Evidence Lacking In The Tobacco Wars

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This article from the July 2014 edition of the IPA Review is by Senior Fellow with the IPA and Professor of Institutional Economics at RMIT, Sinclair Davidson.

Lord Kelvin famously argued, ‘When you can measure what you are speaking about, and express it in numbers, you know something about it; when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind; it may be the beginning of knowledge, but you have scarely, in your thoughts advanced to the stage of science.’

Unfortunately, there must be a corollary to Kelvin’s statement: Even when you can express yourself in numbers your knowledge may still be of a meagre and unsatisfactory kind. Kelvin was a physical scientist and things are complicated enough there—ponder for a moment the climate change debate.

It gets worse in the social sciences. Collecting timely data is difficult and complex, while teasing out meaning is particularly challenging. Unravelling the nuance and differences between

correlation and causation is not a trivial exercise. Yet that is what is required when undertaking policy evaluation. Then we have to overlay the ideological attachment policy analysts have towards their own policies. All up policy evaluation becomes an extraordinarily complex task.

So it is with the debate surrounding the so-called plain packaging wars—what do the numbers mean? How are they interpreted? As it stands the anti-tobacco lobby is putting all its efforts, and claiming success, on the basis of a single data point – in other words, right now their standard of evidence amounts to wishful thinking and good intentions.

According to the Cancer Council's *Tobacco in Australia* report per capita tobacco consumption has been declining since 1960. Not that anyone would think that—given the increasing anti-tobacco hysteria and ever-increasing illiberal regulation directed against the tobacco industry, and the state-sponsored stigmatisation of smokers.

The previous Labor government introduced standardised tobacco packaging into Australia with effect from December 2012. This policy— known as 'plain packaging'—was intended to reduce the sensory pleasure of consuming tobacco for existing smokers causing them to give up the habit and also to discourage new smokers from taking up the habit. Standard economic theory predicts that an absence of branding could lead to an increase in tobacco consumption as tobacco firms are unable to maintain their price premia for high-quality brands and also as smokers substitute to cheaper brands. To the extent that anti-tobacco policy ultimately intends to reduce the incidence of smoking to zero—yes, the ultimate policy objective is prohibition—any policy that has the perverse outcome of increasing tobacco consumption will have failed.

Then we need to consider the tobacco firms themselves. Plain packaging undermines their profit model whereby they establish well-known and well-understood market niches for their products and maximise profits within those niches. In the absence of branding, the rational business objective becomes to maximise sales through price competition. Since William Baumol developed his sales maximisation model, economists have known that this strategy results in sub-optimal profitability.

In short, the plain packaging policy could result in increased tobacco consumption while undermining the profitability of tobacco firms. That is even before we consider the possibility of counterfeiting and smuggling. All up, there are very good reasons to inquire into whether the plain packaging policy actually reduces the incidence of smoking.

In plain English; did the Rudd-Gillard government get just one policy right? When stated in those terms, the answer becomes apparent.

So what do the numbers tell us?

Well one set of numbers—from the tobacco industry—says that the number of 'sticks' sold in Australia increased after the introduction of the plain packaging policy. The industry should know—after all they pay excise on a per stick basis and it is their product. Someone, somewhere, in government knows too. The government collects excise on a per stick basis and tobacco excise

is one of the top ten Australian taxes that collectively generates 90 per cent of all (federal and state) tax revenue. Treasury forecasts dramatic increases in tobacco excise over the forward estimates.

The data exists—yet as the Department of Health indicated; 'Tobacco sales data are not publicly available.' I have no doubt, if the data supported the efficacy of plain packaging, that data would become available.

This raises something of a problem for anti-tobacco activists— *prima facie* the policy has failed. The number of sticks sold is up and expected excise revenue is up. The industry has no incentive to lie about those increases—they are subject to audit from the Australian Tax Office.

There is another source of data— household expenditure data collected and published by the Australian Bureau of Statistics. The anti-tobacco lobby have latched onto that data. Household expenditure on tobacco is at the lowest level since 1959 – but has only shown a decline since the 1980, unlike per capita tobacco consumption data.

The *Tobacco in Australia* report shows that this measure underestimates tobacco consumption.

That is not surprising, really. Expenditure is a measure of quantity consumed multiplied by price. So depending on what is happening to prices, expenditure on tobacco and consumption of tobacco can move in opposite directions. Much has been made of the fact that the ABS tries to eliminate price variation in its household expenditure series. But this is an imperfect process and the prices being used in the current ABS household expenditure series date from 2011-12. The ABS has also had to inform journalists that their 'volume' index does not represent quantities in kilograms or tonnes.

The anti-tobacco lobby have engaged in a classic Type III error— the correct solution to a completely different question. The plain packaging policy objective isn't to reduce household expenditure on tobacco, but to reduce actual consumption of tobacco.

By simply pointing to an inappropriate number and then claiming the veracity of the number given its ABS origins is to deflect debate. Numbers only have meaning in context. Numbers only have meaning given how they are calculated. We should never be lulled into a false sense of confidence given the existence of a number. More importantly, ABS numbers are subject to revision and the one number that the anti-tobacco lobby is relying on will almost certainly be revised.

The difficulty of simply throwing out numbers can be illustrated by a claim from the Health Department. It quoted private Treasury data showing that tobacco excise fell in 2013 relative to 2012, presumably demonstrating a decline in consumption. Yet the tobacco industry argues that this was due to paying excise when substituting plain packaged tobacco for branded tobacco in late 2012 and then receiving refunds in early 2013. Double counting occurred—within the same financial year, but different calendar years. Given that the Treasury would normally operate on a financial year basis, the private release of that data was meant to confuse observers into believing

that consumption has fallen after the introduction of plain packaging.

The bottom line is this: be wary of numbers that simply get thrown out in debate with little context, that don't directly address the issue at hand, and where you suspect the person doesn't really understand the number being quoted. Numbers subject to tax audit are more likely to be correct that numbers collected by surveys.

Establishing the efficacy of the plain packaging policy will take painstaking statistical analysis over a long period of time. This will involve having to untangle the effects of excise increases and changes in smoker behaviour, and substitution to illegal tobacco products. We can't know that the policy has worked simply because a public health official tells us so. Or simply because a single figure—a figure subject to revision—currently suggests expenditure is down, when what we want to know about is consumption.