FuelWatch in Western Australia

4.1 The national Fuelwatch scheme is not just a theoretical construct. A FuelWatch scheme is already operating in Western Australia. It was introduced by a Liberal government in January 2001 in response to a parliamentary select committee report and supported by subsequent Labor governments.

4.2 The WA scheme involves daily monitoring of prices for petrol, diesel and automotive LPG within metropolitan Perth and 52 regional areas (in total covering about 80 per cent of retail outlets). The prices provided by 2 pm each day, which are posted on a website by 4 pm, must be maintained from 6 am the next day to 6 am the following day. FuelWatch also operates a personalised email service, and its information is also disseminated in the evening news on TV and in the main morning newspaper. FuelWatch allows customers to choose where to buy tomorrow, and if prices are going up gives fourteen hours to buy at today's prices.

Opinions of FuelWatch in WA

4.3 The WA Government argues 'FuelWatch enables motorists to make informed decisions about their fuel purchases, which puts downward competitive pressure on fuel prices.'[1] Given the variation in petrol prices at stations across Perth, 'on average at present consumers can save between 13c and 14c for most types of fuel in Perth'.[2]

4.4 The Royal Automobile Club of Western Australia supports the scheme:

> we know from general community support and general use of the FuelWatch scheme, both if you like in an active way and in a passive way, that it is something that has worked well here in WA for consumers.[3]

4.5 Consumer surveys have shown over 90 per cent of WA motorists are aware of FuelWatch.[4] It is widely used:

> Currently, almost 300 000 people are accessing the FuelWatch website per month. Over 32 000 are receiving personalised emails daily so they can make choices about where they buy their fuel…60 per cent of people have indicated that they actually use FuelWatch.[5]

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1 WA Department of Consumer and Employment Protection, *Submission 5,* p. 5.

2 Ms Anne Driscoll, WA Department of Consumer and Employment Protection, *Proof Committee Hansard*, 16 July 2008, p. 2.

3 Mr David Moir, Royal Automobile Club of Western Australia, *Proof Committee Hansard,* 16 July 2008, p. 24.

4 WA Department of Consumer and Employment Protection, *Proof Committee Hansard*, 16 July 2008, p. 5.

5 Ms Anne Driscoll, WA Department of Consumer and Employment Protection, *Proof Committee Hansard*, 16 July 2008, pp 2 and 5.

> …demand for FuelWatch information from the community increases in line with increasing petrol prices.[6]
>
> Because FuelWatch is available on the evening TV news, on the radio and in the newspaper on a daily basis, you are aware generally of the span of prices available tomorrow or that day. You do not have to be the concerned buyer who actively seeks the information by email or SMS or rings up on a daily basis or when you are about to buy the fuel. [7]

4.6 The scheme is popular with consumers in Western Australia. Consumer surveys have shown two-thirds support it.[8]

4.7 Some consumers were alarmed when they heard about opposition to the national Fuelwatch scheme and feared it meant that the WA FuelWatch scheme might be scrapped. They sent emails, saying:

> …the FuelWatch service is invaluable!
>
> Please ensure the service is retained…A great Government service!!
>
> I was appalled to hear on the radio yesterday some senator saying that the WA FuelWatch scheme had not done anything to reduce petrol prices.
>
> …I find it invaluable…[9]

Comparison of Perth fuel prices with other capitals

4.8 In the preceding chapter, it was argued that while the primary focus of Fuelwatch is to empower consumers to find the best price, a consequence of this was to make the retail petrol market more competitive, and this would lead to lower average prices and shift prices in the rest of the week down to what was charged on 'magic Tuesdays'.

4.9 A simple comparison of Perth and Sydney prices over recent weeks suggests this is exactly what has happened (Chart 4.1). The weekly cycle in petrol prices has disappeared in Perth, although it took several years for this to happen. (There had been an intermediate period when Perth moved from a weekly cycle like that in other capitals to a smaller fortnightly cycle.)

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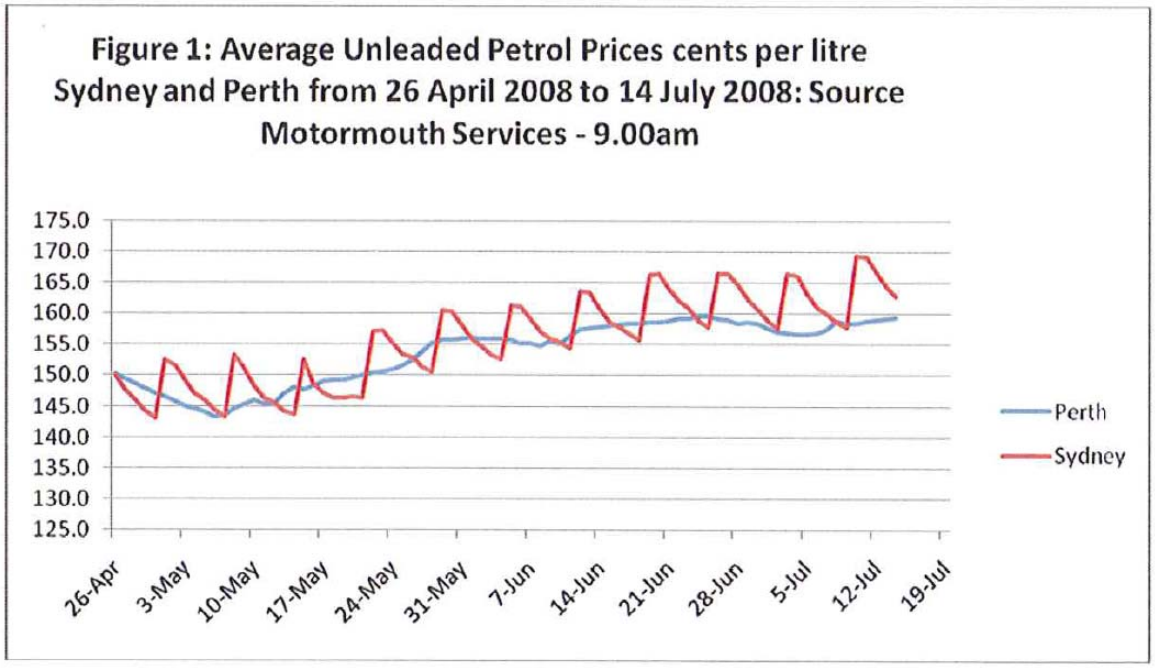
6 Mr Aaron Rayner, WA Department of Consumer and Employment Protection, *Proof Committee Hansard*, 16 July 2008, p. 3.

7 Mr David Moir, Royal Automobile Club of Western Australia, *Proof Committee Hansard*, 16 July 2008, p. 27.

8 WA Department of Consumer and Employment Protection, *Submission 5a*.

9 Concerned consumers, cited in WA Department of Consumer and Employment Protection, *Submission 5a*. The Department notes that 'no negative comments about FuelWatch were received by Consumer Protection'; *Submission 5a*, p. 3.

Chart 4.1



Source: NRMA, *Submission 8*, p. 3.

4.10 Chart 4.1 only compares Perth prices with Sydney. Average petrol prices are also lower in Perth than in other capital cities:

> the average price for petrol was 3c cheaper than in Melbourne, 4.2c cheaper than in Brisbane—without the subsidy—2.4c cheaper than in Sydney and 2.6c cheaper than in Adelaide. [10]

4.11 While this comparison is suggestive that FuelWatch in WA is working as would be expected, it not a conclusive argument. Aside from any effect from FuelWatch, there are three factors that would tend to make petrol prices higher in Perth than in other capitals, and one that may make them lower;

- There is only one refinery in the Perth area whereas there are two each around Sydney, Melbourne and Brisbane.[11]

10 Ms A Driscoll, WA Department of Consumer and Employment Protection, *Proof Committee Hansard*, 16 July 2008, p. 3. The comparison was done as at June 2008.

11 ACCC (2007, p. 50).

- Western Australia has tighter standards on the proportion of methyl tertiary-butyl ether in petrol, which means a premium is added to the price there.[12]

- The Queensland government provides an 8.4 cents a litre subsidy (although some studies suggest this does not get fully passed on to retail prices).[13]

- The closer proximity of Perth to Singapore may act to make prices lower than in other capitals.[14]

4.12 A better approach is to look at *margins* rather than *prices*. Over four years, the ACCC found that the average retail margin in Perth was 3 cents per litre, the lowest in Australia.[15]

4.13 This appears to conflict with assertions that petrol retailers operations are more profitable in WA than in other states.[16] However, when Caltex was asked how profitability in Western Australia compared to other states, they replied 'the profitability is broadly similar'.[17]

4.14 An even better approach may be to compare margins in Perth relative to other capitals before and after the introduction of FuelWatch. While the WA Department of Consumer and Employment Protection, who administer FuelWatch, claim it lowered petrol prices in Perth relative to other capitals, Informed Sources claim it raised them by 1-1½ cents per litre.[18]

4.15 An unusual objection to comparisons between Perth prices and those on the Eastern seaboard is that the Perth market is inherently 'different'.[19] The effects of a

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12 ACCC (2007, p. 83). The WA limit is 0.1 per cent, compared to 1 per cent in the rest of Australia and 15 per cent in Europe (in other respects the Australian and European requirements are virtually the same as those in Europe). Informed Sources suggest this quality premium translates into 2 cents a litre; *Submission 22*, p. 12.

13 Smaller subsidies were removed in Tasmania and Victoria during 2007. The NT government has 1.1 cents a litre subsidy. NSW and SA have some subsidies in rural areas but not in Sydney or Adelaide. ACCC (2007, pp 88-90).

14 Woolworths estimates the difference in shipping costs is 1.3 cents a litre; *Submission 28a*, p. 1. Senator Abetz puts it at 0.7 cents a litre; *Proof Committee Hansard*, 16 July 2008, p. 7.

15 The comparable figures were 3.7 cents in Adelaide, 4.7 cents in Sydney, 4.9 cents in Melbourne and 5.1 cents in Brisbane; ACCC (2001, p. 141).

16 Senator Abetz commented 'as I understand it, Caltex has asserted publicly that it makes its biggest margins in Western Australia' and he said that another oil company made the same claim privately; *Proof Committee Hansard*, 16 July 2008, pp 8 and 26.

17 Mr Michael Ridley-Smith, Caltex, *Proof Committee Hansard*, 1 August 2008, p. 25.

18 Both cited in ACCC (2007, p. 246).

19 As the Royal Automobile Club of Victoria's David Cumming put it, 'they are different over there'; *Proof Committee Hansard*, 7 August 2008, p. 53.

national Fuelwatch could then be different to those in Perth. However, this could as well mean that Fuelwatch is *more* effective in other parts of the country rather than less effective.

4.16 In a similar vein, Professor Harding suggests changes in tax policy around 2000 may have had different effects on petrol station margins in Western Australia to Eastern Australia.[20] He gives no possible explanation as to why the GST should have one effect in WA and another in other states.

Econometric approaches

4.17 Opponents of Fuelwatch have claimed that it led to higher petrol prices in Western Australia. The reasons why shifting market power from large retailers to consumers would have this effect were not made clear. Nonetheless, the ACCC conducted an econometric study to test this assertion, which formed a few pages (Appendix S) of their 2007 report. It has led to an inconclusive 'battle of the models' between economists supporting and opposing Fuelwatch.

4.18 As discussed in the previous chapter, economic theory would suggest Fuelwatch should lead to a fall in average prices. The magnitude would depend on how competitive the market had been previously and how many consumers make use of the Fuelwatch information in deciding when and where to purchase petrol.

4.19 The average difference between terminal gate prices and retail prices is around 5 cents a litre. Part of this is used to pay for staff and other operating costs of service stations. So the impact of FuelWatch on average prices is likely to be only a few cents a litre. It appears that the full impact took a long time to be felt. Given the numerous other changes to the factors driving petrol prices in recent years, it is therefore unsurprising that the econometric studies are not able to agree on precise estimates of the impact of FuelWatch on WA petrol prices.

The ACCC study

4.20 The ACCC's econometric test suggested the average differential dropped by a statistically significant 1.9 cents per litre after the introduction of FuelWatch. The results compare the period August 1988 to December 2000 with that of January 2001 to June 2007.

Volumetric data

4.21 Simple unweighted averages of listed petrol prices may not be a good basis for econometric tests. As a senator put it:

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20 Professor Don Harding, *Submission 4a*, p.19.

> If there are two service stations, one that sells its petrol for $1 a litre and another for 50c a litre, you could say that the average price is 75c per litre. But of course if the service station that sells its petrol at 50c a litre sells all the petrol, the average price paid by consumers is not 75c but in fact 50c a litre. I would have thought that the quantity of fuel sold at any stage of the price cycle is a vital component of any study.[21]

4.22 Ideally, the average observation for each day and market should refer to prices paid weighted by the amount sold at that price. The failure to use consumption-weighted or 'volumetric' data would understate the benefits of FuelWatch as it would not capture the effect of consumers being better placed to switch from buying petrol at dearer stations to cheaper stations.

4.23 Unfortunately, the data were not available to make the comparison using consumption-weighted prices. The closest approximation to a volumetric analysis was in the ACCC's original study where they rerun their tests on minimum prices rather than average prices. The drop in this was calculated as 0.7 cents per litre.[22]

4.24 As the true volumetric result should be bounded by the estimated fall in the average price (which assumes no substitution effects on volume) and in the minimum price (which assumes an extreme substitution effect on volume), and prices were lower whether calculated on average or minimum price, the implication of the econometrics is that a test done on a volumetric basis would also show that Fuelwatch was associated with lower petrol prices in WA.[23]

'Peer review' of the ACCC study

4.25 The ACCC has been criticised for not conducting a blind review of the econometric studies, as would be done with an article published in a scholarly journal.[24] The work was reviewed within the ACCC. The ACCC's methodology was also examined and found robust by Treasury.[25]

4.26 Professor Joshua Gans described the ACCC's work as 'a far more rigorous investigation of the WA scheme than anyone had ever done'.[26] He expressed great confidence in the technical abilities of his former student, the ACCC econometrician, Richard Hayes, who had done the work

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21 Senator Abetz, *Proof Committee Hansard*, 16 July 2008, p. 9.

22 ACCC (2007, pp 247, 375-7); ACCC (2008); and Dr King, ACCC, *Estimates Hansard*, 5 June 2008, p. 51.

23 Mr J Dimasi, ACCC, *Estimates Hansard*, 5 June 2008, pp 19 and 40.

24 This criticism was made by Professor Harding (*Submission 4a*)

25 *Estimates Hansard*, 4 June 2008, p. 85.

26 *Submission 1*, p. 2.

Critiques of the ACCC study

4.27 On the other hand, some econometricians have criticised the econometric approach employed by the ACCC. Professor Don Harding's main criticism in his first paper (*Submission 4a*) is that the difference between the margins should be deflated by a price index. This argument apparently did not convince his fellow sceptics as Professor Davidson and Concept Economics were content to present results using undeflated margins. However even Professor Harding's own preferred methods suggest the relative margin in WA is more likely to have fallen rather than risen after the introduction of FuelWatch.

4.28 There are various other possible weaknesses in Professor Harding's study. It would be interesting to know whether other economists would support his assumption that the margin varies with the fuel price or that it is better to deflate the weekly price margins by the interpolated fuel component of the CPI rather than the weekly price itself.[27] The assumption that the introduction of Coles had a sustained constant impact on the WA fuel market might also be questioned. The structural break tests employed by Professor Harding implicitly assume that FuelWatch had its full effect immediately after introduction. If the impact built up gradually, then the tests will understate the final impact.

4.29 Professor Harding's second paper (*Submission 4b*) benefits from access to Informed Sources data. Instead of comparing Perth prices to those in the rest of Australia, he just compares them to Sydney. The ACCC's Dr King believes this was done because comparisons with other cities put FuelWatch in a good light, a selective use of data which means the test 'has no statistical validity'.[28] Notwithstanding his criticism of the ACCC on this issue, Professor Harding's own paper is not peer-reviewed.

4.30 Professor Davidson from the Institute of Public Affairs and Concept Economics were also provided with data by Informed Sources and conducted econometric tests, also not peer-reviewed, and concluded that Fuelwatch had not reduced relative petrol price margins in WA.[29] However Concept Economics' credibility as dispassionate analysts of the topic was somewhat reduced by their chairman having previously called those giving weight to the ACCC's support for Fuelwatch as 'a fitting subject for psychiatric investigation'.[30]

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27 Serially correlated errors might be introduced by interpolating 13 observations from quarterly CPIs given that fuel prices do not move smoothly.

28 Dr Stephen King, ACCC, *Proof Committee Hansard*, 7 August 2008, p. 6.

29 *Submission 17*.

30 Henry Ergas, 'Kevin 24-7 or 7-11', *The Australian*, 3 June 2008.

4.31 Professor Wang points out some of the difficulties in assessing the impact of FuelWatch when there is only one capital city that has implemented it.[31]

4.32 A challenge for academics doing this work is gaining access to the underlying data from Informed Sources. The organisation provided the data to the ACCC (it is not clear whether voluntarily or under subpeona). The ACCC did not want to make this proprietary data publicly available but was happy for Informed Sources to make it available to academics. Informed Sources have chosen to supply it to some but not all academics who requested it. They say they apply two criteria in deciding whether to release their data; academics must be 'entirely independent of any organisation related to the Inquiry and that the analysis and subsequent report by the analyst will in no way compromise the commercial status or value of the Informed Sources pricing data'.[32] There have been suggestions that there may be another test; that 'the data have been released to parties who had previously expressed … opposition for Fuelwatch'.[33]

The 'Coles entry effect' versus the 'Fuelwatch effect'

4.33 Further analysis has attempted to distinguish the effect of the introduction of FuelWatch from the effect of the entry of Coles into the Perth market. The ACCC's results showed that the entry of Coles had a much smaller impact than did Fuelwatch.[34] By contrast, Professors Harding and Davidson and Concept Economics conclude the entry of Coles was the only factor lowering the WA retail margin and that FuelWatch had no impact. A similar claim is made using a chart rather than econometrics by Neumann Petroleum.[35] Dr King questions whether some of the FuelWatch impact is being wrongly attributed to the Coles entry in these tests.[36] Professor Wang comments 'one cannot separate out the effect of the Fuelwatch from that of Coles or Woolworths by comparing the Perth market and the Melbourne or Sydney markets. Supermarkets entered all the major petrol markets.'[37]

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31 Professor Wang Zhongming, *Submission 27*, p. 10.

32 Informed Sources, *Submission 22a*, p. 7.

33 Mr Graeme Samuel, ACCC, *Proof Committee Hansard*, 7 August 2008, p.7. This interpretation is given some support by the comments by Professor Harding who said after his first paper attacking Fuelwatch came out, 'Informed Sources gave the data to me. They said they were impressed with my work. It was not available to other academics'; Professor Don Harding, *Proof Committee Hansard*, 7 August 2008, p. 24.

34 Dr King, ACCC, *Estimates Hansard*, 5 June 2008, p. 39.

35 *Submission 15*.

36 Dr Stephen King, ACCC, *Proof Committee Hansard*, 7 August 2008, p.7.

37 Professor Wang Zhongming, *Submission 27*, p. 10.

Conclusion

4.34 There seems to be no definitive conclusion from the various econometric studies. But as the majority of them find negative coefficients (albeit sometimes insignificant) on Fuelwatch's introduction when explaining petrol price margins in Perth relative to other cities, there seems no reason on the basis of the econometrics to overturn the reasoning in Chapter 3 that a national Fuelwatch scheme would lead to a modest decline in average retail petrol prices.

4.35 The committee notes in passing that the FuelWatch critics are introducing a demanding standard for changes in policy. If economic policy changes were only made after supportive econometric studies that satisfy all critics, then there would have been no floating the dollar, allowing in foreign banks, introducing the GST, cutting taxes, phasing out tariffs, privatising large government corporations and so forth; reforms which most of the Fuelwatch critics supported.