Better to watch consumer fuel prices going down

How can a measure that prevents fuel prices from going down during the course of any day help consumers? Apart from watching prices offered by service stations, this is what FuelWatch does. It also prevents prices from going up during the day but this will not balance out if preventing prices from going down impacts on more consumers.

You would think that the ACCC Report used to justify the introduction of FuelWatch would have answered the question. But it does not and its econometric appendix, which is suppose to contain the detail, raises more questions. For example, why is the structural break in the price margins between the west coast and the east coast service stations in 2000, before the implementation of Western Australia's Fuel Watch scheme in 2001? Is this a scheme that has an effect before it was even thought of? A footnote in an appendix table of average price margins, which points to the presence of serial correlation, suggests one reason for this oddity, namely that the relationship the ACCC has used to measure for structural breaks is poorly defined.

A second ACCC analysis released prior to the Senate inquiry did not provide any answers either and the footnote just mentioned was omitted from the table. Further testing by the ACCC does confirm that the structural break is before the implementation of FuelWatch but no answers are given as to why this might be the case.

What is going on here? Did west coast service stations that might have only followed prices up leave the industry because they thought something like FuelWatch might be introduced? A more defensible explanation might come from appreciating that posted service station prices just represent the supply side of the market. A posted price, which always goes into the calculation of the ACCC average, is meaningless in terms of the more important market price if no one in the market is buying at that price, and the same conclusion applies to when there are different numbers of buyers at different prices and this is ignored in unweighted averages.

Looking at the more relevant market prices, a bit over 50% or the majority of east coast consumers purchased their fuel at the lowest 20% of prices offered. Only around a quarter of west coast consumers got their fuel at the lowest 20% of their offered prices. Nearly as many west coast consumers paid above average offered prices as do those that paid below average offered prices. By contrast, only a small minority of east coast consumers paid above average offered prices. In short, the west coast volumes were more uniformly distributed across offered prices whereas the east coast volumes were much more skewed, or had many more consumers, on the low price side.

The distribution of service station offered prices will not exactly follow that of consumer market prices as some low priced services stations will attract more consumers. Thus the east coast distribution of service station prices will be less skewed than its distribution of consumer prices and the west coast distribution less uniform. These skewing differences make sense as offered prices are more likely to follow price setters down if allowed, so as to maintain market shares, than to follow them up, and lose market share.

The greater skewedness of east coast offered prices means the comparison of average margins between east coast and west coast prices is meaningless. This is because the estimated margin is the difference of two quite different distributions of services station and consumer prices. The ACCC estimated average price margins and their test of structural change are dependent on well-behaved distributions to have meaning.

A comparison of medians, or the point at which half the population of purchasers lies above and half below, rather than averages would be much more meaningful that a comparison of unweighted averages with such different distributions. West coast median prices are likely to be around the estimated unweighted average posted price. East coast medians will be much lower than their estimated average price, and the difference between the two could more than cover the ACCC estimated average price margin, given the wide range of offered prices.

A lower percentage of service stations offering lower prices in the west coast might not help consumers who put a price on the time to go to these more dispersed service stations and then queue for the less available lower priced fuel. It might not help much, in fact it could frustrate, to know that a lot of other consumers are getting some cheaper fuel 50 kilometres away. It would be better that prices were allowed to domino down towards where you drive. The situation just described would be the case even though a few west coast stations might be offering the lowest price in the country – though it is hard to be definite on this given the meaninglessness of the ACCC estimated minimum price margin averages. A few west coast consumers getting the cheapest fuel does not stack up against the majority of east coast consumers getting cheaper fuel.

Margins between the highest and lowest prices offered were put forward as some measure of the performance of FuelWatch in the recent Senate inquiry. FuelWatch by constraining prices going down, or up, will narrow the range of offered prices. However, if this narrowing pushes the majority of consumers up the price range as suggested by the flattening of the skewing of prices on the low side of the west coast service station price distributions, then it will have a negative impact overall.

It would appear that the usual situation, recognised centuries ago by economists such as Adam Smith, applies – consumers are better off relying on the market and not some expensive bureaucratic intervention. The ACCC would do better, bearing in mind the "consumer" in its title, by explaining what the impact of FuelWatch would be on true average consumer prices or what the majority of consumers pay, rather than watching prices, constrained to the disadvantage of price-conscious consumers, being posted at service stations.

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