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Reform of the Regulation of Liquor*
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Abstract

This paper reviews the tax bases and rates currently applied to alcoholic beverages in Australia. It then considers changes to the tax base and rates. It advocates a single volumetric base with the rate at least equal to that currently levied on spirits other than brandy. However, improved taxes on alcoholic beverages cannot eliminate the externals harms imposed by some drinkers on other persons. The guiding principle for reform of both taxes and other regulations is that they should focus on the small minority of drinkers who cause harm. Effective policy reform will require careful policy design and a commitment from politicians. Some reforms are mooted.

Key Words

External harms, supply side regulations, tax rate, tax base, penalising harmful drinkers

The June 2010 issue of *Economic Papers* published articles by Anderson (2010), Freebairn (2010) and Srivastava and Zhao (2010) on the reform of taxes on alcoholic beverages. These articles were highly informative and advanced the debate about the taxation of alcoholic beverages considerably. My comments are designed to use the lessons of this debate to refine the thinking about the desirable direction of changes to the base and rates of taxes on these beverages and to put taxation into a broader framework of regulation, including licensing of premises selling to retail customers and other actions. The impetus for this debate comes from the recommendation of the Henry Review of Australia's Tax System (Henry, 2010) in relation to alcohol taxation. Since the papers were written, the new Gillard Government has agreed to hold a Tax Summit by June 2011 to discuss all of the recommendations of the Henry Review.

1. The Current Taxation Regime

What have we learnt about the taxation currently levied in Australia on alcoholic beverages?

• Tax rates on different alcoholic beverages differ very widely.

This is partly because of differences in the bases of the taxes and partly because of differences in the tax rates for a given base. For beverages other than wine, the taxes are part of the excise tax system when the product is produced and consumed in Australia, with a matching rate if it is imported. The tax rates are specific with a volume base, that is, dollars per litre of alcohol or, in the case of beers, per litre of alcohol in excess of 1.15 per cent of the volume. The excise tax rates differ among different types of beverages and, for some beverages such as beer, there is a further differentiation according to sub-types; six categories of beer are distinguished in the excise tax system, low, medium and full strength beers and for each strength there is a different rate for draught and for non-draught or packaged beer. At October 2010, the tax rates on different types of beer vary from the low of \$7.25 for draught beer not exceeding 3 per cent by volume of alcohol to the high of \$42.31 per litre of alcohol for bottled or can ("packaged" beer) exceeding 3 per cent by volume of alcohol (Australian Tax Office, 2010). The wine equalisation tax (WET) is levied, for both Australian-produced and imported wines sold in Australia, on the base of the

wholesale price. The rate is a uniform rate of 29 per cent of the wholesale price (or for cellar door and other retail sales, half of that, 14.5 per cent, of the retail price) but a producer in Australia or New Zealand can claim a (maximum) rebate in one financial year of A\$500,000.

Anderson (2010) calculated the rates of tax in terms of consumer tax equivalents (CTE) as a percentage of the wholesale pre-tax price and in terms of dollars per litre of alcohol. The former is the standard measure of the rate of tax on a consumable commodity. It is the rate that is relevant for calculating the effect of the tax on the quantities consumed by buyers and the loss of consumer welfare. The latter facilitates comparison of the taxes levied on alcohol consumed. As of July 2008, he calculates that the CTE on wine was 29 per cent and the comparable rate for beer was 76 per cent and that for spirits was 171 per cent. His estimates of the tax rates, in terms of \$ per litre of alcohol at that time, are \$6.0, \$18.1 and \$48.3 for non-premium, commercial premium and super-premium wines respectively, and \$38 for beer and \$64.1 for spirits. The rate varies for the wine types because the prices of wine vary among these categories. As a generalisation, in terms of both the CTEs and the \$ per unit of alcohol, wine is relatively lightly taxed and spirits are relatively heavily taxed, with beer in the middle.

These rates are average for each group of beverages. For both the CTEs and \$ per unit of alcohol, there is a considerable variation within the group. The CTEs for beer and spirits vary considerably within these two groups both because the rate in terms of \$ per unit of alcohol varies among beverages and because the (wholesale) price varies between beverages and also between outlets. The \$ per unit of alcohol too are averages disguising considerable intra-group rate variations that arise, in the case of the ad valorem WET, because of differences in intra-group prices and, in the case of beer and spirits, differences in the tax rates in terms of \$ per unit of alcohol.

• Compared to other high-income countries with which we might compare ourselves, excise tax rates, in terms of both CTEs and \$ per litre of alcohol, are higher on super-premium wines, beer and spirits and those for non-premium wine are lower in Australia than the corresponding averages in other high-income countries. (These comparisons do not take account of cross-country differences in licensing fees and

other charges on premises selling alcoholic beverages nor in differences in mark-ups due to the restriction of sales in some countries to government-owned outlets which have the effect of implicitly taxing alcoholic beverages. The later are important in some Scandinavian countries in particular. These comparisons also do not take into account cross-country differences in GST or VAT rates.) However, cross-country comparisons of tax rates are not relevant to the issues of efficient corrective taxation of alcoholic beverages, except perhaps for some indirect effects on the industry; for example, the discouragement to Australian wineries to produce super-premium wines may have had an effect on our consumption patterns and on our efficiency vis-à-vis other exporting countries with which we compete.

• Drinking participation rates and the incidence of harmful drinking vary widely among demographic groups differentiated by age, gender and employment characteristics. Srivastava and Zhao (2010) present a wealth of data, derived mainly from the unit records of the Australian National Drug Strategy Household Surveys (NDSHS) conducted by the Australian Institute of health and Welfare. They also document what beverages are consumed by different demographic groups. Given the differences in tax rates between different beverages, this information is useful as a guide to reforms.

Srivastava and Zhao focus on binge drinkers. They state that "The adverse consequences of alcohol consumption are generally linked to heavy or binge drinking." Binge drinking among young drinkers has increased in recent years and is often characterised as an epidemic. Srivastava and Zhao (2010, Table 5) show that the preferred drinks of heavy bingers are in order regular-strength beer, (52.5 per cent), bottled spirits (44.6 per cent) and bottled wine (43.2 per cent). "The results... also indicate that binge drinking is not strictly associated with the alcohol strength in alcoholic drinks. Anecdotal evidence shows that often binge drinkers would mix drinks starting with beer and moving on to RTD [ready-to-drink] products." (Srivastava and Zhao, 2010, p. 218)

2. Reform of the Taxation Regime

What do these findings imply for the desirable reform of taxes on alcoholic beverages? The three papers are inconclusive on this aspect. Anderson emphasises

the relatively high rates of taxation in Australia compared to other countries on superpremium wines, though Srivastava and Zhao show that bottled wine ranks below
regular strength beer and bottled spirits as the drink of choice of heavy binge drinkers.
Srivastava and Zhao emphasise the importance of spirit-based ready-to-drink
beverages in binge drinking. Freebairn (2010, p. 209) examines the nature of the
optimal tax regime, using a model of heterogeneous consusmer groups. He finds: "A
simpler option is to focus on a broad measure of alcohol consumption. Granted that
this option likely means a lower correlation between all alcohol consumption and
external costs compared with more targeted tax or regulatory bases, it has the
advantages of a lesser draw on required information and tax administration costs."

In proposing a reform of the taxation of alcoholic beverages, we need to be specific and clear about the social costs that result from the consumption of alcoholic beverages. The three papers list a number of costs or harms that result from the consumption of alcoholic beverages. These include the costs of alcohol-induced ill health, road accidents, abuse of spouses and children, assault and injuries to other persons, property damage and reduced labour market participation and productivity. This list is not exhaustive.

From the point of view of public policy, there is a crucial distinction between harm inflicted only on the drinker him/herself (such as the private costs of ill health and reduced labour force participation and productivity) and harm inflicted by the drinker on others (such as injuries or death inflicted on other persons through assault or a road accident). Freebairn considers the costs of self harm and lists the first best policy as the provision by the government of information to drinkers who do not understand or underestimate the risks of self-harm. This ranking is generally correct but there are two exceptions. One relates to cases where the costs imposed on the drinker are shifted to others - as in alcohol-induced accidents where the social costs are typically borne by other members of an insurance pool or by the taxpayer funding free treatment in emergency wards of public hospitals. The second relates to cases where drinkers are not rational or underweight future costs - as in those who respond to certain environmental cues (see Clarke, 2008).

All three writers treat the costs inflicted on others as an application of the economic theory of externalities, that is a cost imposed on some person(s) other than the drinker. Anderson (2010, p. 218) and Freebairn (2010, pp. 203-204) point out that, because the externality is associated with consumption activities rather than production, the externality should be represented as a divergence between the marginal private benefit of the consumption of alcohol beverages and the marginal social benefit. This divergence leads to over-consumption of alcoholic beverages. Corrective action requires a reduction in the consumption of these beverages.

Not all consumers generate an externality. Although we do not know the percentage of drinkers who impose costs on others over some period, say one year, we can safely say that it is a small minority of drinkers. Moreover, "all three alcoholic types, beer, wine and spirits, are most commonly consumed in one's own home." (Srivastava and Zhao, 2010, p. 242). Some home drinkers impose external costs on others by - for example, drink driving or spouse or children abuse. For those drinkers who do impose costs on others, they do so on only a fraction of the occasions they drink, for many only once in a lifetime.

This variation in the harm imposed on others among drinkers has important consequences for optimal taxation, as Freebairn noted. Optimal corrective action calls for action when and only when external costs are imposed. There should be a zero rate on those drinkers who cause no harm. It is not, however, possible to impose alcohol taxes so that they fall only on the small percentage of drinkers who cause external costs. All consumers must be taxed at the same rate. It is not even possible to tax drunkenness as a proxy for external costs. All we can do is tax consumption in the hope that this will lower consumption and the lower consumption in turn will lower the incidence of harm. Unlike the textbook case of a production externality where there is a one-to-one correspondence between the production activity and the generation of the harmful pollutant, the tax base for alcoholic beverages is a proxy for harm caused by some consumers and a poor one at that. Thus taxes on alcoholic beverages must inevitably tax a majority of drinkers who cause no social harm. (The taxation of other "sin" commodities, particularly tobacco and gambling, face the same difficulty.)

Furthermore, in order to discourage consumption, tax rates must be high as the demand for alcoholic beverages is generally found to be inelastic. For this aspect of taxation, the CTE is the relevant measure. Some alcohol beverages are subject to rates of taxation in terms of CTEs of over 100 per cent. Here, we should take note of another result from the theory of commodity taxation. For a consumer subject to a consumption tax, the welfare losses increases with the rate of tax but it increases not in proportion to the rate of tax but in proportion to the square of the tax rate. Very high tax rates, therefore, impose exceptionally high costs on consumers. For example, doubling the CTE tax rate (from, say, 20 to 40 per cent) quadruples the consumer loss.¹

Bearing these features of taxation in mind, we can now discuss the desirable reform of the taxation of alcoholic beverages. There should be much greater uniformity in the rates of tax on different beverages because there is substantial substitutability among beverages. Low rates of tax on some beverages leads to avoidance of heavier rates of tax and lowers the overall reduction in the consumption of alcoholic beverages for a given average rate of taxation.

First, we should end the particularly low rates of taxation on some beverages. The elimination of the low rates of tax on alcopops in April 2008 was a desirable reform. This tax almost doubled the tax rate on spirit-based ready-to-drink beverages (from \$39.36 to \$66.67 per litre of alcohol).² The remaining glaring instance of favourable treatment is the producer rebate available to wineries. A wine producer in Australia or New Zealand can claim a (maximum) rebate in one financial year of A\$500,000 which equates to approximately A\$1.7 million of (wholesale) sales. For small-volume wineries, it makes their sales effectively exempt from the WET. Freebairn (2010, p. 201n) noted that this rebate is "...a regional development strategy. But

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¹ This result holds strictly only if the elasticity of supply is infinite so that the whole of the tax is borne by the consumer, as is the case for a tradeable good in a small open economy. If this assumption is not true, the loss is proportional to the square of the increase in the price to the consumer.

The squaring effect has been widely used in the analysis of the effects of tariffs and other policies affecting the prices of tradeables; see Lloyd, Croser and Anderson (2009).

² Previously RTDs had been classified as "other excisable beverages not exceeding 10 per cent by volume of alcohol".

there is no rationale to support wine sales but not other regional activities such as food purveyors and other regional tourist operators". One should add that the rationale for any assistance to particular regions must also be questioned. In fact, this concession is really an income support measure. In the case of wineries selling direct to the public on site, it does little to lower the price of these beverages since the wineries take advantage of this measure to raise cellar door prices up to or close to those in retail bottle shops. And it does nothing to encourage aggregate wine production because the subsidy ceases once sales have reached A\$1.7 million, except perhaps to prevent some winery closures. This favouritism should be ended by eliminating the rebate.

Second, there should be only one base for taxing this group of consumables. Having one set of taxes based on wholesale sales and another on the alcohol content leads inescapably to widely different rates of taxation on individual beverages, both in terms of CTEs and \$ per litre of alcohol.

The base should be the volume of alcohol consumed because it is the cumulative consumption of alcohol which causes drunkenness and leads to behaviour that, in some individuals, causes social harm. If there were a single uniform rate of tax on the alcohol per litre, the CTEs would vary because of variation in the sale price per unit of alcohol. However, this variation would not be large and the CTE rates would become much more uniform than at present.

Should we have a single or uniform rate based on the alcohol content of beverages? Recommendation 71 of the Henry Review followed this course.

"All alcoholic beverages should be taxed on a volumetric basis, which, over time, should converge to a single rate, with a low-alcohol threshold introduced for all products. The rate of alcohol tax should be based on evidence of the net marginal spillover cost of alcohol." (The Henry Review, 2010, Part One, page 93).

Lloyd (1985) has a variant of this uniform rate, based on a model of an individual drinker causing social harm.³ He shows that the optimal rate of tax on beverages is a uniform rate which taxes equally each marginal <u>dollar</u> spent on a unit of alcohol by the consumer. This base is the alcohol content of a beverage divided by its price. For a given alcohol content, it taxes more heavily those beverages which are cheaper per unit of alcohol purchased. While strictly correct, this is unnecessarily complex. A uniform tax based on taxing all alcohol content uniformly is much simpler.⁴

A possible refinement is a progressive structure with the tax rate in terms of \$ per litre of alcohol increasing with the alcohol content. Some of the submissions to the Senate Committee investigating the alcopops tax suggested this. Some wanted an exemption for low-alcohol drinks. A single tax on alcohol automatically levies a low rate of tax in terms of the CTE on low-alcohol-content beverages such as light beer. Those recommending a lower end exemption want to strengthen this effect. This is because, presumably, it would increase the price differential but, given a low alcohol content of, say 1 per cent, this would make little difference. A stronger argument for this exemption is that it avoids imposing costs on drinkers of low alcohol beverages who do not impose harm on other members of society. Others submissions wanted to make drinks with an alcohol content above some limit (such as 20 per cent) subject to a higher rate.

What should the tax rate on the alcohol content of alcoholic beverages be? A single rate has the feature that it would change substantially the relative prices of beverages. The tax rate per litre of alcohol on wines needs to be raised to that applying to beer. The difficult case is spirits which are currently taxed at a much higher rate in terms of the \$ per litre of alcohol consumed. For beers and wine, raising the tax to that currently applying to spirits would increase the tax rates substantially. For bottled or

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³ His analysis is based on a harm which affects only the drinker but it extends to any harm which is a function of cumulative consumption. His recommendation does have the advantage of emphasising the importance of not having particular beverages such as cheap wine and, before the change, alcopops which are subject to low rates of taxation in terms of the tax per unit of alcohol

⁴ Sometimes an argument is made that consumption of certain alcoholic beverages is less harmful then others. The most common example cited is that of wine where it is argued that the consumption of wine typically with food leads to a lower rate of harm. This may be true of wine consumed in the home on average but it is not true of cheap wines consumed by chronic heavy drinkers.

canned beer exceeding 3.5 per cent by volume of alcohol, the increase would be around 120 per cent⁵. For draught beers and low strength beers, the percentage increases would be greater. Conversely lowering the tax rate for spirits other than brandy to that currently applying to full strength bottled or canned beer would lower the rate applying to these spirits by 55 per cent.⁶ The alcohol strength of spirits is many times that of beer, even the strongest beer, and, therefore, it takes less fluid consumption and less time to get drunk on spirits than on beer. Some heavy and binge drinkers regard spirits as a substitute for beer. Consequently, lowering the tax rates on spirits would cause some of these heavy and binge drinkers to substitute spirits for other beverages.

This problem could be avoided by using a progressive two-rate system. The lower rate could apply to all beverages other than spirits. This could be the present rate, as indexed. The higher rate could apply to spirits.⁷ This could be the rate currently applying to spirits other than brandy, as indexed. This structure would eliminate cheap forms of alcohol and lead to a moderate increase to the average price of alcoholic beverages.

In considering the setting of the rates of tax, we need to note that the increase in the price to consumers, in percentage terms, is a fraction of the increase in the rate of tax on alcohol in percentage terms. Consider full strength beers. As noted above, if a volumetric tax on the whole alcohol content were set at the rate currently applying to spirits other than brandy, the percentage increase in the tax rate is around 120 per cent. The consumer tax equivalent of the present tax is 76 per cent (Anderson, 2010, Table 2), implying that the tax component is 43 (=76/176x100) per cent of the price to the consumer. Suppose that, with the introduction of a single volumetric tax, the tax

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⁵ This is equal to [71.67 -32.59]/32.59 per cent. The change mooted would change both the rate of tax (from 42.31 per litre to 71.67 per litre) and the base. Currently the base for beer applies only to the alcohol content in excess of 1.15 per cent whereas that under a zero lower end exemption applies to the whole alcohol content. If the alcohol content of full strength beer is say 5 per cent, a tax of 42.31 per litre in excess of the 1.15 per cent exemption is equivalent to a tax of only 32.59 dollars per litre of alcohol.

⁶ ([71.67-32.59]/71.6x100) per cent.

⁷ Fortified wines also have a high alcohol content but they are unlikely to be substituted for spirits if taxed at a different rate.

increase is passed on 100 per cent, as in the diagrams of Anderson and Freebairn. The percentage increase in the consumer price is then only $51.6 \ (=120 \times 0.43)$ per cent. It is the percentage increase in the price, together with the elasticity of demand, that determines the effect on the quantity consumed.

A single uniform rate has the great advantage that it sends the message to all drinkers that it is the alcohol which is the dangerous component of drinking. This is my preferred structure. If there is a single rate for all alcohol, I recommend raising the tax rate for all alcoholic beverages to at least the level applying to spirits other than brandy. The rate chosen should depend on the best evidence relating to the likely effect of the tax in reducing harms on others caused by alcohol consumption and the deadweight loss to consumers causing no harm. This would lead to a substantial but not huge increase in the prices of alcoholic beverages and a substantial increase in revenue from the taxation of alcoholic beverage, which could be used to finance other measures in a comprehensive reform package (see below).

The rate could be fined tuned after the changes mooted above if any evasive responses from drinkers were observed.

Another lesson from this analysis is that taxing alcohol as a strategy to reduce harmful or excessive alcohol consumption has severe limits. With the constraint of a uniform rate on all alcohol, the rate of tax that would maximise social welfare requires a disaggregated calculation. Freebairn (2010, pp. 210-11) distinguished between the demand curve of the group who cause harm and that of the group who do not. Graphically, the marginal social benefit of the former group is lower than their demand (=marginal private benefit) curve whereas the marginal social benefit curve of the latter is the same as their demand (=marginal private benefit) curve. The higher the proportion of all drinkers who cause no harm on others and therefore the higher the deadweight loss of welfare from taxing these drinkers, and the lower the elasticity of demand for those who do, the lower the optimal tax rate.

But we need to go further and take account of the heterogeneity within the group of drinkers who cause external harms. The divergence between the marginal and social benefit curves is individual-specific and will differ greatly among these individual

drinkers. For many, it will be large. Indeed, there are some for whom the social costs exceed the private benefits of consumption because when harm occurs it is frequently large. For them, the net social benefit of their consumption, measured at the present tax rate, is negative. A tax equal to this divergence would require a tax rate of several hundered per cent in some cases. In practice, the tax rates would have to be set at a much lower level. It may also be that the elasticity of the demand curves of heavy and binge drinkers are lower than those of other drinkers (Freebairn, 2010, p. 212). Thus, raising taxes on alcohol may not, by itself, have a large effect on the consumption of heavy or binge drinking.

The effect of a decrease of consumption on the incidence of harms is more difficult to calculate. Recognising within-group heterogeneity has a second effect here. For the group, Freebairn draws the social marginal benefit curve as uniformly below the private benefit curve. However, it is the relationship between the two curves for the individual drinker which matters. For an individual drinker who causes some specific harm, the harm may continue for some initial reduction in consumption and then stop abruptly as alcohol consumption is reduced to a critical level. At prices above those that induce this critical level of consumption, the private and social benefit curves are identical. Unfortunately, we have no knowledge of the relationhip between increases in the prices of alcoholic beverages on the one hand and the induced changes in external harms on the other.

With the constraint of a uniform rate on all drinkers, the theoretically optimal single rate is the rate at which the marginal welfare gain from raising taxes on harmful drinkers, aggregated across these drinkers, is just equal to the loss of welfare from raising taxes on non-harmful drinkers. Such a tax rate can never eliminate social costs and, practically it is impossible to calculate this rate as we don't know the relationships between higher tax rates, reduced consumption and reduced harm. When the external costs differ across individuals, taxes are inefficient interventions, as the 2010 Nobel Prize winner, Peter Diamond, showed in the context of taxes to relieve road congestion (Diamond, 1973).

A second limitation on the ability of taxes to reduce harmful consumption is that taxing alcohol beverage may lead to substitution towards other harmful drugs that are

not subject to taxes because they are illegal but available. After the imposition of the alcopops tax, it has been alleged that many young partygoers have substituted the cheaper drug ecstasy for the now more expensive alcopops (Johnston and Argoon, 2010). The same might apply to raising the taxes on cheap wines. Substitutions between alcohol and other drugs indicate a lower optimal rate of tax on alcohol, other things equal. Of course a better policy would be to reduce the availability of other drug substitutes by stricter enforcement. On the other hand, if alcohol and other drugs such as cannabis are complements, this indicate a higher rate of tax on alcohol is desirable.

3. Reform of Other Regulations Applying to the Sale or Consumption of Alcoholic Beverages

Reform of taxation of alcohol beverages must be supplemented by other ways of reducing excessive consumption and the harms it causes. A menu of suggestions exists in the literature. For one sample, see evidence presented to the enquiry by the Senate Standing Committee on Community Affairs Report on Ready-to-drink Alcohol Beverages (Senate Standing Committee, 2008, chapter 4). Most of these suggestions related to supply side actions; these include limitations on the number of liquor outlets, restrictions on hours or days of sale, raising the drinking age to 21 or restrictions on advertising.

Welfare economics indicates instead that we should be looking for measures which improve information to consumers or which are targeted at the subset of drinkers who cause external harms. Action should be taken when the consumption of an alcoholic beverage cause harms. Civil laws provide for actions by the offended against offenders. Such actions are in fact difficult. In many cases the identity of the individual causing harm is not known; for example, in a brawl or a hit-and-run accident. Even when the identity is known and the offender has been apprehended, the enforcement costs of actions taken in the justice system may be prohibitively

⁸ One referee noted that there are severe adverse substitutions from taxing alcohol in the area of aboriginal alcohol consumption. I have not addressed the problem of heavy drinking in aboriginal communities. Differences in culture and enforcement in these communities may call for different policies.

expensive. The ability of a convicted offender to pay compensation is limited. Consequently the disincentive effects of Court actions is small.

An example of what can be done is the reforms over the last two decades or so to the laws relating to drink driving and their enforcement. As one measure, total deaths each year due to road accidents have fallen, even though the number of vehicles has risen greatly and the number of vehicle miles at an even higher rate. This is due in large part to tighter drink driving laws and enforcement, though other actions such as improved road design and more safe vehicles have also contributed.⁹

An example of what has not been done is the enforcement of laws to control under age drinking. The NDSHS survey data show that underage drinking is common in Australia. "A fairly high proportion of young Australians under the age of eighteen were found to binge occasionally (24.8 per cent) in 2007, 4.9 per cent binged frequently and about 35.3 per cent were non-bingers" (Srivastava and Zhao, 2010, p. 240). That is, more than one half of the young Australians over the age of thirteen and under the age of eighteen were drinking. There is an epidemic of underage drinking. Most of this is illegal drinking. The enforcement of underage drinking laws is failing massively in Australia.

More targeted programmes require stronger enforcement when illegal or harmful behaviour is detected. We need also to consider new measures. One possibility is mandatory rehabilitation programmes for problem drinkers and education programmes for all drinkers apprehended and found to have breached some law; such as driving with a blood alcohol level in excess of the 0.5 limit or underage drinking. Scandinavian countries have programmes of this kind. Another is the recovery of costs incurred by drunk drivers who present at the emergency wards of public hospitals. All States should have laws prohibiting the sale of beverages containing alcohol to those under the age of 18 without parental consent. New treatments for alcoholics could be introduced.

⁹ Other suggestions were put to the Senate Committee enquiry on ready-to-mix drinks (see Senate Committee, 2008, section 4.12)

Some supply side reforms are called for. These should not be general restrictions on sale such as reducing hours of sale or the number of retail outlets or licensed premises. Consumers of alcoholic beverage who do no harm should have the maximum of choice. Moreover, Australian economic history has several examples of tighter supply side restrictions which were ineffective in reducing alcohol consumption and counterproductive in producing heavy drinking. These include the prohibition of alcohol sales in the 1930s, six o'clock closing of hotels in every state except Western Australia until it ended in the State of South Australia in 1967, the former prohibitions on females drinking in public bars and the bans on the licensing of restaurants. These measures played a large part in the development of rapid and heavy drinking patterns in premises set up for such drinking.

Supply side changes should focus on those premises which are associated more with the effects of excessive consumption. For example, there is a case for reducing the number of licenses for nightclubs selling alcohol until late hours to a large number of drinkers. There should be much more severe penalties for licensed premises found to have sold alcoholic beverage to underage or already-drunk customers. The costs of tighter law enforcement and other programmes could and should be met from the increased tax revenue from raising the tax rates on alcoholic beverages.

The last problem of policy design is the "culture" problem. In mainstream Australian society there is a culture that encourages heavy consumption of alcoholic beverages when people get together. Young people imitate the behaviour of their elders and peers. A second feature of this "culture" is that it is tolerant of the harms that result from drinking. These attitudes may be the most difficult of all problems to overcome. Yet, we can note that some venues such as sporting venues have tightened their own rules relating to the availability of alcohol at these venues. Other measures such as restricting advertising on sporting grounds may contribute.

A coordinated and sustained reform strategy is called for. This should include improved taxation of alcoholic beverages, greater enforcement of existing laws, appropriate supply side restrictions, measures to change the culture of heavy drinking and improved treatment of alcoholics. With coordinated and simultaneous reforms, the reduction in harms is greater than if each were enacted singly.

There are many options to devise more targeted policies to reduce excessive drinking and the social harms it causes but the choice will require careful research on drinking patterns. This must involve social scientists and behavioural psychologists who specialise in social problems due to drinking and the responses of harmful drinkers to proposed actions as well as economists.

4. Difficulties Associated with Divided Responsibilities and Political Economy

There are, however, two further practical difficulties.

One is that, under our constitution, the responsibility for the control of social problems due to excessive drinking is divided between the Commonwealth and the State Government jurisdictions. The Commonwealth Government has responsibility for taxation and the State Governments have responsibility for licensing laws which control the distribution and sale of alcoholic beverages and for other areas such as drink driving laws. Laws and enforcement procedures differ among States; for example, only Queensland and Tasmania have laws prohibiting the supply of beverages containing alcohol to persons under the age of 18 without parental consent. It is difficult at any time to obtain actions coordinated across the States.

The other difficulty is the political economy of reform. There have been numerous enquiries and even Royal Commissions at the Commonwealth and State levels over the years, all of which have recommended various reforms. Yet, reform of the taxation of alcoholic beverages and other regulations bearing on the social costs of excessive drinking has been painfully slow. Often palpably desirable reforms have been obstructed by political parties or coalitions.

One example is the favourable treatment of grape products under our tax system. Wine was exempt from both excise duty and sales tax until a low rate of excise was introduced in 1970. After a number of different tax bases and rates, the present ad valorem tax under the wine equalisation tax was introduced in 2000 but the rate remained low. When the Henry Review was released, the present government

announced that Recommendation 71 which would change the tax system applying to alcoholic beverage would not be implemented because the government perceived that grape and wine industry was struggling under the present wine glut. Similarly, brandy produced in Australia has been subject to a lower rate of excise than other spirits since Federation. Although the margin has narrowed considerably in percentage terms, this is still true; currently, the excise on brandy is \$66.92 per litre of alcohol compared to \$71.67 per litre of alcohol for all other spirits. As alcohol producers that use an agricultural product, the wineries and brandy distillers have always had the political support of the rural politicians. (See Industry Commission, 1995).

A second example is the alcopops tax. This was a highly desirable, widely supported and moderate reform of the taxation of alcoholic beverages. Yet, it was opposed by the Federal Opposition. In the Senate enquiry, Liberal Senators issued a dissenting report. The reasons given for opposing the reforms were

"The increase in the tax rate applying to ready-to-mix alcohol beverages (RTDs) will impose a \$3.1 billion tax burden on Australian consumers. Even assuming positive health implications for this increase, there are certainly potential downsides in terms of employment in the alcohol and hospitality industries, unanticipated deleterious behavioural changes by those who abuse alcohol and greater financial pressures on those who consume alcohol responsibly." (Senate Standing Committee on Community Affairs, 2008, p. 57).

Again the focus is on the supply side effects.

The slow pace of reform can be explained by political economy factors. Producer interests generally take precedence over other interests. The incomes of beverage producers are concentrated, often exclusively, on the production of a small range of beverages ¹⁰ and they stand to gain or lose a lot from changes in the tax system. The same applies to hotels and other licensed premises. Some groups of producers have more leverage over politicians because their production is located in regional or marginal electorates. On the other side pushing for higher taxes and other reforms -

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¹⁰ A referee has pointed out one particular example of regional political economy. If the tax ation of wine moved from an ad valorem WET to a specific alcohol-based tax, this would harm most the hot irrigated parts of winegrape industry who produce mostly for the low-priced part of the domestic market and who are already adversely affected by global warming and water policy reforms.

the health and anti-drug lobbies and concerned citizens - have a small membership and few resources.

Reform of the system of taxation and regulation of alcoholic beverages is urgently needed in Australia. It will require a lot of careful policy design and political commitment.

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