

## TAXING ALCOHOLIC BEVERAGES IN NEW ZEALAND

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Brian Easton<sup>0</sup>

I thought a useful contribution would be to describe the recent history of alcohol taxation in New Zealand, explaining the principles underlying the changes and discussing some unresolved issues.

### **Some Preliminaries: The Impact of Higher Prices on Unsafe Drinking [1]**

Before doing so, I need to say something about the obvious, which is nevertheless frequently overlooked in discussions on the economics of alcohol, when it assumes there is a single price. When we talk of ‘the’ price of alcohol we usually mean the average price, but that is not what purchasers confront. Even if we confine ourselves to off-licence sales, there are a myriad of prices for different drinks. Different consumers respond in different ways. An alcoholic or someone who is short of money and wants to binge drink will look for the cheapest drink, measured by the cost of the absolute alcohol. Others, perhaps purchasing a bottle of wine, will take little interest in the absolute alcohol content – assuming it is the same in each bottle – but will trade off their preferences and the quality of the product against price, subject to what they can afford.

The implication is important for tax policy. If, for any reason, the price of the alcohol rises, consumers may exhibit one of two extreme responses (plus the spectrum between). They may reduce their consumption of absolute alcohol or they may purchase the same amount of absolute alcohol, but buy a lower quality drink. A rise in excise duty (or whatever indirect tax) only reduces the level of absolute alcohol consumption insofar as the first response occurs.

That means that where a rise in excise duty is intended to curb unsafe drinking, it will only succeed insofar as it reduces the absolute alcohol consumed in unsafe circumstances. Although I know of no systematic empirical evidence, it seems likely that those who purchase the lowest price of absolute alcohol drinks are most likely to practice unsafe drinking. That means they are likely to be most influenced by a rise in excise duty.

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<sup>0</sup>1. Economic and Social Trust On New Zealand, 18 Talavera Tce, Wellington, New Zealand; [www.eastonbh.ac.nz](http://www.eastonbh.ac.nz)

Of course some unsafe drinking occurs when the more expensive (measured by the price of absolute alcohol) drinks are consumed. For instance unsafe drivers may have purchased very expensive wine before driving home. A rise in price of the liquor may not deter them from consuming the same quantity of absolute alcohol if they will to purchase a lower quality beverage. So their unsafe drinking is relatively impervious to a higher excise duty. We need some other policy instruments to curb the possibility of harm. Drink-driving requires rigorous enforcement of effective laws.

There are a couple lessons from this. The first is that higher prices for alcohol will not curb all unsafe drinking. It is but one of a set of policies.

The second is that where higher prices are most likely to matter where the price of absolute alcohol is lowest and where, conveniently for policy purposes, a large part of unsafe drinking occurs. From which I conclude that the key price to target to reduce harm from drinking alcohol is the minimum price of absolute alcohol, rather than the average price of an alcoholic beverage.

A series of policy decisions in New Zealand, which I will now describe, have led us to a practical implementation of that targeting.

### **The New Regime**

Until the mid 1980s, taxation on alcoholic beverages was on an ad hoc basis, with excise duties and wholesale taxes on beer and spirits, and a sales tax on wine. In October 1986, the entire indirect tax system was dramatically reformed with the imposition of a GST (goods and services tax) on all purchases, the exceptions being where it was not practical to impose the tax. This means that GST is imposed on all beer, wine and spirits just as their producers and distributors have to pay income, corporate, and any other taxes in the course of their business.

There was a purist element among the official advisers, supported by the liquor industry, who argued that there was no case for taxing alcohol differently from other products. But had only general taxes been imposed on alcoholic beverages, their relative price to other goods and services would have fallen. The loss of revenue would have required a higher GST rate, or lower reductions in income tax. Fiscal prudence, political realities, and the vigour of the alcohol control lobby resulted in the imposition of a excise duty based on the quantity of absolute alcohol, so that wine and beer face the same tax for the same quantity of absolute alcohol. (I mention the exceptions below.)

The officials' justification is that insofar as absolute alcohol was an economic 'bad', there was no compelling evidence that the bad varied between different beverage forms – even if

there are many anecdotes to that effect. (There may also be a case to tax differently different drinking venues, to vary the rate by the quantity of absolute alcohol in a drinking session, but there is no practical way of imposing differential taxes to reflect the different circumstances.)

GST is levied on excise duties. It makes the tax system easier to administer. But also, when GST was raised in July 1989 there was no need to make separate provision for raising the excise duties to maintain the prices of alcoholic beverages relative to other consumables.

Every six months duty levels are automatically increased by the same amount as consumer prices. This is directed by statute, so it is not an abrogation of the principle that parliament sets tax rates. The advantage of this automatic mechanism is that the government does not have to expose itself by passing legislation or – as frequently occurred before the change – not doing anything and allowing the real value of the taxes on liquor to fall.

The new tax regime occurred during other major economic reform, also including liberalisation of the supply of liquor with quality licensing, with no quantitative restrictions on outlets. There has also been increased policing of potential harmful drinking, including tougher enforcement on drink-driving and host-responsibility, backed by public health campaigns.

There has been a reduction in the quantity of absolute alcohol consumed since the reforms. On some indicators there has been a reduction in some harmful drinking, although there is no comprehensive set of measures. Moreover, unsafe drinking among teenagers has risen.

### **Some Consequences**

An absolute alcohol based taxation regime has two consequences. First, as absolute alcohol content rises, the tax payment rises in proportion. The tax paid is the same whether one has the same number of standard drinks from cans of beers, flavoured alcohol beverages, or bottles of wine. The payment is the same whether the drinking occurs in a single session or over a number.

Second, the level of tax is independent of the price or quality of the drink. Thus the excise duty paid is the same on the cheapest bottle of wine as it is on a very expensive one. This partly reflects the principle that the indirect tax system has not the purpose of redistributing income. (In the previous system higher sales taxes tended to be imposed on luxury goods, although subsequent research showed that the redistributive effect was negligible.) New Zealand policy is to have redistribution goals pursued through the income tax and social benefit systems.

(While a lift in alcohol excise duty will raise prices for all drinkers, many will be better off insofar as the resulting tax revenue will be recycled back. Under some assumptions, over 70% of adults will be better off as a result of this recycling (and also from reductions in harm). Because heavy drinking is concentrated in a small part of the population these drinkers will be made worse off as a result. On the other hand heavy drinking is the main source of harm, and so the heavy drinkers would be paying for a greater share of the harm they generate.) Lower cost drinks have a higher proportion of their sale price as excise duty. So the flat excise tax compresses prices relative to the cost of production. Practically, the regime favours those who are primarily concerned with drinking an alcoholic beverage relative to those who merely want to consume absolute alcohol. It is also possible that the lack of poor quality New Zealand wine – the lack of cheap local wines on the supermarket shelves – partly reflects this tax incidence on producers.

## **Exceptions**

There are some exceptions to the principle of the same rate of excise duty being applied on all absolute alcohol.

1. The minimum threshold. Products with an absolute alcohol by volume (aabv) of less than 1.15% are not taxed. This threshold appears to be for administrative convenience. ALAC NZ takes the view that the threshold could be raised to 2.5% aabv, reducing compliance costs, and making low alcohol beers even more price attractive relative to standard beers. (As one senior staffer remarked, ‘one would drown before getting drunk on 2.5% beer’.)
2. Categories: Because it is difficult to precisely control and cheaply measure the aabv for some alcohol products, some duties are set by beverage volume instead of by absolute alcohol content. Thus all wine (below 14% aabv) is taxed as if it is 10% aabv. Since most wine contain a higher proportion of absolute alcohol, it is undertaxed relative to beer.
3. When the rates were being realigned in the 1980s, it was clear that the duty on spirits far exceeded the duties on wine and beer, perhaps arising from the belief that spirits drinkers were more affluent. So a differential was maintained, in order not to disturb relativities too greatly, with the rate for beverages with on absolute alcohol above 23% aabv (spirits) set higher – about double – than for beverages with on absolute alcohol below 23% aabv (wines, beers and FABs). (The consumer price adjustment provision was not applied to the top rate until March 1992.)

## **The May 2003 Reform**

The regime was incrementally reformed in May 2003. What happens also suggests a minor

change in fiscal policy towards greater concern about unsafe drinking.

In late 2002 the Alcohol Advisory Council of New Zealand commissioned me to review alcohol tax. My report *Taxing Harm: Modernising Alcohol Excise Duties* broaches a whole range of issues, many of which are touched upon in this paper. Unusually for such non-official reports, some of its recommendations were implemented quickly – within six months of publication. As its author, I would like to say this promptness reflects the sheer intellectual force of the report. However the truth is that it identified a fiscal anomaly in the system was dealt with quickly, because it involved revenue leakage, as well as the unsafe drinking of cheap alcoholic beverages.

The anomaly arose because the regime constructed in the 1980s was based on various assumptions about the forms of available alcohol. As is typical, the policy aim was for a robust regime which would not need to keep being amended as new products were created. Thus Flavoured Alcoholic Beverages (FABs, a.k.a Ready-to-drinks, RTDs, and alcopops), introduced a little later, were covered. However the two step excise duty created a possibility for commercial gain.

As explained above, the key economic variable to target to reduce harm from drinking alcohol is the minimum price of absolute alcohol, rather than the average price of an alcoholic beverage. So I collected information on the cheapest source of alcohol from off licences.

The ‘winner’ – if one may use that term – was ‘light spirits’, 23% aabv, which sold in late 2002 for as little as \$7.95 in 1125ml bottles, at a time when the minimum hourly wage was almost exactly the same amount (\$8.00). A bottle contained over 25 standard (10ml of absolute alcohol) drinks at an average cost to the consumer of 31 cents. So for just on an hour’s work, a determined drinker could purchase enough alcohol to kill her or himself. On two occasions a coroner said someone did.

Providing absolute alcohol at the same price (these are late 2002 rates):

- a dozen 330ml cans of beer would cost \$6.33, whereas the cheapest I could identify was \$11.95,
- a 1.125 litre bottle of full spirits (at 37.2% aabv) would cost around \$12.85, instead of \$25.95 at the cheapest, and
- a 750ml bottle of wine would cost \$2.76. The cheapest was \$7.95 (although recently, imports as low as \$5.95 a bottle have been available on supermarket shelves).

Why were light spirits so cheap? They are basically flavoured industrial spirit, diluted to 23% aabv, with a couple of tax breaks. The first tax break was that the spirits was taxed at the lower excise duty step, not the higher step which had been set for spirits. And second, because

the lower step was intended for fortified wines and liqueurs and the like, it was based on volume of beverage rather than volume of absolute alcohol. The calculated rate assumed that the aabv was 18% rather than in the case of light spirits the actual 23%. In effect every fifth drink was excise duty free. (Compared to the excise rate for spirits, six out of ten drinks were free). Additionally, the lower tax reduces some of the holding costs and retailer's margin, although production, transport and packaging costs would not be affected.

The government removed these anomalies in May 2003. Today all drinks above an aabv of 14% (the maximum for wine) are taxed at the high step rate and on the basis of actual aabv. The retail price of light spirits may have doubled – 'may' for the product has disappeared from the shelves, indicative it was a source of absolute alcohol rather than a beverage with alcohol. .

I argued that the high step rate should be on all spirits, but that the low step rate should be continued on fortified wine and liqueurs above 14% aabv. This second proposal was not adopted and all liquor above 14% aabv is taxed at the higher step. Journalists focussed on little old ladies in retirement homes who would have to give up their nightly glass of sherry because of the price hike, while sherry producers who would have to abandon production. I did not see a single story about drinking oneself to death with light spirits. In fact, the addition to one's nightly glass of sherry was in the order of 5 cents. I understand there has been little impact on sherry sales, and there has not been a single case of a little old lady being bankrupted as a result of the price hike.

We do not have systematic data yet on the overall impact. I am, however, confident that alcoholics are paying more for their liquor and that teenagers are drinking less absolute alcohol, than had the change not been made.

**Current Rates**

The current excise duty rates above 1.15% aabv can be summarised as follows:

**EXCISE DUTY RATES\* ON ALCOHOL (January 2005)**

	1.15-2.5% aabv	2.5-14.0% aabv	Above 14.0% aabv
Beer	32.967c/l**	\$21.982/l of aa	\$40.035/l of aa
Wine		\$2.1982/l	
Spirits & Bitters		\$40.035/l of aa	
Other***		complicated****	

\* GST not included

\*\*In effect this treats all beverages in the range as having aabv of 1.5% (as .015 x \$21.982 = 32.967);

\*\*\* Liqueurs and cordials; Other fermented beverages (such as cider, perry, mead); Ice cream and other edible ice.

\*\* \*\* 2.5-6.0% aabv: like beer;

6.0-9.0% aabv: \$1.7585/l (in effect treating it all at 8.0% aabv)

9.0-14.0% aabv: like wine (in effect treating it all at 10.0% aabv)

## **Why Two Steps?**

There has been considerable unease as to why the excise duty rate on alcohol is not uniform, the differential appearing to reflect past historic practices. My report argues that when the policy concern is potential harm from drinking, the target variable should be the minimum price of absolute alcohol. This will be determined, before tax, by the cheapest beverage to produce and distribute. In practice in New Zealand that is spirits.

Suppose we decide that in order to target the minimum price of spirits it is necessary to set an excise duty on spirits of \$40.035 per litre of absolute alcohol. Were there but one rate it would also be levied on beer, wines and other alcoholic beverages, raising their current prices substantially because these beverages are much more expensive to produce and distribute.

Instead, the other alcohol forms are excised at a lower rate, ideally to keep their minimum price comparable to that for spirits. A strategy to reduce alcohol induced harm need not be punitive on the drinking of alcoholic beverages.

The spirits producers can reasonably grumble that the two step excise reduces their market relative to that for beer and wine. They may also grumble over the exact parameters. But the logic of a minimum price strategy which is not punitive, is that two steps reflect differences in costs of production. (Note that for the same total revenue, a uniform excise rate would reduce the minimum price of absolute alcohol, which is likely to increase harm, especially among alcoholics, heavy drinkers and teenagers.)

The government has not publically stated it has adopted a minimum price of absolute alcohol strategy. Governments only adopt such policies cautiously. A practical issue is that we do not have the data base – beverage prices statistics are collected as averages not minima.

## **The Wine Anomaly**

My sense of elegance and fairness finds the excise rate on wine uncomfortable. It is levied as if wine has an aabv of 10%, but most wine has a higher alcohol content (up to 14% aabv), and wine drinkers can have a discount of up to almost 30 percent relative to other drinkers of alcoholic beverages.

Now the anti-harm lobby need not be concerned with elegance and fairness, but once light spirits are properly taxed, some of the cheapest alcoholic beverages are cask wines (often the cheapest come from overseas). My report recommended that cheap wines be taxed precisely according to their absolute alcohol content, but that more expensive wines – say over \$15 a litre – be taxed as at present. The suggestion has not been adopted, possibly because of the higher compliance cost. But it is a nice illustration of the principle that the lobby should focus upon cheap alcohol, where the economic policy instrument is its most effective.

### **The Right Excise Duty Level?**

There is little agreement as to the appropriate level of excise duty. Treasury papers sometimes have comparisons with the cost of alcohol harm to the exchequer, with the apparent intention that revenue from excise duties should offset this fiscal cost. There are two reasons why this underestimates the optimal excise duty.

First, there are costs to society other than those which accrue to the exchequer. Second, the socially optimal tax rate is the marginal cost, not the average cost. Unlike tobacco, the cost of alcohol harm rises with the quantity drunk in a session: the sixth beer is somewhat more socially expensive than the first one. Taxing at the social cost of that last drink, that is above the average cost of all the drinks, would be socially beneficial – especially if it deters the consumption of that last high social-cost drink.

We are a long way from calculating what is the correct social marginal cost. It remains an area for continuing debate. The ideal would be a tax rate that depended on the quantity drunk and drinking circumstance, perhaps also with the drinker's personal characteristics. Practically the options are more limited.

### **Conclusion**

Because alcohol consumption and alcohol harm are such complex phenomenon, we are a long way from the ideal excise duty regime. However as a practical system, the evolving New Zealand approach with its focus on the consumption of absolute alcohol has much to commend it.

But tax is only one of a number of policy instruments available for reducing harm. By itself it would be a very blunt one. It is important that we ensure that other effective instruments are implemented as well.

### **Note**

[1] This paper refers more to reducing 'unsafe drinking' rather than minimising harm which is the New Zealand policy goal. Unsafe drinking is where there is a potential to generate harm

but on many occasions unsafe drinking does not cause harm. Safe and unsafe drinking is sometimes distinguished by a measure of 'risky' drinking, the number of standard drinks in a drinking session (with different levels for men and women). While a useful statistical distinction, and a helpful rule of thumb, the limits of safe drinking are dependent upon many more factors than can be captured by such a risk measure.