

### Supplementary evidence from Christopher Snowdon, Institute of Economic Affairs

The committee asked me to provide evidence that alcohol and drugs can be substitute goods. Here are a few studies showing this...

1. <http://www.sciencedirect.com/science/article/pii/S0165176505002016> This study finds that cannabis is a substitute for alcohol, with alcohol consumption declining when cannabis is legalised.
2. <http://www.nber.org/papers/w4212> This study looks at minimum purchase laws for alcohol and concludes: "We find that increases in the minimum drinking age did reduce the prevalence of alcohol consumption. We also find, however, that increased legal minimum drinking ages had the unintended consequence of increasing the prevalence of marijuana consumption."
3. <http://www.nber.org/papers/w4662> This study looks at youth consumption of cannabis and alcohol and finds that "successful marijuana related efforts in the 'War on Drugs', which can be expected to reduce the supply of marijuana and, hence, increase its price will not only lead to less marijuana consumption, but will have the unintended consequence of raising alcohol consumption".
4. <http://www.journals.uchicago.edu/doi/abs/10.1086/668812> This US study looks at medical marijuana legalisation and finds that it leads to fewer alcohol-related traffic fatalities, suggesting lower rates of binge-drinking. (Note that the alcohol industry in the US lobbies against marijuana liberalisation. This study also finds that alcohol prices fell when medical marijuana was legalised which, as the authors note, "marijuana and alcohol are substitutes". Both these facts suggest that drinks companies are well aware that cannabis is a rival product.)
5. <https://www.ncbi.nlm.nih.gov/pubmed/15380293> This study found that amphetamines were a substitute for alcohol and that cocaine & ecstasy were complements.
6. <https://www.ncbi.nlm.nih.gov/pubmed/18201842> This study found that alcohol was a substitute for cocaine, amphetamine and cannabis.
7. <https://academic.oup.com/alcac/article/45/5/403/184976> Finally, this study contains a useful review of the evidence and links to other studies. "While alcohol is the most heavily consumed intoxicant worldwide and the volume of harms attributable to alcohol use are considerable, it is fallacious to presume that consumers do not have a choice of intoxicant and are not willing to substitute and complement substances in order to achieve intoxication... Policies aimed at reducing alcohol consumption can be successful. However, evidence suggests a significant minority of consumers are likely to substitute or complement consumption with a range of intoxicants suggesting that policy is unlikely to reduce all-cause mortality and morbidity."

That study also mentions the experience in Russia which is relevant to minimum pricing: "The rapid increase in the alcohol price in Russia motivated consumers to substitute licit alcohol with illicit alcohol, likely exposing themselves to similar levels of harm and possibly greater harm and, critically, placing themselves outside of further policy-level interventions."

I was also asked about the price of drug Spice. Here are DrugWise's latest estimates of drug prices in the UK: <http://www.drugwise.org.uk/how-much-do-drugs-cost/>