

**Caltex submission to
Senate Economics Legislation Committee
Inquiry into the Price of Petrol in Australia**

August 2006

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Executive summary

Term of reference (a)

The relationship between the landed price of crude oil, refining costs, the wholesale price and the retail price of petrol.

- The landed price of crude oil does not determine the retail price of petrol in Australia – rather, the price of petrol in Singapore forms the basis of the price of petrol in Australia. The prices of Singapore petrol and crude oil do not necessarily rise or fall at the same time or to the same degree.
- The Singapore refiner margin is a market outcome, calculated as the difference between the selling price of petrol ex-refinery and the cost of Tapis crude oil, not determined by refiners. The Singapore petrol refiner margin and crude oil price do not rise or fall at the same time.
- Asian demand has grown strongly since 2001, putting pressure on regional supply sources. Slow growth in refining capacity relative to demand has created more competition for supply of petroleum products, driving up prices.
- The Caltex Refiner Margin has increased more than the Singapore weighted average margin due to tougher Australian petrol standards. The quality premium for Australian petrol has increased with the introduction of tougher Australian fuel quality standards.
- Wholesale prices are calculated using an import parity formula. Petrol sales volumes are sensitive to short term price shocks but tend to partially recover over time.
- Petrol in Australia is among the cheapest in OECD countries. Pump prices in Australia follow the same trends as European and US retail petrol prices.

Term of reference (b)

Regional differences in the retail price of petrol.

- Metropolitan and regional pump prices closely follow terminal gate prices, which closely follow changes in international prices.
- There is only a small difference on average between the average prices of petrol in regional and metropolitan areas when freight is excluded, apart from WA.
- The average difference between regional and metropolitan petrol prices was 2.2 cents per litre (excluding freight) in the first half of 2006 (excluding WA) and similar to the historical average.

Term of reference (c)

Variations in the retail price of petrol at particular times.

Price cycles

- Daily petrol sales respond to price cycles, to the benefit of consumers. About 55% of petrol is sold on low-priced days of the week in the three east coast capital cities compared with high priced days.
- Petrol prices don't all increase at the same time and there is no collusion – only fierce competition that benefits consumers.
- Canberra discount cycles are different from Sydney. The differences between pump prices in Canberra and Sydney are partially related to the irregular price cycles in Canberra.
- 60 per cent or more of consumers take price into account when buying petrol.
- The supermarket alliances operate the largest number of service stations that are aggressive discounters. In most markets, non-major oil company brands play a minor role.

Petrol prices and public holidays

- Prices in Brisbane, Adelaide, Melbourne, Sydney and Canberra did not jump because of the Easter and Queen's Birthday long weekends.
- Coles and Woolworths drove discounting well below terminal gate prices in May in Melbourne and

many other cities.

- Perth prices did not jump because of the Easter long weekend.

Effect of international events

- Petrol refiner margins are the net outcome of many complex market influences, as shown by a case study on petrol refiner margins in 2005 and 2006.

Responses of retail prices to international prices

- Pump prices closely follow international prices.
- There is a one week lag between changes to international prices and their impact on metropolitan and regional pump prices.
- Notional gross margins (the difference between pump prices and international prices) vary up and down with international price changes but these differences are not sustained over time.

Case study – impact of Hurricane Katrina on Australian retail prices

- Pump prices in metropolitan areas closely followed the rise and fall in international prices after Hurricane Katrina.
- Pump prices in regional areas generally followed the rise and fall of international prices after Hurricane Katrina with the exception of the second week. However, higher than average pump prices in regional areas eventually returned to their historical relativity to international prices.

Term of reference (d)

The industry's integrated structure.

- The petroleum industry is not highly vertically integrated.
- Supermarkets have 43 per cent volume share of the petrol market.
- The major oil company brands appear on the largest number of service stations but most are operated by franchisees, supermarkets or independent site owners.

Term of reference (e)

Any other related matters.

Biofuels

- Ethanol is competitive with petrol at current oil prices.
- Consumer confidence is still a major hurdle for ethanol blends.
- Caltex has been discounting E10 petrol by 3 cents per litre relative to regular unleaded petrol from 10 August 2006 – see attached media release for details.

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Caltex submission to Senate Economics Legislation Committee
Inquiry into the price of petrol in Australia, August 2006

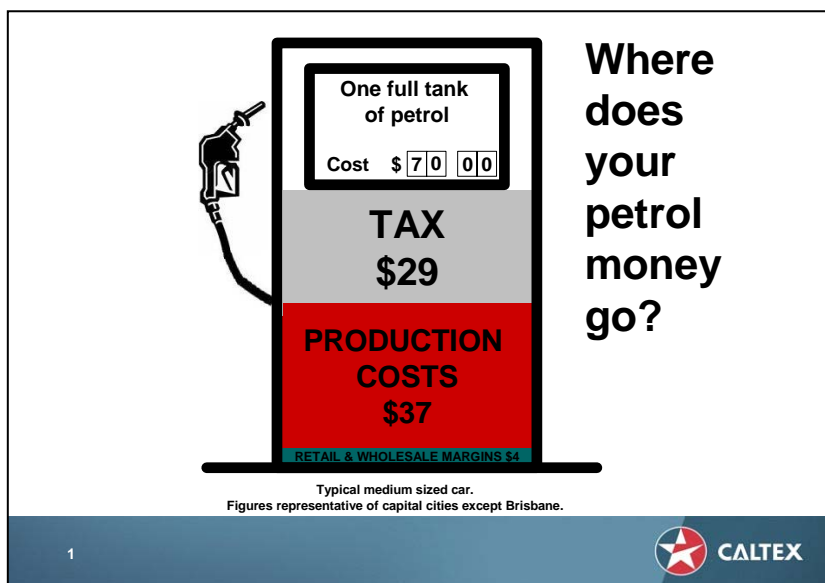
Caltex's submission is in two parts: a main submission (including Attachment A) that may be published; and a separate, confidential Attachment B, which is not for publication or dissemination outside the committee or its secretariat.

Background - Caltex structure and operations

Caltex Australia Limited is Australia's leading refiner and marketer of petroleum products, which are sold under the Caltex, Caltex Woolworths and Ampol brands. Caltex is the only major refiner and marketer listed on the Australian Stock Exchange. Chevron Corporation of the US is a 50% shareholder but Caltex is not a subsidiary and all decisions are made by Caltex's Australian board and management. Caltex is engaged in refining and marketing only and has no exploration or production interests, nor any overseas refining or marketing operations. Caltex has two refineries, in Sydney (Kurnell) and Brisbane (Lytton) and as at 31 December 2005 owned or leased 546 service stations within a network of about 1900 branded service stations. Caltex has about 3000 employees.

Introduction

Chart 1



About 40% of the cost of an average tank of petrol is tax

Excise is 38 cents per litre and GST is included in the total price.

Pump prices for petrol have increased by over 30 cents per litre since early 2005 – mostly due to higher crude oil prices. Australian petrol prices rise and fall in line with world prices. About 20% of our petrol is imported.

Because of strong competition, prices in

larger cities are heavily discounted, typically on a weekly cycle. By watching the price cycle consumers can save by filling up when petrol is cheapest. Prices are higher in many country towns because there is less competition plus higher freight and distribution costs and lower service station sales volumes.

Australia's petrol prices are among the lowest of developed countries. When Australia is \$1.30 per litre, the US is \$1.10 but Japan is \$1.50 and Europe averages about \$2.30 per litre.

Caltex's average profit (on a replacement cost of production basis ie. excluding the effect of prices on inventory) across all petroleum products, including petrol, in 2005 was only 2.2 cents per litre.

The expected profit for first half 2006 equates to approximately 1.7 cents per litre on average for all petroleum products sold. (For first half 2005, the figure was also 1.7 cents per litre.)

Term of reference (a)

The relationship between the landed price of crude oil, refining costs, the wholesale price and the retail price of petrol.

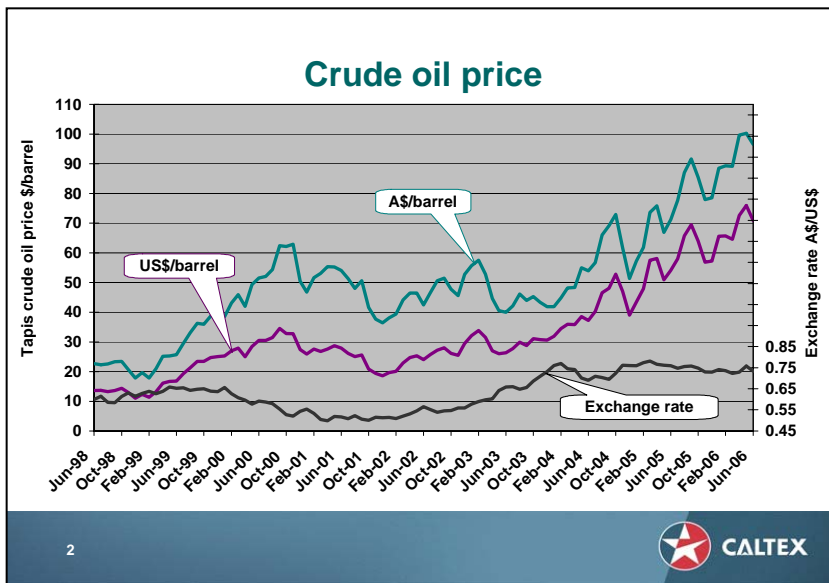
The term of reference implies the price of petrol in Australia is related to the cost of manufacture ie. the price of crude oil plus the margin applied to manufacture the raw materials into finished products. However, this is not the case for most goods in market economies, particularly goods that are exposed to import or export competition. Petroleum products, including petrol, are no exception. As discussed in this section of Caltex's submission, the market determines petrol prices, not costs.

The international market for petrol is the dominant influence over the level of petrol prices in Australia. Local factors including wholesale and retail margins and freight, as well as discount cycles experienced in many major cities, affect prices but to a lesser extent. However price relativities and price variability are often very visible to consumers day to day and may attract considerable media attention.

In general, economic policy in Australia is based on the principle that prices of internationally traded goods within Australia should reflect their international prices. This applies to agricultural and mining commodities as well as manufactured goods. The price support schemes, tariffs and other market interventions applied in Australia's past have largely been removed, with the result that Australia's economy has become more flexible, productive and prosperous.

Import parity pricing for crude oil and petroleum products has been the basis of petroleum product pricing policy since 1988. This coincided with many other economic reforms started under the Labor Government in the 1980s and continued by the Coalition Government. Since deregulation in 1998, import parity pricing for petroleum products has continued to form the basis for pricing in the petroleum products market since deregulation in 1998.

Chart 2



The landed price of crude oil does not determine the retail price of petrol in Australia.

However, the price of petrol is related indirectly to the price of crude oil as a result of its underlying effect on Singapore petrol prices.

Chart 2 shows the price of Tapis crude oil since 1998 in US\$ and A\$ per barrel (159 litres). Tapis, a low density, low sulfur (light, sweet) Malaysian crude oil is used as the

benchmark in price negotiations for supply of light, sweet crude oils in the Asian region.

All references to crude oil prices in this submission are to Tapis APPI crude oil.

Australian dollar crude oil prices were typically in the range A\$40 to 50 per barrel from 2000 through to early 2004, although there were significant downward and upward movements within this period and a rising exchange rate moderated the impact of rising US\$ crude oil prices through to early 2004.

The public's perception of historical petrol prices relates to this period before 2005, under \$1/litre in most states and under 90 cpl in Queensland. Since then, crude oil prices have risen by about A\$50 per barrel or 30 cents per litre. It is this strong upward trend in crude oil prices, not refiner margins or wholesale or retail margins that has been the main driving force in increasing petrol prices relative to the public's historical perceptions.

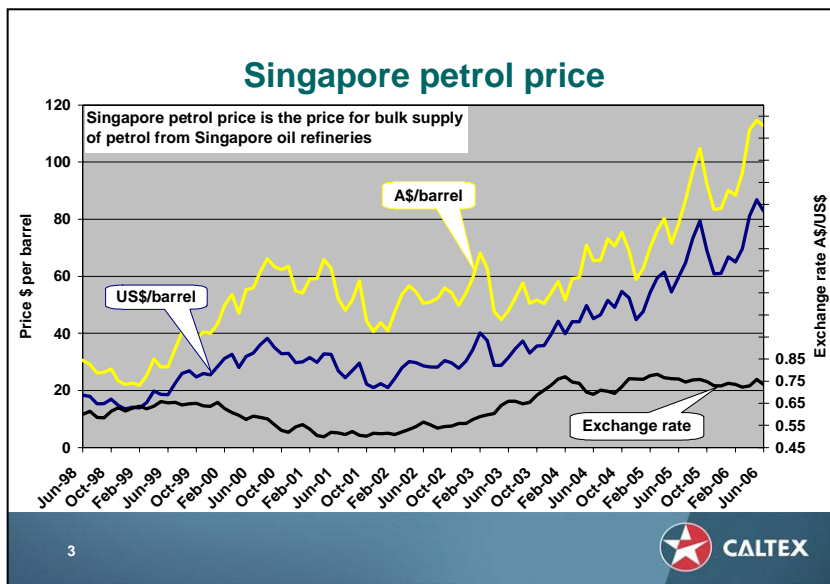
For the first half of 2006, crude oil prices averaged US\$69.20 per barrel, compared with US\$52.00 per barrel in the first half of 2005, an increase of US\$17.20 per barrel. For the first half of 2006, Singapore refiner margins for petrol (ie. what a typical refiner receives for turning crude oil into petrol) averaged US\$6.15 per barrel, compared with US\$4.14 per barrel in the first half of 2005, an increase of US\$2.01 per barrel. Note that refiner margins are gross margins before the deduction of any costs and therefore do not represent a profit margin.

It follows that 90% of the increase in petrol prices since first half 2005 has been due to higher crude oil prices and only 10% to higher refiner margins.

There are four major elements that affect the prices we pay for petrol in Australia, the first two of which have directly affected the higher fuel prices seen in the last 18 months.

1. the price of petrol from Singapore refineries in US dollars
2. the value of the Australian dollar relative to the US dollar – when the value of our dollar falls, this increases petrol prices
3. Australian Government excise and GST less any state government subsidies
4. margins within Australia for storage and distribution, wholesaling and retailing.

Chart 3



The price of petrol in Singapore forms the basis of the price of petrol in Australia.

Chart 3 shows Singapore petrol price (MOPS95) over the same period as Chart 2. MOPS95 is industry jargon for the market price of generic quality 95 octane petrol quoted by Platts (a subscriber based information service) ex Singapore refineries. MOPS stands for Mean of Platts Singapore. Other octane grades are quoted (92 and 97 octane) but

MOPS95 is the most common benchmark price. Australian quality petrol attracts a premium over MOPS95.

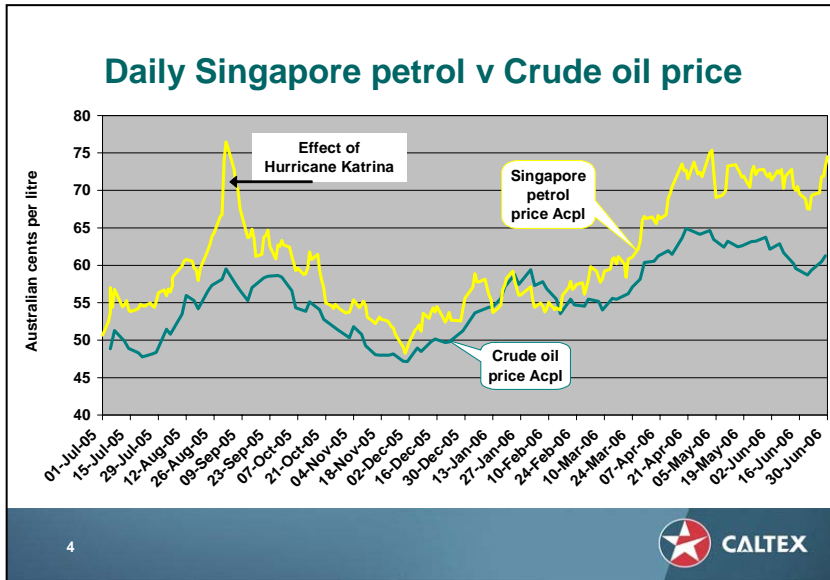
The pattern of prices over time is similar to crude oil, with prices typically in the A\$50 to 60 per barrel range from 2000 to early 2004. A spike in March/April 2003 marks the Gulf War and another spike in September 2005 marks Hurricanes Katrina and Rita. From mid 2004, prices rose sharply due to underlying crude oil prices.

As discussed earlier, prices for petrol from Australian refineries are not based on the actual cost of imported petrol or the crude oil that is refined into petrol. Instead, the ex-refinery price of petrol is based on the Singapore market price for petrol, adjusted for Australian fuel standards and freight to Australia; the price is not regulated but instead determined by market forces.

The reason Australian petrol prices follow Singapore market prices is that Australian refineries must compete against petrol imports (overall 17 per cent of Australia's petrol was imported in 2005) and Singapore is a major source of petrol for importers.

The crude oil markets and the petroleum product markets are completely separate, distinct markets. Traders in these markets influence the prices based on supply and demand, real and perceived shortages and geopolitical instability. Same as for any international traded commodity such as agricultural or mineral commodities or currencies.

Chart 4



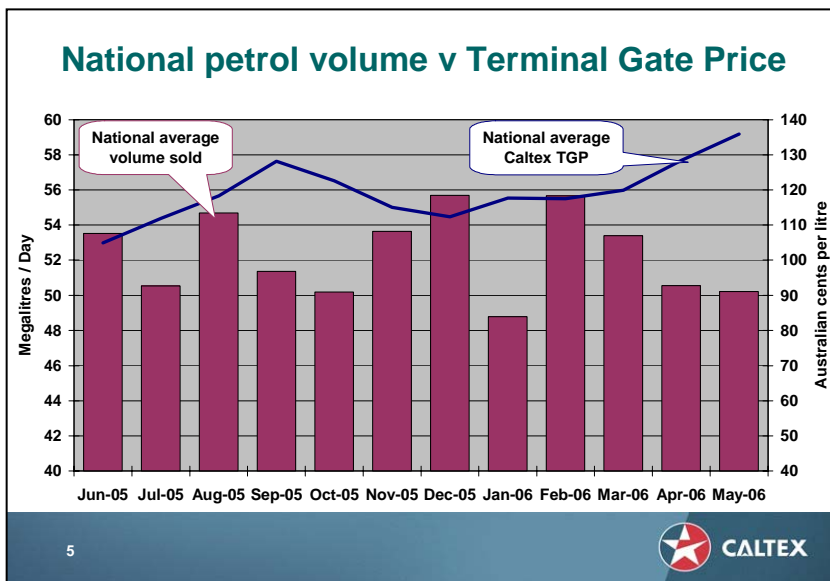
The prices of Singapore petrol and crude oil do not necessarily rise or fall at the same time or to the same degree.

Chart 4 shows Singapore petrol price (MOPS95) v Tapis AAPI crude oil price, both in Australian cents per litre (Acpl). The petrol price spike caused by Hurricane Katrina in the US is clear but so is the rapid decline almost immediately after the peak. Within two weeks, the price increase completely dissipated, with refiner margins (the

difference between petrol and crude oil prices) lower than before the effects of the hurricane.

In February 2006, refiner margins were negative ie. petrol prices ex-refinery were lower than the cost of crude oil used to make it. This also occurred in mid-2001.

Chart 5



Petrol sales volumes are sensitive to short term price shocks but tend to partially recover.

The petrol price shock induced by Hurricane Katrina reduced Australian fuel sales (including petrol) by 6.3% in September 05 versus August 2005, allowing Australia to meet the emergency measure imposed by the International Energy Agency that all member countries cut net oil consumption by at least 4%. Without the effect of

higher prices, Australia may have had to impose rationing but the Australian Government assessed correctly that higher prices would curb demand sufficiently.

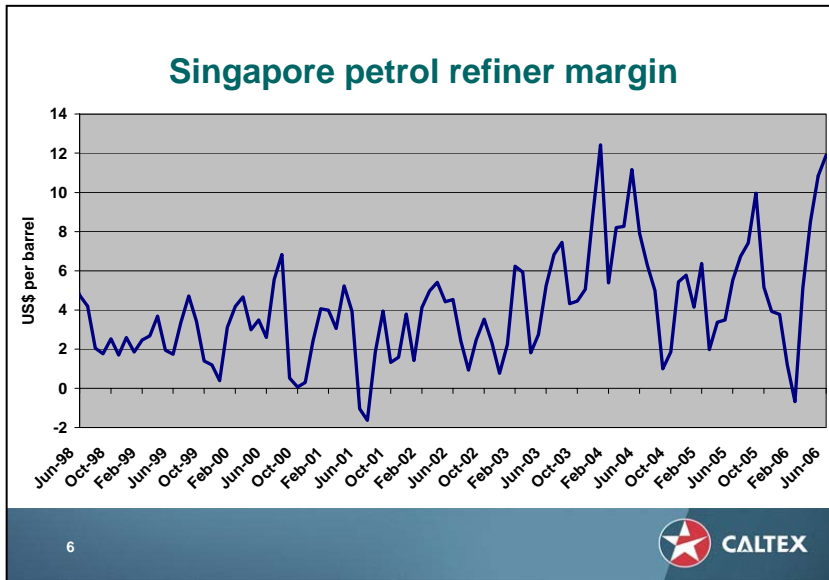
Higher prices in 2006, although painful to consumers, have reduced demand for larger vehicles and curbed petrol demand, which should help lessen the impact of higher oil prices on the Australian economy.

Chart 5 shows Australian petrol sales in megalitres per day (ML/day) for the period June 2005 to May 2006, overlaid with the national average Caltex terminal gate price, an indicator of the overall level of petrol prices.

After greatly reduced petrol sales in September 2005 due to higher prices, sales rebounded in the period to December as prices fell. January sales were low due to school holidays. Sales were at late 2005 levels in February and March; prices were similar. Prices increased sharply in March and April, with a resultant large decrease in sales.

For the first five months of 2006, sales averaged 51.7 ML/day, down 2.5% on the same period in 2005 as petrol prices were much higher in 2006. This suggests that short term price responses (as shown in the chart) are substantially greater than longer term responses as motorists adjust to the high prices. However, there is still a significant response to higher prices, which could increase over time as the consumers choose more efficient vehicles as has happened in Europe. A comparison of the US and European passenger vehicle markets would imply that price has an important influence on vehicle choice.

Chart 6



The Singapore refiner price is a market outcome, and the resultant margin is calculated as the difference between the selling price of petrol ex-refinery and the cost of Tapis crude oil, not determined by refiners.

Chart 6 shows that the average Singapore refiner margin from 1998 to 2002 was about US\$3 per barrel. Since 2003, the average has been about US\$5 per barrel, which is about US\$2 per barrel or 2 Acpl greater than the

earlier period.

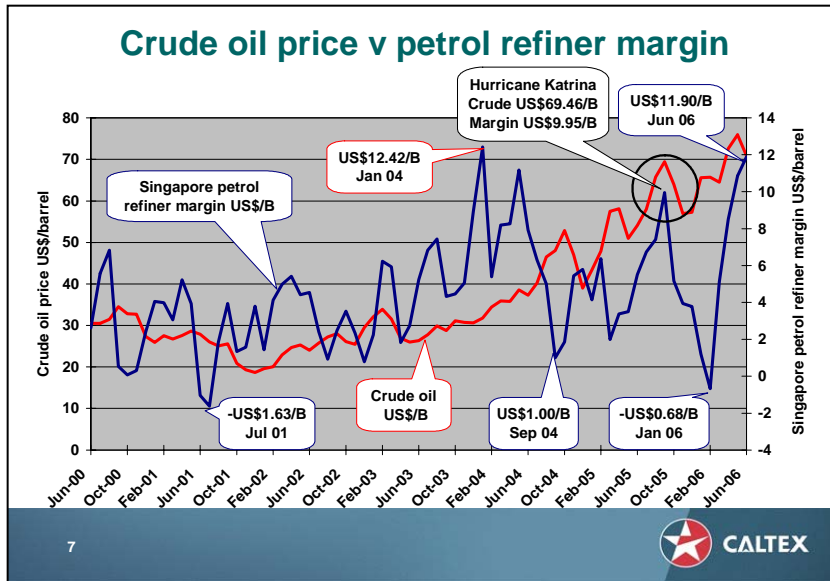
The price of petrol is a market outcome – it is not 'set' by refiners on a 'cost-plus' basis. This is demonstrated by the negative margin for petrol in February 2006 – you could buy petrol cheaper than Tapis crude oil. This resulted from the market setting the Singapore petrol price – if it was set from a cost build-up, the refiner margin would never be negative.

This increase occurred because from mid-2003, Chinese demand for petrol from fast-growing new car sales pushed up refiner growth until mid-2004 when demand controls applied by the Chinese Government eased petrol demand growth and as a result Singapore petrol prices. From 2Q2005, northern summer demand (driving season) pushed up petrol refiner margins with Hurricane Katrina striking on 30 August. Margins quickly returned to more normal levels.

Margins fell in early 2006 due to weak demand and increases in underlying crude oil prices, then increased sharply as demand recovered in the run-up to the northern summer (when demand increases) and many refineries in the region undertook planned maintenance.

In summary, while petrol refiner margins in mid 2006 are higher than on average early this decade, the increase is not significant in explaining the large increase in pump prices – that is mostly due to higher crude oil prices as discussed earlier.

Chart 7



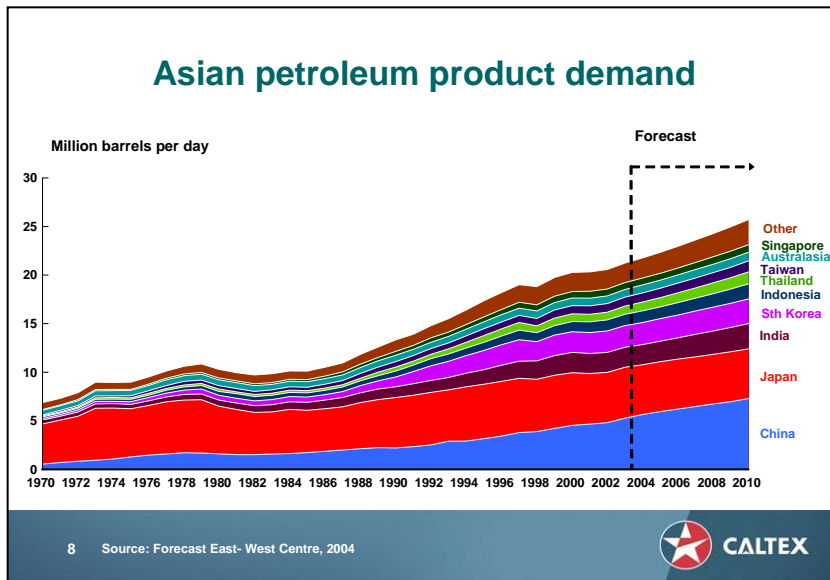
The Singapore petrol refiner margin and crude oil price do not rise or fall at the same time.

It has sometimes been asserted by sources outside the oil industry that higher petrol refiner margins are correlated with higher crude oil prices.

Chart 7 shows that while crude oil prices have trended up since 2002, petrol refiner margins are constantly changing, sharply rising or falling.

Any correlation of the two is limited as regional petrol prices relative to crude are influenced primarily by regional supply and demand fundamentals for petrol while crude tends to be driven by more global supply issues overlaid by geopolitical sentiments.

Chart 8

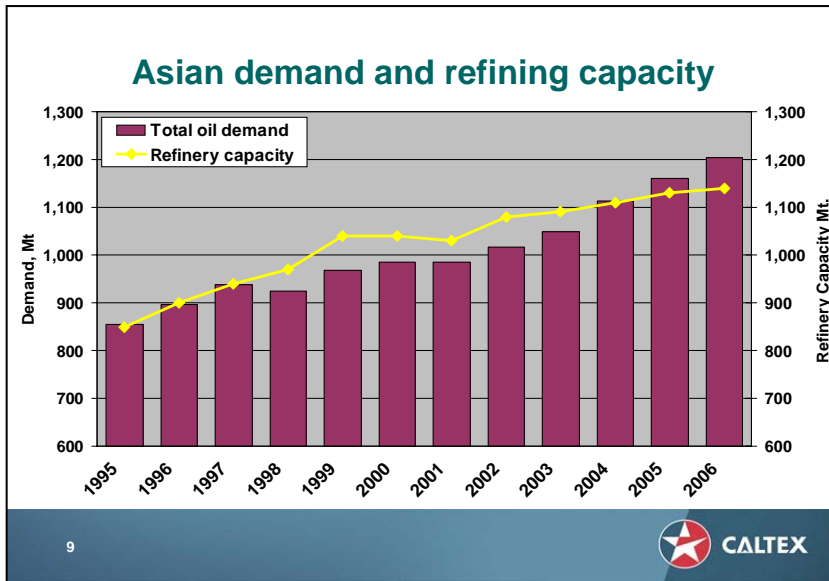


Asian demand has grown strongly since 2001 putting pressure on regional supply sources.

Demand for petroleum products is growing strongly in Asia, led by China. This is helping to drive up the price of crude oil by increasing competition for regional crude production and has also increased product prices in the region through the demand effect on the petroleum products market. Traditional sources for exports within

the region such as China have tightened as more volume is being consumed internally.

Chart 9



Slow growth in refining capacity relative to demand created more competition for products driving up the prices of petroleum products.

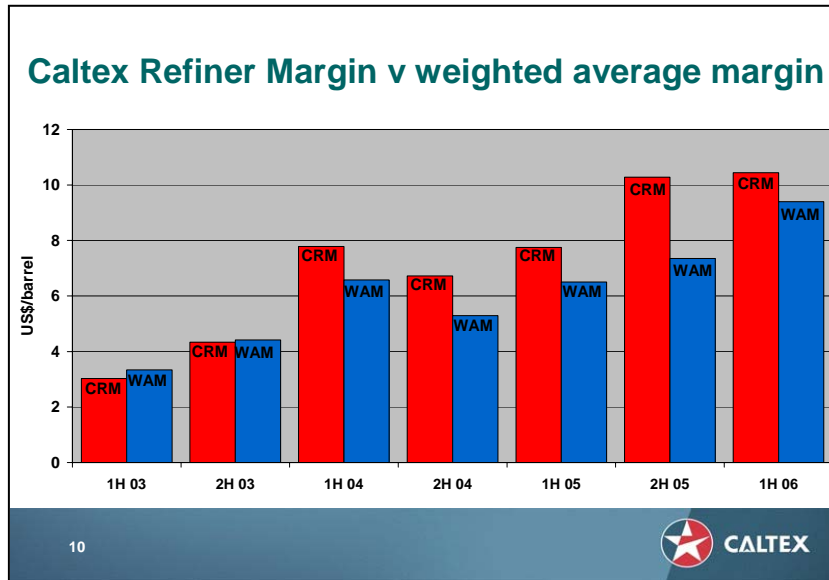
Demand is only one side of the supply/demand equation. Refining capacity in the Asian region has increased more slowly than demand, as shown in chart 9.

The change in demand relative to refining capacity, with resultant increasing refinery

utilisation, has tended to increase refining margins. Margins were unsustainably low (ie. insufficient to justify much major new investment) in the late 1990s and early this decade as a result of over-building of capacity in the first half of the 1990s and the Asian economic slowdown in the second half of the 1990s. Some smaller, less efficient Asian refineries also closed down.

The effects of this poor investment climate are now being reflected in limited refining capacity relative to re-invigorated Asian economic growth, hence growth in petroleum product demand (primarily for diesel but also for petrol as car ownership has become more economically feasible).

Chart 10



The Caltex Refiner Margin has increased more than the Singapore weighted average margin due to tougher Australian petrol standards.

While the Singapore weighted average margin (WAM) – a general indicator of regional refiner margins – has increased due to tightening regional supply/demand, a more accurate calculation for Caltex takes into account factors unique to Caltex.

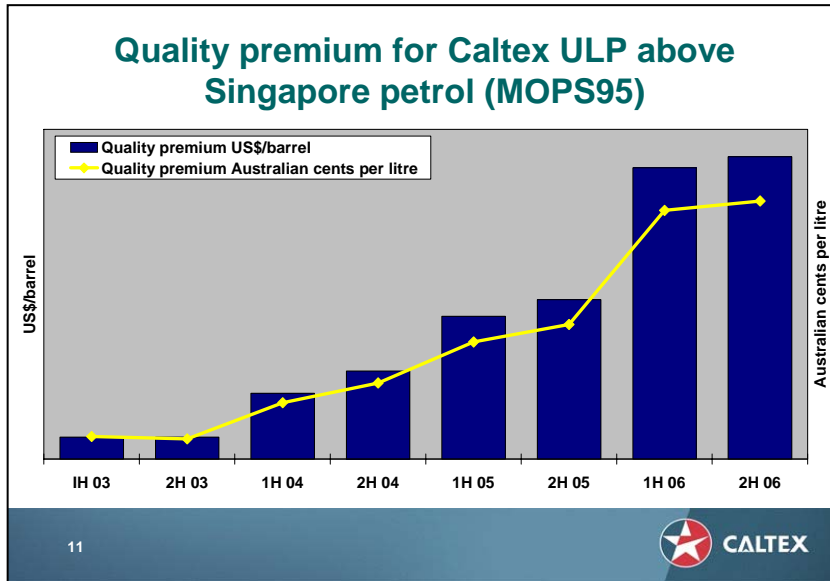
The weighted average Singapore refiner margin (WAM) is based on quoted Singapore margins achieved for the Caltex basket of products over the benchmark crude (Tapis).

The Caltex Refiner Margin (CRM) represents the difference between the cost of importing a standard Caltex basket of products to Eastern Australia and the cost of importing the crude oil required to make that product basket.

The CRM calculation
 = average Singapore refiner margin (WAM)
 + premium for Australian product quality
 + crude oil price discount or premium
 + product freight
 - crude freight
 - yield loss in refining.

The Caltex Refiner Margin (CRM) is published by Caltex every six months as part of its presentations to stock market analysts, which is available on the ASX and Caltex web sites.

Chart 11



The quality premium for Australian petrol has increased with the introduction of tougher Australian fuel quality standards.

Tougher national fuel quality standards mandated by the Australian Government to help reduce vehicle exhaust pollution have meant that petrol produced for the Australian market is now required to contain a maximum of 1% benzene, down from the previous (unregulated) range of 2

to 3%. Since 2003, petrol standards have also been mandated for the content of MTBE, olefins and aromatics, and final boiling point, which are tougher than former voluntary industry standards. These new standards will significantly improve public health and, in the case of MTBE, safeguard water quality

Caltex has invested about \$500 million dollars in upgrading its Kurnell and Lytton refineries to enable them to produce higher quality petrol and diesel.

Tougher petrol standards have increased Caltex's wholesale price of petrol by about 2.5 cpl since 2003.

This is similar to the 2.5 cpl increase in Victorian terminal gate prices (TGPs) for petrol relative to MOPS95 found in a May 2006 report by Consumer Affairs Victoria, which failed to take account of the increase in petrol quality since 2003. This means that contrary to the implication that Victorian TGPs have increased by an amount that is unjustified, the increase has in fact been the result of regulated higher petrol quality.

Wholesale prices are calculated using an import parity formula.

The bulk supply price for refined products into terminals is known in oil industry jargon as the "buy-sell price" and is commercially negotiated every 6 months on a bilateral arms-length basis between each of the Australian refiners (and potentially other Australian bulk suppliers) either for sale or purchase. The price varies by location. The "sell" part of "buy-sell" is relevant to states where oil companies have refineries and sell to other bulk suppliers; the "buy" part is relevant where they have no refineries and must purchase from local refiners (or importers). Import prices are negotiated on a cargo by cargo basis. Buy-sell contracts are commercial arrangements and the 'buy' party can import product as an alternative. In Queensland, NSW and Victoria, there are two domestic refiners as sellers, which generates competition in addition to imports.

Table A1 (available in the confidential appendix) shows a buy-sell price calculation for petrol for a specific day in second half 2006, which is based on the applicable daily Singapore prices. The calculation is in accordance with the negotiated contract formula for 2H2006.

Table A2 (available in the confidential appendix) shows the calculation of Caltex's wholesale price ("Caltex Reference Price" or CRP) for petrol, which is the basis for pricing to service stations and resellers. A discretionary after sale rebate off the CRP ("price support") may be provided to franchisees to help them meet local price competition; wholesale prices to resellers and non-franchised retailers are generally discounted at time of purchase and do not attract price support.

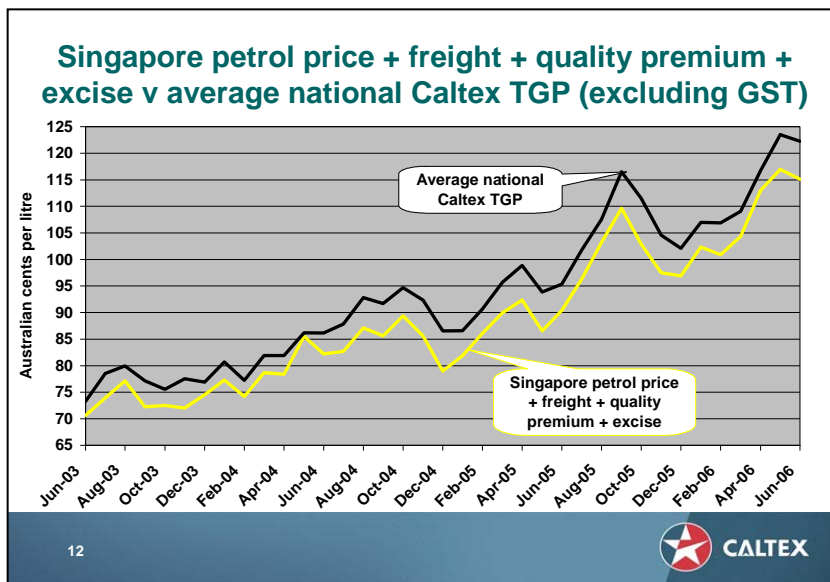
Table A3 (available in the confidential appendix) explains the CRP calculation in more detail.

These tables show that pricing of petrol is not arbitrary or particularly complex, although necessarily confidential. Prices are related to an import parity price calculation and closely follow movements in international petrol prices through the linkage to Singapore prices.

A terminal gate price (TGP) is also posted at each Caltex terminal and available on the Caltex web site, www.caltex.com.au. This is the spot price for a road tanker load (typically about 42,000 litres) of unbranded bulk petrol supply from the Caltex terminal for cash. The TGP calculation is similar to buy-sell except it uses a 7 day rolling average of Singapore prices and exchange rates, is adjusted only twice weekly (daily for Victoria), and includes a terminalling cost and competitive wholesale margin for the particular terminal location.

The proposed mandatory industry code of conduct (Oilcode) under the Trade Practices Act, which is part of the Government's retail petroleum reform package, will require all wholesale suppliers to post TGPs at each wholesale facility and make supply available at these locations at the TGP. While most suppliers already post TGPs at terminals, Oilcode will ensure this is done comprehensively and consistently, so adding to price transparency. Caltex does not use TGP as a basis for term contracts. However, Oilcode once regulated will require wholesale suppliers offering term supply of declared petroleum products to customers to give those customers the option of TGP-based term contracts.

Chart 12



Changes in terminal gate prices are closely related to changes in the import price.

As shown by Chart 12 there is a close relationship between Caltex's terminal gate prices (TGPs – shown here as the national average TGP) and import prices. The difference in price has remained fairly constant over time and changes in TGP are closely related to changes in import prices. This means that changes in TGPs are a good proxies

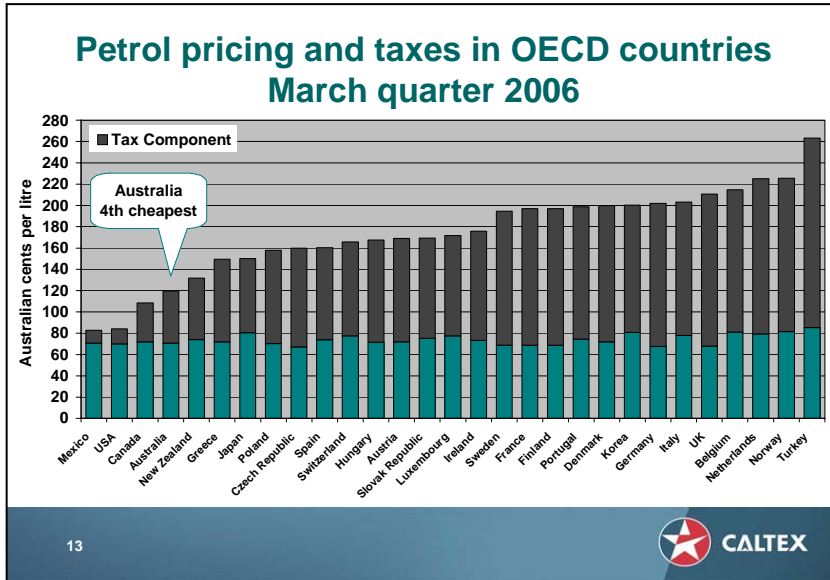
for changes in international prices, which is useful for price transparency as TGPs are more readily available to the public than international prices.

The import price shown in the chart includes Singapore petrol price (MOPS95) plus international freight plus a premium for Australian petrol quality. Excise has also been added to make the numerical comparison with TGP easier. GST is not included in either price. The gap between TGP

and import price shown in this chart is due to insurance on sea freight, wharfage charges, terminal costs and a supplier's margin.

The gap between the two prices averaged 5.5cpl in 1H06, similar to the gaps of 6.0 cpl in Calendar 2005 and 4.5 cpl in Calendar 2004.

Chart 13



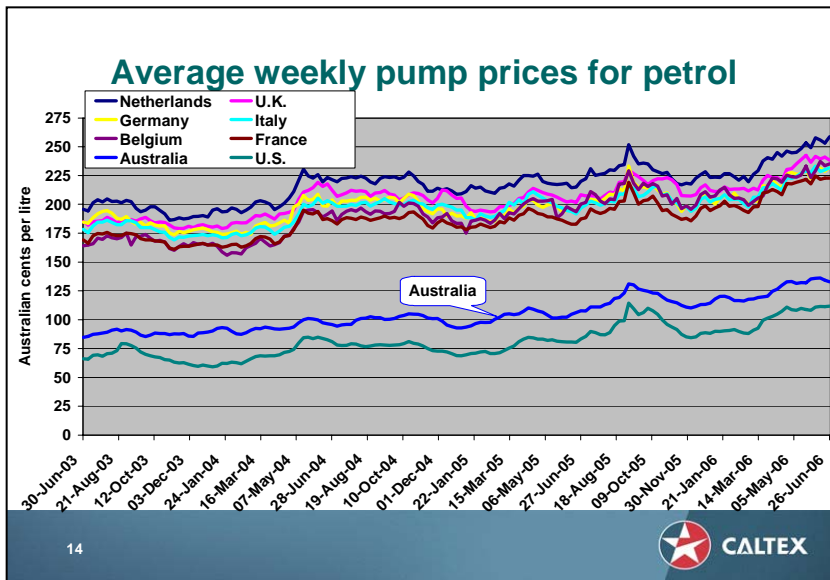
Petrol in Australia is among the cheapest in OECD countries.

Australia has consistently had cheaper petrol than most other OECD countries. Chart 13 shows that the North American countries that do sell the cheapest petrol have a lower tax component when compared to Australia's rate of about 40%.

The lower, blue bar shows petrol prices excluding tax. When prices excluding taxes are

compared, Australia is still among the cheapest (10th out of 29) of OECD countries, reflecting the efficient and highly competitive nature of Australian refining and marketing.

Chart 14



Pump prices in Australia follow the same trends as European and US retail petrol prices.

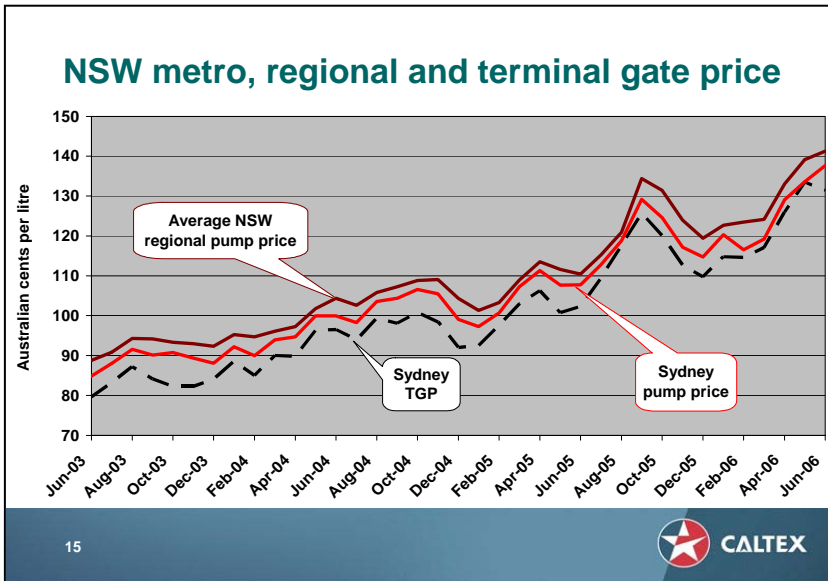
When the weekly price cycle in Australia is averaged out, pump prices reflect the same trends over time as found in Europe and the United States.

Pump prices in Australia are about A\$1 per litre less than typical for Europe and about 20 Acpl more than typical for the US.

Term of reference (b)

Regional differences in the retail price of petrol

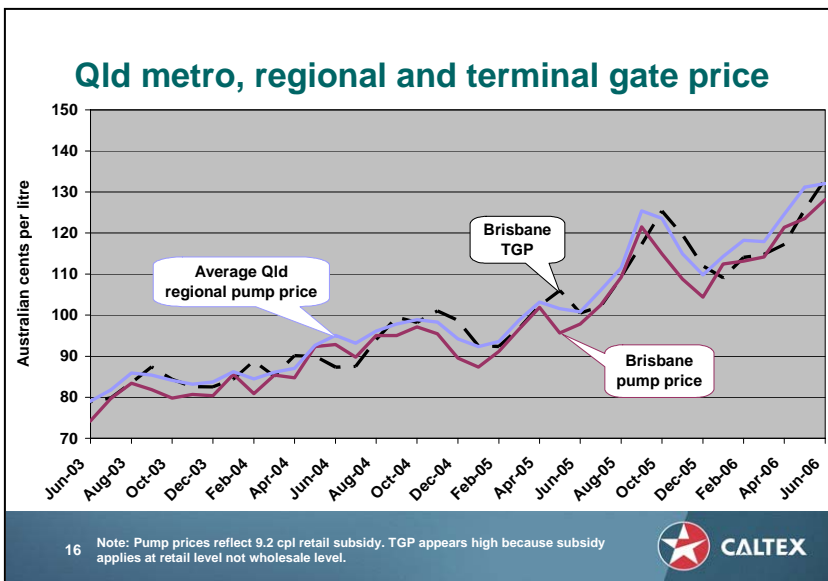
Chart 15



Metropolitan and regional pump prices closely follow terminal gate prices which closely follow changes in international prices.

Caltex's terminal gate prices (TGP), which are published daily, are calculated based on the cost of imports to Australia, terminal costs and a wholesale marketing margin plus excise/subsidies and GST. TGP's are therefore a good indicator of how changes in international prices flow through to ex-terminal wholesale prices in Australia.

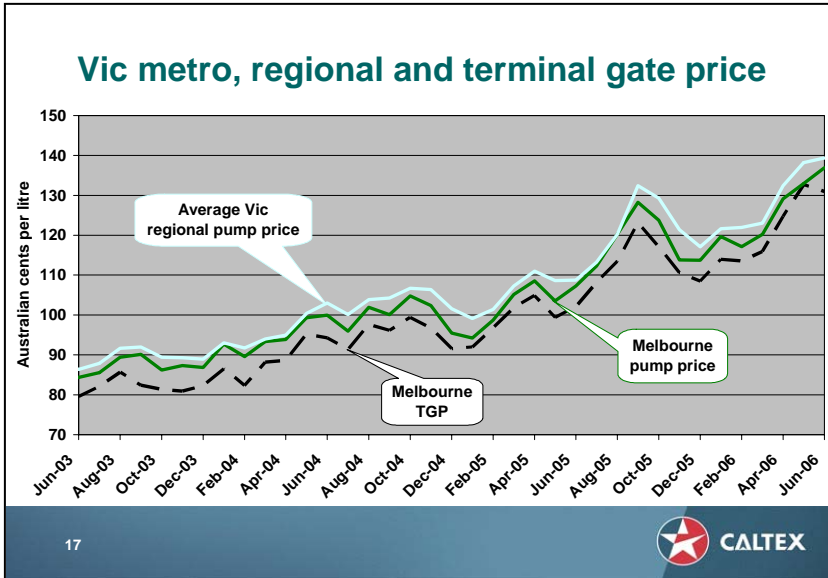
Chart 16



TGP's are spot prices for bulk supply of fuel ex-terminal and are therefore a reasonable proxy for wholesale prices. Actual wholesale prices typically include charges for brand, credit, and site and equipment rental but also may be discounted according to competitive conditions in various markets and customer size.

For each state, monthly average regional and metropolitan prices (AIP data prepared by Orima Research) are shown, together with capital city Caltex TGP's. The differences between regional and metro prices are due to wholesale and retail margins and freight.

Chart 17



The data for the charts is as published by the Australian Institute of Petroleum (AIP) on its web site. (Note the Queensland TGP does not include the state retail subsidy of 9.2 cpl including GST, so pump prices appear low relative to TGP.)

The charts, being state averages, do not show the variation between individual country towns, which are often the subject of media and political interest. In almost all cases, these differences are the result of local competitive factors, including site volumes and site density, the presence of discounters including supermarkets and the impact of new entrants seeking to establish volume.

Retail margins (pump price less wholesale price) are typically higher in the country compared with major capital cities, mainly due to lower fuel volumes and shop sales over which to spread service station operating costs.

Distribution costs (included in the wholesale gross margin) may be significant for country areas where fuel must be stored in depots and double-handled, rather than being delivered directly from coastal terminals.

Freight is typically 1.5 to 3 cpl greater for country than city delivery.

Chart 18

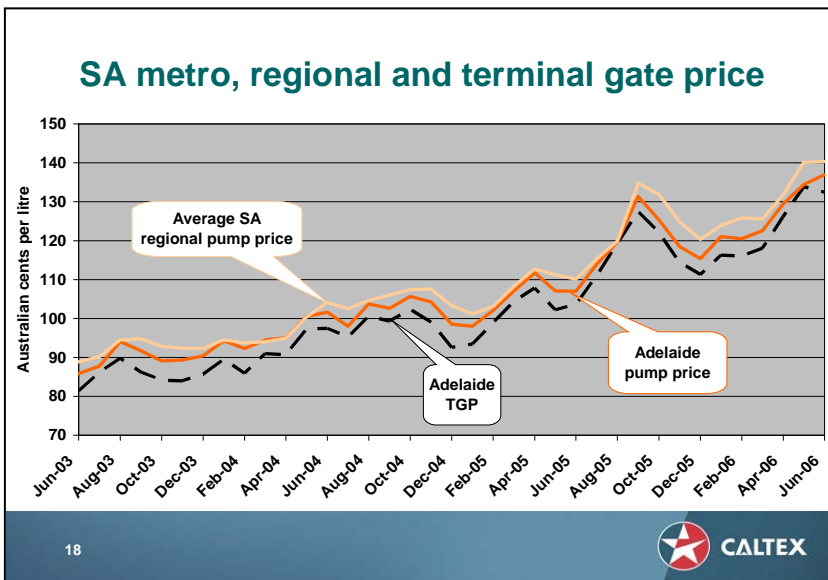


Chart 19

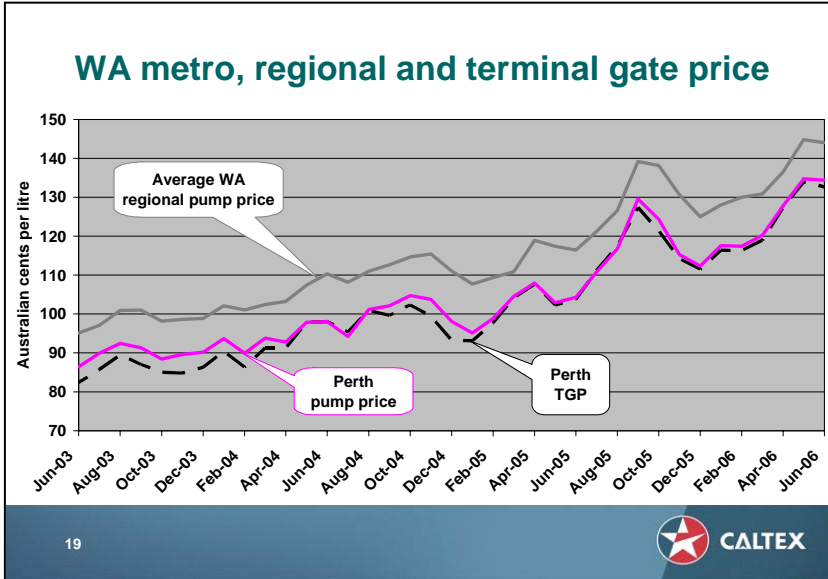


Chart 20

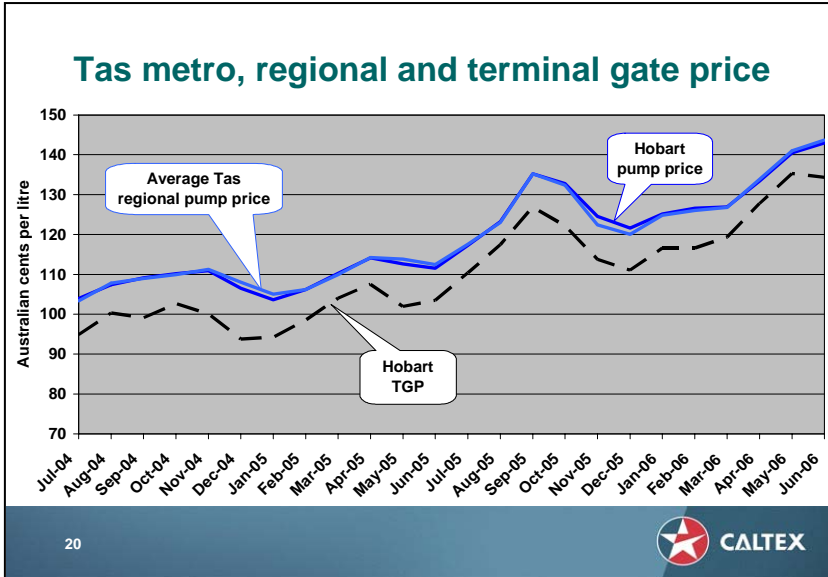


Chart 21

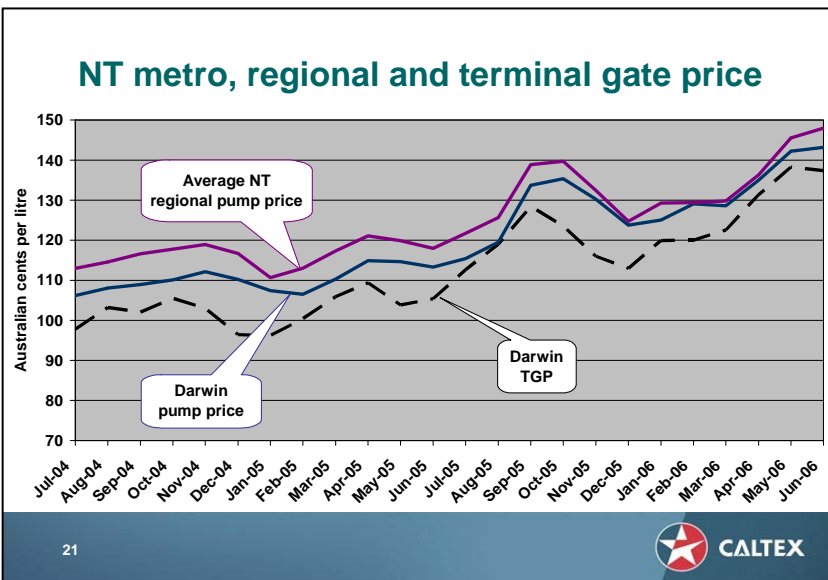
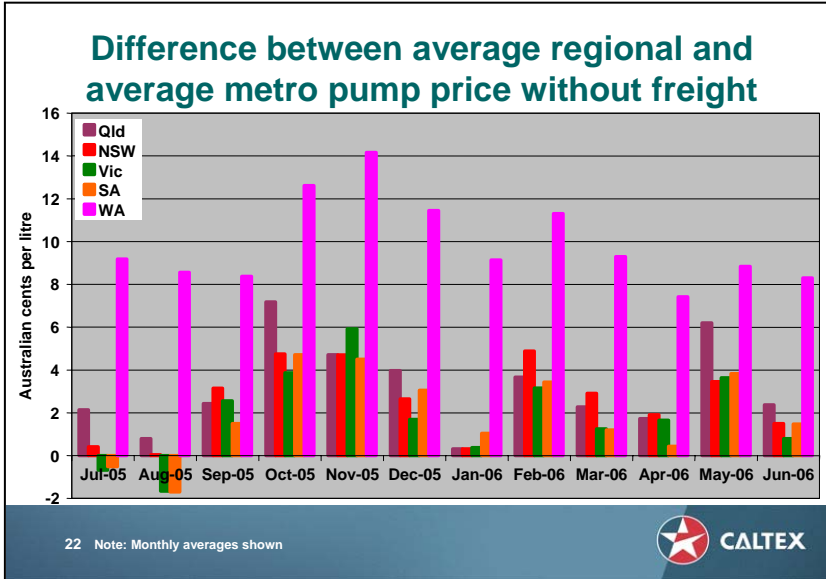


Chart 22



There is only a small difference on average between the average prices of petrol in regional and metropolitan areas when freight is excluded, apart from WA.

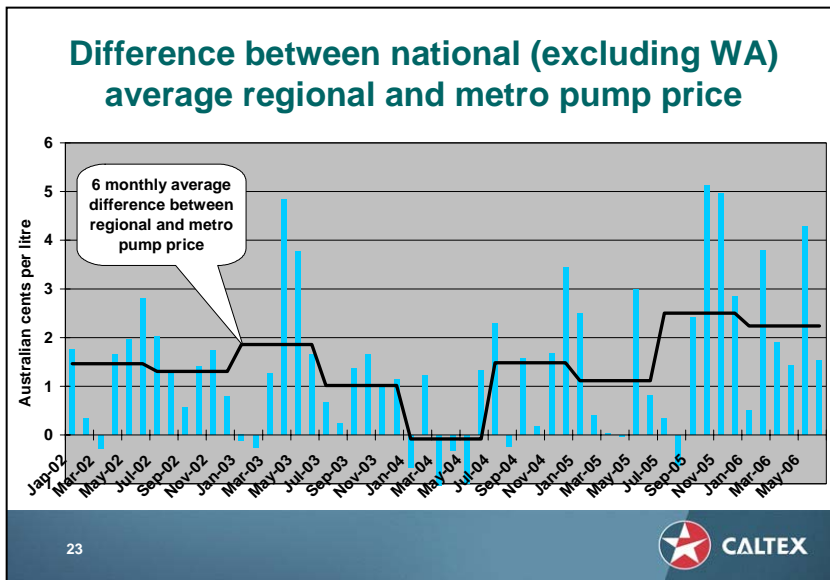
Chart 22 summarises the differences between regional and metro prices (excluding freight) for the five largest states for the period since July 2005. Apart from WA, the difference typically varies between zero and 4 cpl, and about 2 cpl on average.

and about 2 cpl on average.

This is probably significantly less than popular perceptions but these may be shaped by media and other attention on towns with large price differences, not those that have highly competitive pricing.

There is also a tendency to compare relatively stable country prices with the low points of metro discount cycles, which may be near or even below cost. The much larger difference in WA may be attributable to the greater remoteness and smaller size of many WA country towns and consequent higher unit costs.

Chart 23



Excluding freight, the average difference between regional and metropolitan petrol prices was 2.2c in the first half of 2006 (excluding WA) and similar to the historical average.

Chart 23 extends the analysis of the previous chart back to 2002 but shows the national average difference between regional and metro prices for clarity, rather than differences for each state.

This shows the difference between regional and metro prices for Australia, has remained fairly constant at about 1 to 2 cpl (excluding freight).

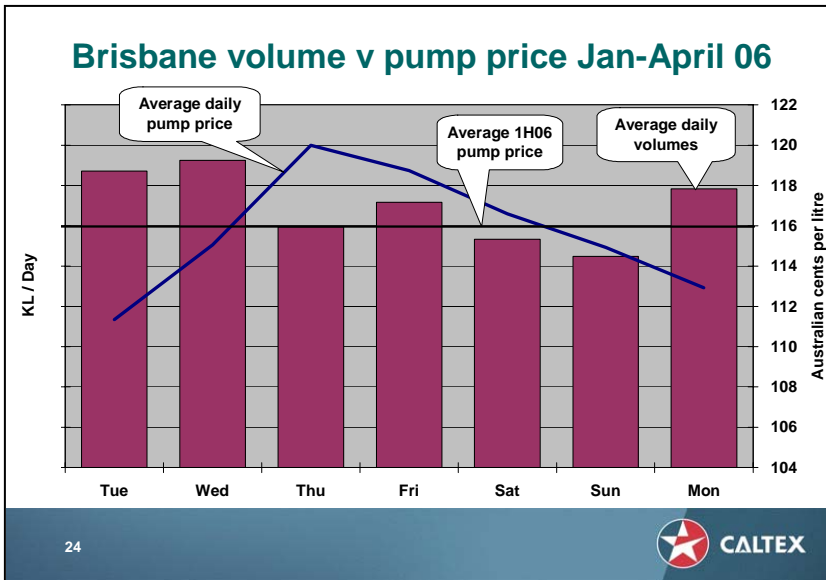
Recent history is about half a cent above the typical range but this is not significant relative to the level of petrol prices. Considering past variations from the average, it is also likely the higher difference will not be sustained.

Term of reference (c)

Variations in the retail price of petrol at particular times

Price cycles

Chart 24



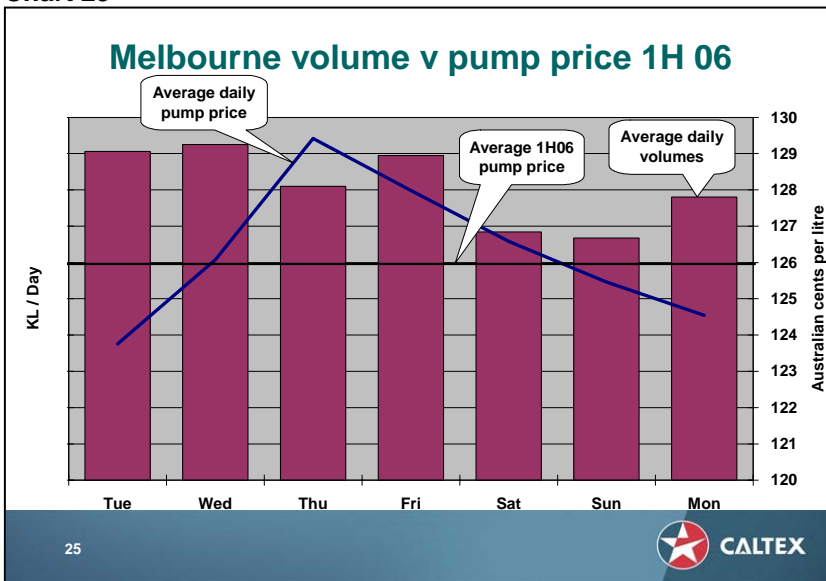
Daily petrol sales respond to price cycles, to the benefit of consumers.

Petrol prices in many metropolitan areas vary in a weekly cycle. (These cycles are shown in charts 32 to 38, which discuss prices around long weekends.) The pattern is not absolutely consistent from week to week and there may be periods where discounting continues over two or more weeks.

However, according to the ACCC web site, prices in Brisbane, Sydney, Melbourne and Adelaide in March to June 2006 typically were lowest on a Tuesday and highest on a Thursday, with Wednesday by implication being a day of transition from low to high prices. For Perth, prices were most commonly lowest on a Sunday and highest on a Wednesday.

Caltex has charted average Caltex prices by day of week for Brisbane for January to April 2006 and Melbourne from January to June 2006.

Chart 25



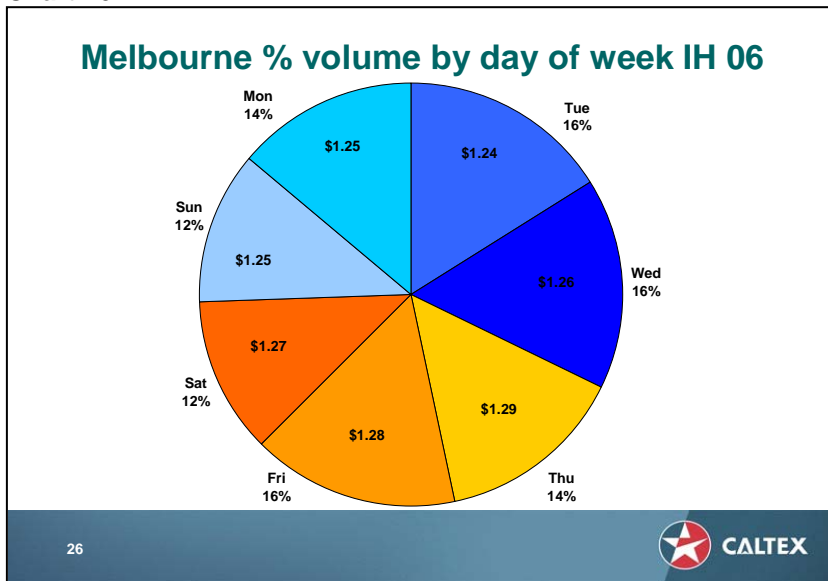
The charts show the highest average Caltex prices on a Thursday and lowest on a Tuesday, which is consistent with the ACCC data for March to June.

Also shown on charts 24 and 25 are average Caltex daily sales volumes, with the Y axis for volume starting at zero. (Actual volumes are shown in the confidential appendix.) It can be seen that Caltex volumes are highest on Tuesday and Wednesday when prices are lowest and fall sharply on Thursday when prices have cycled upwards. Weekend volumes are lower despite lower prices, probably reflecting the closure of most businesses.

The daily volumes show that motorists are sensitive to prices and modify their purchasing behaviour to take advantage of price cycles. It is therefore reasonable to conclude the weekly price cycles typical of many metropolitan areas benefit many consumers who wish to take price into account in their purchase decisions.

Contrary to some assertions, prices do not increase to “take advantage” of higher petrol demand on weekends. In fact, both prices and volumes are lower on weekends than other days of the week.

Chart 26



About 55% of petrol is sold on low-priced days of the week in the three east coast capital cities compared with high priced days.

Chart 26 is based on the same data for Melbourne as Chart 25 but shows sales volumes by day as a percentage of weekly sales. The volume in the three days preceding Thursday – these are the lowest priced days of the week – is 54% of the weekly total. The volume in the three days after

Thursday totals 46%.

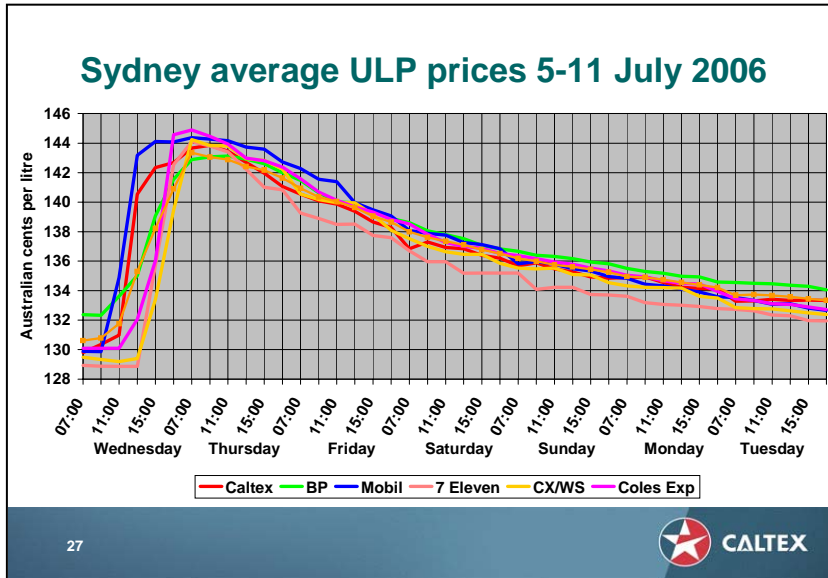
Another way of expressing this data is that about 16% more petrol is sold in Melbourne on lower priced days than on higher priced days.

Similar charts could be constructed for Sydney and Brisbane. For Sydney, the volume in the three days preceding Thursday – these are the lowest priced days of the week – is 55% of the weekly total. The volume in the three days after Thursday totals 45%. 22% more petrol is sold in Sydney on lower priced days than on higher priced days. For Brisbane the corresponding figures are 56%, 44% and 25%.

If we take the average across all three cities, the volume in the three days preceding Thursday – these are the lowest priced days of the week – is 55% of the weekly total. The volume in the three days after Thursday totals 45%. 21% more petrol is sold in the three cities on lower priced days than on higher priced days.

Price sensitive motorists can save money by watching the price cycle and, if they can, buying petrol when it is cheaper – this is typically Tuesday in large metropolitan areas. In Perth, Sunday is typically the best day to buy.

Chart 27



Petrol prices don't all increase at the same time and there is no collusion – only fierce competition that benefits consumers.

Petrol prices are often discounted in major capital cities – and heavily – as a result of intense competition for customers. Service station dealers concentrate on petrol discounting to drive overall petrol sales volumes and associated shop sales.

Supermarkets also use low petrol prices and shopper dockets to drive supermarket sales.

Petrol prices don't all increase at the same time - but sometimes it does look like this because, once a price increase is made by one competitor, other competitors may follow very quickly, as shown in Chart 27. The data in the chart is from Informed Sources, a consultant specialising in industry price data. Informed Sources is also a supplier of data to the ACCC.

Pump prices often appear to jump up together after they have been discounted heavily for several days. Both discounting and price jumps are the result of a highly competitive and price-sensitive market where competitors' prices are readily visible on price boards.

The market works in various ways but the following is typical. At the high-priced point in a cycle, pump prices in an area will be similar, with the operators of all service stations closely watching their competitors' price boards. When one station reduces its price to increase sales, competing service stations act quickly and also reduce their prices to avoid losing sales to a competitor with a lower petrol price. This pattern is repeated over several days.

Not long into the cycle, oil companies will often provide discounts (known as "rebates" or "price support") off the initial wholesale purchase price paid by franchised dealers in order to help them meet the competition and cut prices at their sites.

Without rebates, franchised dealers would soon face losses as pump prices fell. With rebates, over the course of a discount cycle, dealers' retail margins typically do not vary substantially, although dealers are free to set their own margins. Rebates are available to all locations, both city and country.

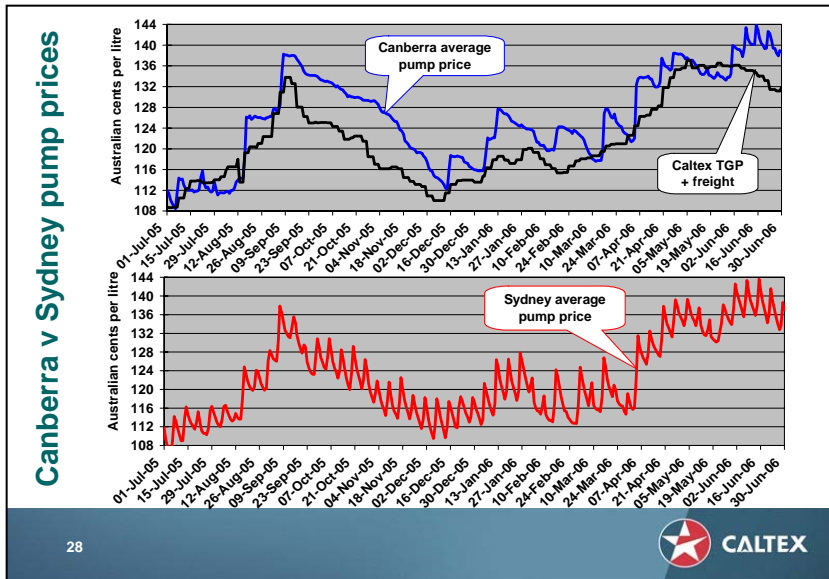
After several days of the discount cycle, with prices decreasing, one wholesaler will no longer be able or willing to sustain the low wholesale prices and will advise its franchised dealers that rebates will cease from a particular time. Prices may also increase at company-operated or commission agent sites. Franchised dealers are free to set their pump prices at any level but typically they will increase them in line with the increase in wholesale price. Other wholesalers, observing the pump price increase, may also cease rebates or increase the pump prices under their control, so that all pump prices may increase in rapid succession.

This behaviour is neither anti-competitive nor illegal and in fact results in lower prices on average over the cycle. Consumers benefit as they have the opportunity to buy petrol at the low point of the discount cycle.

The ACCC investigated price variability in its December 2001 report and concluded "it is likely that consumers in aggregate benefit overall from price cycles." The ACCC also did not support any of

the options it considered to limit price cycles as it was concerned that any such intervention could have the effect of increasing prices.

Chart 28



Canberra discount cycles are different from Sydney.

Canberra does follow a pattern of discounting followed by sharp increases in pump prices however the cycles tend to stretch over more than one week and occur less regularly than in other cities.

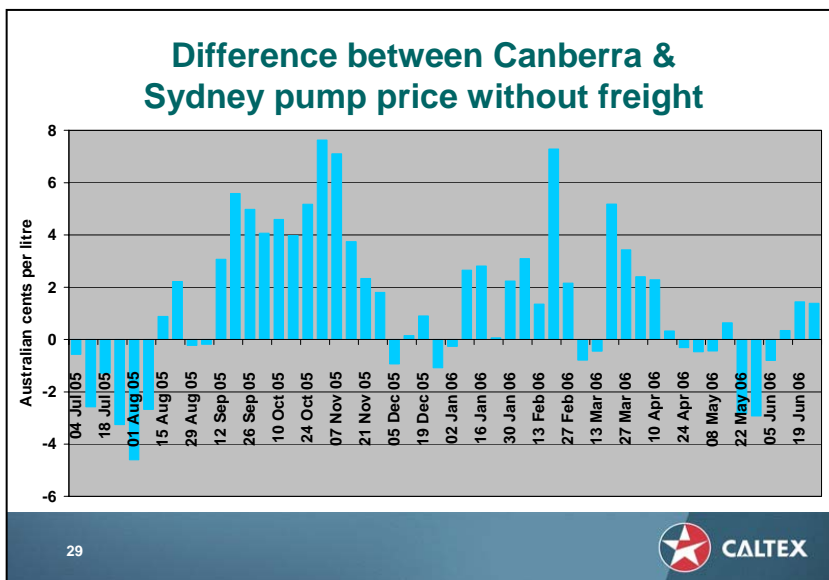
This is shown by the upper chart, which plots Canberra average pump price for ULP against a notional TGP equal to the Sydney TGP plus freight

to Canberra. The TGP is notional because there is no actual TGP posted for Canberra.

The chart shows the bottom of most discount cycles is close to the notional TGP and price increases tend to be very sudden, as in most metro markets.

The lower chart shows the much greater regularity and frequency of discount cycles in Sydney than in Canberra, although the amplitude of the cycles is similar.

Chart 29



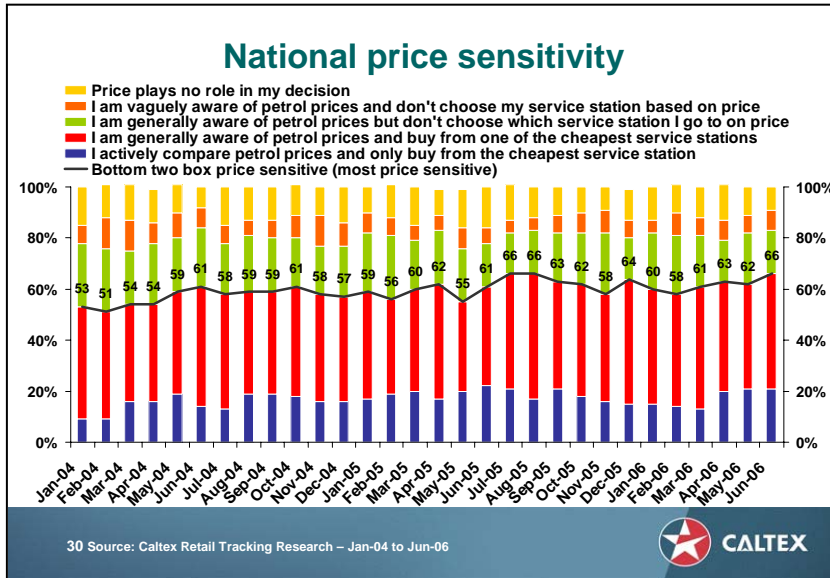
The differences between pump prices in Canberra and Sydney are partially related to the irregular price cycles in Canberra.

The discount cycles in Sydney and Canberra reflect quite different competitive conditions in the two cities. Chart 29 shows the resultant substantial differences in average weekly prices that occur. As there is frequent travel between the two cities, differences in prices may give rise to the perception that

Canberra has higher prices than Sydney.

The chart shows that Canberra may be cheaper than Sydney, similar or more expensive over a period of weeks or months but there is no systematic difference in prices.

Chart 30



60% or more of consumers take price into account when buying petrol.

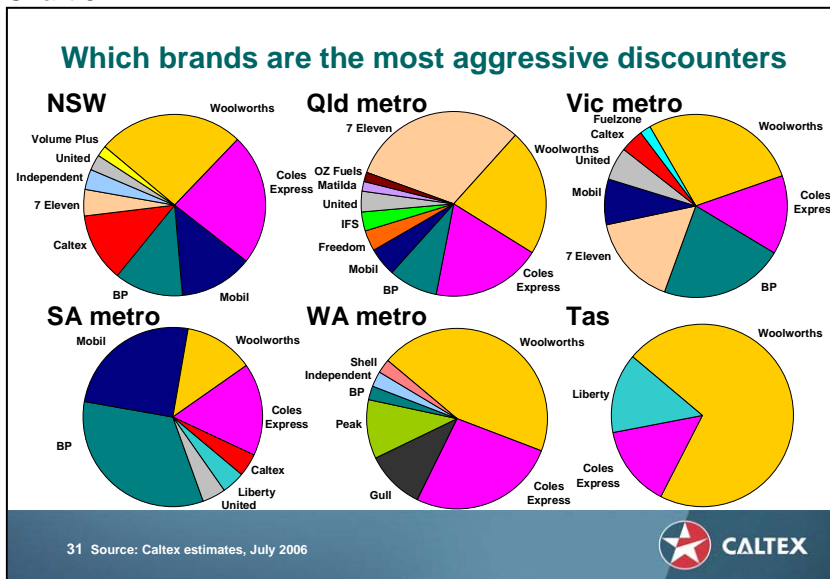
Caltex research, summarised in chart 30, shows about 60% of consumers (66% most recently) are price sensitive – about 20% actively compare prices and only buy from the cheapest service station and about 40% are generally aware of prices and buy from one of the cheapest service stations.

The percentage of consumers taking price into account increases for a short period when prices increase but over time there has only been a small increase in this percentage despite a large increase in prices.

About 40% may or may not be aware of prices but don't use price as a factor in choice of service station (nor, by inference, the day of the week on which they purchase petrol).

The large number of people who shop around on price points to the value of price cycles to those who can time their purchases accordingly but also explains the level of annoyance of those that are not sufficiently aware of the price cycle to avoid days on which prices typically increase. The answer would appear to be greater awareness of cycles by consumers rather than eliminating cycles through market intervention, as has been attempted in Western Australia.

Chart 31



The supermarket alliances operate the largest number of service stations that are aggressive discounters. In most markets, non-major oil company brands play a minor role.

Chart 31 shows the results of Caltex research in 284 market areas across Australia where the brand of service station that has historically been the most aggressive discounter was identified.

It shows Woolworths and Coles Express sites were identified as the most aggressive discounters in a majority of markets. This is more significant when the relatively limited number of sites under these brands is taken into account (about 20% of the national total number of sites). Both Woolworths and Coles Express rely on petrol sales to drive supermarket sales through their shopper-docket redemption offers.

All Woolworths sites are co-branded Caltex (for fuel) and Woolworths (for the shop) but prices are set by either Woolworths or (for Caltex-contributed sites) Australian Independent Retailers Pty Ltd under the direction of Woolworths. Coles Express sites are co-branded Shell.

BP and 7-11 metro sites (both commission agency operations) in Victoria and Mobil (franchised) and BP in South Australia also had a significant number of aggressive discount sites.

Petrol prices and public holidays

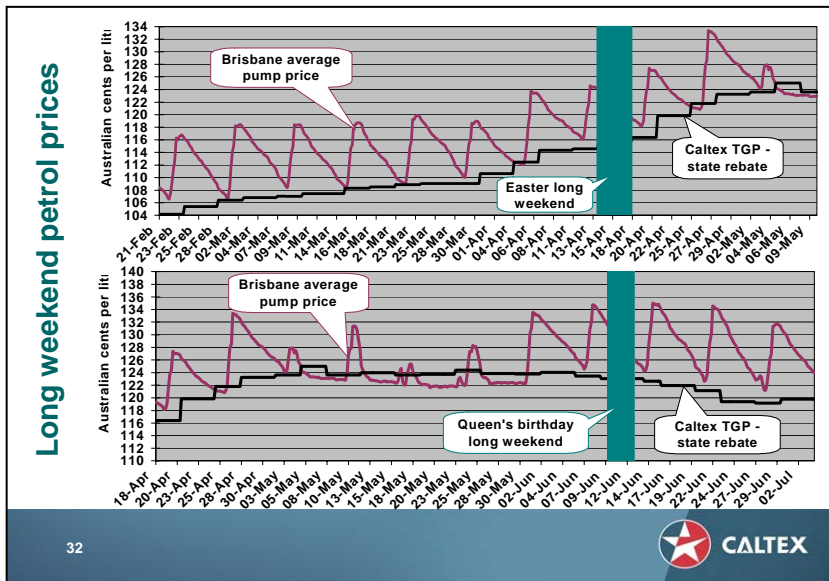
Prices do not jump because of long weekends.

In the lead up to, and throughout, holiday long weekends pump prices follow their typical weekly cycles. This normal behaviour is typical of all holiday periods in major metropolitan areas.

The following series of charts for capital cities show that contrary to the assertions of some commentators, pump prices did not jump up because of the Easter or Queen’s Birthday (June) holiday weekends in 2006.

In each chart, the pump price at the trough of the cycle is typically similar to the terminal gate price ie. the bulk wholesale price ex-terminal. Pump prices at the top of the price cycle could be 10 cpl or more above TGP, although these prices are rapidly discounted over the course of the week and sometimes two weeks or more.

Chart 32 - Brisbane



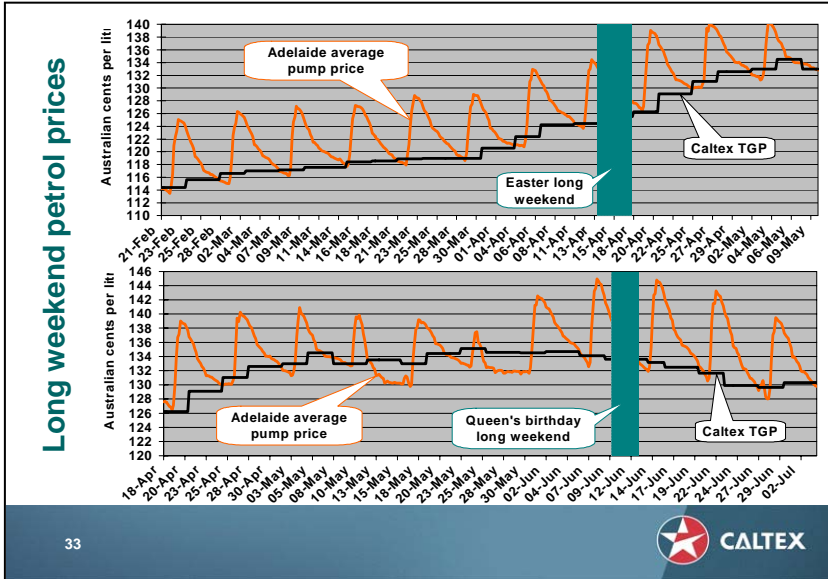
Brisbane prices did not jump because of long weekends.

In Brisbane the price cycle was normal before, during and after the Easter long weekend.

A similar pattern was exhibited up to and over the Queen’s Birthday long weekend in June, the only difference being that there was intense discounting during three weeks of May (this was common to other cities). This meant that when the price cycle returned to normal 10 days prior to the June long weekend, the peak of the cycle, while in the normal range (ie. as experienced historically – a peak pump price relative to TGP of 10cpl or less) increased pump prices around 12cpl because of the previous discounting below TGP.

(The likely reason for this intense discounting period, which was common to many cities, is discussed with chart 35.)

Chart 33 - Adelaide



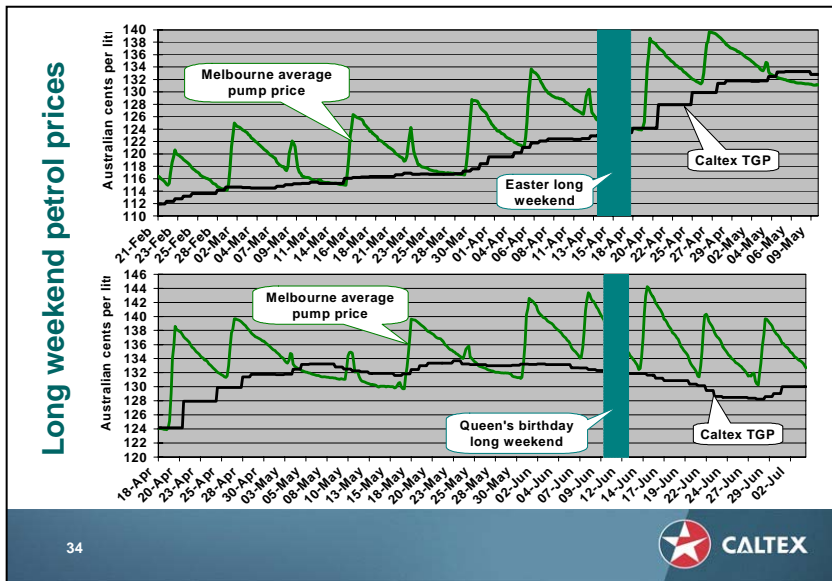
Adelaide prices did not jump because of long weekends.

In Adelaide the price cycle was normal before, during and after the Easter long weekend.

As in Brisbane, there was intense discounting during three weeks of May. Ten days prior to the long weekend the normal cycle returned, increasing the pump price of petrol at the peak of the cycle by about 10cpl (8cpl above TGP). However the end of this

cycle again resulted in discounting below TGP meaning that the peak of the cycle in the week prior to the June long weekend increased pump prices by nearly 12cpl although this was about 10cpl above TGP which is again in the normal range.

Chart 34 - Melbourne

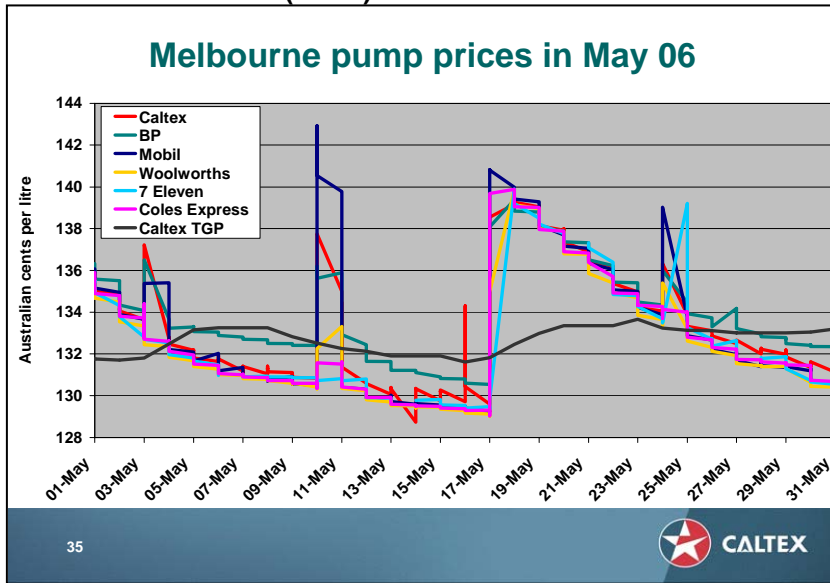


Melbourne prices did not jump because of long weekends.

In the lead up to Easter, Melbourne experienced price cycles that lasted two weeks instead of the typical one week. There were mini-peaks within the cycles that typically lasted only a day before the pump price again continued to drop. One such mini-peak occurred two days before Good Friday, however during the long weekend pump prices were on average only 1.2cpl above TGP.

Melbourne also experienced the intense discounting typical of many other capital cities during May. It too returned to typical cycling 10 days prior to the June long weekend.

Chart 35 – Melbourne (detail)



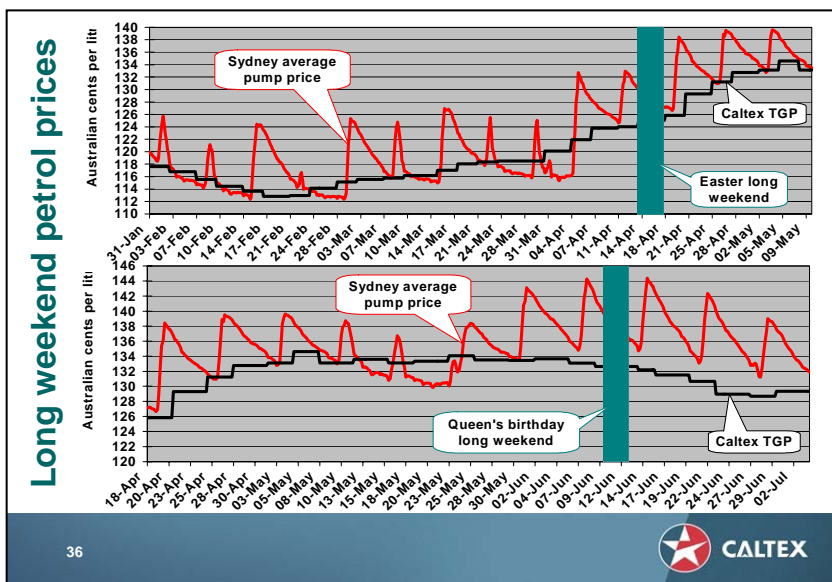
Coles and Woolworths drove discounting well below TGP in May in Melbourne and many other cities.

Chart 35 shows the average pump price by brand during May against Caltex TGP (used here as an indicator of spot market wholesale petrol prices). It indicates that the intense discounting (where petrol was sold below TGP) was driven by Woolworths and Coles and followed by most other major brands.

Brisbane, Sydney, Melbourne, Adelaide and Canberra all experienced this intense discounting driven nationally by the supermarket alliance sites.

This period of intense discounting could be due to a number of factors. Most notably April saw a steep decline in the volume of petrol sold nationally compared with March (10% drop) due to the sharp increase in price (Caltex TGP increased by 7%) – see Chart 5. Both Woolworths and Coles rely on petrol sales to drive supermarket sales through their shopper-docket redemption offers. By reducing their profits from petrol, or eliminating them for a short time, they can increase their supermarket sales volumes and also their relative petrol market shares. It therefore is possible that both supermarket chains drove petrol prices down in May to recover from poorer sales in April, with inter-company rivalry adding to competitive pressure to lift sales.

Chart 36 - Sydney



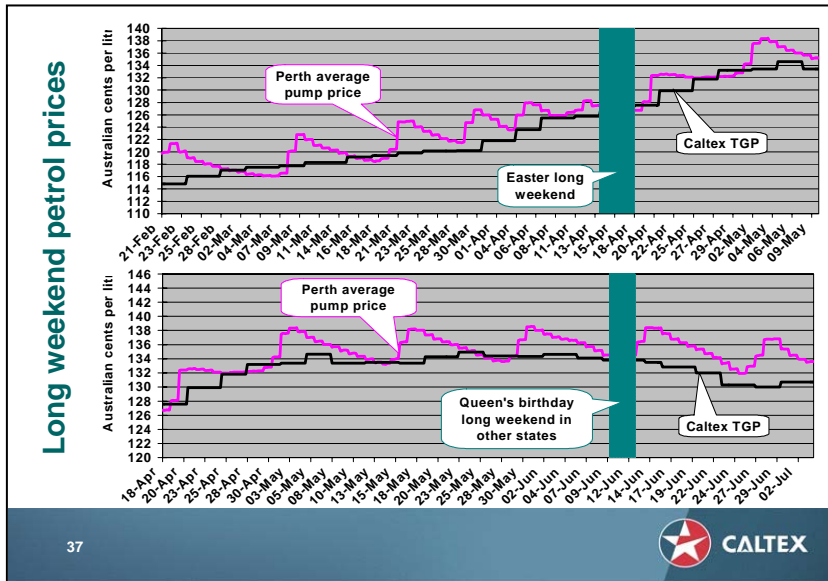
Sydney prices did not jump because of long weekends.

Sydney experienced unusually deep discounting (well below TGP) two to three weeks before Easter, which resulted in an unusually large jump in pump prices 10 days before Easter. However, the peak pump price after this jump was at about the typical level relative to TGP.

Another period of intense unusually deep discounting occurred in mid to late May. The typical price cycle returned more than two weeks before the June long weekend.

As in other states that experienced this atypical pricing in June as the apparent result of supermarket strategies, the resultant price increase when the market returned to a typical cycle was more noticeable than usual.

Chart 37 - Perth



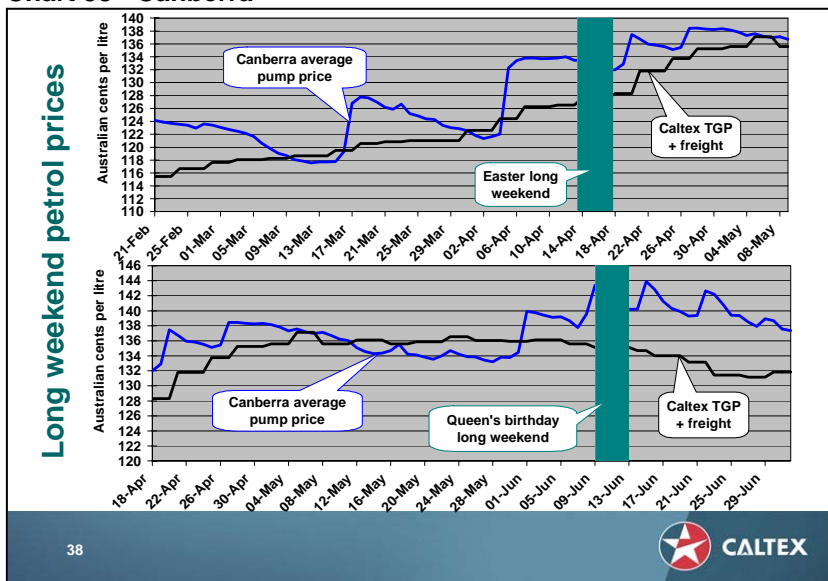
Perth prices did not jump because of the Easter long weekend.

In Perth the price cycle was normal before, during and after the Easter long weekend.

It was widely asserted in the media that Perth did not experience the same jump in pump prices that occurred in other cities prior to the June long weekend as there was no long weekend in WA. (The Queen's Birthday public holiday does not

fall on the same day as the rest of Australia.) However, this is not the case as there was no jump in prices ahead of the June long weekend in other cities, only typical price cycles.

Chart 38 - Canberra



Canberra prices did not jump because of long weekends.

Canberra does not follow the same weekly price cycle as other cities. However, it does have a pattern of discounting followed by sharp price rises then slow falls but cycles when they occur tend to last longer than one week.

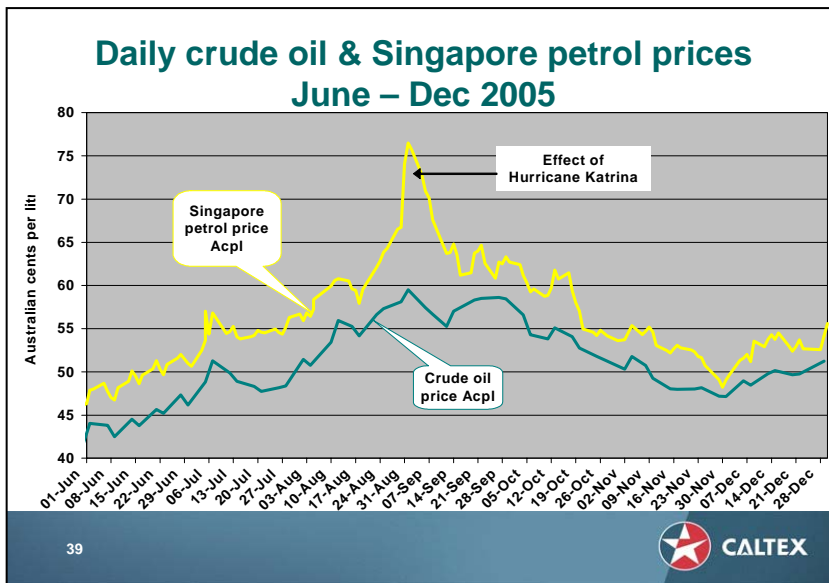
The sharp price increase that occurred 10 days before Easter was more visible in Canberra

because of the long cycles that are historically typical of the city. These long cycles mean that pump prices decrease over a period of two weeks so the shock is greater when the cycle peaks as it occurs less regularly than in other cities.

The perceived jump ahead of the June long weekend followed 20 consecutive days of discounting in which prices were well below TGP. This level of discounting was unsustainable and pump prices returned to their typical pattern following discounting of sharp price rises and then slow falls. Prices increased as part of this pattern 10 days prior to each long weekend.

Effect of international events

Chart 39



Petrol refiner margins are the net outcome of many complex market influences - case study on petrol refiner margins.

Petrol prices in Singapore between June 2005 and January 2006 varied greatly from the price of crude oil. For the first couple of months from June through August the difference (the refiner margin) was fairly constant at around 5 to 6 Australian cents per litre (Acpl).

The situation changed dramatically at the end of August 05, although prices had been increasing since July due to hurricane related outages at US refineries and rapidly falling stock levels.

Hurricane Katrina struck the Gulf Coast of the United States on 30 August shutting down about 25% of US crude oil production and 30% of US oil refining capacity. While considerable capacity was quickly restored, Hurricane Rita struck less than a month later, with similar impact.

The result was a dramatic increase in petrol prices on the US market. The Singapore market was also affected, particularly by Hurricane Katrina, as the United States imported petrol from markets around the world to make up for the shortfall in its refining capacity. Although most cargoes to the US to make up the shortfall came from Europe, the effect on markets was global.

In two days the Singapore petrol price increased 10 Acpl only to fall sharply over the next two weeks as some of the damage from the hurricane was repaired and some of the initial uncertainty over the impact on global oil supply became known. Hurricane Rita had much less effect on the Singapore market than Katrina, perhaps because the global market had already started to adjust to the supply uncertainty and redirect oil supplies.

By the end of September the refiner margin for petrol (ie. the difference between the Singapore petrol price and the Tapis crude oil price) was back to about the level experienced in June and July.

At the same time other factors were affecting the Singapore market. In China, petrol prices from refineries are controlled by the state and increases in crude oil prices earlier in the year had outstripped the allowable increase in Chinese petrol prices. This resulted in the earnings of Chinese refiners being compressed sharply between the capped petrol prices and increase in crude oil prices. As a result they tended to export petrol leaving the Chinese petrol market short of supply. By August this was causing considerable consumer unrest and Chinese authorities responded in August by limiting the amount of petrol that refiners were allowed to export (ie. before the impact of Katrina).

This normally would have contributed to higher prices on the Singapore market through less supply being available but from 1 October the Indonesian government increased petrol prices by about 90%. It did this by reducing fuel subsidies that were imposing great strain on its budget because of the increase in fuel prices during the year. As a result the reduction in Indonesian demand tended to offset the reduction in Chinese supply of petrol so that refiner margins for petrol stayed at about 3 to 4 Acpl through to the end of the year.

From about the middle of January 2006 the Singapore price for petrol became less than the cost of the crude oil used to manufacture it, i.e. refiner margins went negative. This occurred because the Chinese government eased restrictions on the export of petrol from 1 January and restored export subsidies. The price of Tapis crude oil also increased sharply relative to other global crude oil benchmarks (such as WTI), resulting in lower Singapore refiner margins due to higher crude oil costs.

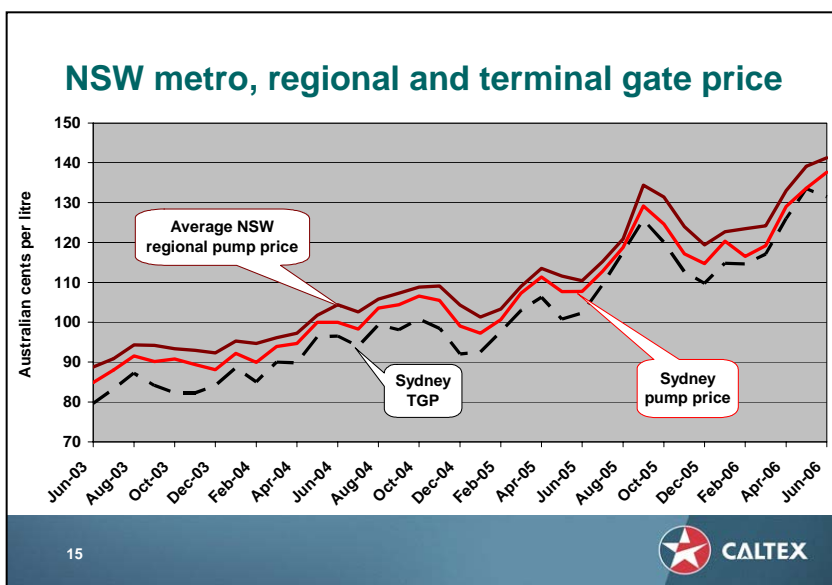
The Chinese move increased supply of petrol into the Asian region at a time when demand was weak due to the Northern Hemisphere winter. Petrol demand in the Northern Hemisphere is highest in the second and third quarters of the year during the northern summer and prices for petrol on the Singapore market typically increase early in the second quarter as refiners build inventory in anticipation of summer demand.

In the second quarter, petrol refiner prices have increased due to stock building for the northern summer, planned refinery shutdowns for maintenance, and phase-out of MTBE in the US increasing demand for high octane blendstocks. Regionally Chinese petrol demand has increased in first half 2006 by 14% over the same period in 2005 resulting in exports falling back to only 30,000 barrels per day in June. At the same time petrol imports by Indonesia and Vietnam have been increasing.

This case study is a good example of how volatile the regional price of petrol can be and how natural events like Hurricane Katrina or political events as in China and Indonesia can have a very marked effect on refiner margins for petrol.

Responses of retail prices to international prices

Chart 15 (repeated)



Pump prices closely follow international prices.

As shown in the chart (Chart 15 is reproduced here for illustration), there is a very close correlation between pump prices and international prices (represented by TGPs) over time.

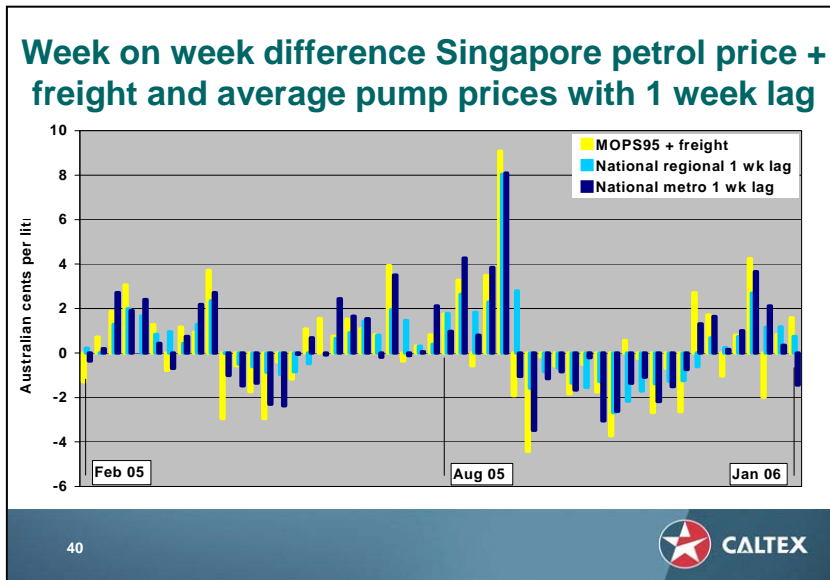
It is clear that pump prices do rise and fall with international prices. The turning points of each price series are closely matched – Charts 16 to 21 for the other states and

territories show a similar close relationship.

However, close examination shows that as international prices increase, gross margins (represented by the difference between pump prices and TGPs) tend to be compressed, with losses being recovered through higher notional gross margins when international prices fall.

The increase in margins is larger for regional prices than metro prices but in both cases, the increase is not sustained over time and the close correlation is restored.

Chart 40



There is a one week lag between changes to international prices and their impact on metropolitan and regional pump prices.

There are two issues in examining the response of pump prices to international prices – the timing of the price changes and the size of the price changes.

Chart 40 analyses the timing of price changes. (Chart 41 analyses the size of price changes.)

The chart considers the correlation of national average metro and regional pump prices (weekly average across all brands) one week after a change in the Singapore price (MOPS95) plus freight (since the calculated import parity price includes freight to Australia).

As shown by the chart, changes in Singapore petrol prices or Australian/US dollar exchange rates typically take one week to flow through into either increases or decreases in pump prices. These changes are often masked by weekly cycles in pump prices in major capital cities.

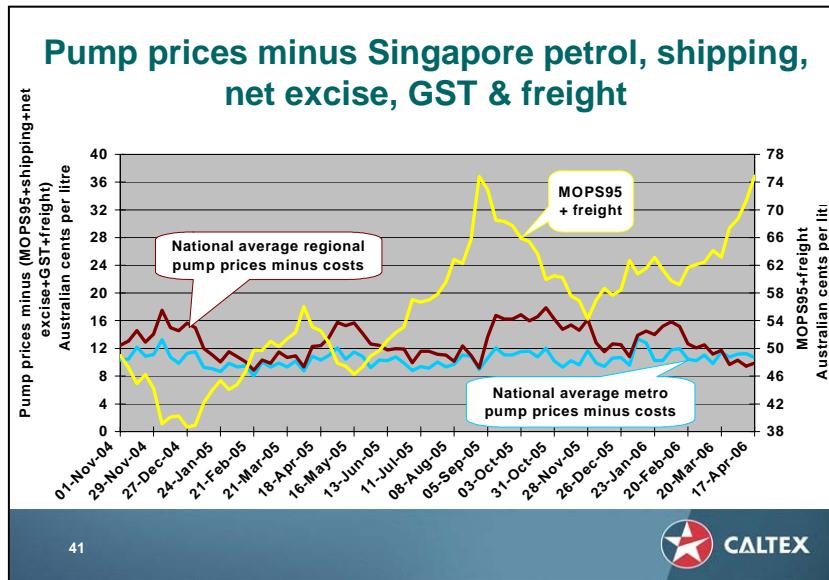
A criticism commonly levelled at oil companies by the public is that petrol prices are quick to rise but slow to fall in response to international prices. This is clearly not correct – prices change equally fast in both directions, with rare exceptions.

The one week lag could be explained by wholesale pricing formulas. Caltex uses a 7 day rolling average to smooth out daily MOPS95 fluctuations when setting wholesale prices and time required for stock turnover at service stations could further extend the response time. Other companies may also employ similar averaging of MOPS, which was used by the ACCC in price regulation up until 1998.

The chart shows changes in pump prices (with a one week lag) and Singapore prices are well correlated, with matching of turning points in most cases. However, the amplitude of metro price changes tends to be less than MOPS changes and regional prices show less amplitude than metro prices ie. country prices respond quickly in both directions but the response is damped.

While the correlation with international prices is quite strong, other factors can greatly affect the correlation on a week by week basis, including weekly competitive price cycles.

Chart 41



Notional gross margins vary up and down with international price changes but these differences are not sustained over time.

Chart 41 shows national average metro and regional pump prices minus MOPS95, shipping, net excise, GST and freight ie. retail and wholesale gross margins.

The chart shows that as international prices increase, gross margins fall. As international

prices decrease, gross margins recover. Some commentators tend to focus on periods in which margins are increasing but fail to make public comment on periods when margins are falling. However, it is clear from the chart that margins return to a historical level over time.

In metro areas, the variations are smaller than in regional areas. Caltex can't offer a definitive explanation for regional pump price behaviour as we operate very few sites in the country. However, a plausible explanation is as follows.

There is less competition in regional and rural areas than in metro areas and major supermarket chains have a strong presence. While benefiting motorists through lower prices, supermarket chains have built volume at the expense of smaller, typically independent, service stations and they also have a stated policy of pricing against the lowest competitor in a country town.

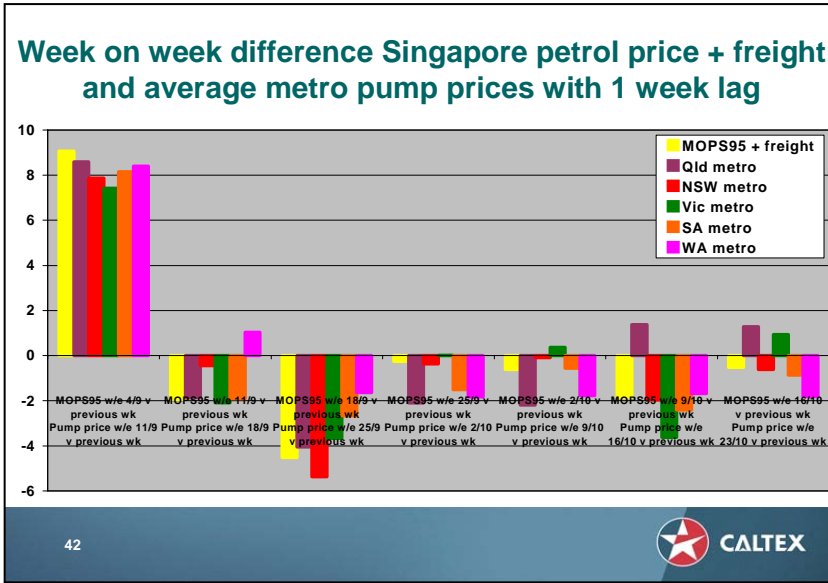
As a consequence, the volume gained by any non-supermarket service station from discounting could be short-lived as a result of the pricing responses of competitors, so the net result of discounting could be no volume gain but a reduction in retail margin. For this reason, pump prices, through normal competitive forces, are likely to move downwards slowly with a consequent increase in retail margins.

Similarly, when Singapore prices fall, hence wholesale prices (the two are typically rigidly linked), pump prices follow more slowly than in the city. A similar effect occurs when wholesale prices increase as a result of increasing Singapore prices – an individual retailer cannot raise pump prices easily without loss of volume, so retail margins are compressed. Note that changes in CRP are rigidly linked to wholesale prices to resellers, so Caltex wholesale prices to resellers respond quickly to falling international prices. However, as discussed earlier, this decrease in wholesale prices may take longer to flow through to customers because of the need to recover margins lost when prices increased.

The large price spike induced by Hurricane Katrina and considerable uncertainty about the global supply outlook may have had a greater impact than normal on margins, as retailers anticipated a prolonged period of high wholesale prices. Higher margins may have been necessary to cover higher cash costs for petrol deliveries, particularly if additional working capital was difficult to obtain from lenders.

Case study – impact of Hurricane Katrina on Australian retail prices

Chart 42

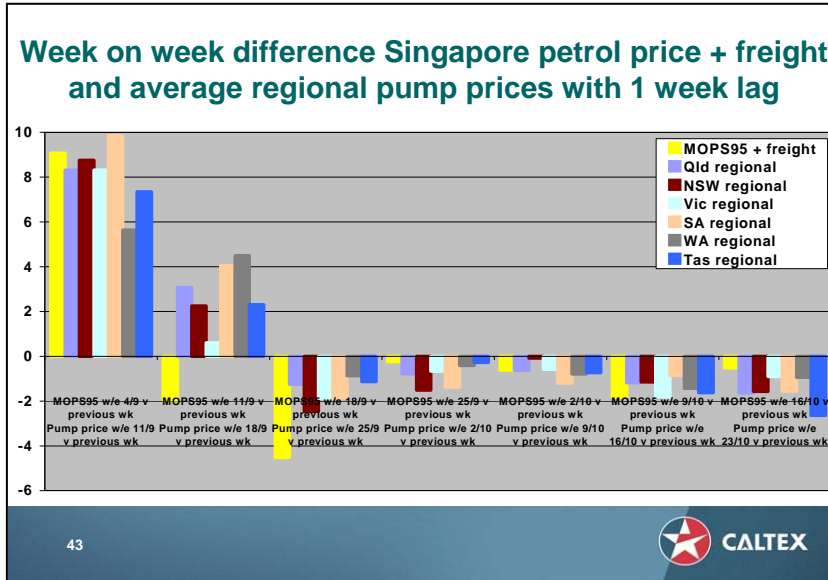


Pump prices in metropolitan areas closely followed the rise and fall in international prices after Hurricane Katrina.

Chart 42 shows a short period after Hurricane Katrina struck on 31 August 2005. Changes in metro pump prices for petrol (lagged one week to account for the flow-through of international prices) are shown against changes in the international price, represented by MOPS95 plus freight.

The first set of bars shows that the Singapore petrol price (plus freight) increased 9 Acpl in the week after Katrina struck and metro pump prices rose on average about 8 Acpl the following week. A week later, the Singapore price fell 2 Acpl and most prices fell a week later by the same amount. Similar patterns occurred the following week. The clear message from the chart is that metro pump prices increased and decreased closely in line with Singapore prices in both directions.

Chart 43

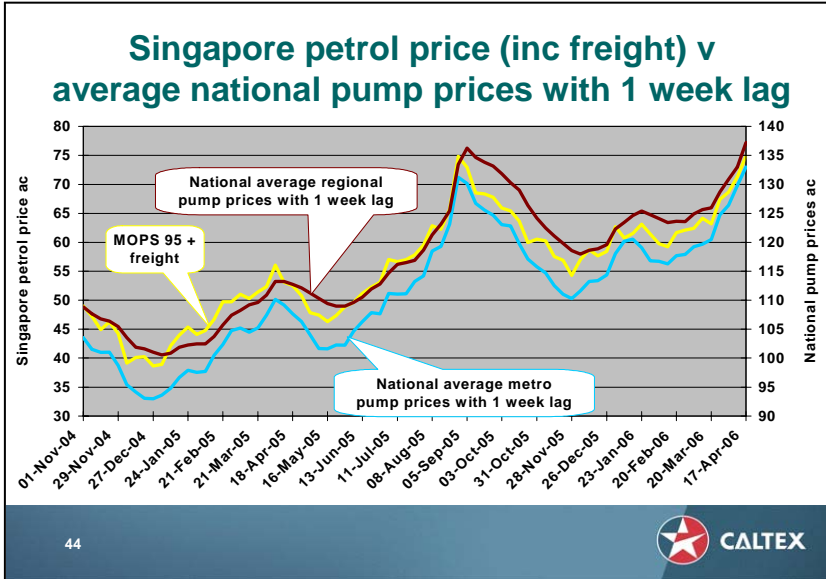


Pump prices in regional areas generally followed the rise and fall of international prices after Hurricane Katrina with the exception of the second week.

Chart 43 shows the same period as the previous chart, this time for regional prices. The pattern of response here is quite different from metro areas in the second week after Hurricane Katrina struck. Regional prices on average matched the increase in

Singapore prices in the first week but in the second week, regional prices increased rather than decreasing with Singapore prices. The sign of the change was correct in the third week but the amplitude less (consistent with history) and in the following weeks the changes were fairly well matched. This meant that on a cumulative basis, country prices stayed relatively high against Singapore prices rather than falling as for metro prices.

Chart 44



Pump prices in regional areas eventually returned to their historical relativity to international prices.

Following the initial steep rise in international prices due to Hurricane Katrina, regional pump prices did follow the subsequent fall, however did not fall to similar margin levels relative to international prices until the end of December.

Historically on every occasion that metro prices

decrease, the margin between regional and metro prices increases, for up to 3 months. When metro prices increase, the margin is greatly decreased.

The increase in the regional/city pump price difference post-Katrina, which is also an increase in the regional pump price relative to Singapore prices, is consistent with this earlier experience. Over time, prices average out and the regional/metro relationship is highly correlated, as shown on the chart. No one is being “gouged” and there is no “profiteering”.

Term of reference (d)

The industry's integrated structure

Chart 45

Australian service station structure	
<u>Controlling entity</u>	<u>Number of sites controlled**</u>
Major oil companies*	238
Supermarkets (includes Caltex Woolworths and Coles Shell sites)	1040
Franchisees – major oil company brands	800
Independent sites – major oil company brands	3900
Other brands (eg. 7-11, United, IFS, Neumann)	600
	6600

45 * Caltex, BP, Mobil, Shell; ** Company-controlled sites reported under Sites Act to DITR, end-Oct 2004, supermarkets at May 2005, other data adapted from AIP June 2004 survey.

The petroleum industry is not highly vertically integrated.

Chart 45 shows there are few sites directly operated by major oil companies. There is large number of independent sites, over half the total.

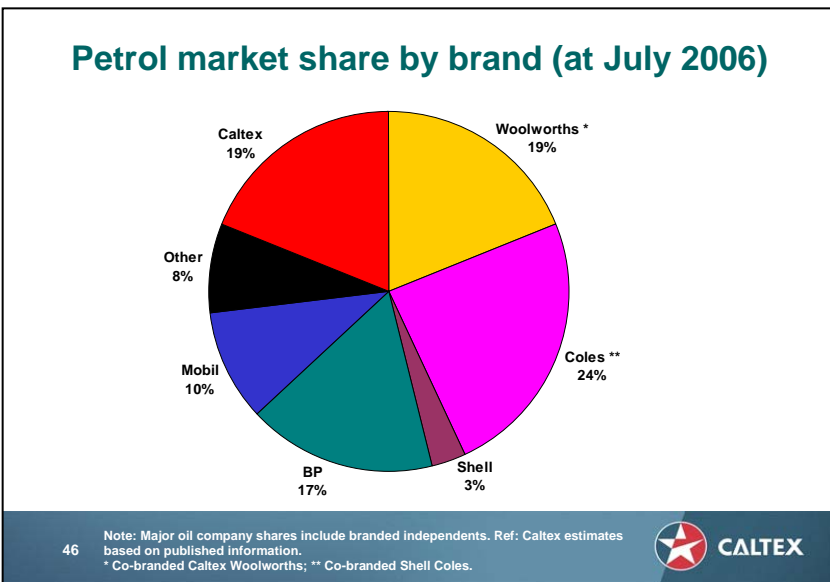
Supermarkets operate about 20% of sites and franchisees (of which Caltex has by far the largest number) operate about 10% of sites.

Although the data is from

2004 data the picture would be similar today. On this basis, the retail sector is not highly concentrated nor highly vertically integrated.

At the bulk wholesale level, seven refineries owned by four major oil companies buy and sell fuel and there are a number of importers and import terminal operators including Gull, Neumann Petroleum, Trafigura and Vopak. At the wholesale level, apart from major oil companies, wholesalers include Neumann Petroleum, Gull and Liberty.

Chart 46



Supermarkets have 43% volume share of petrol market.

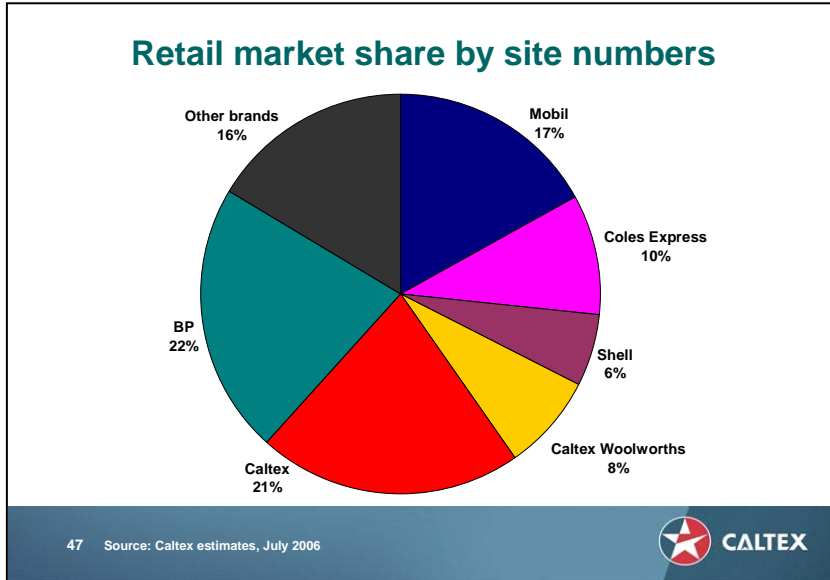
Chart 46 shows petrol market share by brand across Australia. There are four major competitors of similar size on a national basis. The fifth major competitor, Mobil, is of similar significance to these four competitors in the states where it has concentrated its operations. For Australia, this is not a concentrated market and competition is vigorous. There are also several smaller but

significant chains operating in particular states.

The brand market shares are based on total sales from all sites that display a company's brand, not who operates the sites. Very few branded sites are operated by the four refiner-marketers; sites may be operated by franchisees, commission agents or independents as well as by the major oil companies themselves.

The combined share of the two supermarket competitors, Woolworths and Coles, is 43%. This is less than the 50% or more commonly stated in the media as that number appears to mistakenly include Caltex's share with Woolworths. All Woolworths sites are co-branded Caltex (for fuel) and Woolworths (for the shop) but prices are set by either Woolworths or (for sites contributed by Caltex to the Caltex Woolworths venture) Australian Independent Retailers Pty Ltd under the direction of Woolworths.

Chart 47



The major oil company brands appear on the largest number of service stations but most are operated by franchisees, supermarkets or independent site owners.

Chart 47 shows market share by site numbers. This includes many independently operated sites carrying major oil company brands as well as franchised sites.

Woolworths have relatively few sites however a large market share by volume. Coles Express and Caltex

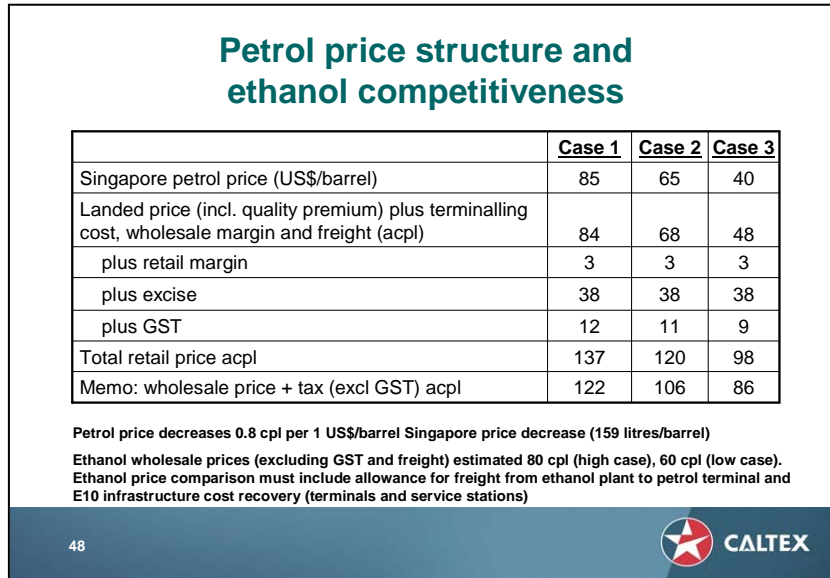
Term of reference (e)**Any other related matters****Biofuels****Chart 48****Ethanol is competitive at current oil prices.**

Chart 48 shows a typical build-up of wholesale and retail petrol prices from the Singapore price. At an assumed Singapore petrol price of US\$85 per barrel, the resultant pump price (average over a week) is 137 Acpl. At US\$40 per barrel, the pump price is 98 cpl. Corresponding wholesale prices (excluding GST) are 122 Acpl and 86 Acpl. The table is based on the current US\$/A\$ exchange

rate of about 0.75.

The high case is similar to prices in July 2006 and can be used as an example to work through ethanol economics.

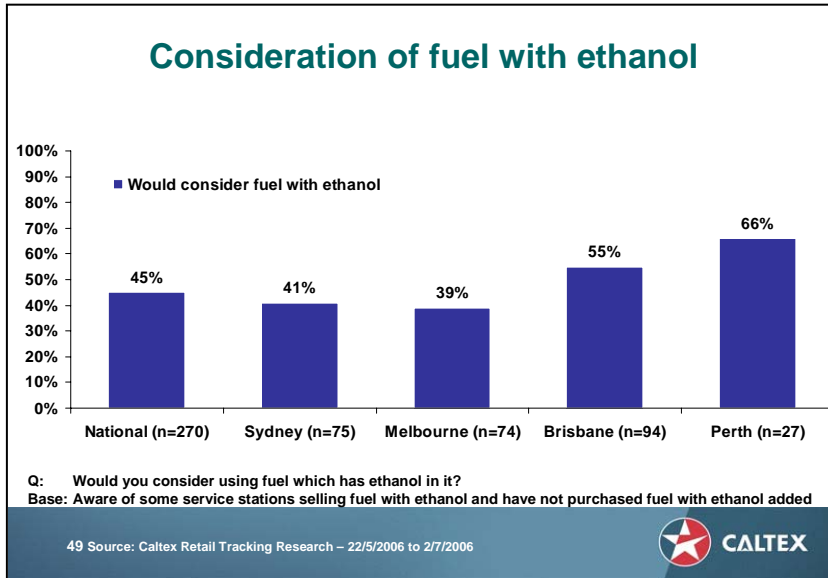
From the viewpoint of a theoretical service station faced with the choice of purchasing E10 or straight petrol, the wholesale petrol price is 122 cpl and ethanol about 80 cpl (both excluding GST), a difference of about 40 cpl, or 4 cpl in a 10% blend. In reality, the advantage is not so great as ethanol delivery is typically more expensive due to greater distance from the plant and an allowance needs to be made for amortisation of terminal upgrades to blend ethanol and service station conversion costs for E10. Assuming these items come to 10 cpl, the cost advantage of E10 is about 3 cpl, quite significant compared with a typical metro area gross retail margin of about 3 cpl.

Actual pricing of E10 versus regular unleaded petrol (ULP) will reflect local competition, including competition from other service stations selling E10. With relatively few service stations selling E10, some service stations may choose not to discount E10 in order to shore up retail margins, which are under great pressure in most metro and many country markets. Other service stations may choose to discount E10 relative to ULP to build sales volumes of all petrol. As the E10 market develops, pricing is likely to reflect the change in competitive conditions.

However, Caltex announced on 10 August 2006 that it had put in place pricing arrangements for its E10 Unleaded petrol to be sold at 3 cents per litre (cpl) less than regular unleaded petrol. The 3 cpl discount would apply at all company-operated sites and also at wholesale to resellers. The full text of Caltex's media release, detailing the pricing arrangements, is at the end of this section.

In conclusion, E10 therefore *may* reduce petrol prices – as at present - but given the reduction of the ethanol cost advantage with lower oil prices, government policy should not rely on E10 as a mechanism to reduce petrol prices in the long term.

Chart 49



Consumer confidence is still a major hurdle for ethanol blends.

Caltex research and experience shows less than half of all consumers would consider buying ethanol blended fuel if it were available. This shows that while the economics of ethanol blending are currently positive, selling the products to motorists remains a challenge.



CALTEX

Caltex Australia

Media Release

For immediate release

Thursday 10 August 2006

Caltex to discount all E10 petrol by 3 cents per litre

Caltex announced today it has put in place pricing arrangements for all its E10 Unleaded petrol to be sold at 3 cents per litre (cpl) less than regular unleaded petrol.

There are currently 41 sites selling Caltex's E10 Unleaded in Queensland and New South Wales under the Caltex, Ampol and Bogas brands. More than 100 sites are targeted to be selling E10 by the end of this year.

"From today, Caltex company-operated service stations that supply E10 Unleaded will sell it for 3 cents per litre less than regular unleaded petrol," said Caltex Managing Director Des King.

"The pricing decision is part of Caltex's strategy to meet its annual biofuels supply targets. These targets have been committed to the Australian Government as part of its industry action plan for biofuels. The decision also recognises the concerns of motorists about current petrol prices driven up by record high world oil prices."

"Caltex is also selling E10 Unleaded to its resellers – its wholesale fuel distributors - at a wholesale price 3 cents per litre less than regular unleaded petrol, so they can discount E10 Unleaded to their Caltex, Ampol and Bogas branded and other service station customers," Caltex General Manager Marketing Mark Burrowes said.

"For some resellers, E10 Unleaded must be trucked from more distant terminals than for unleaded petrol, incurring additional freight costs. The amount of discount passed on therefore may have to take into account these additional freight costs."

"Caltex is also discounting the wholesale price of E10 Unleaded by 3 cents per litre to its franchised service stations, so they are able to set an E10 Unleaded price at a discount to regular unleaded petrol.

"Franchisees are solely responsible for setting their own pump prices but the highly competitive petrol market should see the lower wholesale price passed on to motorists.

"Price support arrangements for franchisees will ensure the 3 cents per litre discount can continue to be provided even when unleaded petrol prices in major metropolitan areas are heavily discounted.

"Caltex E10 Unleaded is being supplied from Caltex terminals in Newcastle and Cairns. Investments in tanks and other facilities at Caltex terminals are being planned, together with other terminalling arrangements. These additional supply points will help reduce freight costs."

E10 Unleaded is a blend of 10 per cent ethanol in regular unleaded petrol, which meets the national fuel quality standard. It is suitable for use in most new vehicles and many older vehicles.

Caltex has been supplying E10 Unleaded petrol since 1996 through one of its resellers in NSW. E10 Unleaded was launched under the Caltex and Ampol brands in Queensland in 2003. Caltex independent and company-owned resellers have taken the lead in developing the E10 Unleaded market. Depending on the service station, ethanol used in E10 Unleaded is derived from either sugar cane or wheat.

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Group Manager Corporate Affairs
Phone: 02 9250 5224, pager: 02 9214 1146

E10 Sites - AS AT 10/08/2006

Location	Address	Brand
QLD		
CAIRNS	KENNY ST	Caltex
CAIRNS	SHERIDAN ST	CX/WOW
CAIRNS	RESERVOIR RD	Ampol
MAREEBA	BYRNES ST	Caltex
AYR	EDWARDS ST	Caltex
BOWEN	BRUCE HWY	Caltex
CHARTERS TOWERS	GILL ST	Caltex
GARBUTT	PILKINGTON ST	Caltex
INGHAM	HERBERT ST	Caltex
KIRWAN	THURINGOWA DRIVE	Ampol
ST GEORGE	VICTORIA ST	Caltex
TOOWOOMBA	TAYLOR ST	Caltex
TOOWOOMBA	RUTHVEN ST	Caltex
TOOWOOMBA	STENNER ST	Caltex
TULLY	BRUCE HWY	Caltex
WARWICK	TRUCKSTOP	Caltex
STANTHORPE	NEW ENGLAND HWY, APPLETHORPE	Caltex
GOONDIWINDI	BOUNDARY RD	Caltex
NSW		
COFFS HARBOUR	ORLANDO ST	Caltex
COONABARABRAN	JOHN ST	Bogas
DUBBO TALMAC	CNR BOURKE AND ERSKINE ST	Bogas
DUBBO DULHUNTY	WINSOR PDE	Bogas
GEORGETOWN	GEORGETOWN RD	Bogas
GILGANDRA	CASTLEREAGH ST	Bogas
GUNNEDAH	ABBOTT ST	Caltex
HEATHERBRAE	PACIFIC HWY	Bogas
HEXHAM	PACIFIC HWY	Bogas
KARIONG	LANGFORD DRIVE	Bogas
LIGHTNING RIDGE	MORILLA ST	Bogas
BOGAS MUSWELLBROOK	16 SYDNEY ST	Caltex
QUICKSTOP MUSWELLBROOK	82 - 84 MAITLAND ROAD	Bogas
NARROMINE	49 BURROWAY ST	Caltex
QUIRINDI	199 GEORGE ST	Bogas
TAMWORTH	109 GUNNEDAH ROAD	Bogas
TAREE	VICTORIA ST	Caltex
TOORMINA	TOORMINA RD	Bogas
TRANGIE	76 NARROMINE ST	Caltex
WARREN	COONAMBLE ROAD	Caltex
WINGHAM	CNR ISABELLA AND PRIMROSE ST	Bogas
WOY WOY	66 MEMORIAL AVE	Bogas
CORRIMAL	2-4 RAILWAY ST	Caltex

ATTACHMENT A

Caltex submission to Senate Economics Legislation Committee inquiry into the price of petrol in Australia.

The calculations in this appendix are actual calculations that Caltex has made in the course of business using real data. Their purpose is to illustrate how buy-sell prices and Caltex Reference Prices (CRPs) are calculated. The buy-sell price, calculated daily, is the bulk supply price into a fuel storage terminal. The CRP is the ruling wholesale price (ie. the list price) for a product supplied to a wholesale customer, excluding delivery. It has bundled into it charges that relate to both fuel and services (eg credit, brand, site rental but not delivery) so is different in concept from Caltex's terminal gate prices, which are for supply of fuel at the terminal loading rack into a road tanker for cash.

Table A1

Indicative Brisbane buy/sell price for ULP in 2H2006 excluding excise and GST.

Assumed Density (L/T)	1356	
Assumed Density (BBL/T)	8.5	
MOPS 95 (daily spot)	USD/bbl	
Quality Premium	USD/bbl	
subtotal	USD/bbl	
Exchange Rate (daily spot)	USD/AUD	
<i><u>FREIGHT & WHARFAGE</u></i>		
Worldscale (WS)	USD/t	
Platts WS index		
Freight	USD/bbl	
Insurance&Loss (%)		
I&L	USD/bbl	
Wharfage	AUD/kL	
Wharfage	USD/bbl	
subtotal	USD/bbl	
Total Price	USD/bbl	
Total Price	ACPL	

Table A2

Indicative Brisbane CRP for ULP in 2H2006 excluding excise and GST.

Assumed Density (L/T)	1356	
Assumed Density (BBLS/T)	8.5	
MOPS95 7 day rolling Average	USD/bbl	
Quality Premium	USD/bbl	
subtotal	USD/bbl	
Exchange Rate Rolling Average	USD/AUD	
<i><u>FREIGHT & WHARFAGE National Average</u></i>		
Worldscale	USD/t	Average
Platts	Index	
Freight	USD/bbl	
I&L (%)		
I&L	USD/bbl	
Wharfage	AUD/kL	Average
Wharfage	USD/bbl	
Subtotal	USD/bbl	
Marketing margin, including terminal and	Acpl	
Total Price	Acpl	

Table A3

What is the Caltex Reference Price?

- Caltex Reference Price (CRP) is Caltex's ruling wholesale price.
- Caltex calculates the CRP for petrol and diesel on a daily basis.
- The Caltex Reference Price is based on the concept of import parity and uses Singapore prices (USD/bbl) for product trading, as a marker.
- To reduce price variability and for ease of administration, CRP is changed only if the calculated price movement is greater or less than 0.50 cpl.
- Utilisation of seven day rolling averages for pricing factors such as MOPS and exchange rates to reduce price volatility.

Caltex Ruling Wholesale Price Petrol

- Adjusted Singapore Spot Price (USD/BBL) ie. for ULP we use MOPS 95 and add to it the National Quality Premium US\$XX/BBL
- Seven day rolling average price converted from USD/BBL to ACPL (Price of Basket)
 - + Insurance factor *(Price of Basket + Weighted average freight)
 - + Weighted average wharfage
 - + Marketing margin, including terminal and other marketing costs
 - = National Base Price
 - + Excise
 - State subsidy (where applicable NB. Qld subsidy is at retail level, not wholesale)
 - + State quality premium (where applicable)
 - = CRP (excl GST)
 - + 10%GST
 - = Caltex Reference Price (or Caltex's ruling wholesale price including GST).

Caltex sites by type of operation

Caltex sites are operated by various entities as shown in Table A4 below.

Table A4

OPERATION (FUEL SALES)	METRO	COUNTRY
CALTEX COMPANY OPERATED	27	10
CALTEX WOOLWORTHS (CTX EMPLOYEES WITH CALTEX AS AIR* SELLING AGENT)	29	3
CALTEX WOOLWORTHS (CTX FRANCHISEES AS AIR* SELLING AGENTS)	80	15
FRANCHISED (CALTEX OWNED & LEASED SITES)	270	158
FRANCHISED (INDEPENDENTLY OWNED SITES)	50**	-
COMMISSION AGENT	18	2
INDEPENDENTLY OWNED (CALTEX & AMPOL BRANDED)	416	824
TOTAL SITES - 1902	890	1012

* AIR - Australian Independent Retailers Pty Ltd

** Includes metro and country sites

*** Data: April 2006, includes only sites accepting Starcard (most sites)

Various pricing arrangements operate at these types of sites:

- Caltex operates a small number of sites, mainly with company employees, as shown in the first row of the table below. At these sites, prices are set by Caltex or at Caltex's direction.
- About a quarter of sites are operated by Caltex franchisees. Under a Caltex franchise, fuel is purchased by the franchisee at Caltex's ruling wholesale price, the Caltex Reference Price (CRP). A franchisee may also be eligible for price support to help meet local competition, which effectively reduces the franchisee's wholesale price.
- AIR selling agents may be sites with Caltex employees or franchisees acting as selling agents for AIR fuel in accordance with directions from Woolworths. Caltex or franchisees operate the convenience store portions of the premises. AIR determines the fuel prices.
- Independently operated sites (which include sites with Woolworths employees) purchase fuel at wholesale from Caltex or its resellers (distributors) for resale. Prices are set by the independent operators. Fuel from Caltex is priced either under a national contract (eg Woolworths - terms are confidential) or at the CRP less a negotiated fixed discount.

Caltex is a bulk wholesale supplier and licenses its Caltex and Ampol brands for use at service stations. Fuel may be distributed directly to service stations from seaboard terminals by Caltex or distributed by branded resellers, which may have 100%, 50%, 37.5% or zero Caltex ownership. Caltex ultimately is responsible for the wholesale price from 100% equity resellers to service stations, although day to day operation is by the reseller. Caltex only sets prices from 100% equity resellers. Reseller arrangements are summarised in Table A5 below.

Table A5

CALTEX 100% EQUITY	AUER PETROLEUM P/L	QLD
	BARRY PETROLEUM P/L	ACT
	CALTEX ENERGY	NSW
	CALTEX FAR NORTH QUEENSLAND	QLD
	CALTEX SOUTH EAST	VIC
	CALTEX SYDNEY	NSW
	CALTEX WEST COAST	SA
	COOPER & DYSART P/L	WA
	PETRO FUEL AND LUBRICANTS	QLD
	CALTEX 50% EQUITY	GERALDTON FUEL COMPANY P/L
LINK ENERGY P/L		WA
SOUTH EAST QLD FUEL SUPPLIES P/L		QLD

CALTEX 37.5% EQUITY	NORTHERN MARKETING MANAGEMENT P/L	NSW
ZERO EQUITY	ADELAIDE FUEL DISTRIBUTORS	SA
	BENNETTS PETROLEUM	TAS
	BONICK P/L	QLD
	BUCHANAN'S BULK FUELS	NSW
	CALTAS P/L	TAS
	CALTEX DEPOT	NSW
	CARLING FUELS	SA
	CENTRAL COAST FUEL MARKET	NSW
	CENTRAL QUEENSLAND PETROLEUM	QLD
	COLLISON & EVERETT	NSW
	COUNTRY PETROLEUM	QLD
	CROKERS FUEL & OILS	QLD
	CUNDERDIN FARMERS CO-OP CO LTD	WA
	D M & B P WISKICH P/L	NSW
	DG & RJ BOLAND	NSW
	DIRECT FUEL SUPPLIES	WA
	DUNNING INVESTMENTS P/L	WA
	F & R MCNABB P/L	NSW
	GEOGRAPHE PETROLEUM	WA
	HAWKINS FUELS	QLD
	HAYES PETROLEUM	NSW
	HUNTS FUEL	SA
	I & M SIMPSON & SON	VIC
	INDERVON P/L	NT
	J CHISHOLM P/L	VIC
	J L KEEN	QLD
	JOHN DUFF & CO PTY	VIC
	K&S AMPOL	SA
	KEL CAMPBELL P/L	NSW
	LOVELL & COWEN P/L	TAS
	MALCOLM SLATER P/L	NSW
	MARYBOROUGH FUEL DISTRIBUTORS	QLD
	MAVIN PETROLEUM	NSW
	MCCLINTOCK'S FUEL SUPPLIES	QLD
	MERRIWA PETROLEUM & AG SUPPLIES P/L	NSW
	NORTHERN FUEL DISTRIBUTORS	NT
	PURTILL PETROLEUM	NSW
	R & P MATTHEWS P/L	VIC
	RIVERINA FUEL SUPPLIES	NSW
	ROBCO PETROLEUM P/L	VIC
	SLATER FUEL SERVICES	NSW
	SOUTH WEST FUEL CENTRE P/L	NSW
	THE HASTINGS CO-OP LIMITED	NSW
	TOUGH FUEL SUPPLIES	NSW
	TRAMBY & HANKS	NSW
	TROPIC DISTRIBUTORS	QLD
	TUNBRIDGE PETROLEUM P/L	NSW
	TURNER FUEL	SA
	W H PHIPPS & CO	QLD
	YENDA FRUIT AND CASE SUPPLY	NSW