

Alcohol Price Policies as an Instrument of Health Equity: Differential Effects
of Tax and Minimum Price Measures

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Increasing the price of alcohol has been shown to reduce alcohol related harm (Babor et al., 2010). Existing regulatory strategies to manipulate price include taxation or specific price controls such as minimum unit pricing (MUP). The effects of these strategies on overall consumption are significant (Holmes et al., 2014; Stockwell et al., 2012), as well as their effects of consumption by sub-groups such as people on low incomes. Indeed, modelling in the UK suggests that the introduction of MUP would impact most on the consumption of low income harmful drinkers (Holmes et al., 2014). Leaving aside issues of equity, the modelling predicted two beneficial effects of MUP on the reductions of purchasing by this group of drinkers; it would result in overall decreased spending on alcohol and produce better health outcomes as a by-product of the reductions in purchasing and consumption.

Although much of the recent discussion surrounding price and taxation has been focused on MUP the broader question is how price changes resulting from any strategy differentially impact on different drinkers, be they grouped by socioeconomic status, drinker category or by the beverage that they choose to drink. Five papers presented in this special section tackle this important issue. These papers were all presented at the Kettil Bruun Society Thematic Meeting on Alcohol Policy Research in Melbourne in September 2014. All five are focused on price and/or taxation policy and examine how these policies impacts on affordability.

The paper from Sornpaisarn and colleagues sets the scene, presenting simulations of different combinations of tax methods, including *ad valorem* and specific taxation and different combinations of the two, to examine their impact on tax per unit of ethanol while taking into account the perceived quality per unit, that is what value the consumer assigns to each beverage. They demonstrate that the while taxation according to value (*ad valorem* taxation) resulted in a lower tax burden for cheaper products and the specific tax method resulted in a lower tax burden for higher quality beverages, combination methods such as mixed specific and *ad valorem* taxation can result in unintended outcomes. These could include relatively cheaper medium quality beverages or the removal of disincentivisation of increasing the alcohol content of cheaper beverages depending on the type of combination method applied. The importance of ensuring that each tax method does not provide an incentive to increase the ethanol or decrease the quality of beverages in order to avoid a tax burden is stressed.

Jiang and Livingston provide the first study on the relationship between alcohol consumption, price and affordability over time. Their model showed that increases in price resulted in initial short term decreases in consumption that levelled off over time. However, their findings suggest that increases in affordability had longer lasting impacts with increases in consumption still found in the long term. Of the beverage categories they considered, beer and spirits appeared more susceptible to price-based changes in consumption than wine, but all trends in beverage-specific consumption were at least somewhat affected by changes in price over time.

Kerr and colleagues examine the consequences of the marked increase in liquor sales outlets that accompanied the end of a state monopoly on spirits sales in Washington state in 2011, Using measurements taken before and after the end of the monopoly they found that many items increased in price, primarily as a reflection of the increased taxes implemented to make up for the loss of revenue from the monopoly's end. Bulk spirits at large-scale stores did not increase in price, instead showing a non-significant decrease, despite being one of the items possibly

related to harmful consumption. This finding highlights how competition in the alcohol market can alter price differentially in ways that may not always be uniform and result in undesired public health perspective.

Callinan and colleagues examine who it is that purchases cheap alcohol to determine the drinker groups who would most likely be affected by a MUP strategy. They found that effects on groups of drinkers differed depending on whether the outcome variable was the absolute number of drinks purchased at low cost or the proportion of all drinks purchased that are low cost. This finding is primarily driven by the larger absolute amount of alcohol that harmful drinkers purchase, meaning that they purchase a higher amount of low cost alcohol, even if the proportion of low cost drinks of all of their drink purchases is similar to that of other drinkers.

Finally, Makela and colleagues investigate the differential impact of alcohol pricing on harm across the socioeconomic spectrum in their review of the impact of alcohol price changes in Finland. They found that price changes do tend to increase harms experienced by low income drinkers point out that in previous research larger impacts were found when a beverage type favoured by lower income drinkers becomes the target of a price increase. The efficacy of such a measure is rarely debated, instead it is issues of equity and fairness, or who it is that bears the greatest financial burden of changes in price that is raised rather than seeing price changes as a means of reducing inequalities.

This special section highlights the observed and modelled impacts of policy changes related to alcohol price. Crucially, the papers provide new evidence about the likely impact of a price change, in particular about who will be disproportionately impacted by any kind of change in taxation or pricing policies. These considerations are paramount; debates around policy changes require discussion of both the harms and benefits of that go with consumption changes related to price changes (Holmes et al., 2014). Here, the question is whether low income drinkers end up worse off after a price increase because of the impact on their finances or better off because reducing consumption increases their health. All five papers in this Special Section provide insights relevant to this question and the consequences of changes in alcohol price that need to be considered by policymakers and the wider community.

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