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Tax on Alcohol is all wrong - I'll drink to that!

By Jonathan Seaton

Introduction:

Dr Jonathan Seaton conducts research in the area of business economics focusing on supermarket price competition, sugary soda pricing and the impact of taxation on the price of alcoholic drinks. He is part of a team of internationally renowned researchers at UEA, Warwick and Sheffield who together have won grants totaling £1.5m from the medical research council and the ESRC. In this brief, Jon discusses the issues behind some of his recent research on one of Britain's favorite addictive drugs – alcohol – and how we can achieve the right balance of a highly profitable export-led industry with the hard fact that many people die because of their overconsumption of it.

As an introduction to this topic, let's review some news headlines taken from Google News for 24th May 2017:

- *Why your waist measurement can predict cancer risk* (The Guardian),
- *Six bars of chocolate a week could cut risk of common heart condition* (The Telegraph),
- *'Half a glass of wine every day' increases breast cancer risk* (BBC News),
- *Arthritis cure - adding THIS to diet could reduce painful symptoms in the knees* (Express.co.uk),
- *Vitamin D supplements: Taking the 'sunshine vitamin' could help chronic arthritis pain* (Express.co.uk),
- *Is Instagram Bad For Your Mental Health?* (HuffPost UK),
- *Smokers more vulnerable to most common lung cancer from 'light' cigarettes, scientists say* (The Independent)...
- and my personal favourite: *People perceive attractive scientists as more interesting but less able, studies show* (Science Daily)

As can be seen from this sample of material, the news media, and presumably their readers, are fascinated by how consumption behaviour or our characteristics impact on health and wellbeing.

Additionally, when 'science' finds out something is good or bad for us we often feel that *something should be done* by someone (namely the government). When the Liberal Democratic party decided to put cannabis legalisation in their 2017 election manifesto, many news outlets argued that legalisation of cannabis could create new business opportunities, greater employment and a reported potential 1bn tax windfall. Their action highlighted the moral dilemma faced by policymakers each day: How can you weigh up decisions that can help or harm different groups?

There is a fine balancing act between the freedom of the individual versus collective responsibility. Monitoring these decisions and giving a scientific basis for them is the world economists and other social scientists inhabit. Hard science may create new products, new efficiencies and expand our future domain, but it is the political, legal, business, economic and regulatory nexus that allows the genie out of the bottle creating value, economic growth, employment, improved health and wellbeing.

A first best guess at overall economy-wide happiness, though many alternative measures have been suggested, is economic growth, i.e., the percentage increase in an economy's income, which has always been a key component of government policy. Economists might argue about short-term demand-led growth strategies – which often fail as they can be over dependent on ever-rising levels of unsupportable consumption – but to generate long-term economic growth, they tend to agree that an economy needs to encourage investment in highly productive technology, training, skills and health.

The market place is vitally important for health outcomes, but to understand the interaction between the science, the market place, competition and pricing (my area of interest), we need to delve deeper into what constitutes 'good' consumption patterns and how the market can be helped to provide that.

To understand alcohol consumption issues, let's start off by discussing its saintly cousin – water. We all know that water is a fundamental necessity for life . However, it's a little-known fact that drinking too much water can result in hyponatremia, which can be fatal. Between these two extremes is a healthy amount; in the UK it's often quoted as about 1.2 litres a day – a 'Goldilocks' zone.

Similarly, there are 'optimal' levels of consumption for food like Stilton cheese, Melton Mowbray pork pies, fish and chips, Cornish clotted cream, haggis, Welsh cakes, black pudding, Quorn, lettuce, fizzy drinks, drugs like ibuprofen and, of course, alcohol.

Now, these Goldilocks quantities will change as you alter the variety and quantities of each food or drink item consumed. Your 'average' person needs about 2000 calories per day to maintain a healthy weight, so if you reduce your pasta consumption you might increase your cheese consumption to bring you back to 2000, which is a good thing. But even nutrition experts argue between themselves about how much fat you should consume, as fat can be

good or bad for you depending on whether you are swapping calories or adding calories to the consumption mix.

Your quantity of life, quality of life and wellbeing are clearly affected by choices like these over food, drink, exercise, lifestyle etc. So getting the mix right is self-evidently important but complex as we are complex animals. No one – economists, food manufacturers, farmers, biologists, doctors, retailers, media experts, TV presenters – really knows what is best for you to eat each day or each minute of your life for an optimum healthy, happy lifespan, they can only give hints and probabilities for an average person.

So why are people like me – economists, scientists, politicians, health experts, associated pressure groups, retailers, manufacturers – always telling people what they should or shouldn't do regarding alcohol consumption? Unlike many other foods and drinks that can lead to self-harm in large doses, alcohol is both addictive and can radically affect behaviour/cognition – it is both a drug and a poison, and as drugs and poisons go it tastes good, is socially acceptable, is relatively cheap, and businesses make an awful lot of money out of it.

According to the Wine and Spirits Association (WSTA) facts and figures 2016, the wine and spirit industry is responsible for £50bn in economic activity from half a million employees with a total value of sales in the region of £21bn contributing to nearly £18bn in tax revenue. In terms of our exports of food and drink, whiskey, beer, wine and gin are in the top 10, according to the Food and Drinks Federation (FDF). Whiskey dominates this sector with £4bn in exports in 2016. Needless to say, whiskey exports are an essential part of the export market for Scotland. Does this mean we should drink more alcohol because it employs more people and supports a major UK industry?

Of course not. It's argued that there are about 60 medical conditions caused by alcohol consumption including mouth, throat, stomach, liver and breast cancers; high blood pressure; cirrhosis of the liver; and depression. In 2014, the Office of National Statistics (ONS) estimates that almost 9,000 deaths were related to alcohol consumption. If you include falls, cancers etc, this figure rises to about 20,000, costing the NHS £3.5bn and the taxpayer about £120 a year.

Alcohol Concern, the major anti-alcohol pressure group, goes further by evaluating the impact alcohol has on others via crime linked to alcohol consumption – here the figures are huge - UK alcohol-related crime costs between £8bn and £13bn per year with 8,270 casualties of drink driving accidents in 2013 (240 fatalities and 1,100 with serious injury). The ONS state that, "Alcohol-related harm costs England around £21bn per year".

We could argue that by allowing this market to exist we are in essence employing over half a million people to kill up to 20,000 people a year and inflict much pain and suffering on many, many thousands. But just a minute – the 20,000 or so – some if not most of them

have harmed themselves: they were not forced to drink the alcohol. If anyone is to blame it is those who have overconsumed alcohol despite the clear warnings.

Now this is where our work kicks in. Funded by the Medical Research Council, myself and a team of researchers from the University of Sheffield's School of Health and Related Research (ScHARR) and the University of East Anglia (UEA) have asked the simple question about whether the forces operated by the government designed to restrict alcohol consumption – e.g., raised prices via excise tax and VAT – are actually realised. Supermarkets in the UK could be hindering government efforts to reduce the negative impacts of alcohol consumption by not fully passing tax increases onto the price of the cheapest beers and spirits. Retailers appear to respond to increases in alcohol taxes by 'under-shifting' their cheaper products (raising prices below the level implied by the tax increase) and conversely 'over-shifting' their more expensive products, according to the research.

The findings, published in the journal *Addiction*, showed that supermarkets responded to tax increases by subsidising prices of cheaper products. Price rises for cheaper products were up to 15 per cent below the level expected if the tax increase had been passed on fully. Although under-shifting affected around one in six of all product lines, these drinks account for a large proportion of total sales: approximately 68 per cent of beer, 38 per cent spirits and 31 per cent of cider sales.

In conclusion, these findings show there is a very clear need for a re-think on government policy in the way alcohol duty is levied to take more fully into account how retailers pass on duty increases to consumers. The government needs to send a strong message to retailers to encourage more responsible price setting on alcohol or otherwise face regulation through more direct policies such as minimum pricing. I'll certainly drink to that – but probably with a nice, cool glass of water!