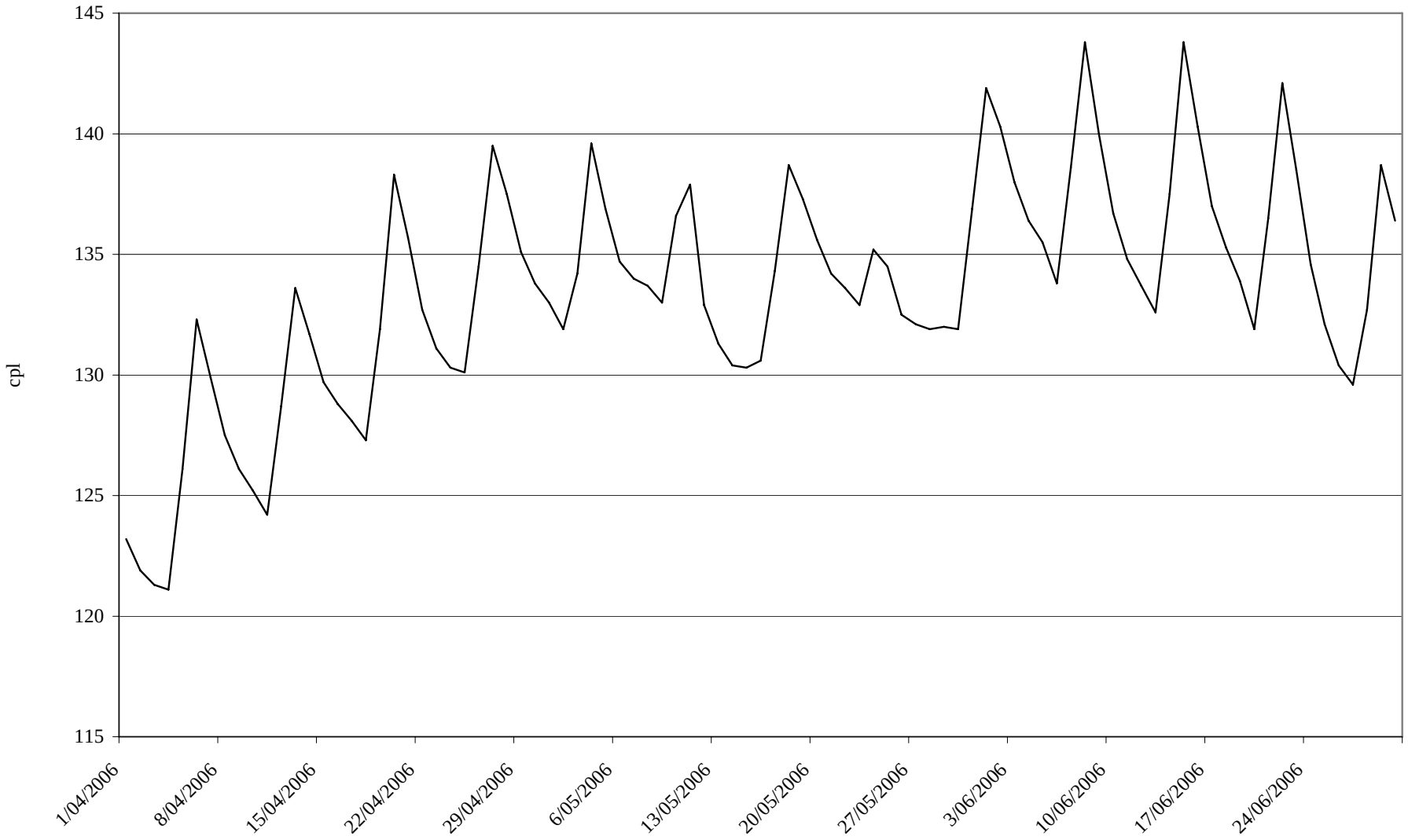
Source: ACCC and Informed Sources

Chart 5.3 Brisbane—average daily retail prices—1 April to 30 June 2006



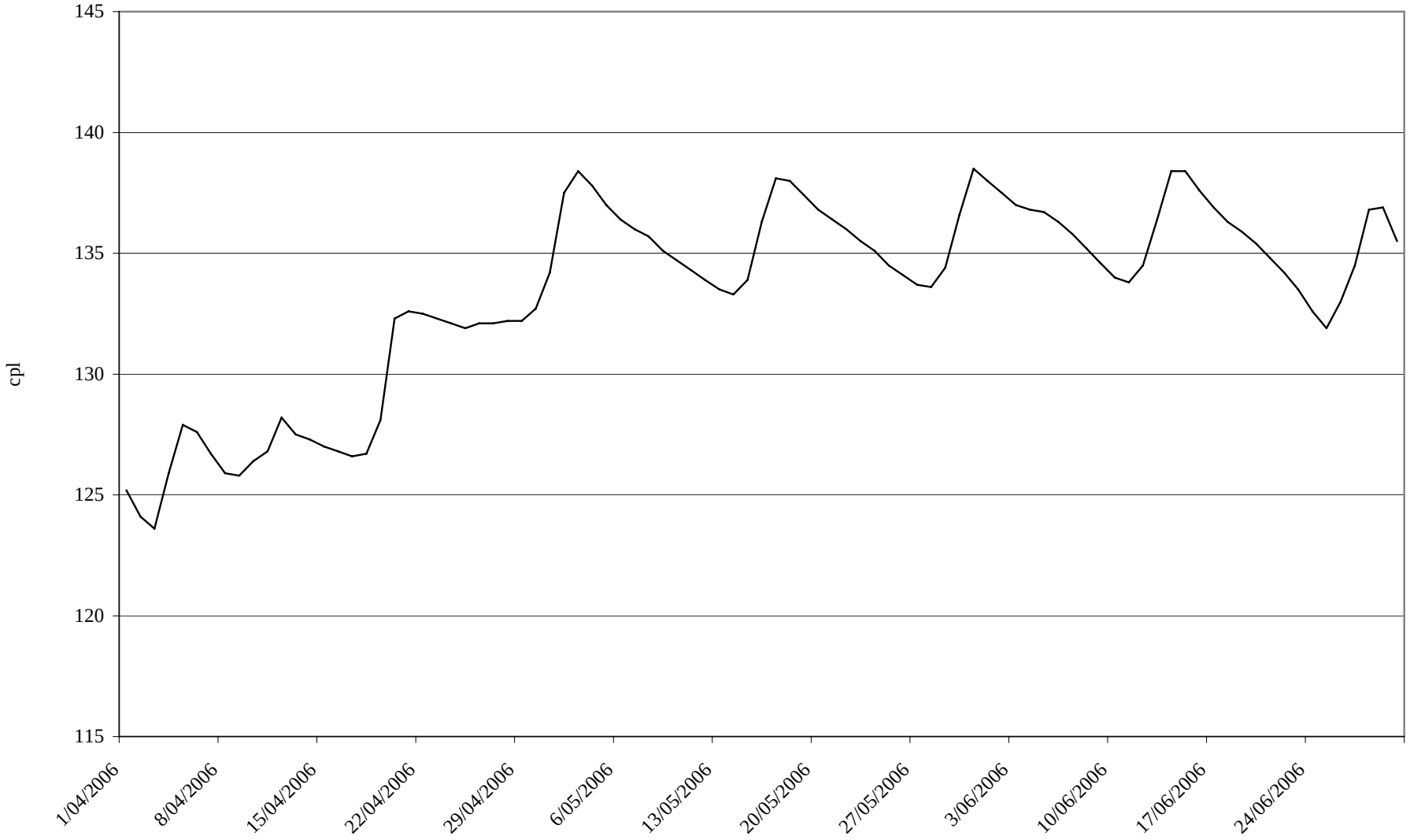
Source: ACCC and Informed Sources

Chart 5.4 Adelaide—average daily retail prices—1 April to 30 June 2006



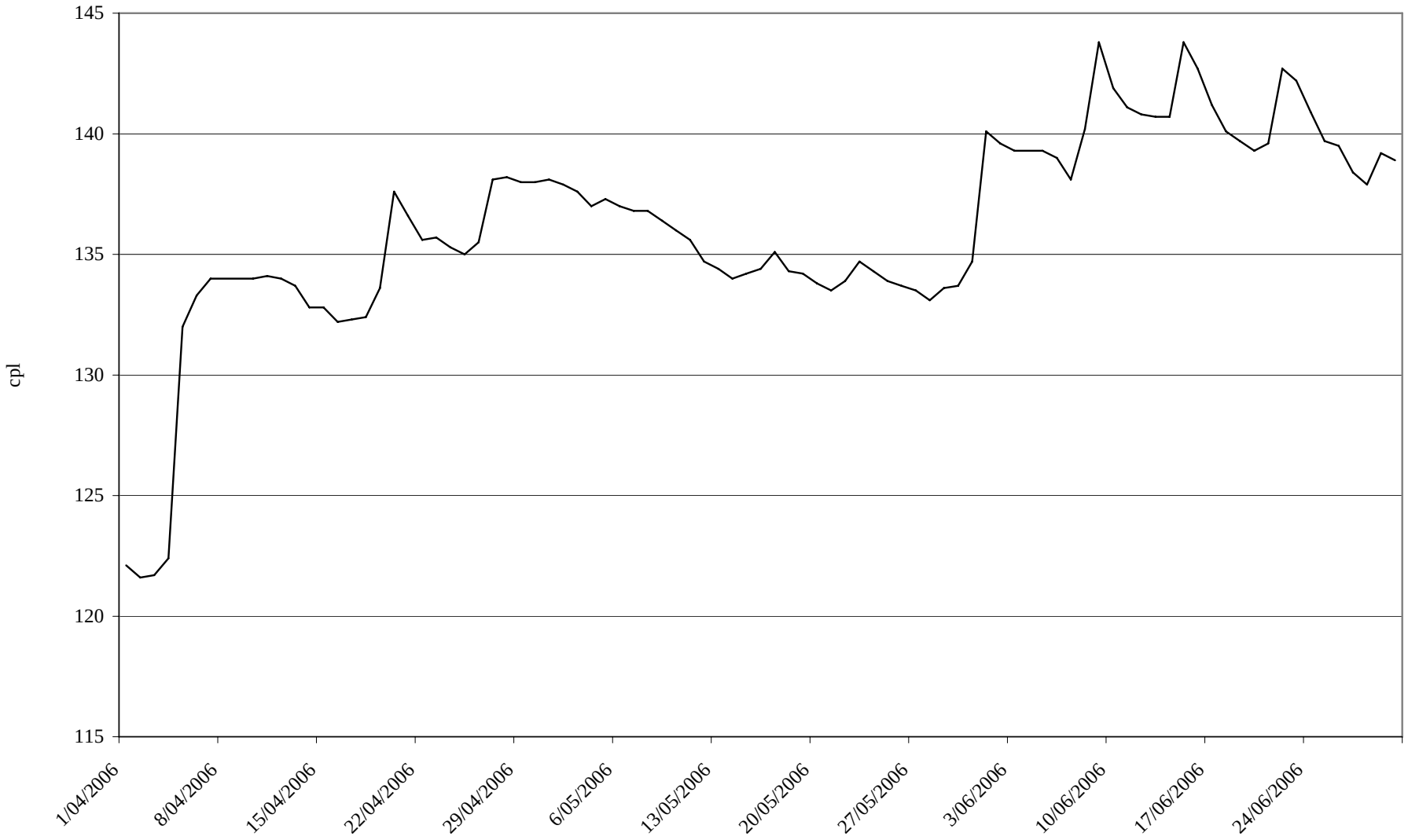
Source: ACCC and Informed Sources

Chart 5.5 Perth—average daily retail prices—1 April to 30 June 2006



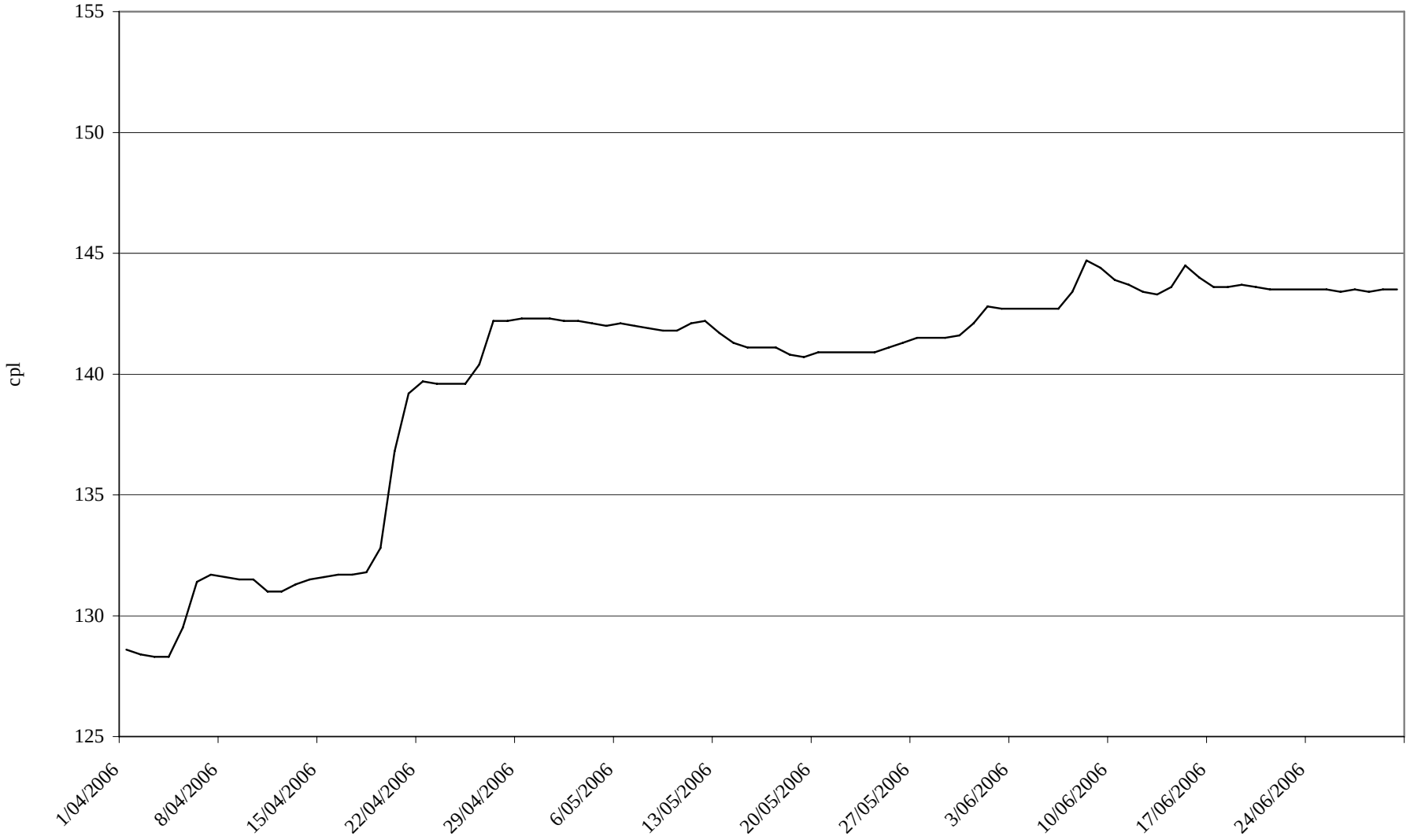
Source: ACCC and Informed Sources

Chart 5.6 Canberra—average daily retail prices—1 April to 30 June 2006



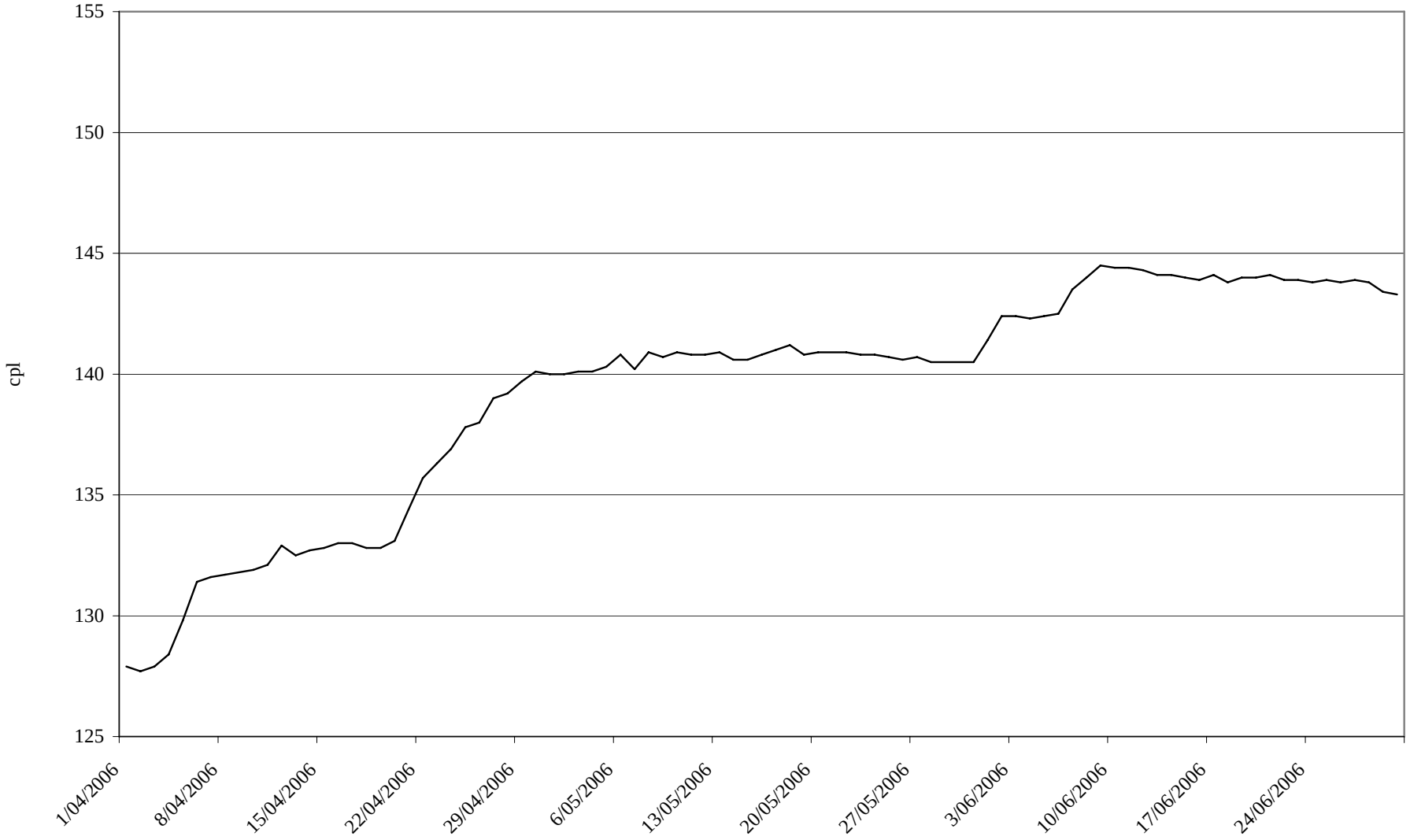
Source: ACCC and Informed Sources

Chart 5.7 Darwin—average daily retail prices—1 April to 30 June 2006



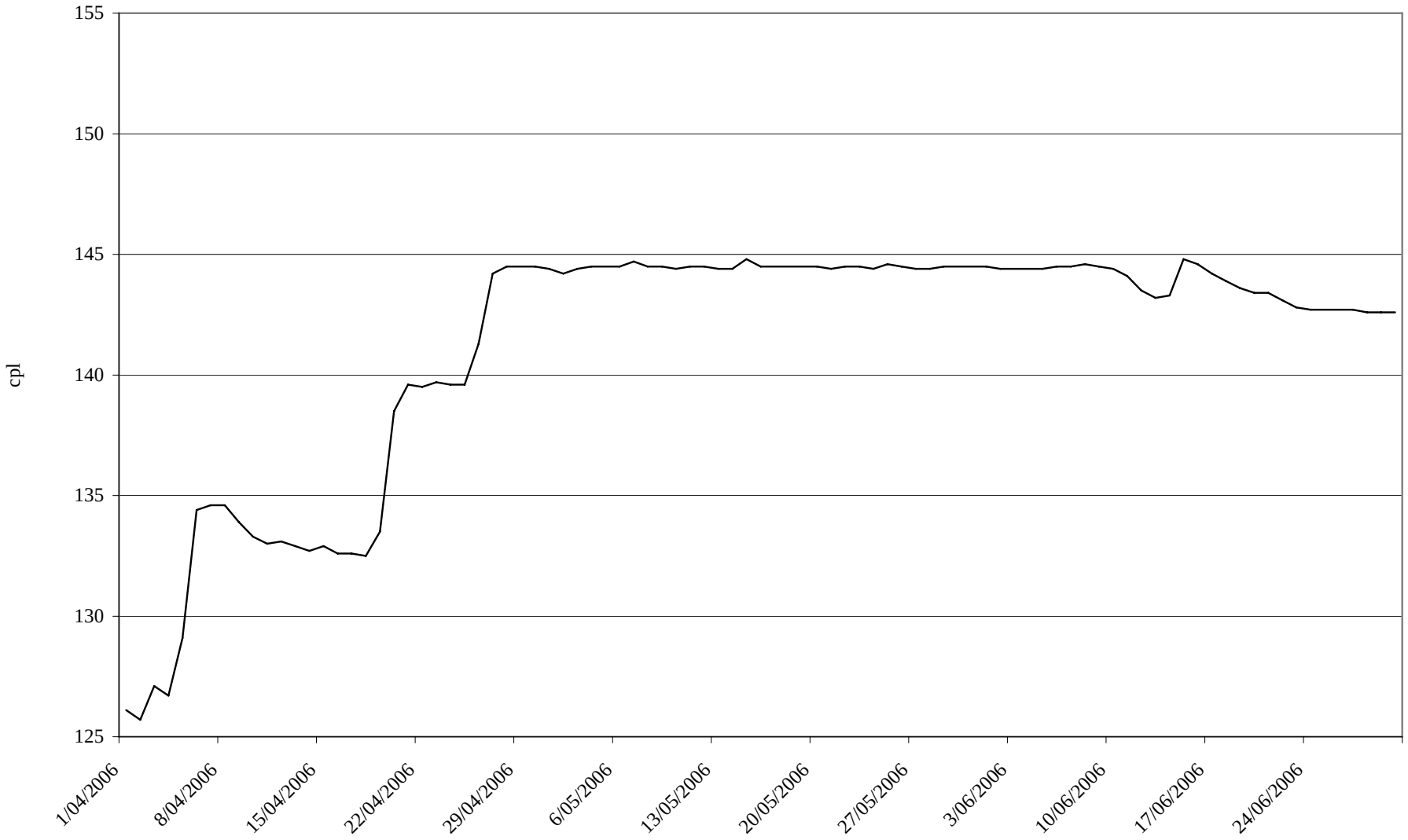
Source: ACCC and Informed Sources

Chart 5.8 Hobart—average daily retail prices—1 April to 30 June 2006



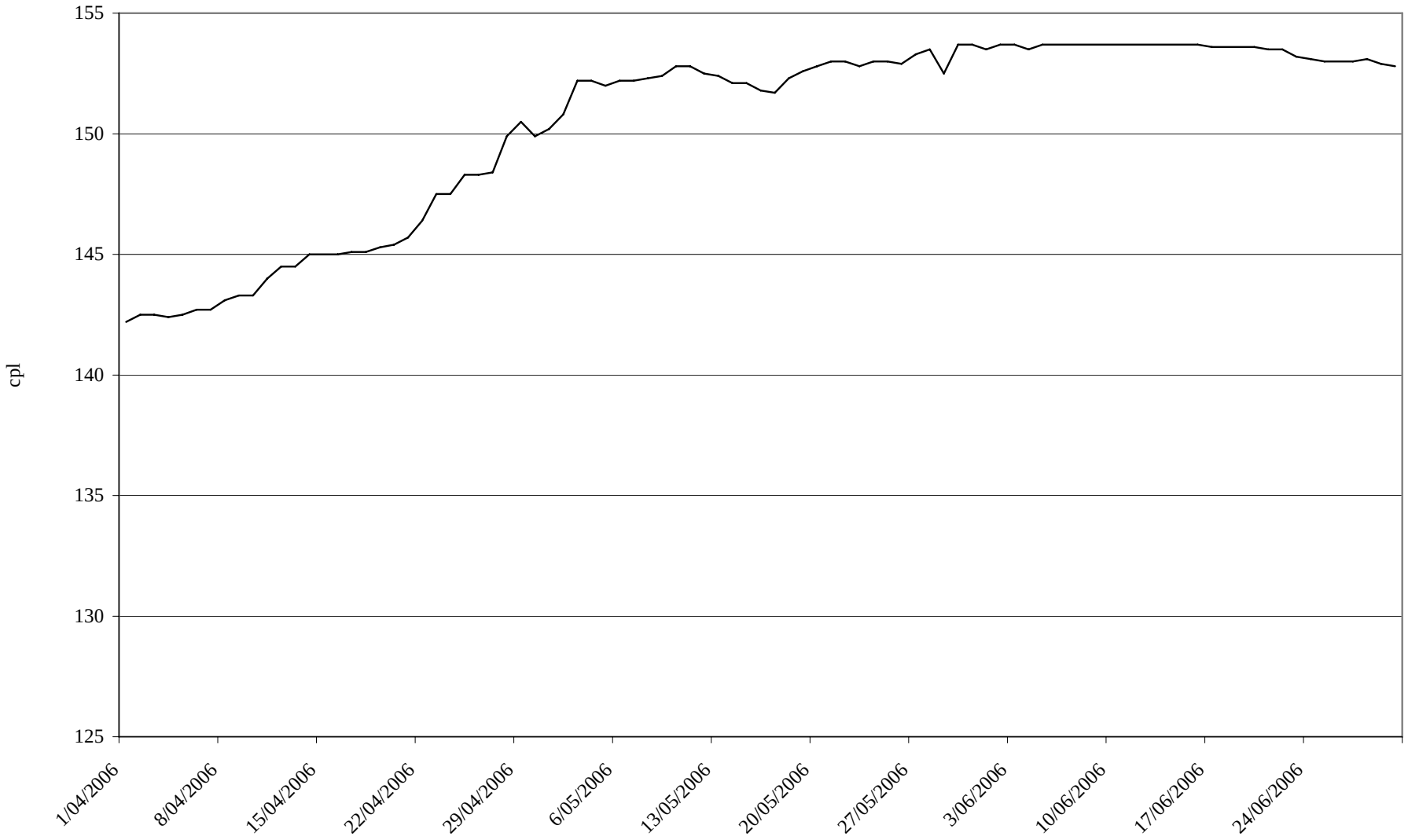
Source: ACCC and Informed Sources

Chart 5.9 Tamworth—average daily retail prices—1 April to 30 June 2006



Source: ACCC and Informed Sources

Chart 5.10 Broome—average daily retail prices—1 April to 30 June 2006



Source: ACCC and Informed Sources

5.4 Causes of price cycles

The causes of price cycles are complex and appear to be influenced by many factors.

Competition among petrol retailers for market share

- Petrol is basically a homogenous product and therefore competition is largely based on price. The main way to increase sales volume is to have a lower price than competitors. Price discounting continues in the market until prices become unsustainable and one retailer may then decide to significantly raise prices with competitors rapidly following.

Changes in demand on different days of the week

- During times of low demand retailers have an incentive to lower prices to lift sales of petrol and non-petrol items. During peak demand, there is less need to do this. Peak demand seems to occur towards the end of the week, with demand being lower early in the week.

Provision of price support by the refiner/marketers to their franchisees

- In general, price support takes the form of the refiner/marketers guaranteeing a certain margin to their franchisees. They may use price support as a way to enable their franchisees to be competitive and/or to increase their influence over the pricing behaviour of retailers. The removal of price support is claimed by some to be one of the major determinants of price cycles.

Different wholesale prices offered to petrol retailers

- A range of wholesale prices are offered to retailers. The larger independent chains can generally buy petrol at lower wholesale prices than franchisees or smaller independents. This is because they buy large quantities and can negotiate relatively lower prices. This enables them to lower retail prices to obtain market share.

Short-term excess product at refineries

- Short-term excess product at the refineries (which have high fixed costs and limited storage facilities) may provide an incentive for the refiner/marketers to give some independents discounts. This may have been the case in the past, but is probably less relevant today with tighter supply at the refining level in Australia.

Possible anti-competitive practices

- Refiners, wholesalers and retailers that engage in possible anti-competitive practices, such as price collusion and misuse of market power (for example, predatory pricing), will influence price cycles.

Industry participants cannot agree on the relative significance of these factors. As some factors are also interdependent, they cannot be considered in isolation. Their influence may also vary between locations and over time.

5.5 Data on price cycles

This section analyses data on the movements in average daily retail prices for petrol in the five major metropolitan cities for the six-month period 1 January to 30 June 2006.

Summary data is provided in section 5.5.2. Charts with further information about price cycles in the five largest metropolitan cities for the six months to 30 June 2006 are provided in Appendix 2.[38]

5.5.1 Methodology

In the following analysis:

- A **price cycle** is considered to have occurred if there are total price movements between trough to peak of one cent per litre or more and from that peak to subsequent trough of one cent per litre or more [39]
- The **variation** of a price cycle is the difference in price (in cents per litre) between the bottom (trough) and the top (peak) of the price cycle
- The **duration** of a price cycle is the number of days between the trough of one price cycle and the trough of the next cycle
- The data includes all days of the week and public holidays
- The data was obtained from Informed Sources
- The price data used in the analysis is based on average daily prices. Therefore, the actual fluctuations at individual service stations on any particular day would have been higher in some instances and lower in others.

5.5.2 Summary

Table 5.1 shows summary data on price cycles in the five largest metropolitan cities for the first six months of 2006.

[38] Similar data to that included in Appendix 2 for the first half of 2006 was included in the ACCC 2001 variability report (in Appendix A) for the first half of 1998 and the first half of 2001.

[39] In cases where the average daily price remains constant for more than one day at the bottom (trough) or top (peak) of a cycle, the trough or peak is taken to have occurred on the first day.

Table 5.1 Summary of price cycle analysis—1 January to 30 June 2006

	Sydney	Melbourne	Brisbane	Adelaide	Perth
Number of cycles[40]	24	20	25	25	13
Variation—cpl					
Smallest variation	2.7	1.2	1.2	2.3	2.4
Largest variation	15.4	13.9	11.7	11.2	11.8
Average variation	7.6	7.7	7.7	9.1	5.6
Most common variation	7 to <8	9 to <10	7 to <8, 8 to <9 & 9 to <10	9 to <10	6 to <7
Duration—days					
Ave no. days trough to peak	2.0	1.9	2.2	2.1	4.2
Ave no. days peak to trough	5.3	6.6	4.8	4.9	9.2
Ave no. days in price cycle	7.3	8.5	7.0	7.0	13.4
Most common duration	7.0	7.0	7.0	7.0	14.0
Peaks and troughs					
Most common day of peaks	Thursday	Thursday	Thursday	Thursday	Wednesday
Most common day of troughs	Tuesday	Tuesday	Tuesday	Tuesday	Sunday

Source: ACCC and Informed Sources

Table 5.1 shows that the main features of the price cycles in the five largest metropolitan cities in the six months to 30 June 2006 were as follows.

Sydney

- There were 24 price cycles.
- The average variation of price cycles was 7.6 cpl.
    - The variation over the period ranged from 2.7 cpl to 15.4 cpl, with the most common variation being between 7.0 cpl and 7.99 cpl.
    - The most common duration of the price cycle was seven days.
    - Thursday was the most common day for peaks (80 per cent), and Tuesday was the most common day for troughs (84 per cent).

Melbourne

- There were 20 price cycles.
- The average variation of price cycles was 7.7 cpl.

[40] For all five major metropolitan cities the period began with a trough and ended with a peak. This means that there will be one less completed price cycle than the total number of troughs and peaks because a completed cycle is taken to be the movement in prices between a trough to a peak and subsequent trough. The same will be true for the total number of variations (which is the difference in price between the trough and the peak).

- The variation over the period ranged from 1.2 cpl to 13.9 cpl, with the most common variation being between 9.0 and 9.99 cpl.

- The most common duration of the price cycle was seven days.

- Thursday was the most common day for peaks (81 per cent), and Tuesday was the most common day for troughs (90 per cent).

Brisbane

- There were 25 price cycles.

- The average variation of price cycles was 7.7 cpl.

    - The variation over the period ranged from 1.2 cpl to 11.7 cpl, with the most common variation being between 7.0 cpl and 9.99 cpl.

- The most common duration of the price cycle was seven days.

- Thursday was the most common day for peaks (96 per cent), and Tuesday was the most common day for troughs (85 per cent).

Adelaide

- There were 25 price cycles.

- The average variation of price cycles was 9.1 cpl.

    - The variation over the period ranged from 2.3 cpl to 11.2 cpl, with the most common variation being between 9.0 cpl and 9.99 cpl.

- The most common duration of the price cycle was seven days.

- Thursday was the most common day for peaks (96 per cent), and Tuesday was the most common day for troughs (92 per cent).

Perth

- There were 13 price cycles.

- The average variation of price cycles was 5.6 cpl.

    - The variation over the period ranged from 2.4 cpl to 11.8 cpl, with the most common variation being between 6.0 cpl and 6.99 cpl.

- The most common duration of the price cycle was 14 days.

- Wednesday was the most common day for peaks (57 per cent), and Sunday was the most common day for troughs (43 per cent).

5.6 Implications of price cycles

Many motorists are annoyed and frustrated about petrol price cycles, especially when petrol prices increase by 10.0 cpl or more in a day, and when they occur before weekends and public holidays. However, some consumers take advantage of price cycles and buy petrol at the bottom of the cycle when prices are lower.

5.6.1 Consumers overall may benefit from price cycles

The data in section 5.5.2 indicates that there is a significant variation in average prices from trough to peak in price cycles in the five major metropolitan cities. It also shows that in general the price cycles in these cities are fairly regular and there is a degree of consistency in the days when petrol prices peak and trough. In most of these cities they overwhelmingly tend to peak on Thursdays and trough on Tuesdays.

Therefore, while price cycles may annoy consumers when they miss out from purchasing their petrol at lower prices, they also present opportunities for consumers who are prepared, and able to, plan their purchases to obtain lower prices.

It is the ability to purchase petrol at lower prices that enables consumers to benefit from price cycles. Data on petrol sales volumes shows that on average across the price cycle, around 60 per cent of the total volume of petrol is sold at prices below the average price of the price cycle, and around 40 per cent is sold above.[41] This suggests that consumers overall may be benefiting from price cycles.

In general, consumers in aggregate can be better off with variable prices than with a fixed (simple average) price. When the price is fixed, consumers have to pay that price and that price alone. However, if the price is variable around this fixed price, consumers can buy at the lower price—and they will tend to buy more at the lower price and restrict their purchases when the price is high. The opportunity to do this will tend to make consumers better off.

5.6.2 Increasing consumer awareness of price cycles

While consumers taken as a whole may benefit overall from price cycles, there are individual consumers that do not. Some of these consumers may be price sensitive and it may be possible to help them change their purchasing behaviour by increasing their awareness of price cycles.

In the 2001 variability report, the ACCC recommended that there should be a consumer awareness initiative to increase consumers' understanding of price cycles and to enable them to time their purchases so that they can buy petrol at times when petrol prices are relatively low. The Australian Government accepted this recommendation. In November 2002 the ACCC established its petrol price cycle website (the contents of which are described in section 7.2.1).

[41] ACCC 2001 variability report, p. 45. These proportions remained broadly the same when, in 2004, the ACCC examined the impact of its price cycle website on price cycles in the five largest metropolitan cities.

5.7 Price cycles and public holidays

This section analyses data on the variation of price cycles (ie the movement from trough to peak) immediately before public holidays in the five largest metropolitan cities.

It examines the six-month period 1 January to 30 June 2006, which included the following public holidays:[42]

- Australia Day, Thursday 26 January 2006
- Easter, commencing on Good Friday 14 April 2006
- Anzac Day, Tuesday 25 April 2006
- Queen's Birthday, Monday 12 June 2006[43]
- Various regional holidays:
    - Victoria—Labour Day, Monday 13 March 2006
    - Queensland—Labour Day, Monday 1 May 2006
    - South Australia—Adelaide Cup Day, Monday 13 March 2006
    - Western Australia—Labour Day, Monday 6 March 2006 and Foundation Day, Monday 5 June 2006.

[42] The New Year Holiday (Monday 2 January 2006) also occurred during the period. However, the price cycle that occurred before this holiday has not been included in the analysis as it falls outside the six-month period.

[43] In Sydney, Melbourne, Brisbane and Adelaide, but not in Perth.

5.7.1 Sydney

Chart 5.11 shows average daily retail prices for petrol in Sydney from 1 January to 30 June 2006. It identifies the variation of each price cycle during the period and the public holidays.[44] It also includes information on the average, minimum and maximum variation of price cycles.

The chart shows that the variations that occurred before the Australia Day and Anzac Day public holidays were 10.1 cpl and 10.6 cpl respectively, which were higher than the average variation over the six-month period of 7.6 cpl.

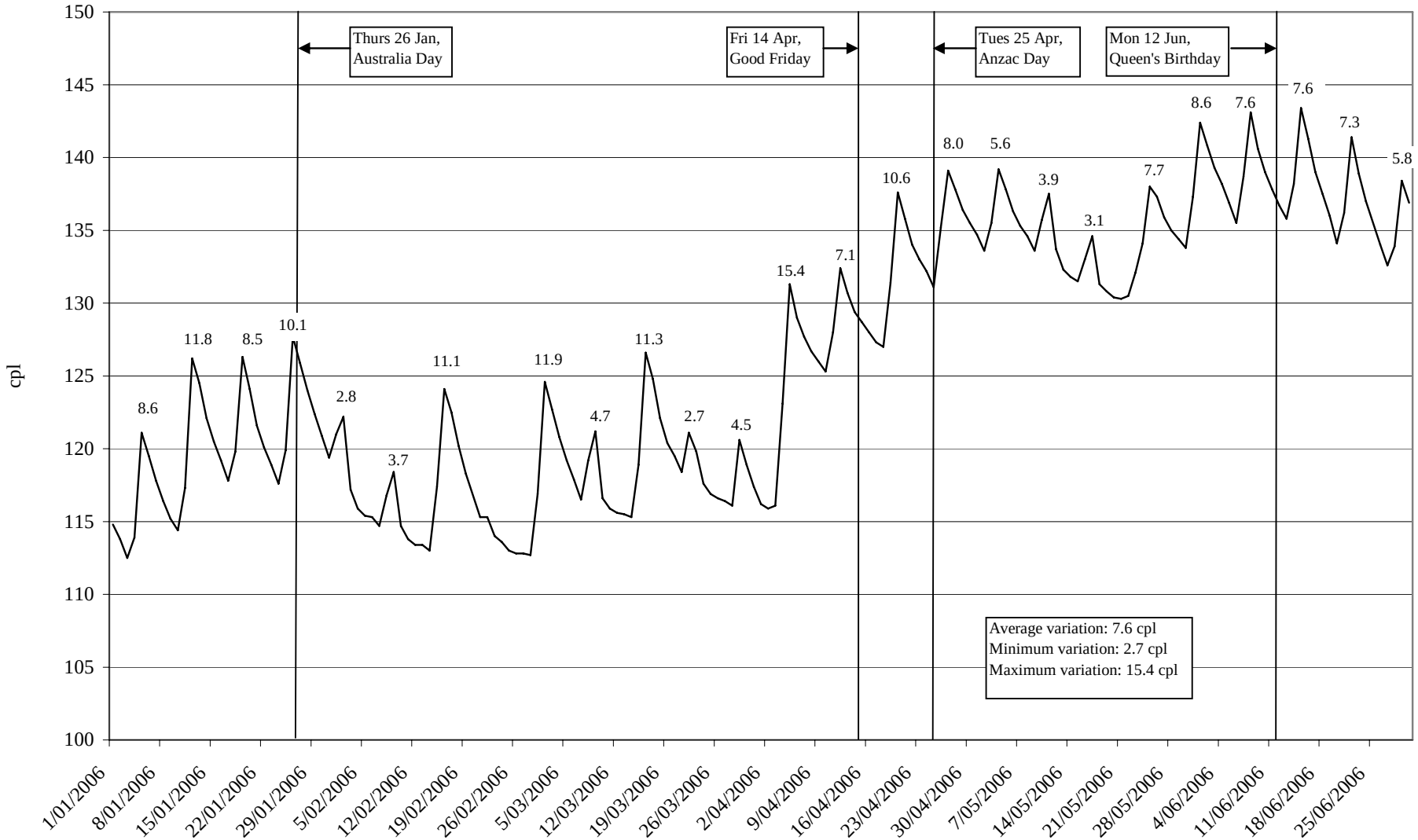
The variation before the Queen's Birthday public holiday was 7.6 cpl, which was equal to the average variation over the six-month period, and the variation before Good Friday was 7.1 cpl, which was lower than the average variation.

All variations before the four public holidays were lower than the highest variation of 15.4 cpl (which occurred on 5 April 2006).

For all price cycles before public holidays in Sydney—with the exception of Good Friday—the trough occurred on a Tuesday and the peak on a Thursday. This is consistent with the pattern of price cycles in Sydney, where 84 per cent of troughs over the period occurred on a Tuesday and 80 per cent of peaks over the period occurred on a Thursday. The peak before Good Friday occurred one day earlier, on a Wednesday.

[44] The price cycle variations that occurred before school holidays over the period were also examined. For Sydney the term 1 holidays began on Good Friday and the term 2 holidays began right at the end of the period (on Saturday 1 July 2006). The price cycle variation that occurred before the term 1 holidays is considered in the context of Good Friday. The price cycle variation before the term 2 holidays was 5.6 cpl, which was lower than the average variation over the period.

Chart 5.11 Sydney—average daily retail prices—price cycle variations and public holidays—1 January to 30 June 2006



Source: ACCC and Informed Sources

5.7.2 Melbourne

Chart 5.12 shows average daily retail prices for petrol in Melbourne from 1 January to 30 June 2006. It identifies the variation of each price cycle during the period and the public holidays.[45] It also includes information on the average, minimum and maximum variation of price cycles.

The chart shows that the variations that occurred before the Australia Day and Anzac Day public holidays were 8.2 cpl and 13.9 cpl respectively, which were higher than the average variation over the six-month period of 7.7 cpl.

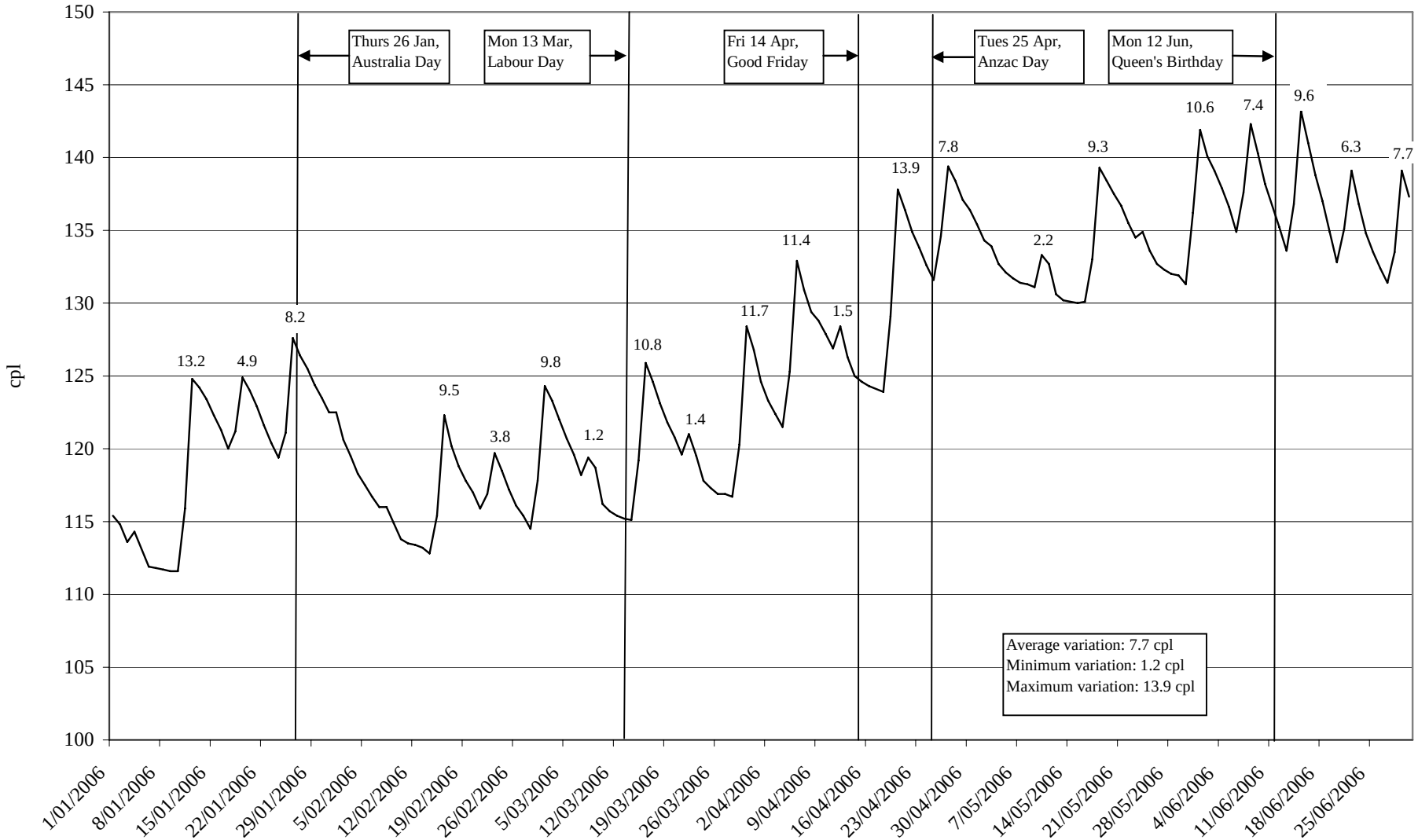
The variations before the Labour Day, Good Friday and Queen's Birthday public holidays were 1.2 cpl, 1.5 cpl and 7.4 cpl respectively, which were all lower than the average variation over the six-month period.

The variation before the Labour Day public holiday was the lowest variation over the period. The variation before the Anzac Day public holiday was the highest over the period.

For most price cycles before public holidays in Melbourne the trough occurred on a Tuesday and the peak on a Thursday. The exceptions were the Labour Day and Good Friday public holidays when the peak occurred one day earlier on a Wednesday. This is consistent with the pattern of price cycles in Melbourne, where 90 per cent of troughs over the period occurred on a Tuesday and 81 per cent of peaks over the period occurred on a Thursday.

[45] The price cycle variations that occurred before school holidays over the period were also examined. For Melbourne the term 1 holidays began on Saturday 11 March 2006, immediately before the Labour Day public holiday and the term 2 holidays began on Saturday 17 June 2006. The price cycle variation that occurred before the term 1 holidays is examined in the context of the Labour Day public holiday. The price cycle that occurred before the term 2 holidays had a variation of 9.6 cpl which was higher than the average variation over the six-month period. Consistent with the pattern of price cycles in Melbourne over the period the trough occurred on a Tuesday and the peak on Thursday.

Chart 5.12 Melbourne—average daily retail prices—price cycle variations and public holidays—1 January to 30 June 2006



Source: ACCC and Informed Sources

5.7.3 Brisbane

Chart 5.13 shows average daily retail prices for petrol in Brisbane from 1 January to 30 June 2006. It identifies the variation of each price cycle during the period and the public holidays.[46] It also includes information on the average, minimum and maximum variation of price cycles.

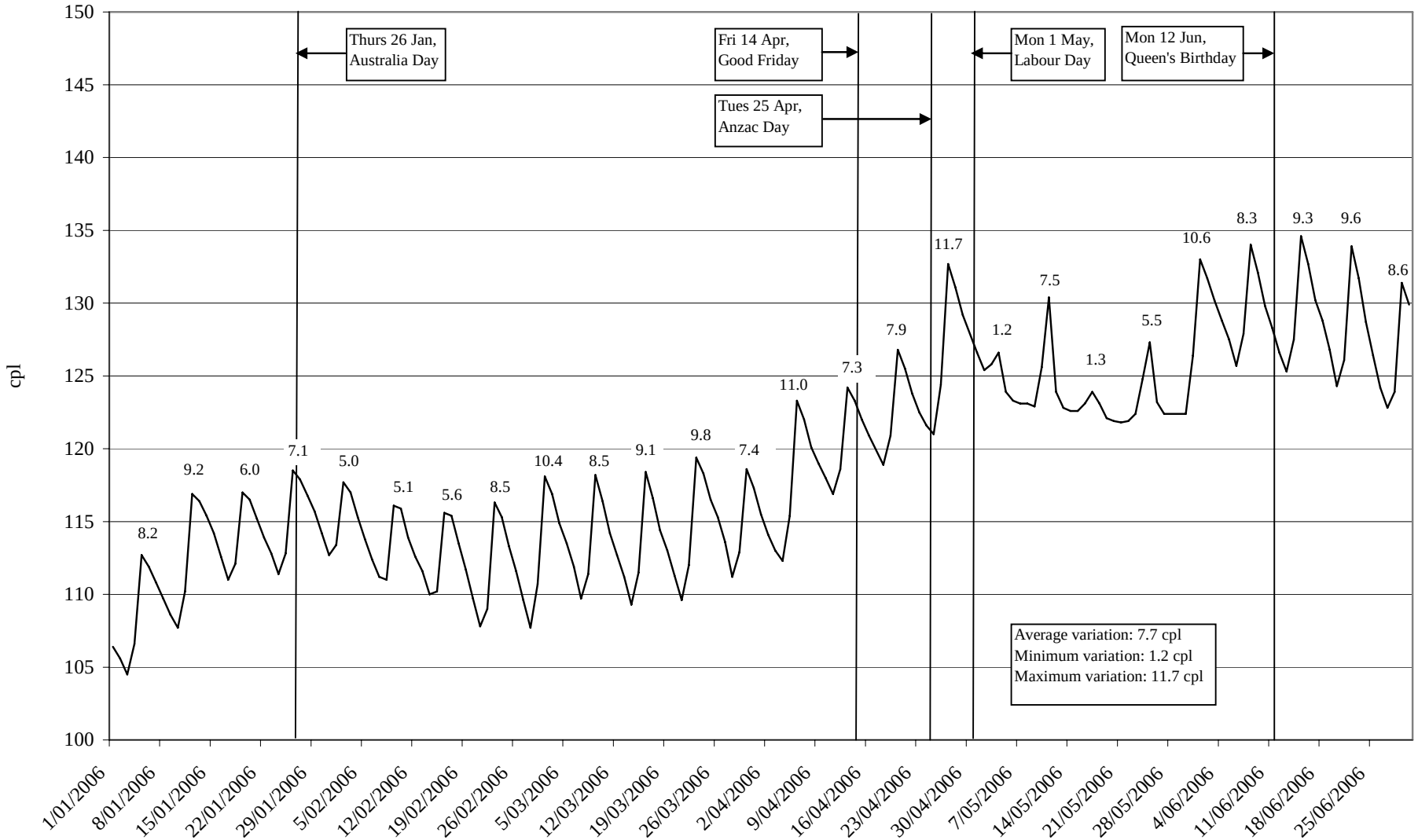
The chart shows that the variations that occurred before the Australia Day and Good Friday public holidays were 7.1 cpl and 7.3 cpl respectively, which were lower than the average variation over the six-month period of 7.7 cpl.

The variations before the Anzac Day, Labour Day and Queen's Birthday public holidays were 7.9 cpl, 11.7 cpl and 8.3 cpl respectively, which were higher than the average variation over the six-month period. The variation before the Labour Day public holiday was the highest variation over the period.

For all price cycles before public holidays in Brisbane the trough occurred on a Tuesday and the peak on a Thursday. This is consistent with the pattern of price cycles in Brisbane, where 85 per cent of troughs over the period occurred on a Tuesday and 96 per cent of peaks over the period occurred on a Thursday.

[46] The price cycle variations that occurred before school holidays over the period were also examined. For Brisbane the Easter holidays began on Saturday 8 April 2006 and the winter holidays began on Saturday 24 June 2006. The price cycle that occurred before the Easter holidays had a variation of 11.0 cpl. The trough occurred on a Tuesday and the peak on a Thursday. The price cycle that occurred before the winter holidays had a variation of 9.6 cpl. The trough occurred on a Tuesday and the peak on Thursday. These two price cycle variations were higher than the average variation over the six-month period.

Chart 5.13 Brisbane—average daily retail prices—price cycle variations and public holidays—1 January to 30 June 2006



Source: ACCC and Informed Sources

5.7.4 Adelaide

Chart 5.14 shows average daily retail prices for petrol in Adelaide from 1 January to 30 June 2006. It identifies the variation of each price cycle during the period and the public holidays.[47] It also includes information on the average, minimum and maximum variation of price cycles.

The chart shows that the variations that occurred before the Australia Day, Adelaide Cup Day, Good Friday, Anzac Day and Queen's Birthday public holidays were 9.4 cpl, 9.6 cpl, 9.4 cpl, 11.0 cpl and 10.0 cpl respectively, which were all higher than the average variation over the six-month period of 9.1 cpl.

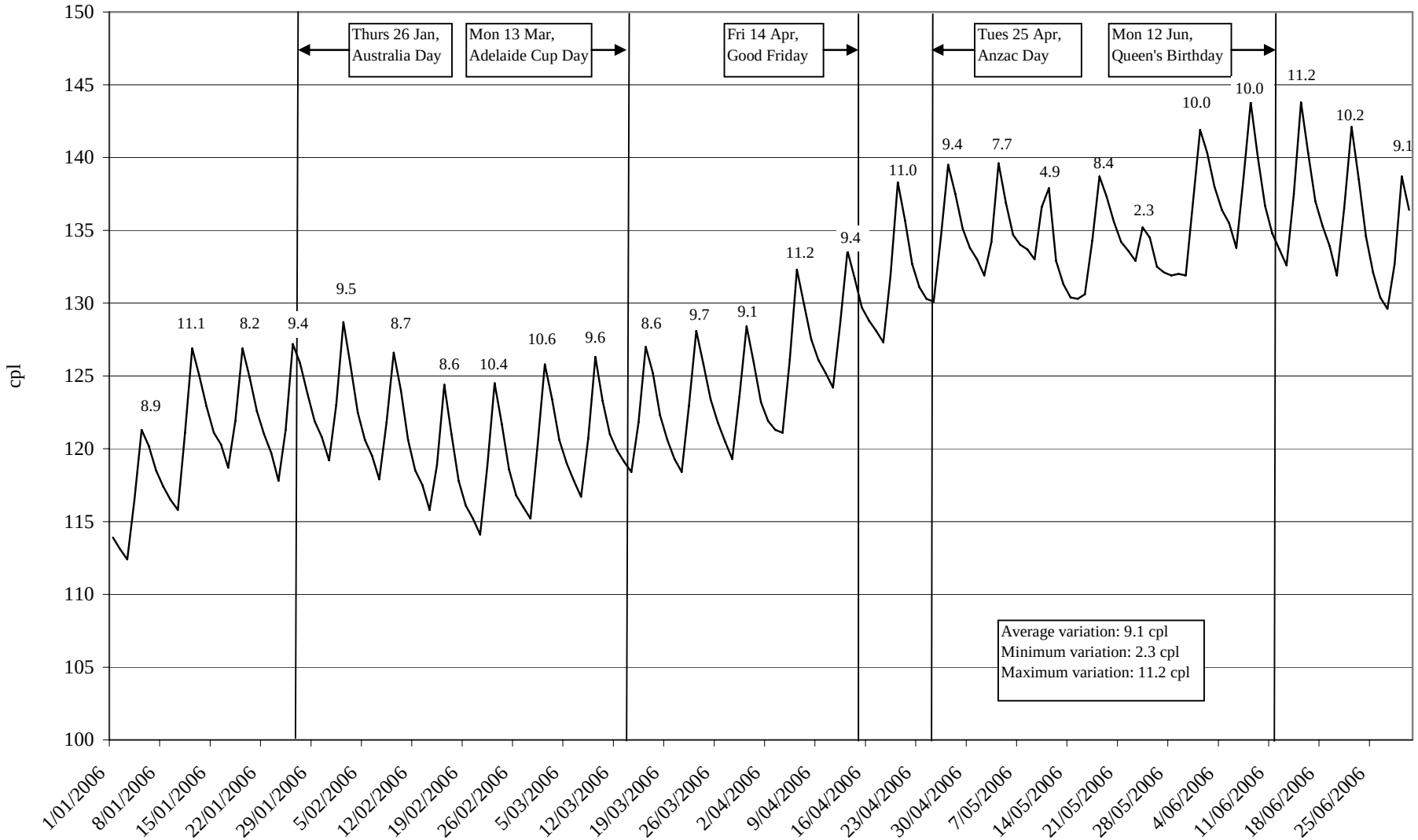
However, for three of five public holidays the difference between the variation before the public holiday and the average variation over the period was 0.5 cpl or less.

All variations before the five public holidays were lower than the highest variation of 11.2 cpl (which occurred on 15 June 2006).

For all price cycles before public holidays in Adelaide the trough occurred on a Tuesday and the peak on a Thursday. This is consistent with the pattern of price cycles in Adelaide, where 92 per cent of troughs over the period occurred on a Tuesday and 96 per cent of peaks over the period occurred on a Thursday.

[47] The price cycle variations that occurred before school holidays over the period were also examined. For Adelaide the term 1 holidays began on Good Friday and the term 2 holidays began after the end of the period (on Saturday 8 July 2006). The price cycle variation that occurred before the term 1 holidays is examined in the context of Good Friday.

Chart 5.14 Adelaide—average daily retail prices—price cycle variations and public holidays—1 January to 30 June 2006



Source: ACCC and Informed Sources

5.7.5 Perth

Chart 5.15 shows average daily retail prices for petrol in Perth from 1 January to 30 June 2006. It identifies the variation of each price cycle during the period and the public holidays.[48] It also includes information on the average, minimum and maximum variation of price cycles.

The chart shows that the variations that occurred before the Australia Day and Labour Day public holidays were 6.6 cpl and 6.0 cpl respectively, which were higher than the average variation over the six-month period of 5.6 cpl.

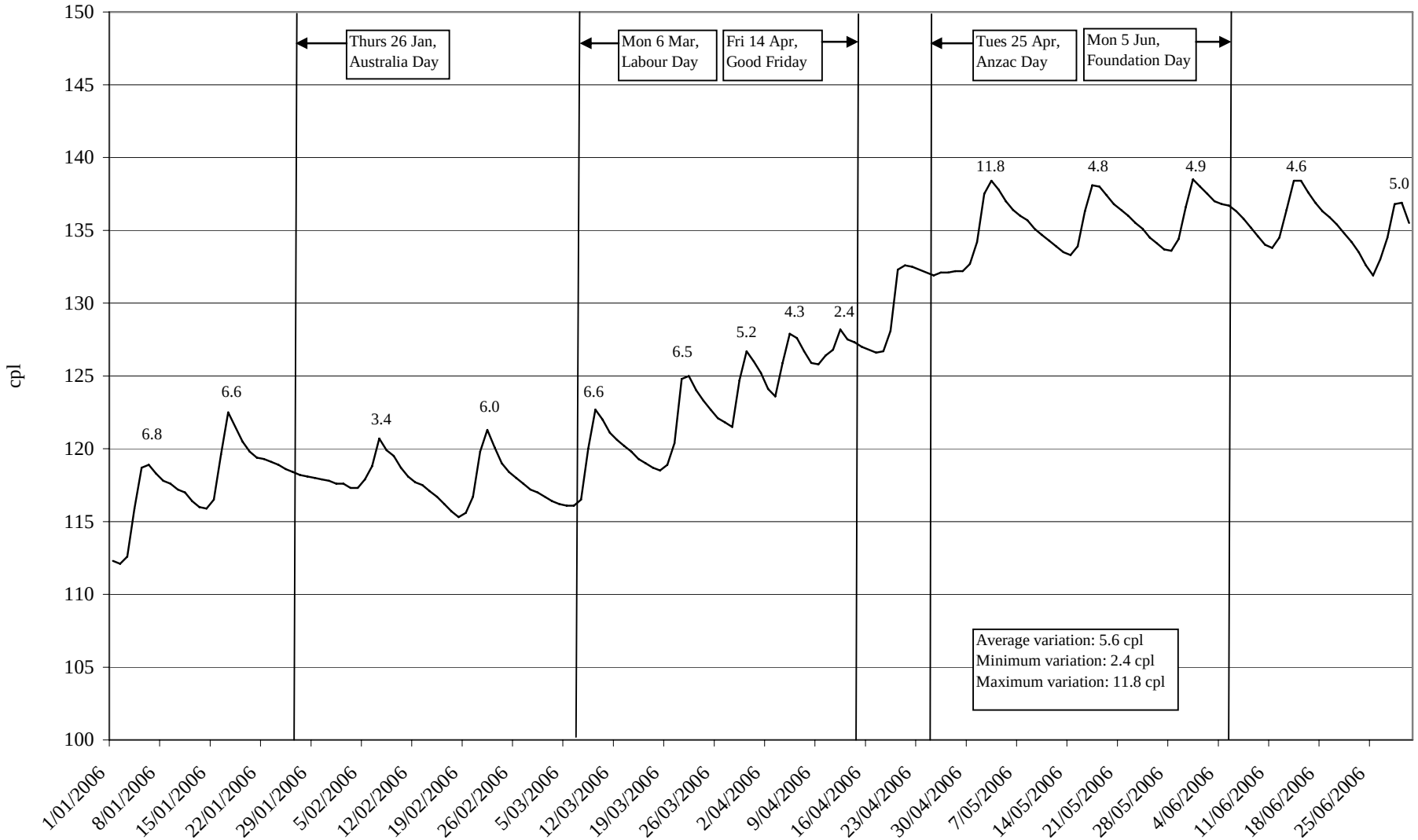
The variations that occurred before the Good Friday and Foundation Day public holidays were 2.4 cpl and 4.9 cpl respectively, which were both lower than the average variation over the six-month period. No price cycle variation occurred in the week before the Anzac Day public holiday.

All variations before the four public holidays were lower than the highest variation of 11.8 cpl (which occurred on 3 May 2006).

For the price cycles before public holidays in Perth two troughs occurred on a Sunday and two occurred on a Saturday, while three peaks occurred on a Wednesday and the remaining peak occurred on a Tuesday. This is broadly consistent with the pattern of price cycles in Perth, where 43 per cent of troughs over the period occurred on a Sunday and 57 per cent of peaks over the period occurred on a Wednesday.

[48] The price cycle variations that occurred before school holidays over the period were also examined. For Perth the term 1 holidays began on Good Friday and the term 2 holidays began after the end of the period (on Saturday 8 July 2006). The price cycle variation that occurred before the term 1 holidays is considered in the context of Good Friday.

Chart 5.15 Perth—average daily retail prices—price cycle variations and public holidays—1 January to 30 June 2006



Source: ACCC and Informed Sources

5.7.6 Conclusion

The analysis of price cycle variations and public holidays in the five largest metropolitan cities shows that:

- in Sydney, Melbourne, Brisbane and Adelaide price cycles tend to peak on a Thursday—this trend typically continued before the public holidays in these cities

- in Sydney, Melbourne, Brisbane and Perth the price variations that occurred before public holidays were in some cases **below** the average variation of price cycles for the six-month period, and in some cases **above** the average variation of price cycles for the six-month period

    - only in one city—Adelaide—were all of the price variations that occurred before public holidays **above** the average variation of price cycles for the six-month period

- furthermore, in Sydney, Brisbane and Perth the highest variation in price cycles over the six-month period did not occur before a public holiday

    - only in two cities—Melbourne and Adelaide—did the highest variation in price cycles over the six-month period occur before a public holiday.

There have been suggestions in the media that petrol price increases before public holidays are always higher than the price increases that occur at non-public holiday times. From the above analysis this generally not the case for the five largest metropolitan cities.

6 City–country differential

6.1 Introduction

The difference between city prices and country prices is an issue of particular concern to motorists in rural and regional areas. This section provides information on the reasons for the city–country differential and analysis of the city–country differential over time.

6.2 Reasons for the differential

Section 4 outlined the determinants of petrol prices and categorised them into underlying and locally specific factors.

6.2.1 Underlying factors

The key underlying influences on domestic petrol prices are movements in the Singapore price for refined petrol and the Australian/US dollar exchange rate. There is generally a time lag of around one to two weeks between changes in these prices and price changes at petrol bowsers. This is due to the averaging formula used by refiners in Australia and the frequency of changes to terminal gate prices.

This lag is generally longer in country areas because petrol stocks are replenished less often by wholesalers and retailers, due to the generally lower volume of sales. When the underlying factors lead to either an increase or decrease in international prices, these changes are then reflected faster in the metropolitan cities.

6.2.2 Locally specific factors

In general there are no regular price cycles in country towns and therefore country prices are more stable than metropolitan prices. Examples of price movements in a couple of country towns (Tamworth in New South Wales and Broome in Western Australia) were provided in section 5.3.

Some country towns have regular cycles but these tend to be towns that are close to major metropolitan cities. A number of country towns have some cyclical movement in prices, but with no regularity.

Country petrol prices are generally higher than those of the larger metropolitan cities because of the locally specific factors that influence the level of competition in local markets (which were outlined in section 4.3.4). These factors generally also explain price differences between country towns.

It is not possible to generalise about the effect of these factors because each location in rural and regional areas will tend to have particular factors that influence petrol prices at particular times.

6.3 Data analysis[49]

6.3.1 Annual city–country differential

The city-country differential is the difference between the average country price and the average capital city price.

Table 6.1 below shows the city–country differential for the six states and the Northern Territory on an annual basis for the five years from 2001–02 to 2005–06. It also shows a couple of aggregate indicators of the city–country differential (five-city and eight-city city–country differentials).[50]

Table 6.1: City–country differential—annual—2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	2005–06	5–year ave
State	cpl	cpl	cpl	cpl	cpl	cpl
New South Wales	5.2	4.1	3.5	3.4	4.9	4.2
Victoria	5.2	4.7	3.3	5.7	4.9	4.8
Queensland	4.9	4.5	4.1	5.0	5.3	4.8
South Australia	5.7	5.1	3.9	4.6	5.1	4.9
Western Australia	8.9	7.9	8.7	10.4	9.6	9.1
Tasmania	1.0	-0.1	0.5	0.0	–1.5	0.0
Northern Territory	8.4	7.4	4.2	4.7	3.4	5.6
Aggregate indicators						
Five-city	5.8	4.9	4.2	5.3	5.3	5.1
Eight-city	3.3	2.4	1.5	2.5	2.4	2.4

Source: ACCC and FUELtrac

[49] The data analysis in this section is based on monthly country price data from FUELtrac. This is the only publicly available source of historical country price data. As at June 2006 FUELtrac provided monthly average petrol prices for the eight capital cities and around 115 country towns. The data for some of these towns goes back to April 1998. The data is available on the Australian Automobile Association website (www.aaa.asn.au).

[50] The city–country differentials for each state are the difference between the arithmetic average of average annual prices in each country town in the state and the average annual capital city price.

The **five-city** city–country differential is the difference between the arithmetic average country price for the six states and the Northern Territory (there are no prices available for the Australian Capital Territory other than Canberra) and the arithmetic average price for the five major metropolitan cities—Sydney, Melbourne, Brisbane, Adelaide and Perth.

The **eight-city** city–country differential is the difference between the arithmetic average country price for the six states and the Northern Territory and the arithmetic average price for the eight capital cities (i.e. the five major metropolitan cities plus Canberra, Hobart and Darwin). Since the eight-city city–country differential includes in the city price the smaller capital cities, which tend to have higher prices than the five largest metropolitan cities, the eight-city city–country differential produces smaller numbers than the five-city city–country differential.

2005–06 compared with 2004–05

The table shows that, compared with the previous year, in 2005–06:

- There was an increase in the city–country differential in New South Wales, Queensland and South Australia
    - The largest increase was in New South Wales, with an increase of 1.5 cpl
- The city–country differential decreased in Victoria, Western Australia, Tasmania and the Northern Territory
    - The largest decrease was in Tasmania, with a decrease of 1.5 cpl
- The five-city city–country differential remained constant and the eight-city city–country differential decreased marginally (by 0.1 cpl).

2005–06 compared with the five-year average

The table shows that, compared with the five-year average, in 2005–06:

- The city–country differential was higher in New South Wales, Victoria, Queensland, South Australia and Western Australia.
    - The largest variation was in New South Wales, where it was higher by 0.7 cpl.
- The city–country differential was lower in Tasmania and the Northern Territory.
    - The largest variation was in the Northern Territory, where it was lower by 2.2 cpl.
- The five-city city–country differential was slightly higher (by 0.2 cpl) and the eight-city city–country differential remained constant.

2001–02 to 2005–06

The table shows that over the five year period 2001-02 to 2005–06:

- The lowest city–country differential over the period occurred in 2003–04 for three states (Victoria, Queensland and South Australia)
    - In Western Australia the lowest city–country differential was in 2002–03, in New South Wales it was in 2004–05 and in Tasmania and the Northern Territory it occurred in 2005–06
- The lowest five-city and eight city city–country differentials also occurred in 2003–04
- In all years, Western Australia had the highest city–country differential and Tasmania had the lowest

- The difference between the highest and lowest city–country differential over the five years ranged between 2.4 cpl and 2.5 cpl for three states (ie, Victoria, Western Australia and Tasmania)
    - In New South Wales and South Australia the difference was 1.8 cpl, in Queensland it was 1.2 cpl and in the Northern Territory it was 5.0 cpl
- The difference between the highest and lowest five-city city–country differential over the five years was 1.6 cpl and the difference between the highest and lowest eight-city city–country differential was 1.8 cpl.

6.3.2 Movements in city and country prices in 2005-06

Charts 6.1 to 6.7 show for each state and the Northern Territory average monthly capital city and average country prices over the period July 2005 to June 2006.[51]

It can be seen that the difference between country and city prices varies over the year.

The charts show that prices in country areas tend to take longer to reflect the movements in Singapore refined petrol prices. For example, when movements in Singapore refined petrol prices lead to an increase or decrease in overall prices, it is reflected in the major metropolitan cities first and in country areas with a lag of around one to two weeks.

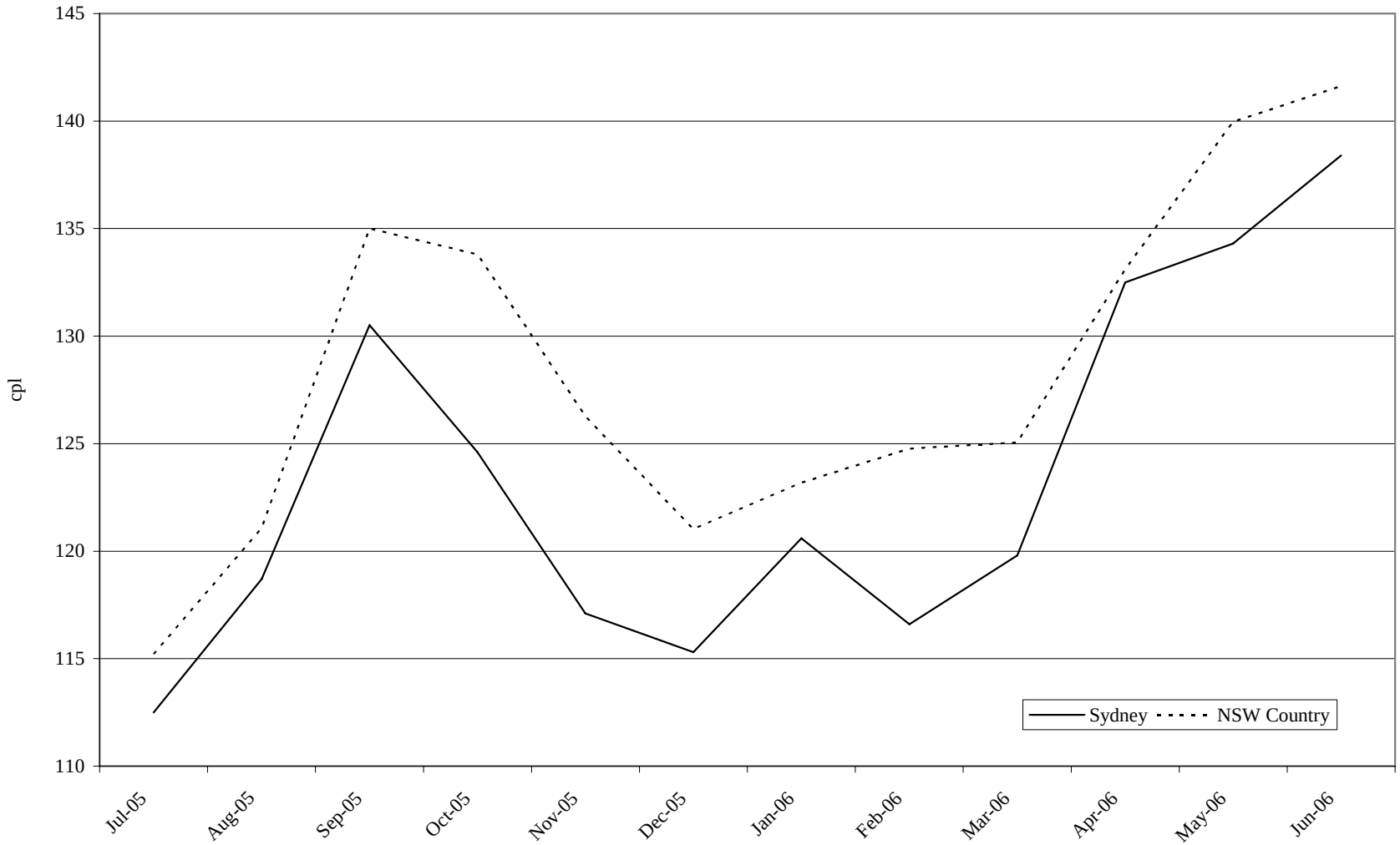
This lag leads to city prices being closer to country prices during a rise in Singapore refined petrol prices (such as in August 2005) and further apart during a fall in Singapore refined petrol prices (such as in October 2005). This causes the city–country differential to vary over the year.[52]

---

[51] The average country price is the average of monthly prices in all towns in the state or the Northern Territory for which prices are available.

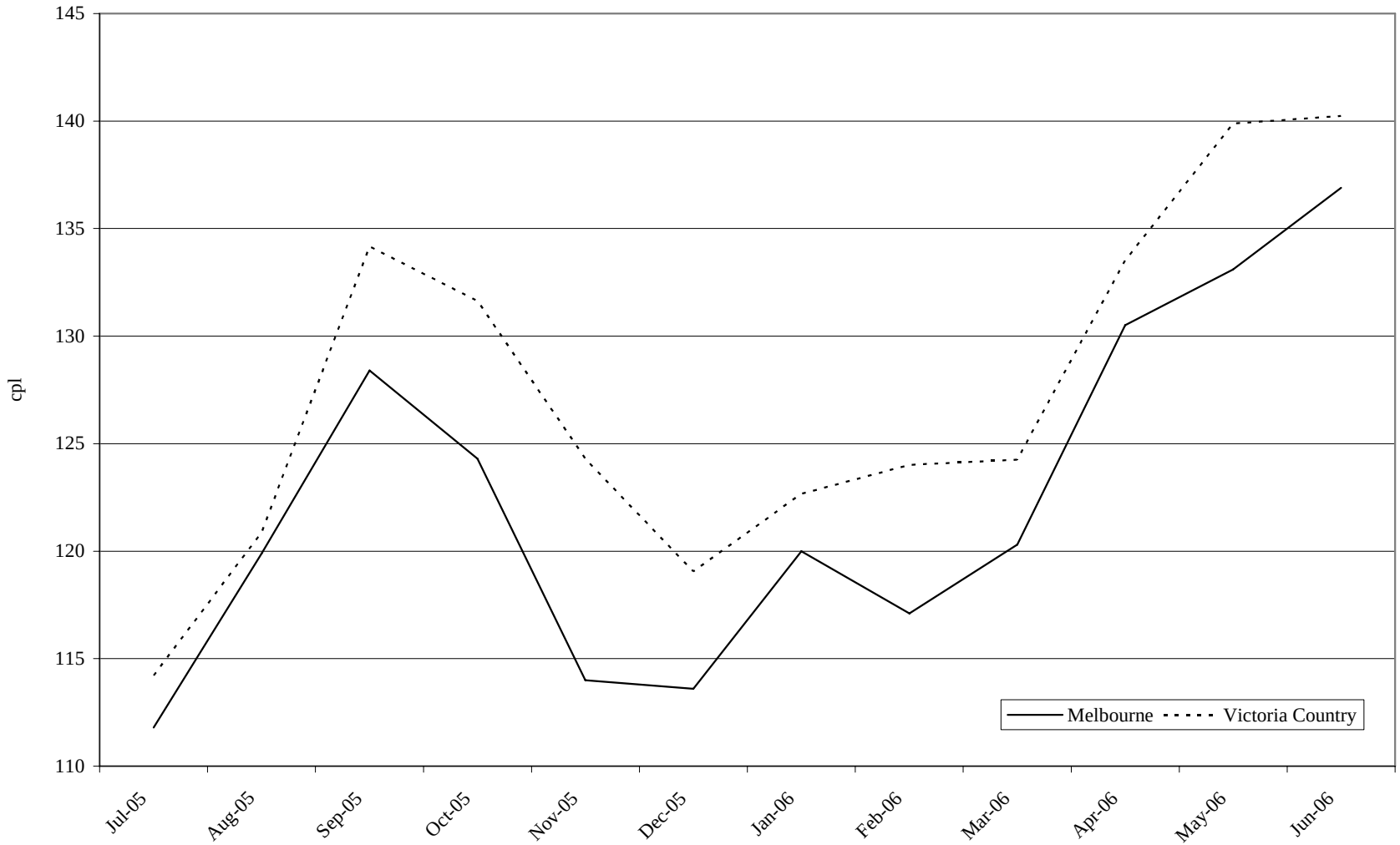
[52] In the charts, city and country prices peak or trough during the same month in most cases. This is because monthly average prices are being examined, which may mask the effect of the generally one or two week lag.

Chart 6.1 Sydney and NSW country—average monthly retail prices—July 2005 to June 2006



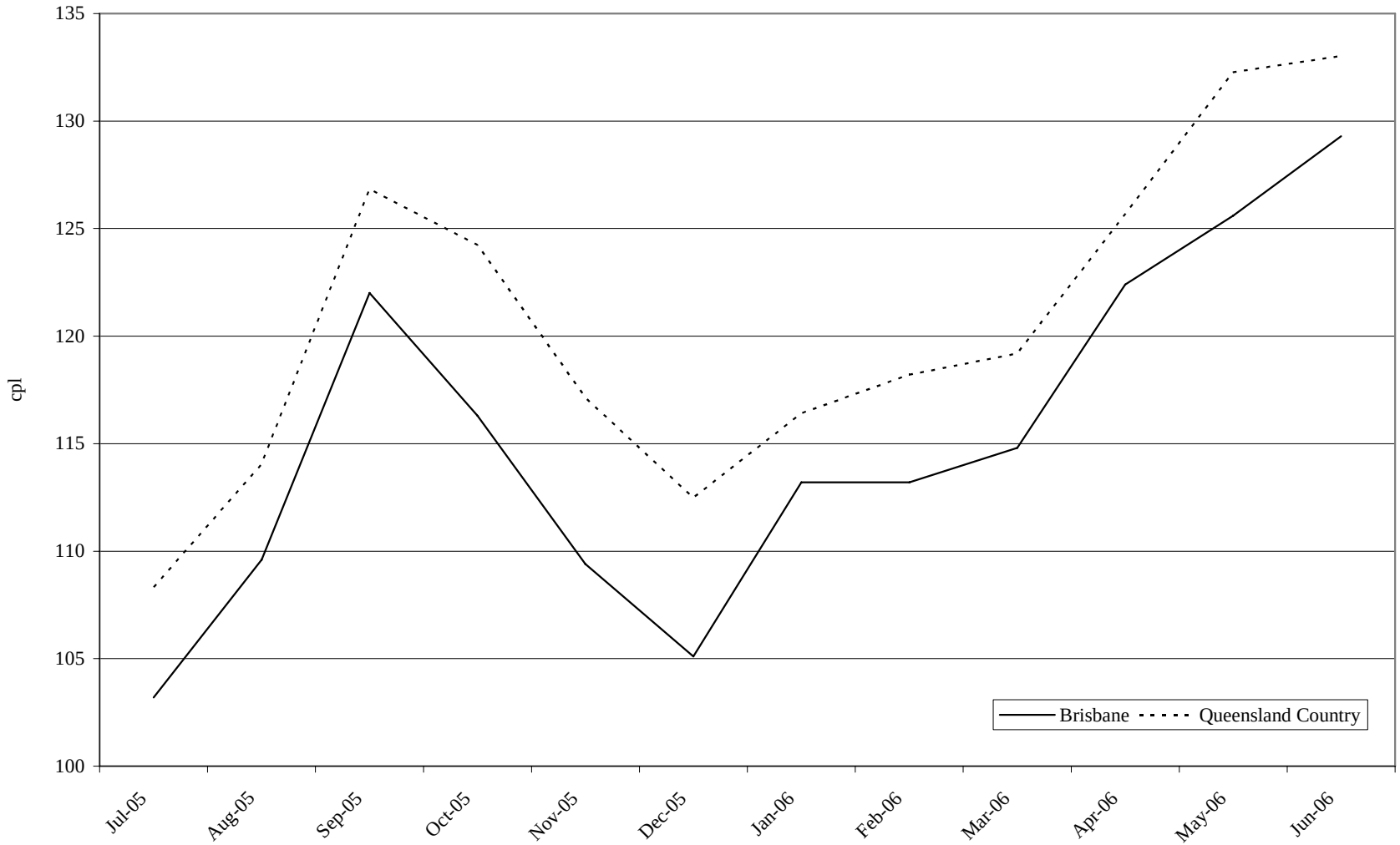
Source: ACCC and FUELtrac

Chart 6.2 Melbourne and Victoria country—average monthly retail prices—July 2005 to June 2006



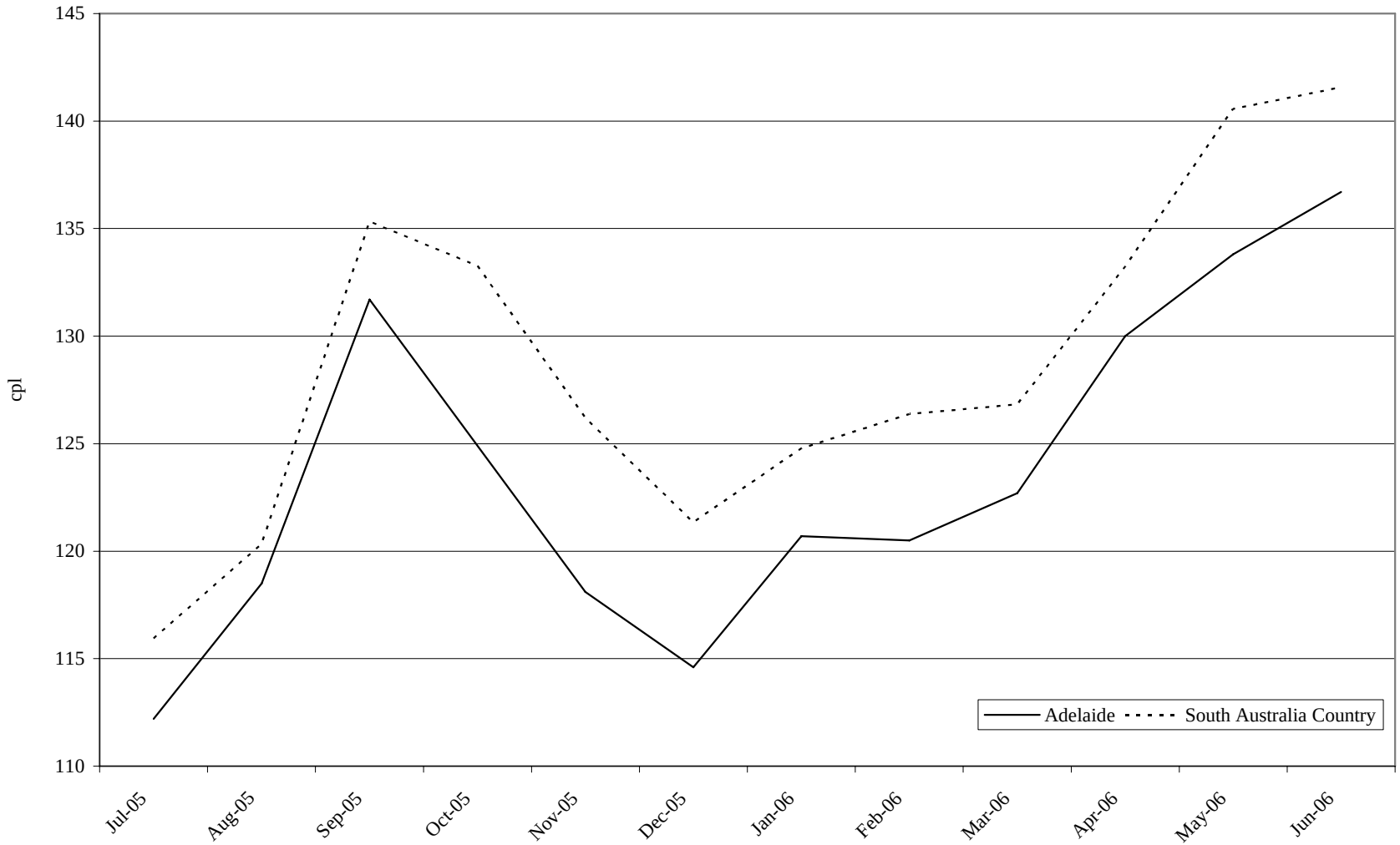
Source: ACCC and FUELtrac

Chart 6.3 Brisbane and Queensland country—average monthly retail prices—July 2005 to June 2006



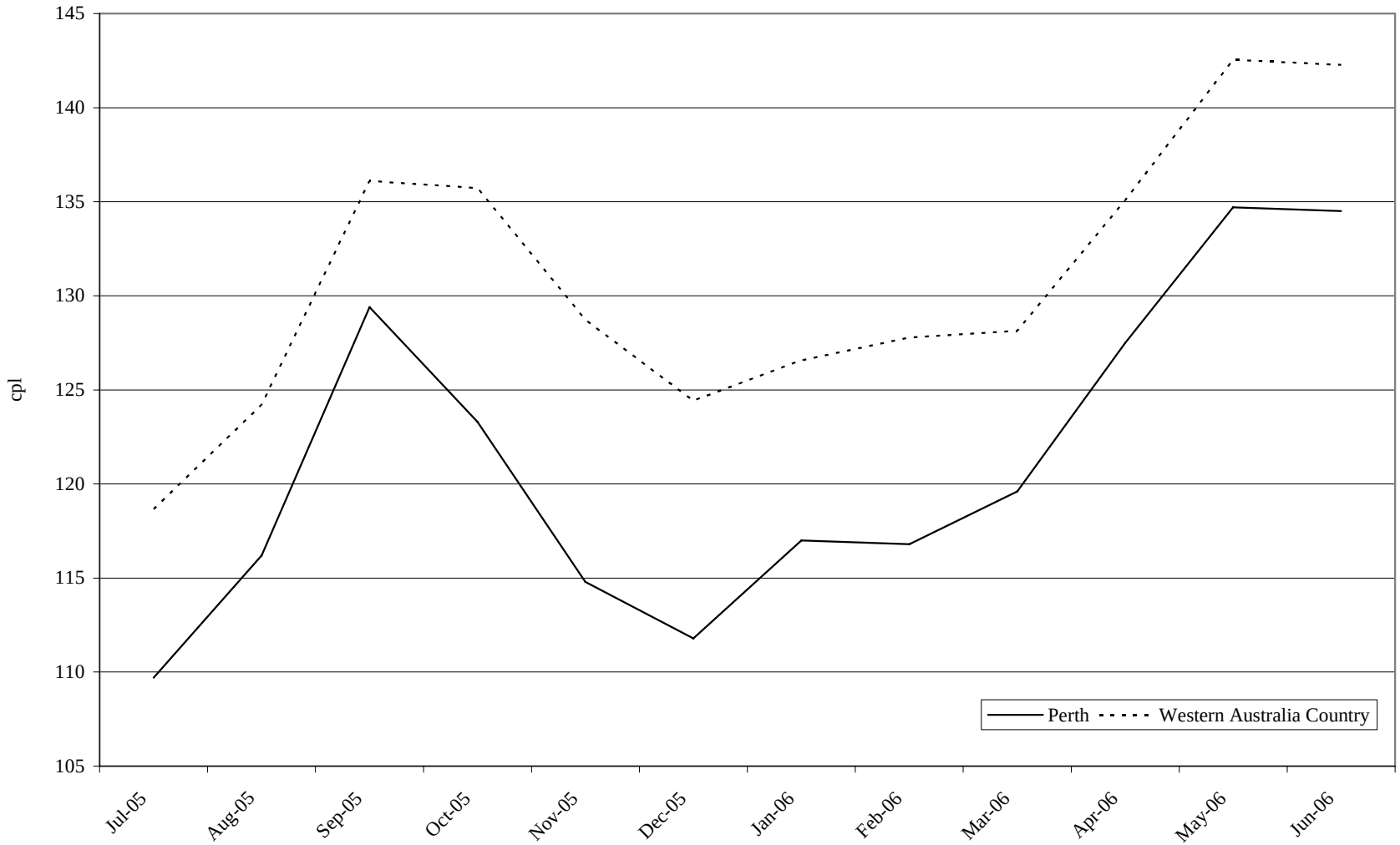
Source: ACCC and FUELtrac

Chart 6.4 Adelaide and South Australia country—average monthly retail prices—July 2005 to June 2006



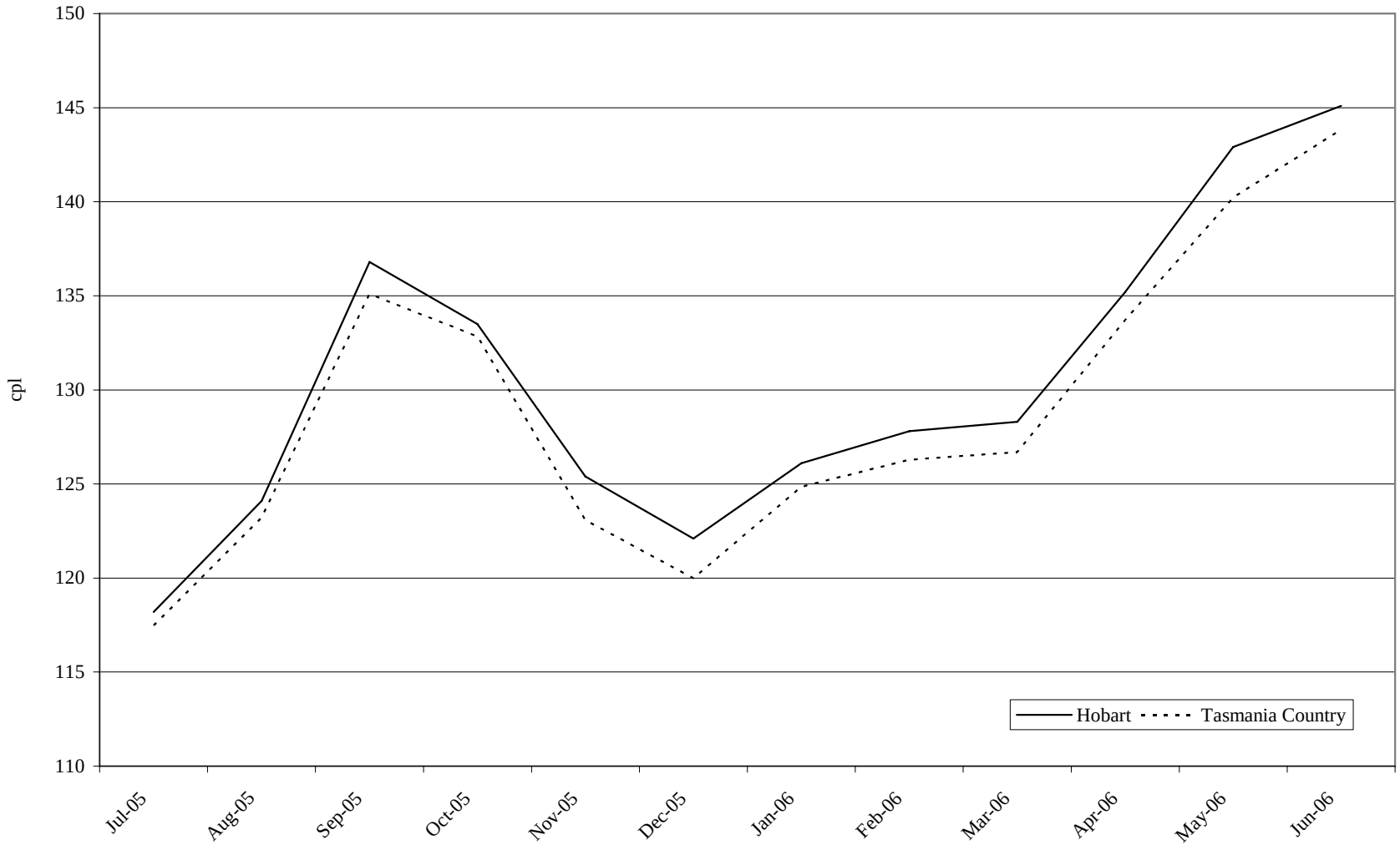
Source: ACCC and FUELtrac

Chart 6.5 Perth and Western Australia country—average monthly retail prices—July 2005 to June 2006



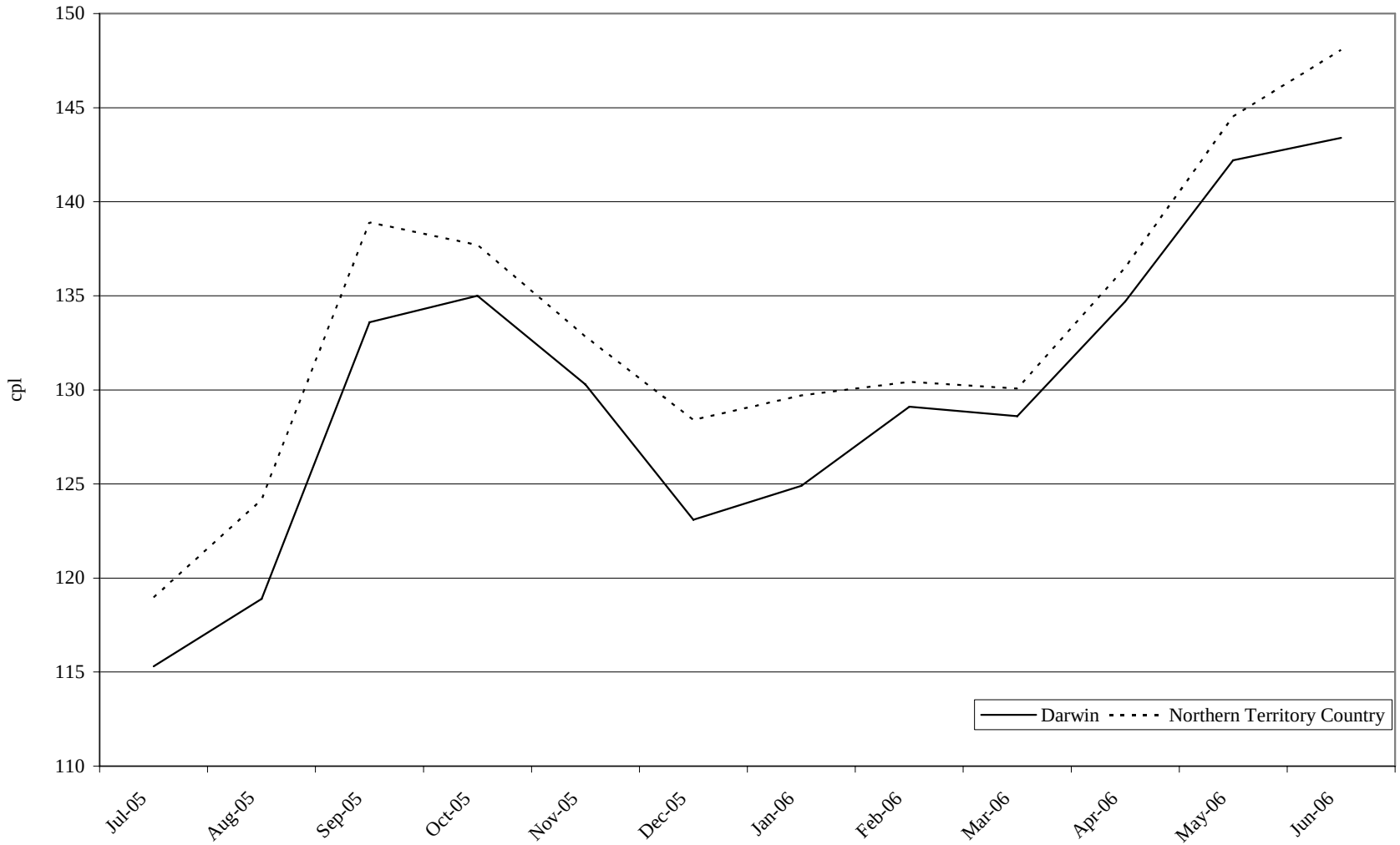
Source: ACCC and FUELtrac

Chart 6.6 Hobart and Tasmania country—average monthly retail prices—July 2005 to June 2006



Source: ACCC and FUELtrac

Chart 6.7 Darwin and Northern Territory country—average monthly retail prices—July 2005 to June 2006



Source: ACCC and FUELtrac

6.3.3 Variation in the city–country differential

The significant variation in the city–country differential over a year is demonstrated in chart 6.8, which shows the monthly city–country differential in New South Wales from July 2005 to June 2006.

The chart shows that:

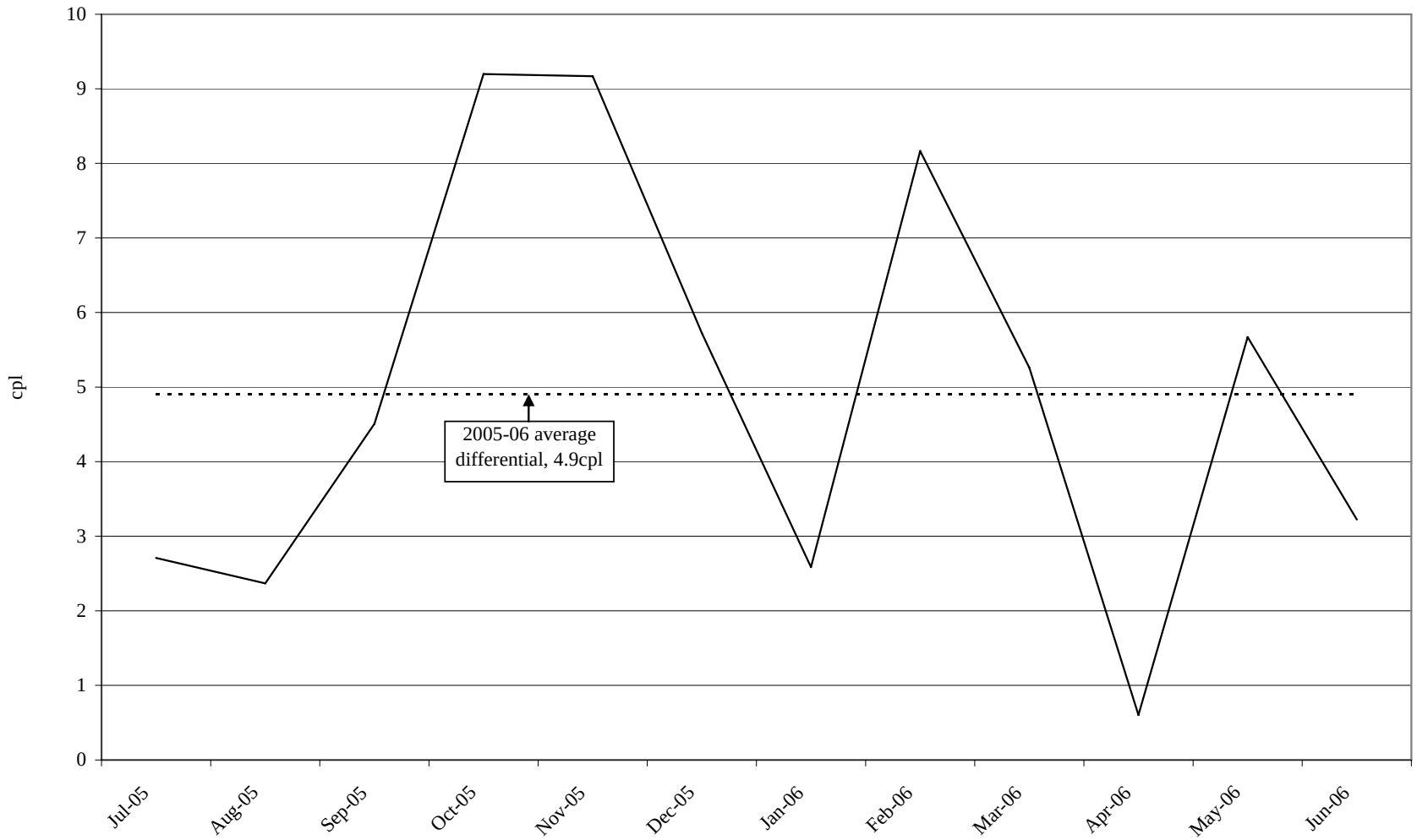
- The average city–country differential over the twelve-month period was 4.9 cpl
- The monthly city–country differential fluctuated greatly over this period—it ranged from a low of 0.6 cpl in April 2006 to a high of 9.2 cpl in October and November 2005.

The decreases in the city–country differential in January, April and June 2006 reflect the fact that in those months the average Sydney petrol price increased by more than the increase in the average country petrol price in New South Wales.

The increase in the city–country differential in October 2005 reflects the fact that the average petrol price in Sydney decreased by more than the average country petrol price in New South Wales, and the increase in May 2006 was due to the average country petrol price in New South Wales increasing by more than the average petrol price in Sydney. The increase the city–country differential in February 2006 reflects the fact that the average petrol price in Sydney decreased but the average country petrol price in New South Wales increased.

These variations in the monthly city–country differential largely reflect the fact that county price movements lag behind movements in city prices.

Chart 6.8 New South Wales—monthly average city-country differential—July 2005 to June 2006



Source: ACCC and FUELtrac

7 Role of the ACCC in the petrol industry

7.1 Introduction

The ACCC is responsible for administering the *Trade Practices Act 1974* (TPA). The main purpose of the TPA is to promote competition and efficiency in markets within Australia and to protect consumers from unlawful anti-competitive conduct and unlawful market practices.

The ACCC—and before it was established in 1995 the Prices Surveillance Authority and the Trade Practices Commission—has had a long involvement in the petroleum industry. This includes prices surveillance, informal price monitoring, education and enforcement of the TPA.

7.2 Price monitoring

7.2.1 Current petrol price monitoring arrangements

The ACCC has informally monitored petrol prices since 1 August 1998 when petrol prices were deregulated.

The Australian Government announced the deregulation of petrol prices on 20 July 1998 in a joint statement by the Treasurer, the Hon. Peter Costello, and the then Minister for Industry, Science and Tourism, the Hon. John Moore.[53] In the joint statement, the ministers stated:

> *The ACCC will continue to monitor petrol prices, with a particular focus on 'hot spots'.*

The ACCC currently monitors:

- the retail prices of petrol, diesel and automotive liquefied petroleum gas in the capital cities and around 110 country towns
- international crude oil and refined petrol prices
- published terminal gate prices of the refiner/marketers and some independents
- the city–country retail price differential.

The ACCC obtains its retail petrol price data from Informed Sources and its international prices from Platts Pty Ltd.

---

[53] Joint statement, The Treasurer, the Hon. Peter Costello and Minister for Industry, Science and Tourism, The Hon. John Moore, *Petroleum marketing reforms*, 20 July 1998.

The ACCC's price monitoring is used to provide information to consumers—through its publications and on its website—and to assist in the ACCC's role in administering the TPA. It also assists the ACCC in preparing analysis and reports for the Australian Government and Parliament.

Education

ACCC petrol price cycle website

The ACCC petrol price cycle website contains information for consumers on how to take advantage of petrol price cycles in the five largest metropolitan cities. The website was established in November 2002 after the Australian Government's response to the ACCC's 2001 variability report.

The website provides regularly updated data on:

- average daily retail petrol prices over the past 30 days
    - this enables consumers to see how average prices have been moving in the last month, the peaks and troughs, and where the current day is placed in terms of the pattern of price cycles in their city
    - This data is updated daily
- the days of the week on which prices were at the bottom and top of the price cycles in the previous four months
    - this provides a simple guide to the best days of the week on which to buy petrol
    - This data is updated monthly
- the length of price cycles (in terms of the number of days from trough to the next trough) in the previous four months
    - this informs consumers about how long the current price cycle may last
    - This data is updated monthly.

The website provides information on petrol issues and also has links to other websites with information on petrol prices and petrol pricing issues.

Petrol booklet

In September 2005 the ACCC publicly released a booklet on petrol pricing in Australia. The booklet aims to provide an understanding of petrol prices by presenting answers to some frequently asked questions on this issue. The booklet was widely distributed. Copies were sent to all parliamentarians in Australia, media outlets and industry stakeholders. Copies are publicly available from the ACCC website.

The ACCC also prepared a summary version of the booklet which was made available at virtually all service stations around Australia. Copies of the brochure are also publicly available from the ACCC website.

Petrol price snapshot

Between September and December 2005 the ACCC produced a weekly petrol price snapshot on the ACCC website, the aim of which was to provide additional information to consumers after retail petrol prices and Singapore refined petrol prices increased significantly in early September 2005 (principally as a result of the effect of Hurricane Katrina).

The petrol price snapshot gave consumers information on petrol prices in the five largest metropolitan cities, international petrol prices and the refiner margin. It was discontinued in late December 2005 because at that time retail petrol prices in the five largest metropolitan cities and Singapore refined petrol prices had decreased significantly from their peak levels in mid-September 2005.

Reports to government

In recent years the ACCC has prepared reports on various petrol pricing issues at the request of the Australian Government. These include the following:

- *Increase in the average retail petrol prices in Australia compared with the rise in international prices*, October 1999
- *Reducing fuel price variability*, December 2001
- *Terminal gate pricing arrangements in Australia and other fuel pricing arrangements in Western Australia*, December 2002.

Copies of these reports are available from the ACCC website.

The ACCC has also undertaken monitoring of price changes at particular times at the request of the Australian Government. One example is in March 2001 when the government reduced the excise on petrol and diesel by 1.5 cpl and asked the ACCC to monitor the passing on of this reduction to consumers.

7.2.2 Price surveillance provisions in the TPA

There have been some calls recently for the price surveillance provisions of the TPA to be used for petrol prices.

The prices surveillance provisions are in Part VIIA of the TPA.[54] The object of prices surveillance is to provide a way to act when competitive pressures in an industry are not sufficient to achieve efficient prices and protect consumers. Accordingly, prices surveillance would typically be used in industries for which there is little effective constraint on a business' pricing power.

Forms of price surveillance

There are three broad forms of price surveillance.

---

[54] The *Prices Surveillance Act 1983* was repealed on 1 March 2004 with the main parts incorporated into Part VIIA of the *Trade Practices Act 1974*.

Price inquiry

In simple terms, a price inquiry is conducted to see if purchasers are getting a fair deal in the supply of goods and services. The minister may give the ACCC written notice requiring (or approving) the ACCC to conduct an inquiry into the supply of specified goods or services. The minister may also, as will be set out in the written inquiry notice, confine an inquiry to a particular person or particular persons, involved in the supply of a specified good or service.

The minister will also set a time limit for when the inquiry must be completed. At the conclusion of the inquiry the ACCC will provide a report of its findings to the minister. Price inquiries must generally be held in public and the submissions would normally be made available to interested parties.

During the course of an inquiry restrictions on supply in new localities and price increases can be imposed on the person(s) that are the subject of the inquiry. However, the person(s) may increase the price with the ACCC's approval.

Price notification

Price notification operates to protect purchasers from excessive price increases. The minister (or the ACCC with the minister's approval) may declare that a person is a 'declared' person and that specified goods or services are 'notified' goods or services.

Certain price and supply restrictions are imposed on a 'declared' person's supply of the specified goods or services. Most relevantly, declared people cannot sell specified goods or services at a price above the highest price that was in place over the previous twelve months unless they comply with the notification procedures.

The ACCC maintains a public register of price notifications, its own decisions and the reasons for those decisions.

Under the price notification provisions a declared person must notify the ACCC of a price rise if the proposed price is higher than the price level operating for the previous 12 months. If a notification is not submitted to the ACCC, there is a breach of the TPA and the declared person can be fined. However, while a declared company is required to observe the notification procedures there is no obligation to comply with decisions made by the ACCC.

Price monitoring

Price monitoring occurs when the ACCC monitors the pricing in an industry, or the pricing behaviour of certain people in an industry. The TPA provides that the minister may direct the ACCC to monitor the 'prices, costs or profits' relating to the supply of goods or services in a specified industry, or that relate to the supply of goods or services by specified person(s).

Under the formal price monitoring arrangements, the ACCC has the power to obtain relevant information or documents, and there are penalties if they are not provided. These powers are not available under informal price monitoring, when the ACCC relies on the voluntary provision of information from the parties.

The ACCC is required to provide the minister with a report on its findings, and is also required to make copies of that report available for public inspection.

Price surveillance and the petroleum industry

The main form of prices surveillance in the petrol industry in the past was under the price notification provisions.

Before 1 August 1998 the four major oil companies were declared under s. 22 of the then *Prices Surveillance Act 1983* for sales of all grades of petrol and diesel. Under this section the declared companies were required to formally notify the ACCC of proposals to increase wholesale prices above the previously endorsed wholesale price.

Under the arrangements developed for the oil companies, the ACCC calculated maximum wholesale prices based on import parity and endorsed proposed prices by the oil companies provided they were not in excess of these calculated prices.

In 1998 the maximum wholesale price was made up of three components:

- the import parity component—the 'landed cost' for ex-refinery petrol stock from Singapore (incorporating the spot price for petrol, freight, wharfage, insurance and loss, and the Australian/US dollar exchange rate)

- the assessed local component—which incorporated downstream terminalling, marketing and distribution costs as well as return on assets employed in that sector

- subsidies and excise.

For sales by the major oil companies in non-refinery locations, the ACCC determined maximum wholesale prices by calculating an additional allowance (the freight differential) above city prices for freight costs for approximately 4 000 locations around Australia.

From 1 August 1998 petrol and diesel prices were deregulated and wholesalers are now free to set their own prices based on market conditions.

Rationale for deregulation

As noted in section 7.2.1, the Australian Government announced the deregulation of petrol prices effective from 1 August 1998 in a joint statement by the Treasurer, the Hon. Peter Costello, and the then Minister for Industry, Science and Tourism, the Hon. John Moore, on 20 July 1998.

The joint statement noted that:

> Price surveillance of petrol prices and the setting of a maximum endorsed wholesale price has had an adverse effect on the retail petrol market. In the capital cities, the maximum endorsed wholesale price has acted as a target for prices at the end of a discount cycle. In the country, the maximum endorsed wholesale price has acted as a price floor underwriting the price paid by country consumers.

This comment reflected the conclusion reached by the ACCC in its 1996 report.[55] In a media release on 15 August 1996, which outlined the conclusions of the ACCC report, it was stated:[56]

> The Australian Competition and Consumer Commission has recommended to the Federal Government that the declaration for price purposes of the supply of petrol and automotive distillate by the four 'oil majors' be revoked during 1997, subject to certain conditions.
>
> 'These conditions include the development of more vigorous competition in the industry, which is expected to follow increased numbers of independent retailers entering the industry over the next 12 months through the growth and spread of imports of fuel,' ACCC Chairman, Professor Allan Fels, said today. 'The ACCC believes that as a result of restructuring and increased competition there are better prospects for lower prices in city and country over time.
>
> 'The price controls do not serve a very useful purpose. In most capital cities, they only restrain prices occasionally, and on those occasions only a little. At other times, the setting of the prices in fact facilitates price coordination, not competition, encouraging companies at times to charge the maximum price rather than a lower one. In rural areas the controls have been avoided to a significant degree by oil companies selling through distributors who are not subject to price restraints. In addition there have been some harmful side effects on the efficiency of the industry.

7.3 Administering the TPA

The ACCC is responsible for administering the TPA. As a part of this role the ACCC has investigated allegations of price fixing, predatory pricing and other anti-competitive activities in the petroleum industry. It has also considered proposed mergers in the petroleum industry and third line forcing notifications relating to shopper docket schemes.

7.3.1 Price fixing

Petrol retailers who get together to fix their prices are breaking the law. The ACCC has taken action in the courts in the past against service station operators and oil companies for price fixing.

Recent examples include the following.

- In March 2005 financial penalties totalling $23.3 million were ordered by the Federal Court for price fixing conduct in the Ballarat petrol market.

---

[55] ACCC, *Inquiry into the Petroleum Products Declaration,* August 1996.

[56] ACCC media release, *ACCC recommends end to petrol declaration when competitive forces re-structure fuel industry*, 15 August 1996.

- After the successful appeal by two respondents, the total penalty was reduced by $3.2 million. In September 2005 the ACCC sought special leave to appeal this decision to the High Court. This application was dismissed by the High Court in June 2006.

- In June 2005, the Federal Court made declarations based on admissions of price fixing conduct involving two service stations in the Brisbane area.

  - In November 2005 the Federal Court imposed penalties totalling $470 000.

- There is a further case currently before the courts concerning alleged price fixing in the Geelong area of Victoria.

Parallel prices

It is often claimed that the similar movement in petrol prices over a short period of time is a result of price fixing.

A feature of petrol prices is that they tend to reflect a high incidence of price matching or 'parallelism'. This relates to the fact that petrol (particularly regular unleaded petrol) is generally a very similar product with minimal brand loyalty, which means that competition is based primarily on price. Retailers therefore cannot afford to set prices that are higher than prevailing market prices for too long or they risk losing market share.

Furthermore, in the automotive fuel industry, it is not difficult for retailers to be aware of each other's prices. They are prominently displayed on roadside price boards and made available in comprehensive up-to-date surveys of retail prices in major cities.

So it is not surprising that retail petrol prices cluster around an average. As long as prices are determined individually without collusion, there is no breach of the TPA. The courts have held that the similarity or even uniformity in price of similar products is not, of itself, sufficient evidence to suggest a breach of the TPA.

Section 45A of the TPA prohibits any agreement that has the purpose or effect of fixing or maintaining prices. If prices are determined individually without collusion then there is no breach of s. 45A of the TPA. To demonstrate a breach of s. 45A it is necessary to show actual collusion between suppliers has taken place. Such collusion could occur during industry meetings, by telephone or e-mail or in other formal or informal ways. However, evidence of such collusion is essential before a contravention of s. 45A can be proven.

'Price gouging' and 'profiteering'

There have been claims made in recent times that there is 'price gouging' and 'profiteering' with petrol prices. The question of whether petrol resellers have engaged in 'price gouging' and 'profiteering' is a complex one, which raises several issues.

Firstly, the concepts 'price gouging' and 'profiteering' do not have clear meanings and are not used in the TPA.

Furthermore, concepts of 'price gouging' and 'profiteering' would usually be associated with market power and it is not clear how they would apply in the context of an industry that supplies an internationally traded commodity such as petrol. As noted in section 4, petrol prices in Australia tend to follow Singapore refined petrol prices because refiners in Australia have to compete with refiners in the region in marketing refined petrol in Australia and Asia.

Another issue is the determination of the appropriate period to make an assessment of profits. For example, should profitability be measured over a short period, such as the recent months covering the upswing in prices, or should a longer term perspective be taken, such as over a year or more.

To make claims of 'price gouging' and 'profiteering' requires a notion of the appropriate level of prices and profits and an assessment that current prices and profits are significantly above that appropriate level.

The claims of 'price gouging' and 'profiteering' have been raised in the context of the high refiner margin in recent times. However, changes in the refiner margin are due to movements in the international prices of crude oil and refined petrol, which reflect underlying demand and supply factors.

7.3.2 Mergers

The ACCC investigates and reviews those mergers it becomes aware of that have the potential to raise concerns under s. 50 of the TPA. Section 50 prohibits acquisitions that would have the effect, or be likely to have the effect, of substantially lessening competition in a substantial market in Australia, in a state or territory.

The most significant merger in the petroleum industry in recent times was the merger of the refining and marketing interests in Australia of Ampol and Caltex in 1995. This merger was allowed to proceed subject to legally enforceable undertakings that enhanced the position of independents in the industry to the benefit of consumers. These included the divestiture of oil terminals, distributorships, depots and retail sites to ensure supplies to independent retailers. These undertakings contributed to the subsequent growth of independents in all levels of the industry.

The ACCC considered the Coles and Shell arrangements in 2003 and the Caltex and Woolworths joint venture arrangements in 2004 and considered that there would not be a substantially lessening of competition if they proceeded.

7.3.3 Notifications

Section 47 of the TPA prohibits exclusive dealing conduct which, broadly, involves one person trading with another imposing restrictions on the other's freedom to choose with whom, or in what, or where they deal. One form of exclusive dealing conduct is known as third line forcing. Businesses can gain immunity from legal action under the third line forcing provisions of the TPA by lodging a notification.

The ACCC may remove the immunity provided by a third line forcing notification at any stage if it is satisfied that the likely public benefit from the conduct will not outweigh the likely detriment to the public.

Generally speaking, the petrol shopper docket promotions enable consumers to receive a discount on petrol at certain outlets provided that grocery items of a specified value have been purchased from a third party, often a supermarket. Without notification, shopper docket arrangements may raise concerns under the third line forcing provisions of the TPA.

In February 2004 the ACCC released its shopper docket report, which discussed the ACCC's consideration of a number of petrol and grocery related issues, including allowing a number of third line forcing petrol shopper docket notifications to stand (i.e. Coles and Woolworths).

In the 2004 shopper docket report, the ACCC concluded that the shopper docket petrol discount arrangements were likely to result in a net public benefit arising from lower prices for consumers, generation of a culture of discounting and increased non-price competition.

Since February 2004, and as at 30 June 2006, more than 500 shopper docket notifications have been lodged with the ACCC covering over 1 000 service stations. The majority of these notifications involve localised arrangements with independently owned major branded sites or independent fuel retailers. Since September 2004 arrangements involving Foodland Associated Limited and independent fuel outlets, and the Servo Saver scheme, have been the subject of a number of the shopper docket notifications.

The ACCC has also received several notifications on fuel discount arrangements that are alternatives to the shopper docket schemes. For example, these arrangements may provide consumers with a discount on fuel when they use credit card or telecommunication services.

All of the shopper docket arrangements that have been notified to the ACCC have been allowed to stand.

7.3.4 Abuse of market power

Over the years the ACCC has received complaints from some service station operators that a competitor is engaging in predatory pricing, by which they generally mean that a competitor is keeping their retail prices low to drive them out of business.

There is no provision in the TPA that deals specifically with predatory pricing. However, this issue may be considered under s. 46 of the TPA which relates to the misuse of market power.

Section 46 prohibits a company with a substantial degree of market power from taking advantage of that power for a proscribed purpose. The proscribed purposes are:

- eliminating or damaging a competitor in that market or another market
- preventing entry to that or another market
- deterring or preventing competitive conduct in that or another market.

When considering allegations of breaches of s. 46 there are many issues that need to be addressed. A threshold question is whether the corporation in question in fact enjoys a substantial degree of power in a market.

Even if it could be shown that the corporation has a substantial degree of power in a market, the ACCC then needs to demonstrate a use of such power for one of the three proscribed purposes.

In this context it should be noted that retailers selling petrol below cost does not in itself constitute abuse of market power. To fall into that category, such behaviour would need to be targeted at one or more competitors (i.e. it needs to have the purpose of damaging a competitor) over a sustained period. Competitive pricing to gain market share or to respond to general competitive pressures is not predatory.

There is generally a thin line between conduct that breaches s. 46 and vigorous competition. In *Queensland Wire Industries Pty Ltd v Broken Hill Proprietary Co Ltd (1989)*, a s. 46 case, the High Court noted that:

> Competition by its very nature is deliberate and ruthless. Competitors jockey for sales, the more effective competitors injuring the less effective by taking sales away … these injuries are the inevitable consequence of the competition section 46 is designed to foster.

The ACCC has examined a number of claims of abuse of market power in the petroleum industry, but has been unable to find sufficient evidence to indicate a breach of the TPA.

Some industry participants have in past called for industry-specific arrangements to address concerns of misuse of market power in the petroleum industry. The ACCC considers that the petrol industry is no different from other industries and therefore s. 46 provisions should apply. This is consistent with the Hilmer report into national competition policy which stressed the desirability of the universal application of competition law.

7.4 Downstream petroleum reform package

The Australian Government's downstream petroleum reform package envisages a specific role for the ACCC in administering and enforcing the Oilcode.[57]

The package comprises the introduction of a mandatory industry code under s. 51AE of the TPA—the Oilcode—in concert with the repeal of the *Petroleum Retail Marketing Sites Act 1980* and the *Petroleum Retail Marketing Sites Franchise Act 1980*.

The bill to repeal these two Acts is likely to be considered by the House of Representatives in the 2006 spring session.

---

[57] See *Petroleum Retail Legislation Repeal Bill 2006, Explanatory Memorandum*.

Key elements of the Oilcode include:

- the establishment of minimum standards for petrol re-selling agreements between retailers and their suppliers
- the introduction of a nationally consistent approach to terminal gate pricing
- the establishment of an independent downstream petroleum dispute resolution scheme.

Appendix 1 ACCC petrol publications since 1996

Below is a list of publications on the petroleum industry by the ACCC since its establishment in 1996. All of these are available from the ACCC website, except the 1996 report (which is available from the ACCC Publications Unit).

Inquiry into the Petroleum Products Declaration, August 1996

Increase in the average retail petrol prices in Australia compared with the rise in international prices, October 1999

Report on the movement in fuel prices in the September quarter 2000, October 2000

Reducing fuel price variability, December 2001

Terminal gate pricing arrangements in Australia and other fuel pricing arrangements in Western Australia, December 2002

Assessing shopper docket petrol discounts and acquisitions in the petrol and grocery sectors, February 2004

Understanding petrol pricing in Australia—answers to some frequently asked questions, August 2005.

Appendix 2 Data on price cycles in the five largest metropolitan cities

This appendix provides data on petrol price cycles in Sydney, Melbourne, Brisbane, Adelaide and Perth for the first six months of 2006.

For each of the cities, charts show:

- Average daily retail petrol prices
- The range of the variation of price cycles
- The range of the duration of price cycles
- The days of the week of peaks and troughs.

Methodology

In the following analysis:

- A **price cycle** is considered to have occurred if there are total price movements between trough to peak of one cent per litre or more and from that peak to subsequent trough of one cent per litre or more [58]
- The **variation** of a price cycle is the difference in price (in cents per litre) between the bottom (trough) and the top (peak) of the price cycle
- The **duration** of a price cycle is the number of days between the trough of one price cycle and the trough of the next cycle
- The data includes all days of the week and public holidays
- The data was obtained from Informed Sources
- The price data used in the analysis is based on average daily prices. Therefore, the actual fluctuations at individual service stations on any particular day would have been higher in some instances and lower in others.

[58] In cases where the average daily price remains constant for more than one day at the bottom (trough) or top (peak) of a cycle, the trough or peak is taken to have occurred on the first day.

Sydney

Chart S.1 shows the average daily retail prices for petrol in Sydney between 1 January and 30 June 2006.

- The chart shows that over the period there were 24 completed cycles.

- The average variation was 7.6 cpl. The variations ranged from 2.7 cpl to 15.4 cpl —a span of 12.7 cpl.

Chart S.2 shows the range of the variation of price cycles in the first six months of 2006.

- It shows that over the six months the most common variation was between 7.0 and 7.99 cpl. This occurred in 5 cycles (21 per cent).

Chart S.3 shows the range of the duration of price cycles between 1 January and 30 June 2006.

- It shows that the most common duration of price cycles was seven days, with 17 cycles (71 per cent) lasting this long. The duration ranged from five to 14 days.

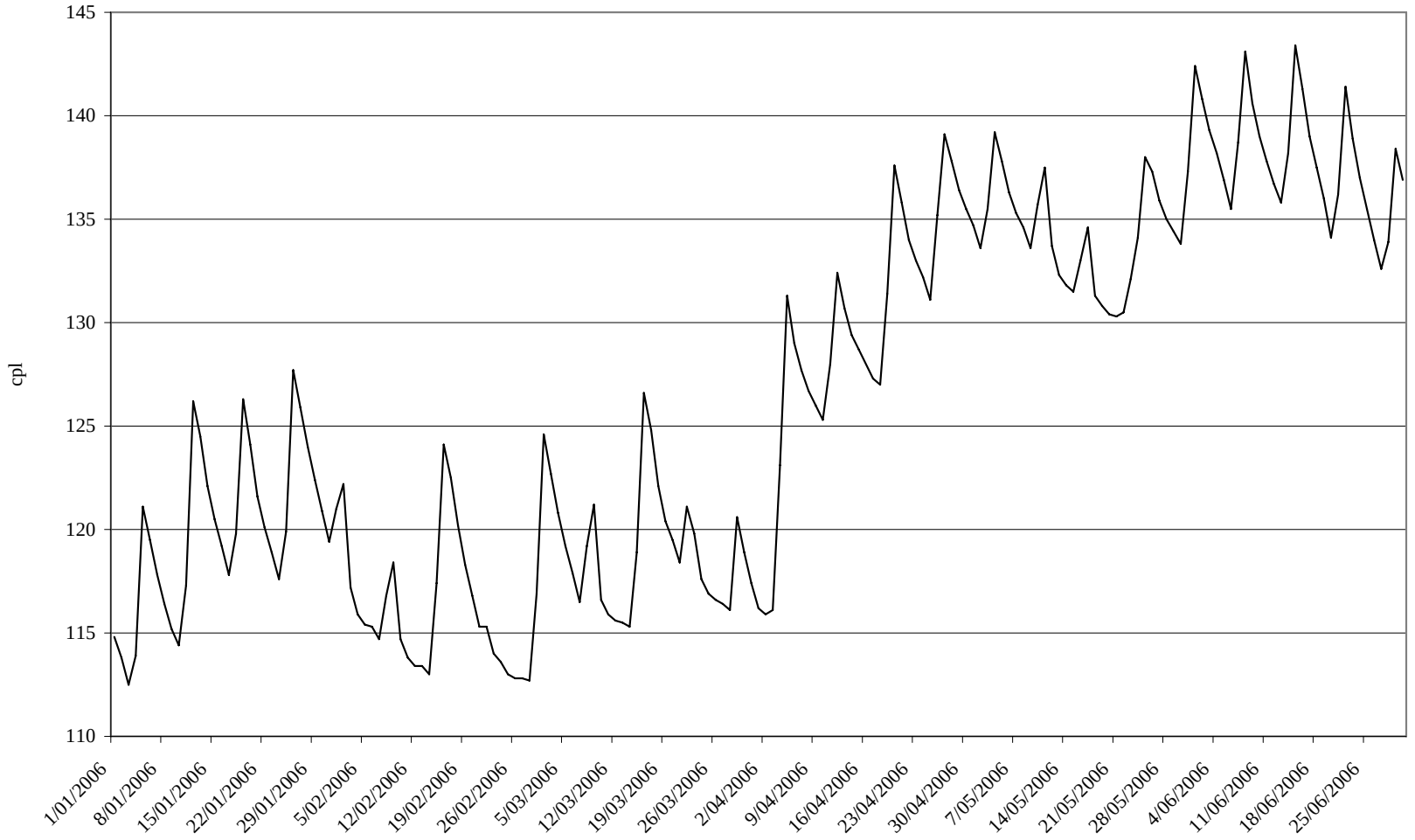
- The average duration of price cycles was 7.3 days.

Chart S.4 shows the frequency with which prices peaked and troughed on each day of the week between 1 January and 30 June 2006.

- The most common day for prices to peak was Thursday, with 20 peaks (80 per cent) occurring on this day.

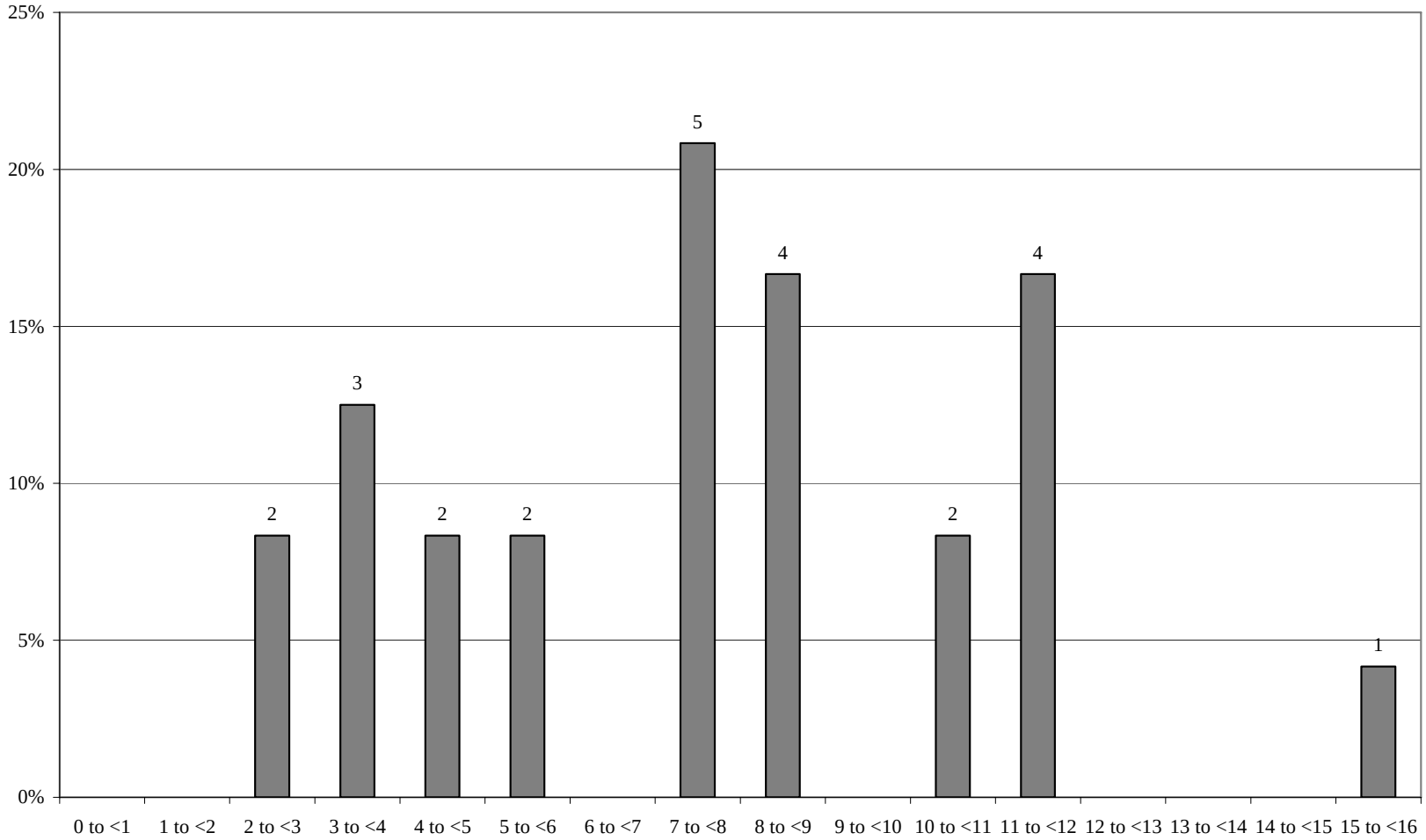
- Tuesday was the most common day for prices to trough, with 21 troughs (84 per cent).

Chart S.1 Sydney—average daily retail prices—1 January to 30 June 2006



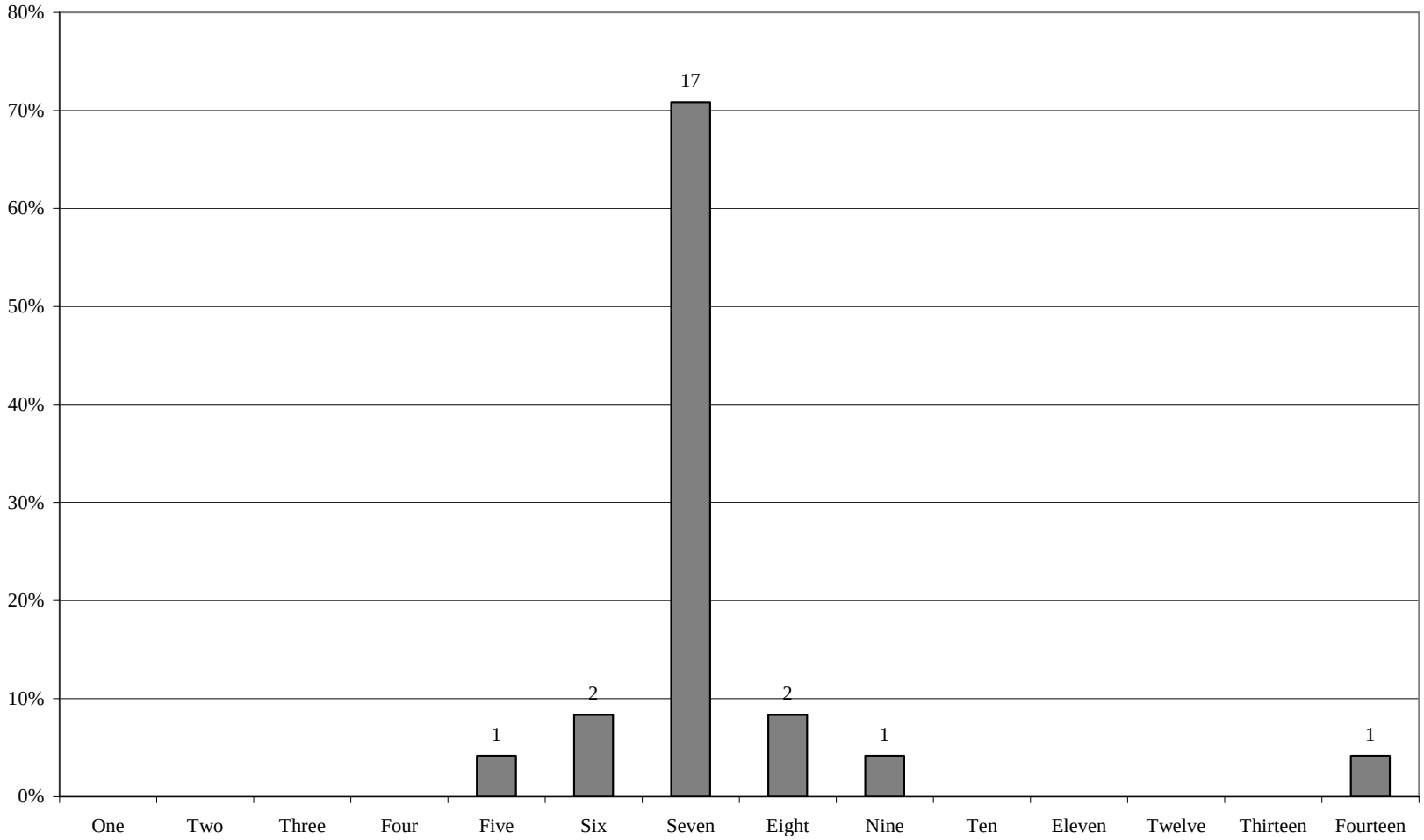
Source: ACCC and Informed Sources

Chart S.2 Sydney—range of the variation of price cycles—1 January to 30 June 2006



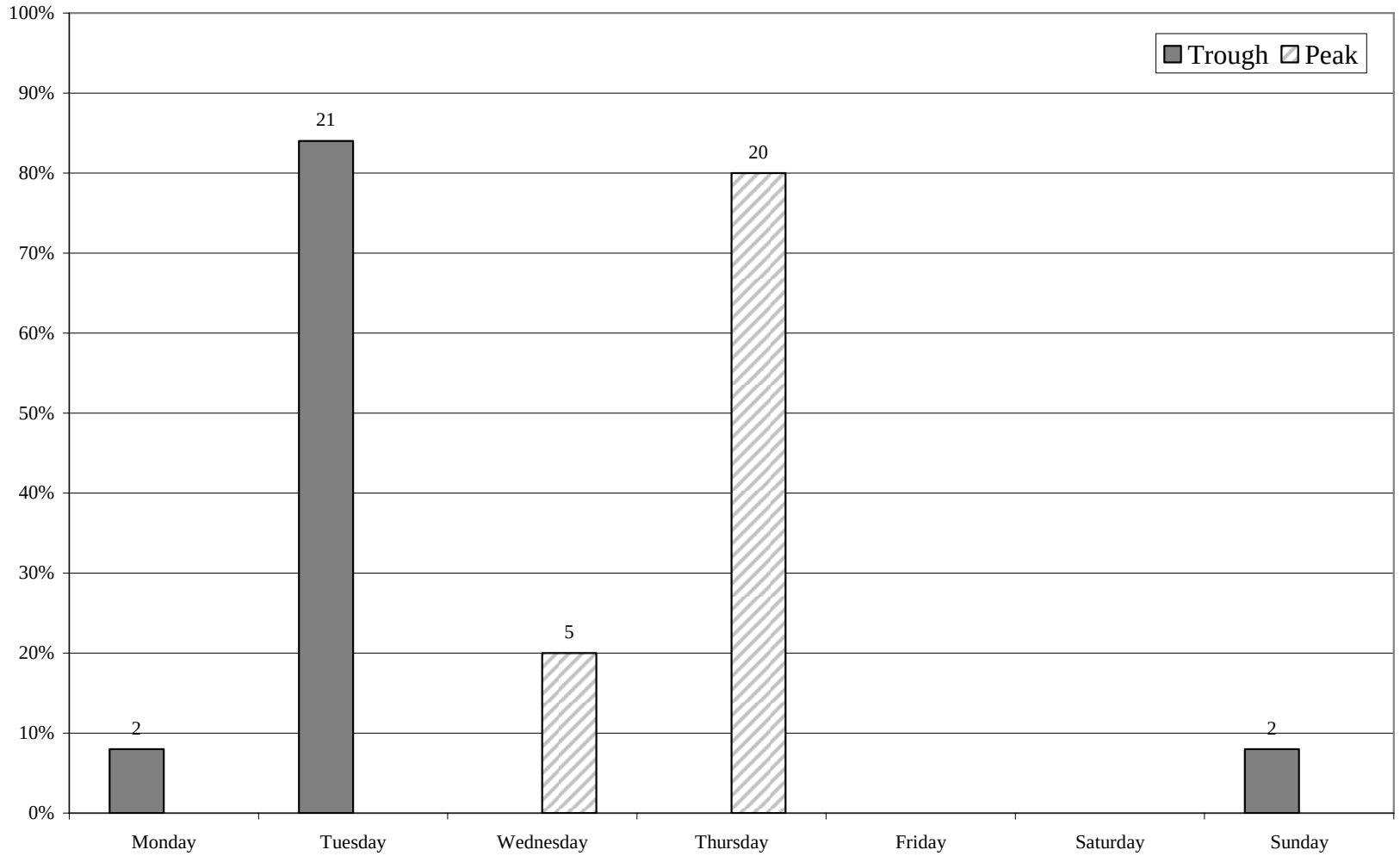
Source: ACCC and Informed Sources

Chart S.3 Sydney—range of the duration of price cycles—1 January to 30 June 2006



Source: ACCC and Informed Sources

Chart S.4 Sydney—days of the week for peaks and troughs—1 January to 30 June 2006



Source: ACCC and Informed Sources

Melbourne

Chart M.1 shows the average daily retail prices for petrol in Melbourne between 1 January and 30 June 2006.

- The chart shows that over the period there were 20 completed cycles.

- The average variation was 7.7 cpl. The variations ranged from 1.2 cpl to 13.9 cpl —span of 12.7 cpl.

Chart M.2 shows the range of the variation of price cycles in the first six months of 2006.

- It shows that over the six-month period the most common variation was between 9.0 and 9.99 cpl. This occurred in 4 cycles (19 per cent).

Chart M.3 shows the range of the duration of price cycles from 1 January to 30 June 2006.

- It shows that the most common duration of price cycles over the period was seven days, with 15 cycles (75 per cent) lasting this long. They ranged between six and 21 days.

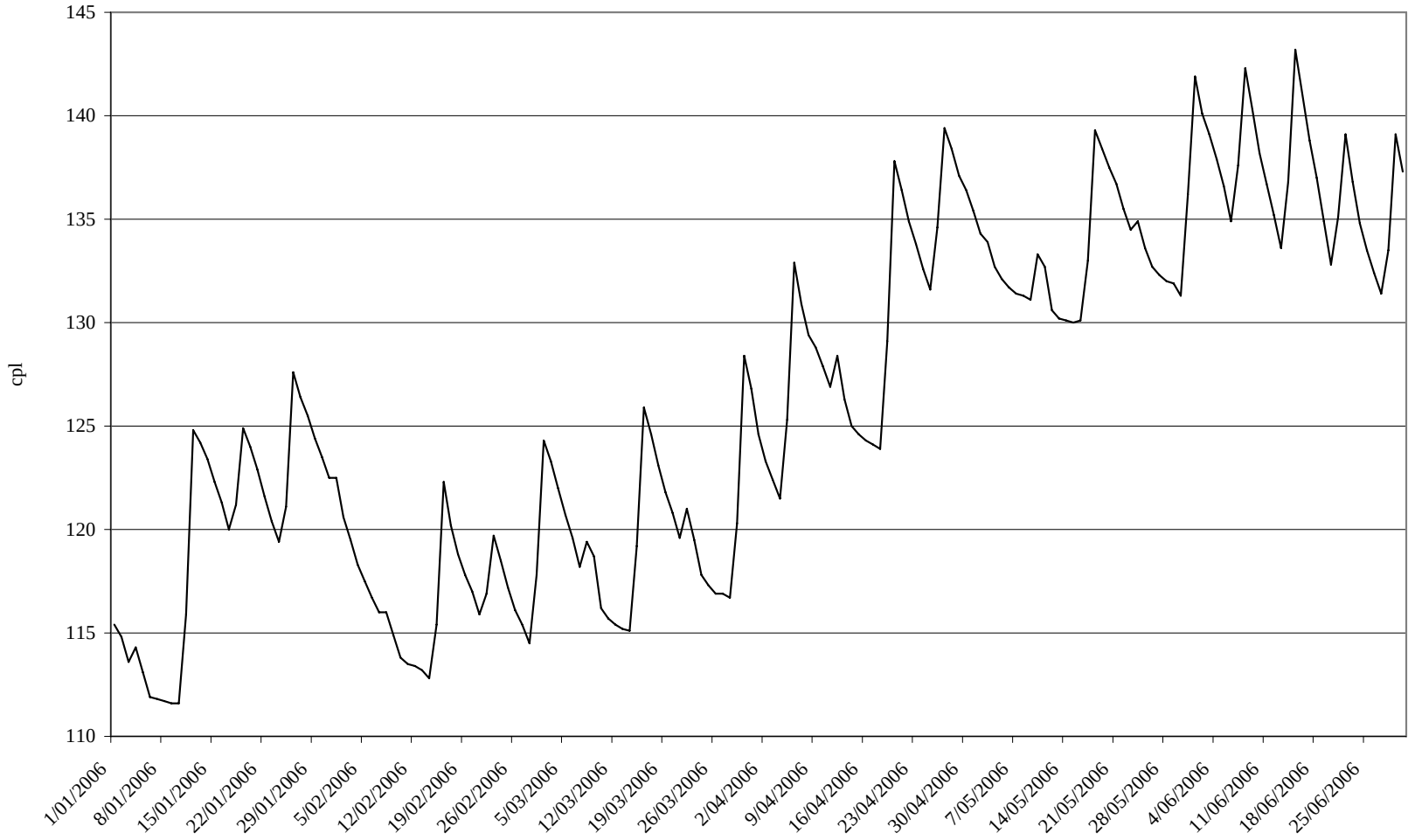
- The average duration of price cycles was 8.5 days.

Chart M.4 shows the frequency with which prices peaked and troughed on each day of the week between 1 January and 30 June 2006.

- The most common day for prices to peak was Thursday, with 17 peaks (81 per cent) occurring on this day.

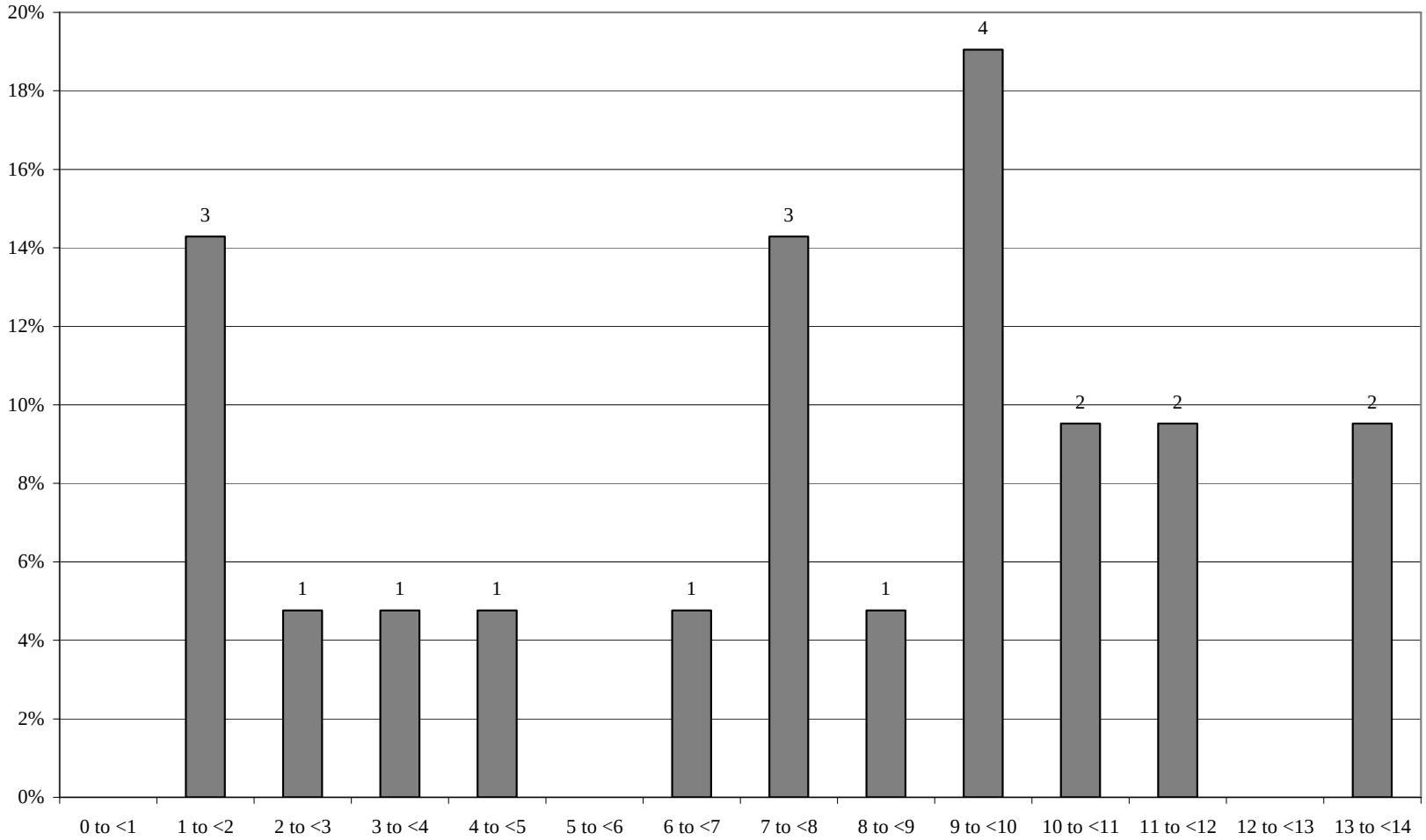
- Tuesday was the most common day for prices to trough, with 19 troughs (90 per cent).

Chart M.1 Melbourne—average daily retail prices—1 January to 30 June 2006



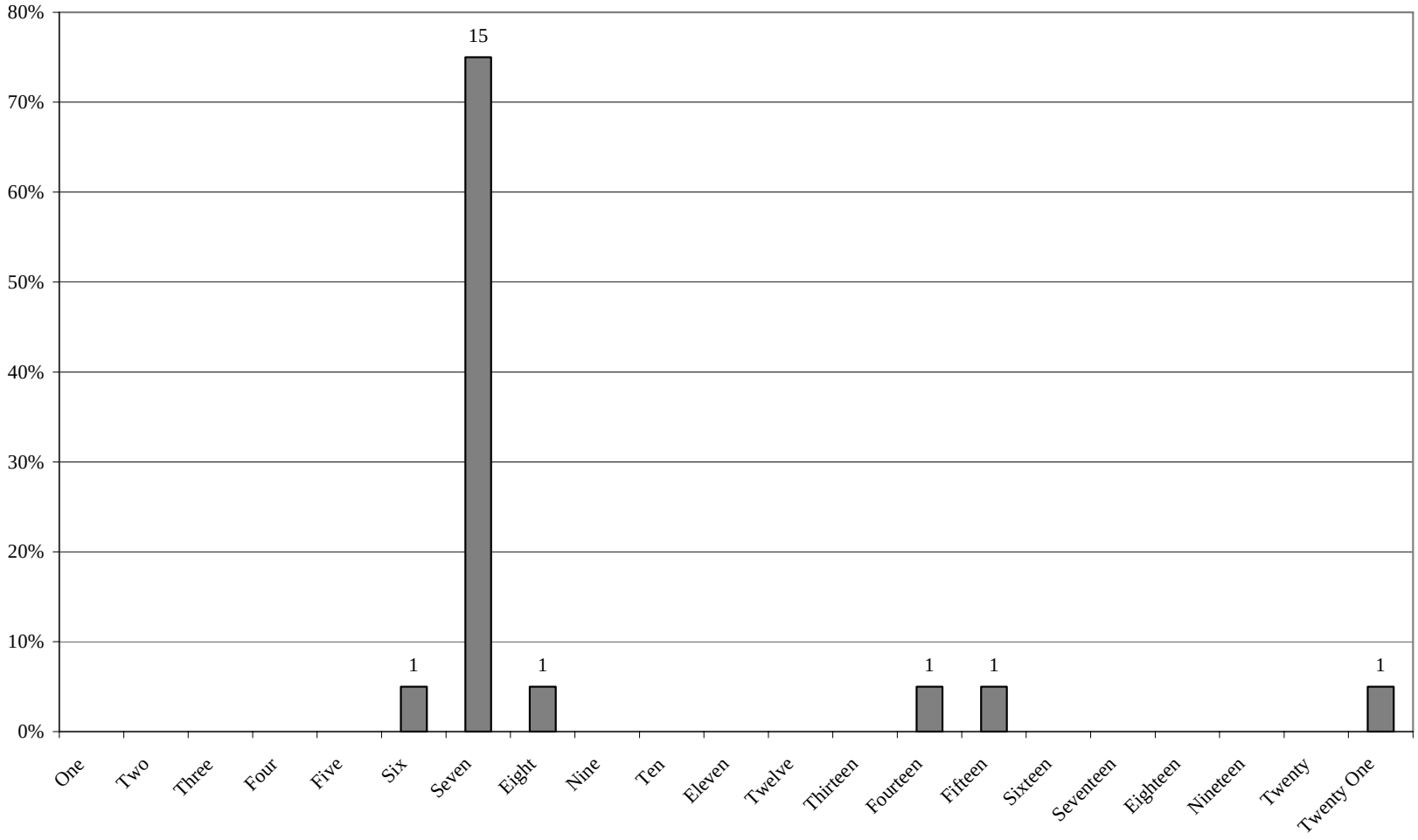
Source: ACCC and Informed Sources

Chart M.2 Melbourne—range of the variation of price cycles—1 January to 30 June 2006



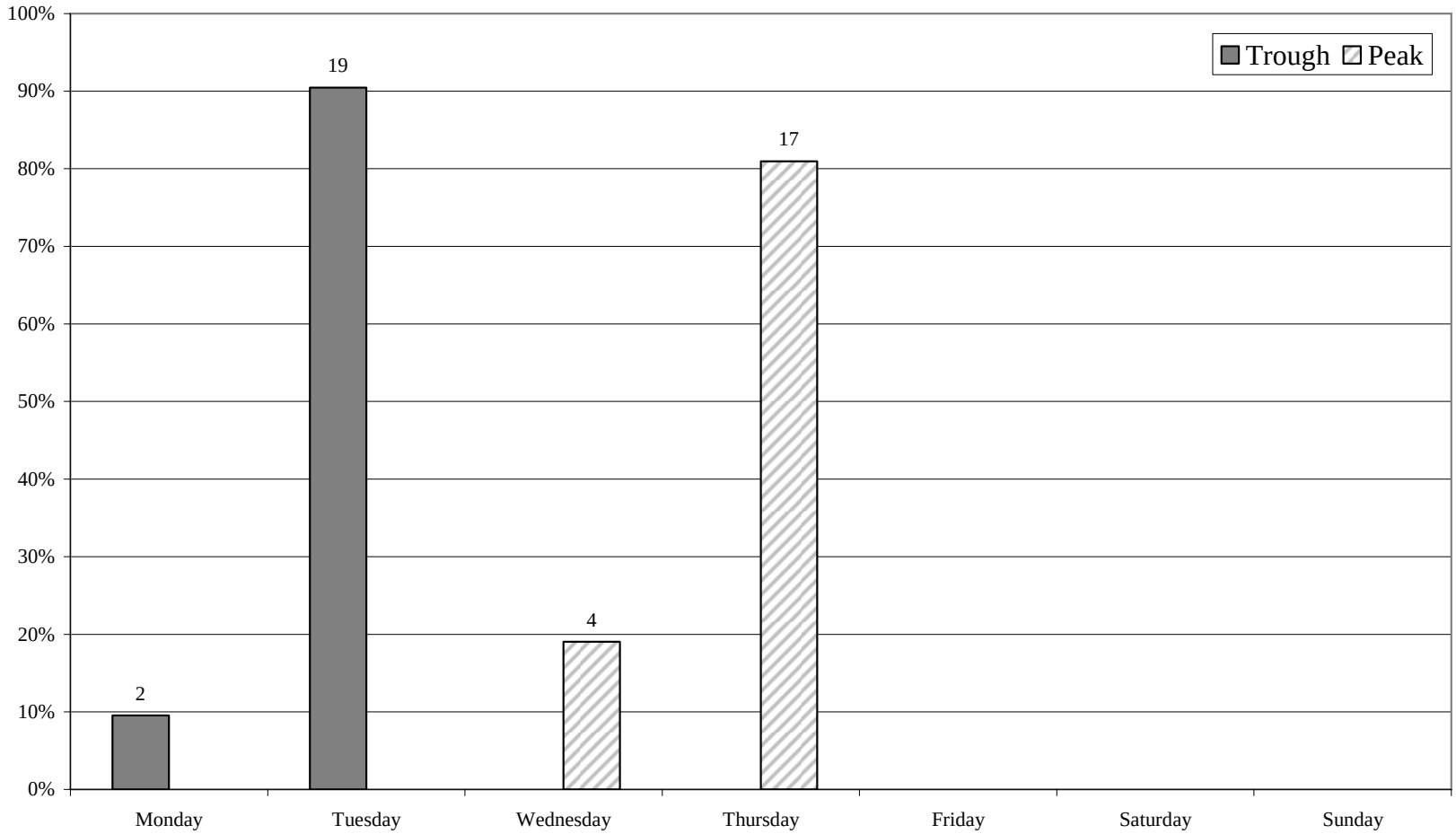
Source: ACCC and Informed Sources

Chart M.3 Melbourne—range of the duration of price cycles—1 January to 30 June 2006



Source: ACCC and Informed Sources

Chart M.4 Melbourne—days of the week for peaks and troughs—1 January to 30 June 2006



Source: ACCC and Informed Sources

Brisbane

Chart B.1 shows the average daily retail prices for petrol in Brisbane between 1 January and 30 June 2006.[59]

- It shows that over the period there were 25 completed cycles and the average variation was 7.7 cpl.

- The variations ranged from 1.2 cpl to 11.7 cpl—a span of 10.5 cpl.

Chart B.2 shows the range of the variation of price cycles in the first six months of 2006.

- It shows that over the six months the most common variation was equally between 7.0 and 7.99 cpl, 8.0 and 8.99 cpl and 9.0 and 9.99 cpl. This occurred in 5 cycles each (57 per cent in total).

Chart B.3 shows the range of the duration of price cycles from 1 January to 30 June 2006.

- It shows that the most common duration of price cycles over the period was seven days, with 21 cycles (84 per cent) lasting this long. They ranged between five and nine days.

- The average duration of price cycles was 7.0 days.

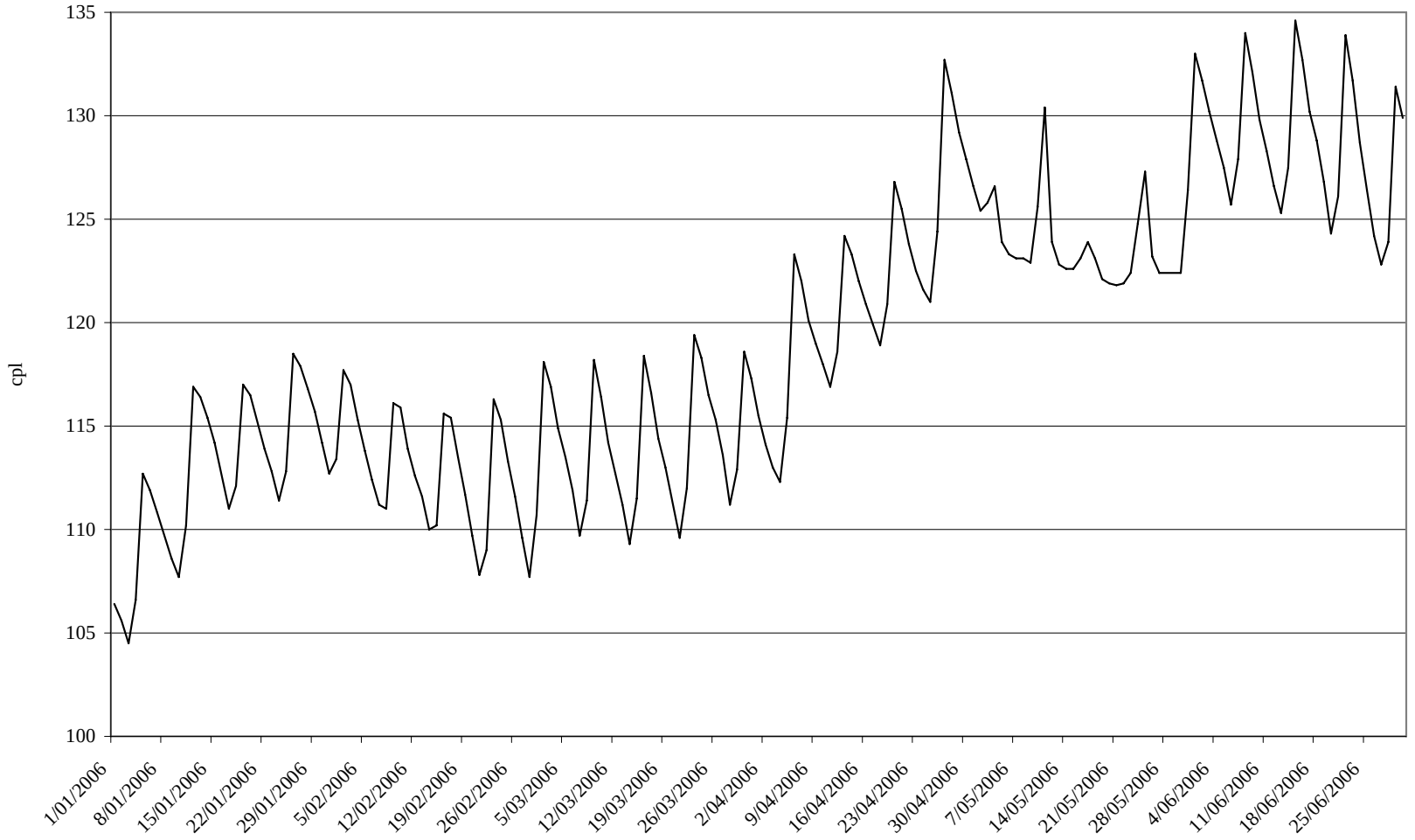
Chart B.4 shows the frequency with which prices peaked and troughed on each day of the week between 1 January and 30 June 2006.

- The most common day for prices to peak was Thursday, with 25 peaks (96 per cent) occurring on this day.

- Tuesday was the most common day for prices to trough, with 22 troughs (85 per cent).

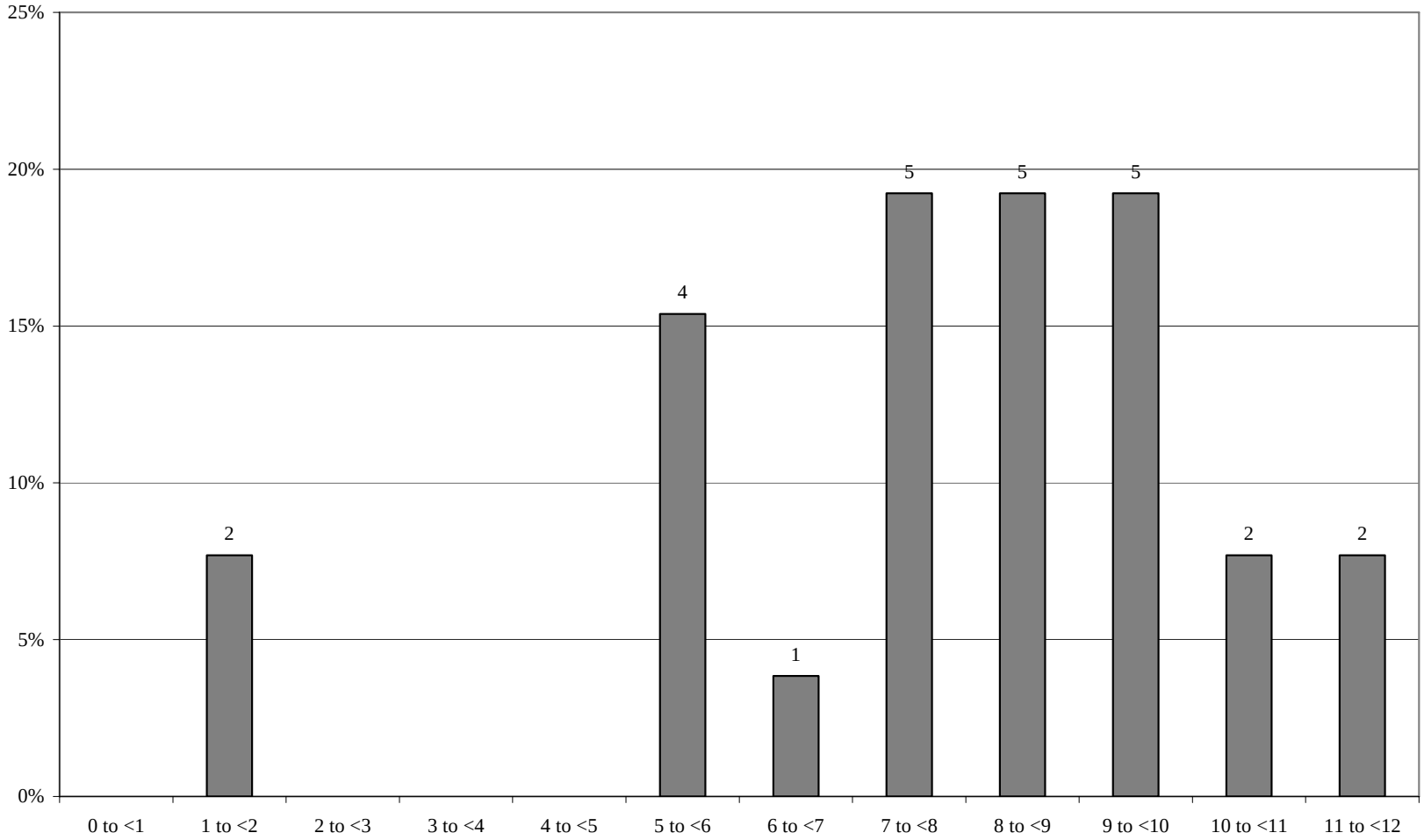
[59] Brisbane prices are significantly lower than the prices in other major metropolitan cities as a result of the Queensland fuel subsidy of 8.354 cpl (around 9.2 cpl including the GST).

Chart B.1 Brisbane—average daily retail prices—1 January to 30 June 2006



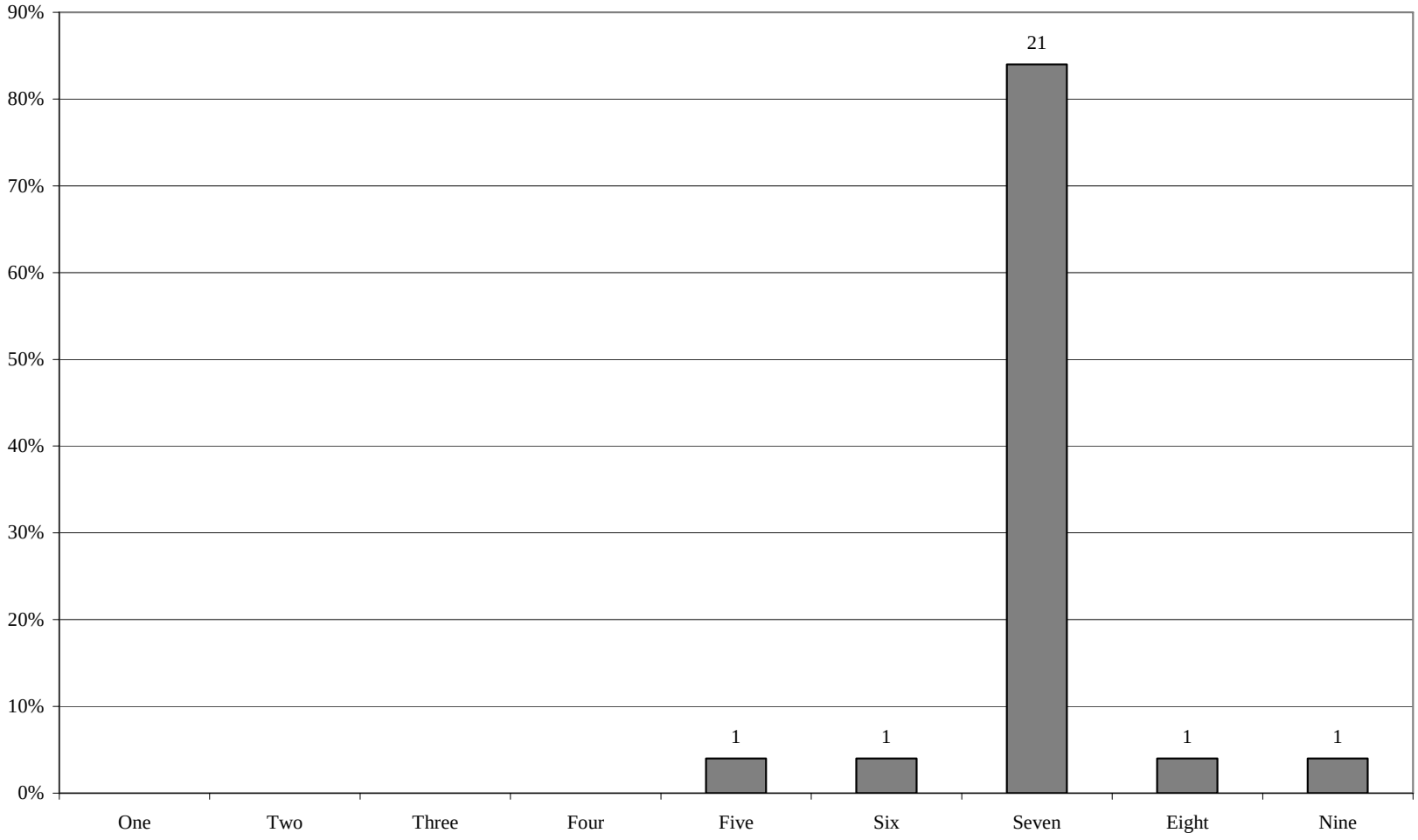
Source: ACCC and Informed Sources

Chart B.2 Brisbane—range of the variation of price cycles—1 January to 30 June 2006



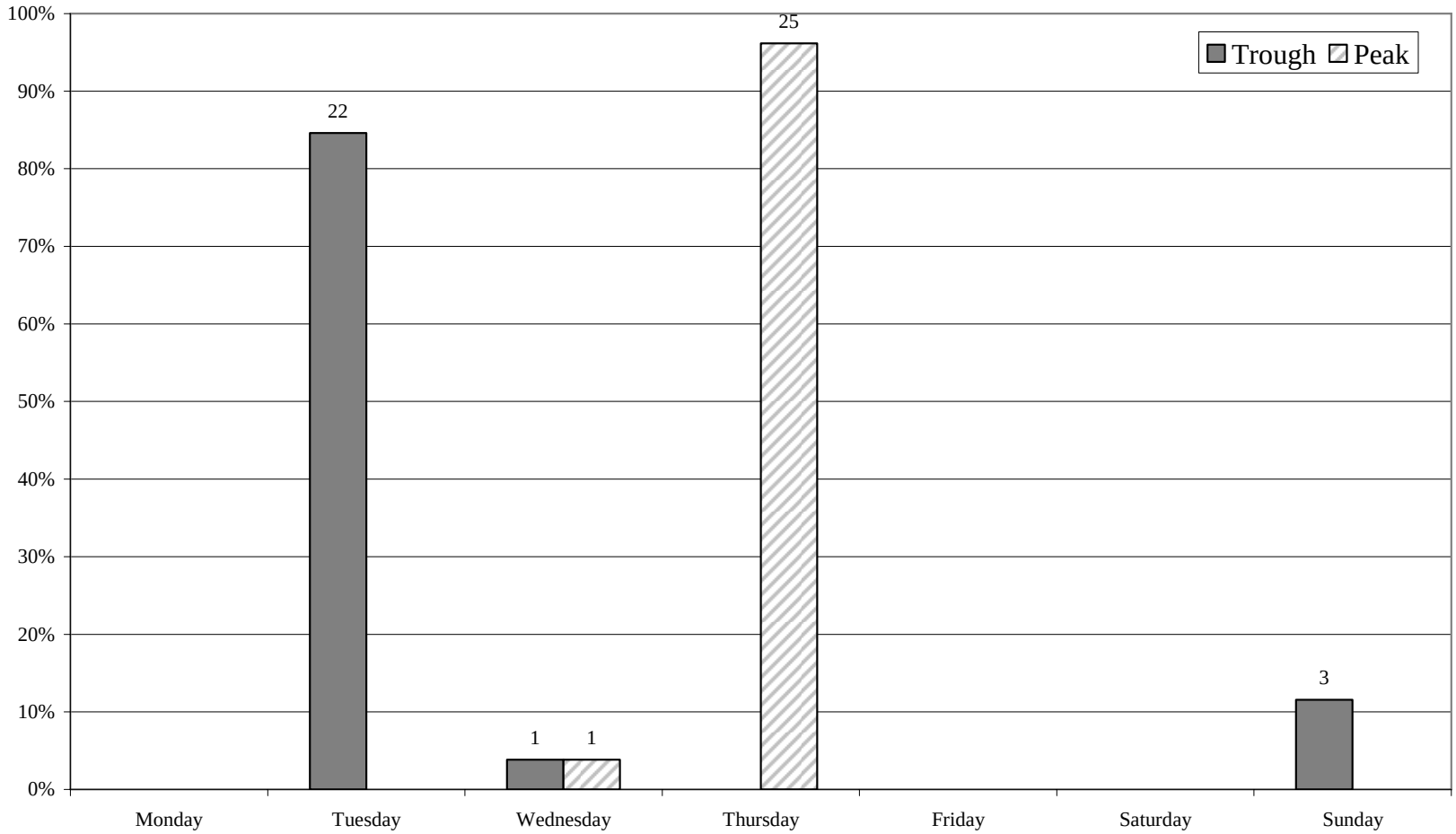
Source: ACCC and Informed Sources

Chart B.3 Brisbane—range of the duration of price cycles—1 January to 30 June 2006



Source: ACCC and Informed Sources

Chart B.4 Brisbane—days of the week for peaks and troughs—1 January to 30 June 2006



Source: ACCC and Informed Sources

Adelaide

Chart A.1 shows the average daily retail prices for petrol in Adelaide between 1 January and 30 June 2006.

- It shows that over the period there were 25 completed cycles.

- The average variation was 9.1 cpl. The variations ranged from 2.3 cpl to 11.2 cpl —a span of 8.9 cpl.

Chart A.2 shows the range of the variation of price cycles in the first six months of 2006.

- It shows that over the six months the most common variation was between 9.0 and 9.99 cpl. This occurred in 8 cycles (31 per cent).

Chart A.3 shows the range of the duration of price cycles from 1 January to 30 June 2006.

- It shows that the most common duration of price cycles over the period was seven days, with 21 cycles (84 per cent) lasting this long. They ranged between five and nine days.

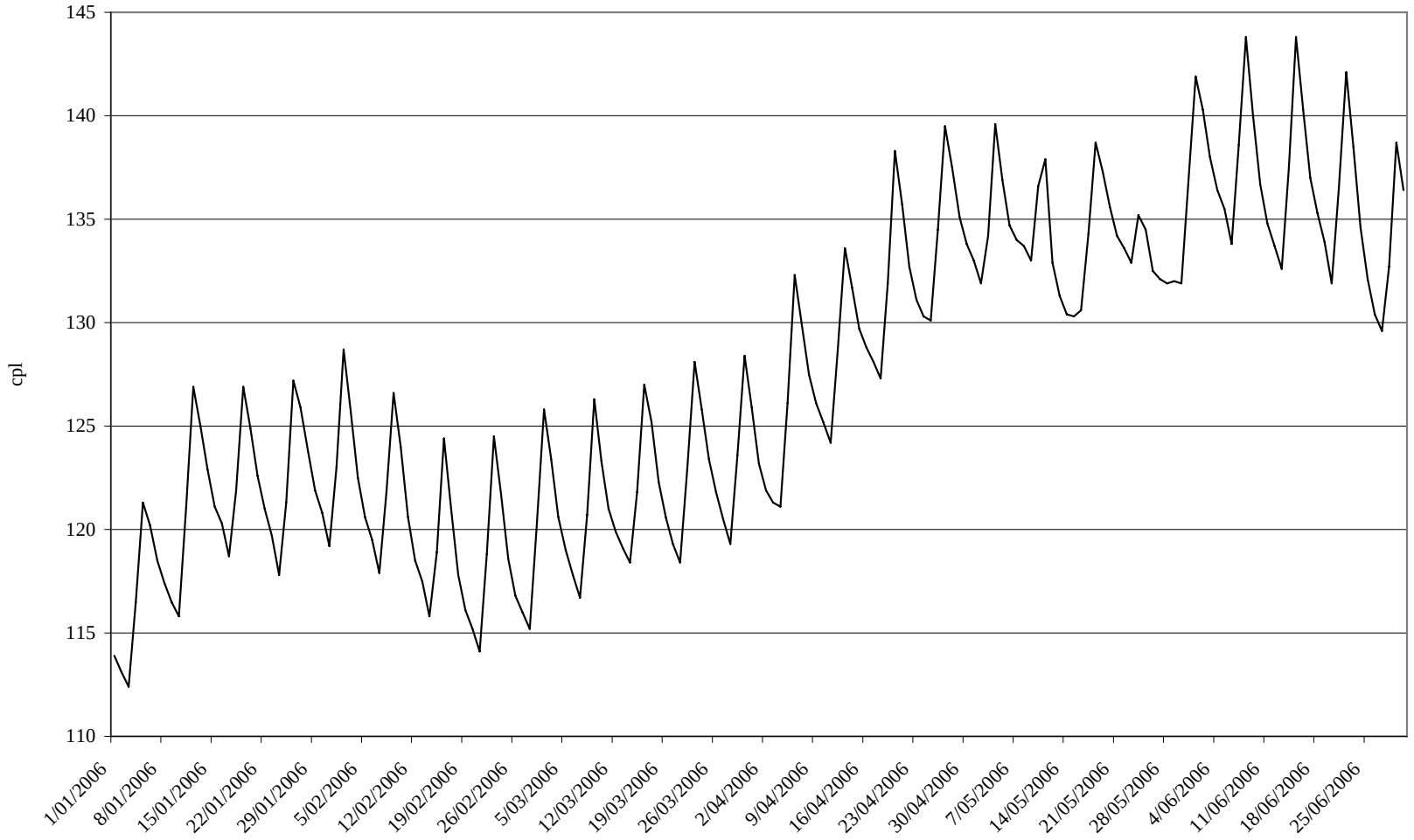
- The average duration of price cycles was 7.0 days.

Chart A.4 shows the frequency with which prices peaked and troughed on each day of the week between 1 January and 30 June 2006.

- The most common day for prices to peak was Thursday, with 25 peaks (96 per cent) occurring on this day.

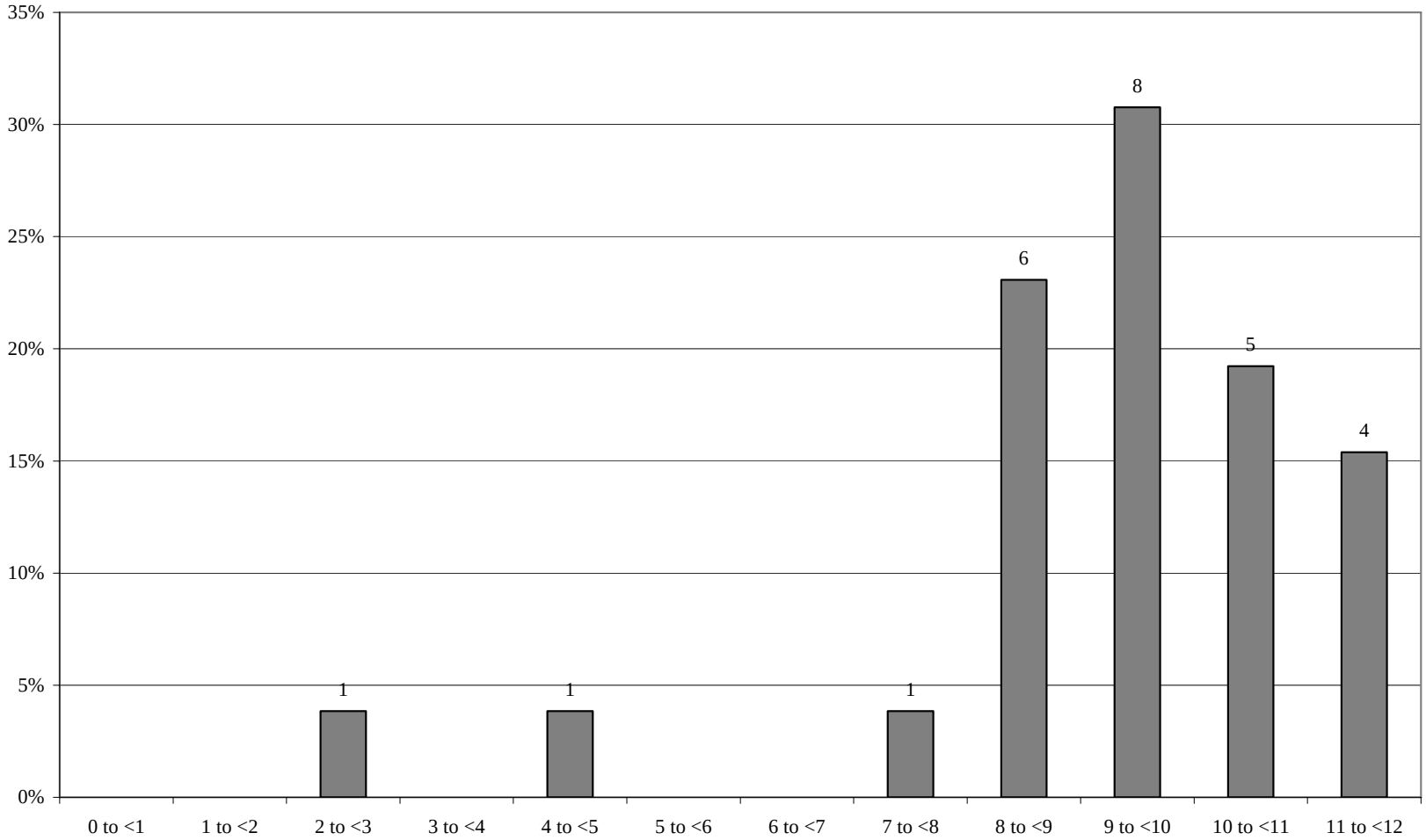
- Tuesday was the most common day for prices to trough, with 24 troughs (92 per cent).

Chart A.1 Adelaide—average daily retail prices—1 January to 30 June 2006



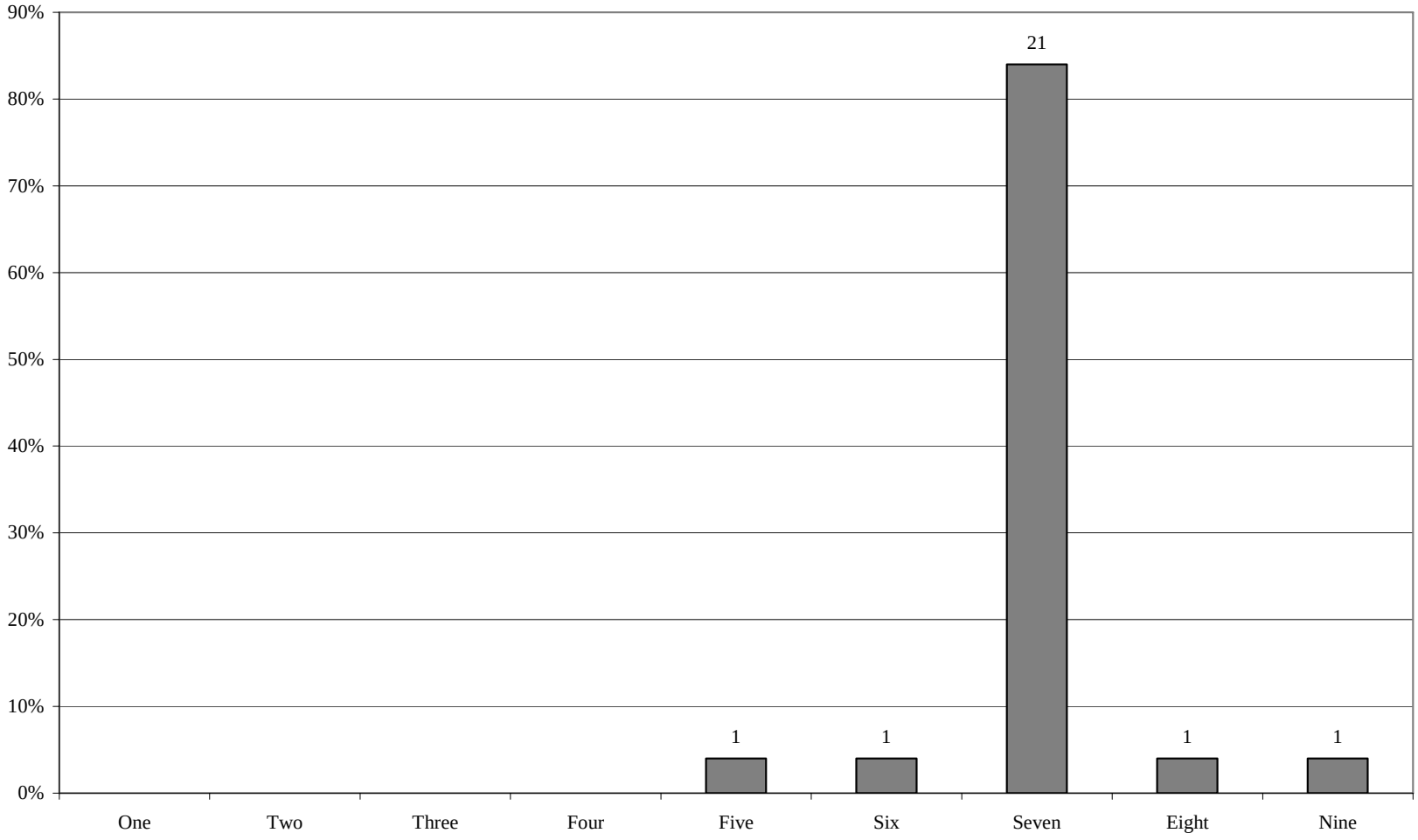
Source: ACCC and Informed Sources

Chart A.2 Adelaide—range of the variation of price cycles—1 January to 30 June 2006



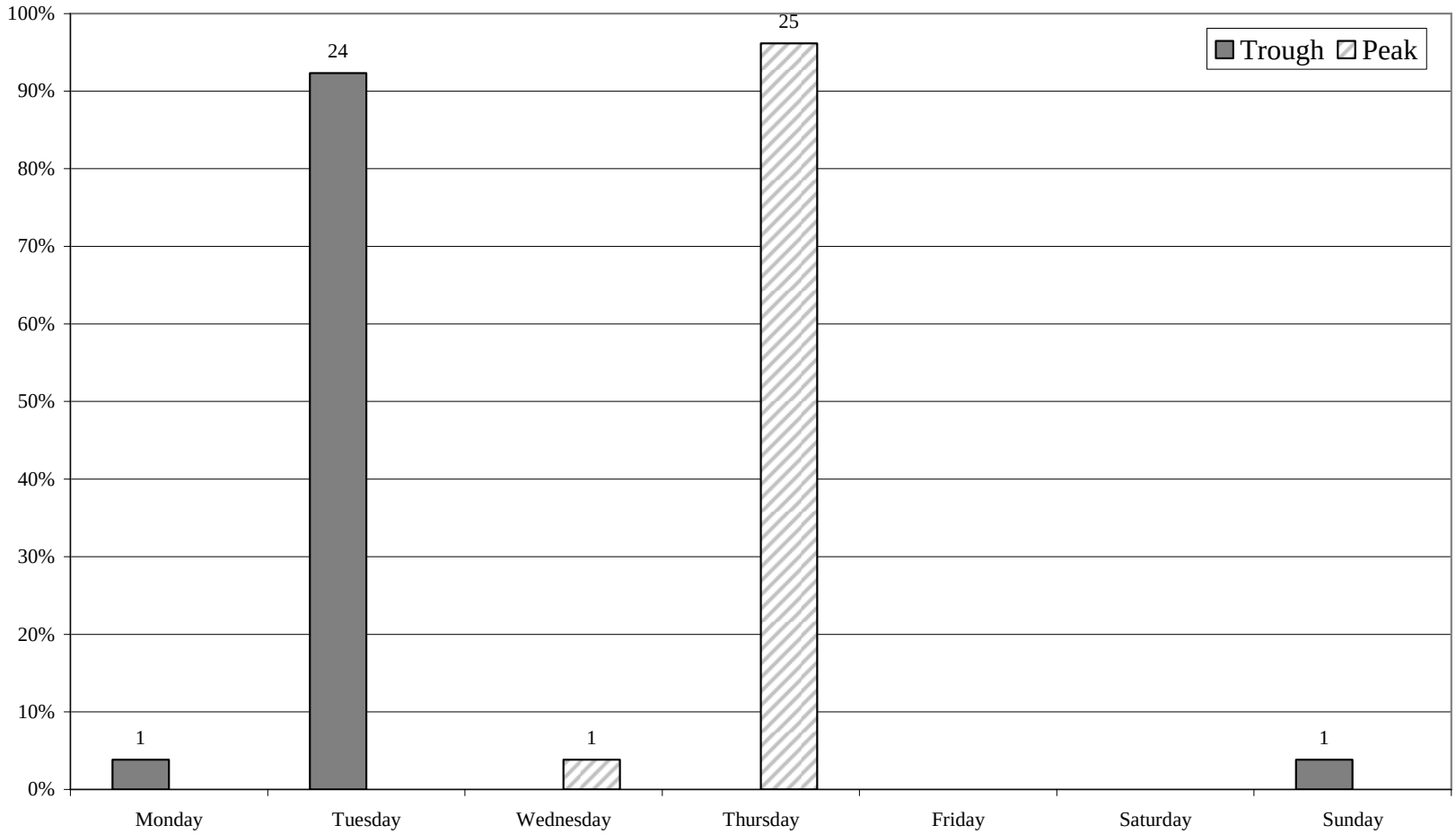
Source: ACCC and Informed Sources

Chart A.3 Adelaide—range of the duration of price cycles—1 January to 30 June 2006



Source: ACCC and Informed Sources

Chart A.4 Adelaide—days of the week for peaks and troughs—1 January to 30 June 2006



Source: ACCC and Informed Sources

Perth

Chart P.1 shows the average daily retail prices for petrol in Perth between 1 January and 30 June 2006.

- It shows that over the period there were 13 completed cycles.

- The average variation was 5.6 cpl. The variations ranged from 2.4 cpl to 11.8 cpl—span of 9.4 cpl.

Chart P.2 shows the range of the variation of price cycles in the first six months of 2006.

- It shows that over the six months the most common variation was between 6.0 and 6.99 cpl. This occurred in 5 cycles (36 per cent).

Chart P.3 shows the range of the duration of price cycles from 1 January to 30 June 2006.

- It shows that the most common duration of price cycles over the period was fourteen days, with 3 cycles (23 per cent) lasting this long. They ranged between six and twenty-seven days.

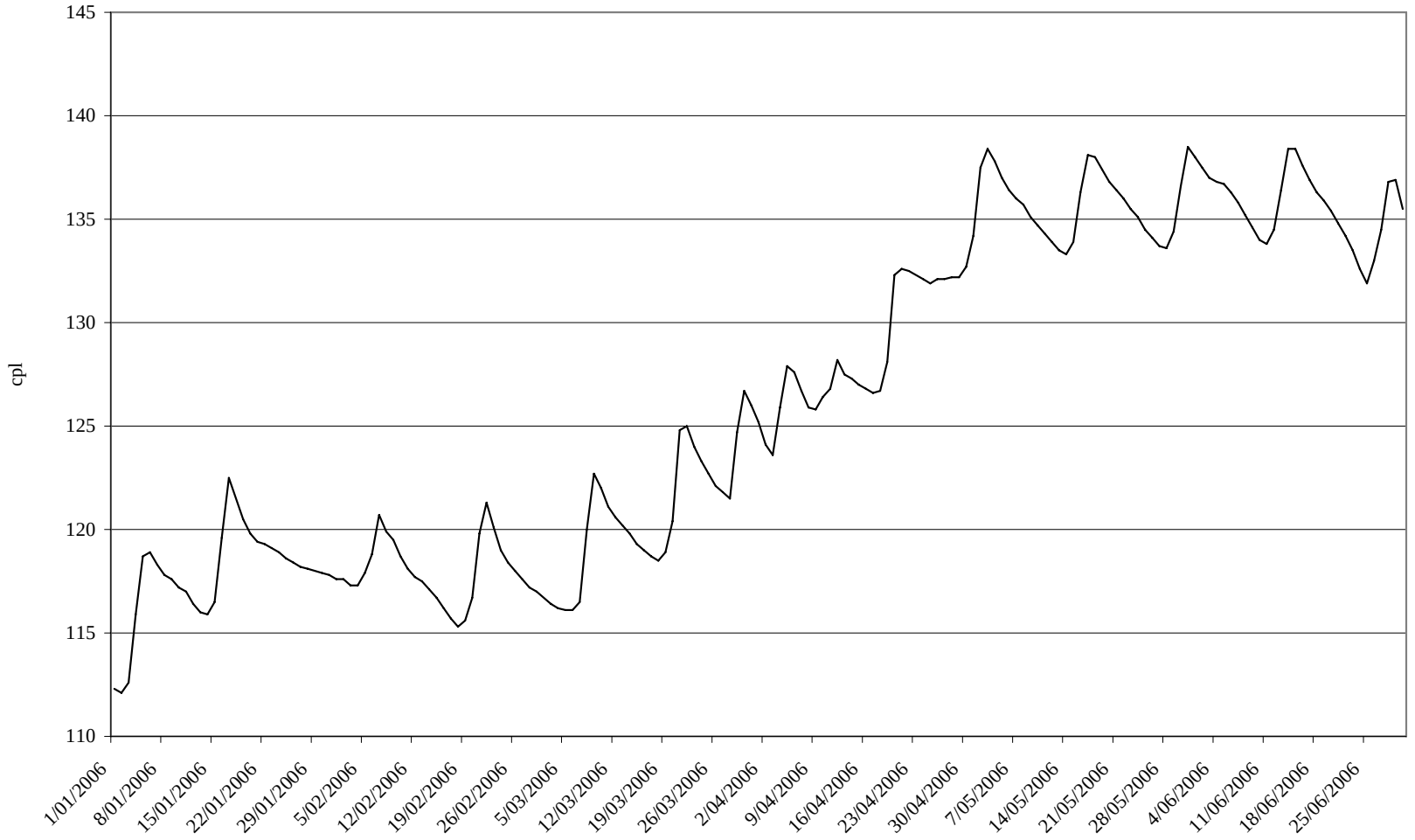
- The average duration of price cycles was 13.4 days.

Chart P.4 shows the frequency with which prices peaked and troughed on each day of the week between 1 January and 30 June 2006.

- The most common day for prices to peak was Wednesday, with 8 peaks (57 per cent) occurring on this day.

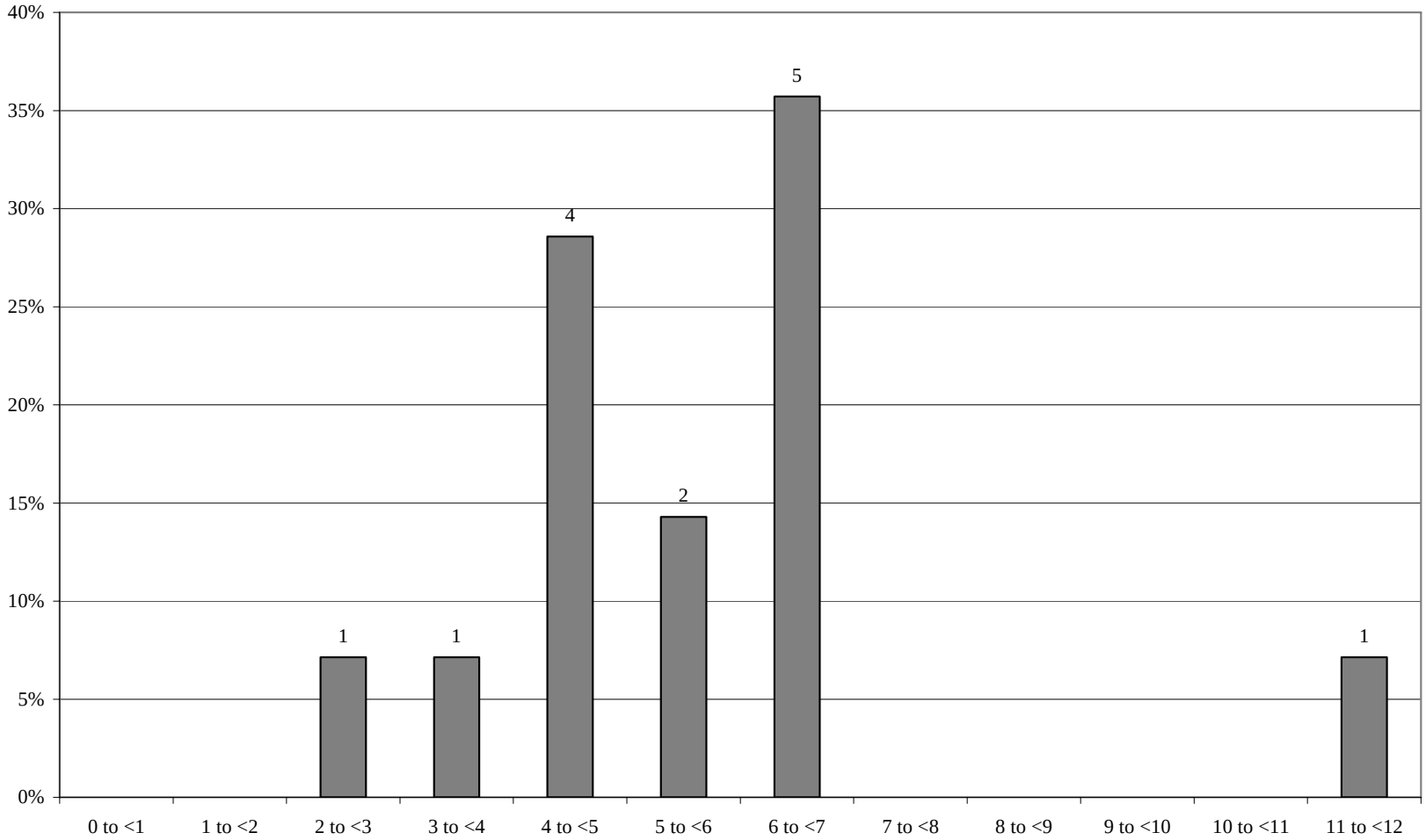
- Sunday was the most common day for prices to trough, with 6 troughs (43 per cent).

Chart P.1 Perth—average daily retail prices—1 January to 30 June 2006



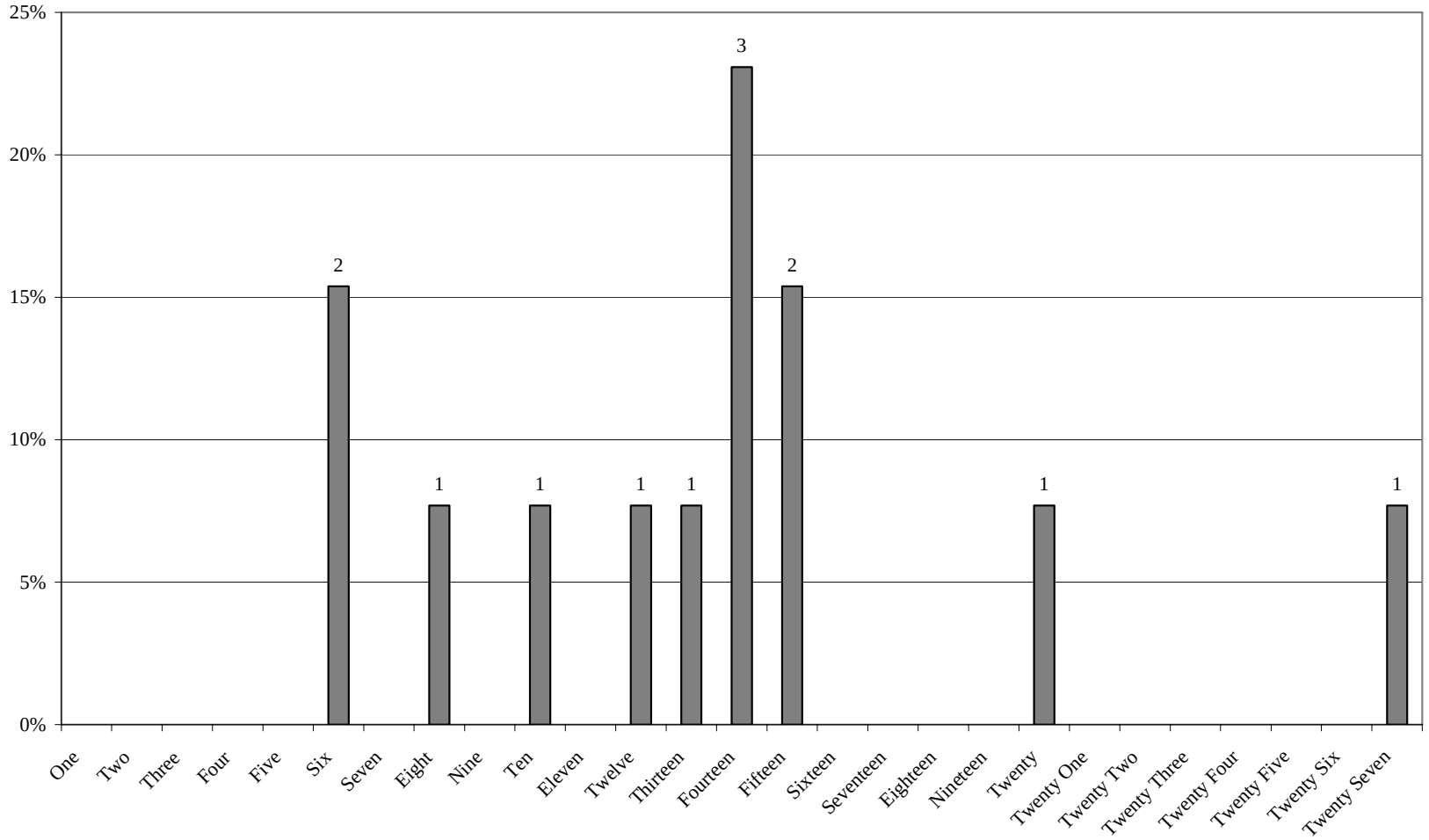
Source: ACCC and Informed Sources

Chart P.2 Perth—range of the variation of price cycles—1 January to 30 June 2006



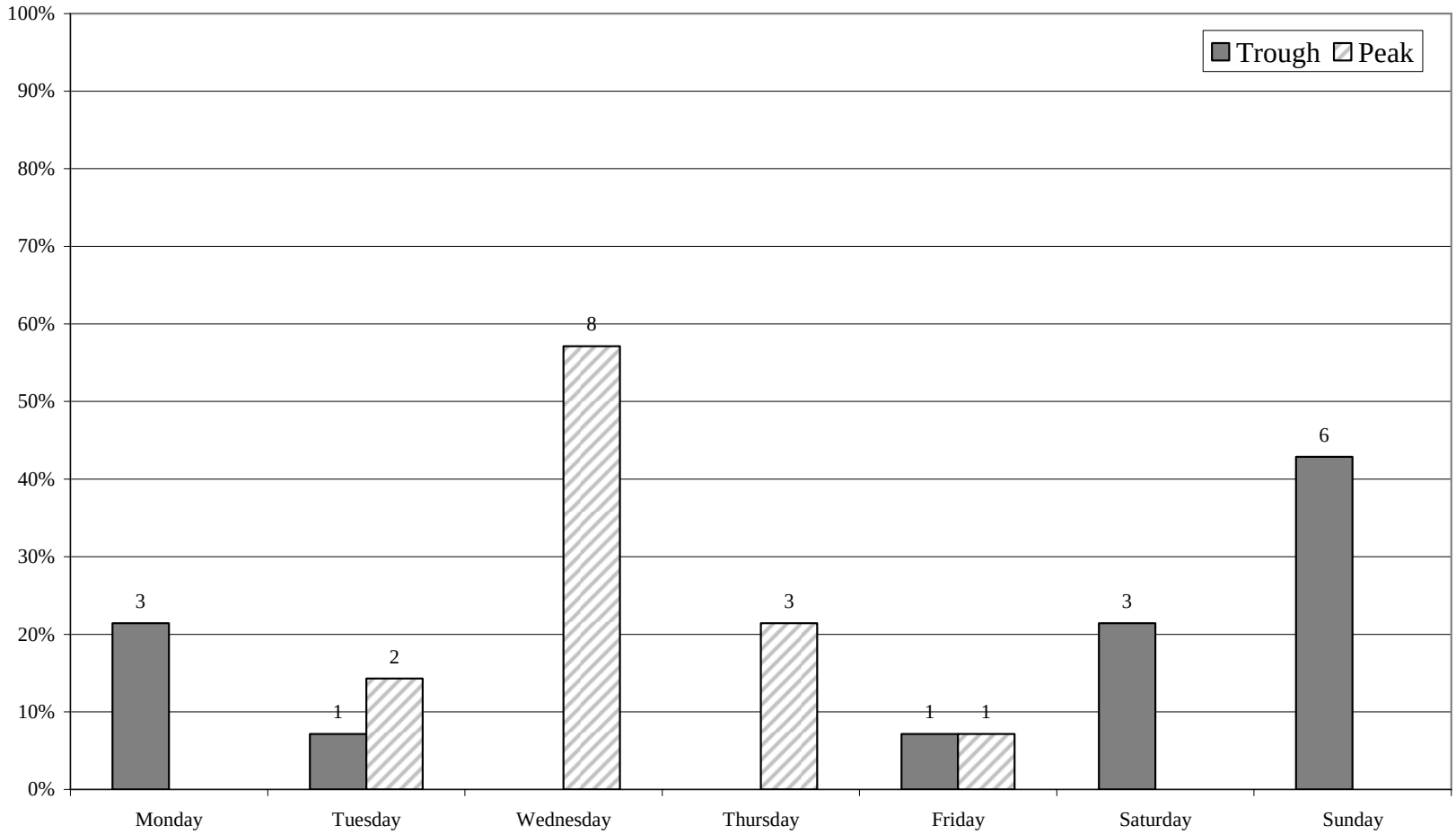
Source: ACCC and Informed Sources

Chart P.3 Perth—range of the duration of price cycles—1 January to 30 June 2006



Source: ACCC and Informed Sources

Chart P.4 Perth—days of the week for peaks and troughs—1 January to 30 June 2006



Source: ACCC and Informed Sources