Submission to Senate Economics Committee FuelWatch inquiry By Don Harding Professor of Economics Latrobe University 15 July 2008

I am an academic economist who is concerned about how evidence is used in policy making. In this submission I focus on

- the issues related to 'evidence-based-policy'; and
- the quality of the ACCC's econometric work.

I submit two papers to the committee which address these issues:

- FoolWatch: A Case study of econometric analysis and 'evidence-based-policy making' in the Australian Government; and
- FoolWatch: Further Discussion of Econometric Analysis Undertaken By ACCC.

Both of these papers are in the public domain.

Should the Committee find it useful I will be available on the morning of 7 August or in the afternoon after 4.30pm in Melbourne to discuss these papers and my submission.

Most of the remainder of this submission provides an overview of the main points that I wish to bring to the committee's attention. It is a compilation of the material in the abstracts and conclusions of these two papers together with my opinion piece in the Age. The submission ends with some requests to the committee regarding issues related to FuelWatch.

Overview

Evidence based policy

The decision to introduce a national FuelWatch scheme provides a timely case study of `evidence-based- policy' making in Australia.

The government based its decision on econometric work by the ACCC who refuse to release the data. They claim that their analysis is robust because it has been subject to scrutiny within the ACCC and by Treasury.

Experience with `evidence based policy' making in the United Kingdom (UK) raises doubts about such claims. The UK experience led to the term `policy-based-evidence' to describe the end result where government agencies filtered out information that was inconsistent with government policy. The Demos report *The Received Wisdom* by Jack Stilgoe, Alan Irwin and Kevin Jones provides an excellent overview of the issues encountered in the United Kingdom with 'evidence-based-policy'.

Econometric analysis in the ACCC report

The data used by the ACCC can be digitized from a graph in their report. I then use the data so obtained to assess the robustness of the ACCC analysis and econometrics. Since the government and their advisors did not realize that the data could be obtained in this way it provides a `natural experiment' in which their claims can be evaluated and tested. I find that the ACCC apply the wrong tests to the wrong variable. Specifically, they study the nominal retail margin when economic theory suggests that analysis of anything but the real retail margin to producers creates a misspecified model inconsistent with the econometric assumptions used.

The econometrics in Appendix S of the ACCC report on petrol is substandard in application of techniques and in reporting of what was done.

The ACCC findings are not robust. When I apply the correct version of the procedures used by the ACCC to the correct variable I find that the data does not support the original ACCC finding. Specifically, it is not possible to conclude as the ACCC did that FuelWatch did not raise petrol prices in Western Australia.

Using data supplied by InformedSources I find additional flaws in the ACCC analysis of FuelWatch.

First, the drop in petrol prices that is so visually convincing in the ACCC chart S1 is in fact an artifact of the method of data construction and can be attributed primarily to increases in prices in Adelaide and Melbourne --- events that had nothing to do with Western Australia or FuelWatch.

Second, redoing the analysis using Sydney as the point of reference and adding prices in other cities as explanatory variables lead to results that contradict ACCC findings. I find that the two best models that I estimate yield the conclusion that Fuelwatch either increased petrol prices in Western Australia by a small amount or had no effect.

Third, I find that the entry of Woolworths and Coles into the Western Australian market had the effect of reducing unleaded petrol prices Perth by about 2.67 per cent relative to Sydney. This finding contradicts statements made by the ACCC that the entry of Coles and Woolworths had effects that were small in comparison to those of FuelWatch.

Is the fundamental problem with econometricians or is it with the process for including their work in policy?

FuelWatch of itself is unimportant. The important issues here relate to the integrity of the government's `evidence-based' approach to policy. The UK experience clearly shows that relying on the untested opinion of `experts' leads to fudging' of the evidence or overstatement of the conclusions that can be supported by the data. This ultimately corrupts the evidence-based-policy approach. The FuelWatch experience shows that these dangers are present for Australian policy makers.

A natural but incorrect response is to blame the econometricians who undertook the ACCC analysis. The public service has many very able econometricians and economists and I draw no adverse conclusion about those who undertook this work or those who reviewed it.

Econometrics is a difficult art. The quality of econometric work is almost always improved by public scrutiny and particularly by seminars and workshops involving academics. Thus a significant cause of the error is the increased secrecy of governments and their failure to make adequate use of academics and public scrutiny.

By the same token the quality of econometric work is almost always reduced by factors such as secrecy, the issues being politicised, ambitious junior ministers seeking to make a name for themselves and when the 'evil trio' of the 'managers manager', lawyers and 'econometric guns for hire' are involved. Several of these apply to the FuelWatch case.

Rather than blame econometricians for the errors, the FuelWatch case should be seen as reflecting on the process through which their work is incorporated into reports and used by government. The fact that four departments got the analysis correct in the leaked Cabinet coordination comments confirms that there is more than adequate econometric expertise in the public service. The failure is in the inability of government to heed that advice. There is also a failure of government to give adequate assurances of protection to public servants who provide it with accurate but unpalatable advice.

The Treasurer's comment that departmental advice, which ultimately proved to be correct, was 'too academic' besides being deeply offensive is dangerous for any government that is committed to ideas. Rejecting departmental advice in such an of hand way is unlikely to produce good policy.

Ultimately, these are errors made by a government which has become distracted by stunts at a time when the nation faces major problem such as climate change, energy and food price shocks and inflation.

Finding solutions to these problems will require the government to assemble a wide range of evidence and to convince the Australian people that they have not been 'economical with the truth' in forming and communicating that evidence or in basing policy on that evidence.

The danger with stunts such as FuelWatch that go badly wrong is that they corrupt the whole fabric of evidence based decision making and erode public trust in governments. The UK experience with Bovine Spongiform Encephalopathy (BSE) provides evidence for this proposition.¹

Greater respect for the wisdom in Cabinet coordinating comments, transparency by government, publication of data and analysis underpinning government decisions and independent review of econometric work are the main protections against the danger of 'policy-based evidence'. Failure to implement these protections will invalidate claims about the evidence base of future policy decisions by Australian governments.

¹ See N Phillips (Lord), J Bridgeman and M Ferguson-Smith, *The BSE Inquiry, Report: Evidence and supporting papers of the inquiry into the emergence and identification of Bovine Spongiform Encephalopathy (BSE) and variant Creutzfeldt-Jacob disease (vCJD) and the action taken in response to it up to 20 March 1996* (London HMSO, 2000), see <u>www.bseinquiry.gov.uk</u>.

Adequacy of existing review procedures

The existing review procedures such as Senate Estimates hearings and Senate inquiries are inadequate to the task of separating 'evidence-based-policy' from 'policy based evidence'. There are several reasons for this four of which I mention here. One reason is that the Senate committees are far too political in their approach – a quick reading of the transcripts or the reports which are often split on party political lines establishes the evidence for this proposition.

Another factor, is there is no incentive for a public servant to make 'a career limiting move' by revealing the defects in a policy that is being championed by ambitious ministers.

The third reason is that often the inquiries fail to establish who in the bureaucracy is the 'expert' in the sense that they were the person who actually undertook the scientific analysis and or econometrics. Such people are crucial to establishing 'the evidence'.

The fourth and related factor is that inquiries often fail to establish the chain of command and information ie who is the manager and the manager's manager etc. Establishing these details about the chain of command and the distance between decision maker and the actual 'expert' is crucial in understanding how 'policy-based-evidence' can arise in situations where at every point in the chain the person is well intentioned and seeks to produce 'evidence-based-policy'.

Given that neither of the major political parties has a majority in the Senate there exists an opportunity to re-establish the role of the Senate as a house of review in which the evidence base of government policy can be assessed. I hope senators make the best of this opportunity.

Specific requests to the committee are over the page.

Specific requests to the committee

I ask the committee to

- 1. Report on what considerations precludes the ACCC from releasing the data on which its econometric analysis was undertaken.
- 2. Report on whether it was necessary for the ACCC to subpoen the data from InformedSources.
 - a. My understanding is that informed sources had already supplied the data to the ACCC prior to the subpoena. If this is correct what is the point of the subpoena?
- 3. Report on what rules apply to the public release of data obtained by the ACCC via subpoena but not used/tested in a court of law.
- 4. Report on how the Senate and Australian citizens can make an informed decision about FuelWatch if the ACCC and by extension the government refuse to release the data behind its econometric analysis.
- 5. Report on how the Australian government can use the FuelWatch experience to improve the way it uses evidence to inform policy. Specifically, I request that the senate suggest that the Australian government:
 - a. Adopt the standard that it will not claim that a decision is evidence-based unless:
 - i. It releases the data and analysis on which that decision was based; and
 - ii. It has subjected the analysis to truly independent review.
 - b. Heed the lesson in the fact that the advice from his department that the Treasurer dismissed as `too academic' proved ultimately to be correct;
 - c. Recognize that Cabinet coordinating comments which are often partly anonymous serve both to protect a government against error and also partly protect bureaucrats who provide accurate but unpalatable advice.
 - d. Recognize that some decisions cannot be evidence-based because there is insufficient evidence on which to base a decision or the evidence is inconclusive. In these cases 'fudging' the evidence or overstating what conclusion the evidence supports acts to corrode and corrupt the use of evidence in shaping policy; and
 - e. Recognize that academics provide an invaluable resource capable of the independent reviews necessary to catch cases of 'policy-based-evidence'. Providing such academics with access to resources and the data is fundamental to implementing evidence-based-policy making.

Signed Don Harding Professor of Economics LaTrobe University 15 July 2008