

Archived data for ‘A structured representation of system complexity to inform health economic models of the effects of tobacco and alcohol policy change’

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Metadata

These data resulted from a study that aimed to produce a conceptual description of the system through which policies affect tobacco and alcohol consumption. The study addressed the research question, ‘How could we model the effects of policies that target tobacco and/or alcohol consumption in a common framework?’

Participants were identified from UK research networks, government agencies, and non-governmental organisations, selected for expertise in UK research and policy related to alcohol and/or tobacco. Neither tobacco nor alcohol industry representatives were invited to avoid conflicts of interest. Of 37 individuals invited, 24 agreed to participate and completed the survey; 21 attended the workshop.

Our data came from three research phases: a survey, a review and a workshop in which we guided participants through a structured process of debate and reflection. Our survey and review informed the material that we provided to participants at the start of our workshop.

Our deductive coding framework included:

- Policy theme: Price, Place, Person, Promotion, Prescriptive. The cross-cutting theme of industry regulation was allowed to emerge inductively through the coding of concepts related to industry regulation within each of the other policy themes.
- The mnemonic CATWOE from Soft Systems Methodology [1, 2] with the root definitions in Table 1.

- The COM-B framework [3], which defines individual behaviour in terms of: Capability, e.g. knowledge and understanding; Opportunity, either in the physical environment e.g. neighbourhood characteristics, or social environment e.g. exposure to ideas; Motivation, comprising reflective and automatic decision-making.

Table 1. Definitions of concept categories and examples of codes used in our coding framework adapted from the CATWOE mnemonic of Soft Systems Methodology.

CATWOE	ROOT DEFINITION	ADAPTED DEFINITION	EXAMPLES OF CODES
Customers	The people who benefit within the system	Characteristics of people that modify how they feature within the system – individual differences	smoking/drinking practices; income; gender; medical history; geography; ethnicity; employment; socio-economic group; age; mental health; health awareness (capability); attitudes to health (motivation); physical health; access to products (opportunity); access to support services; addiction; maternal status
Actors	The people who perform the tasks in the system	Defined roles of the people involved in the system but with limited ability to change the system	public health practitioners; medical professionals; retailers; community groups; advocates; enforcement agencies; importers; industry third parties; workplace managers
Transformation	The core activity of the system	Hypothesised causal relationships or mechanisms in the system, usually in phrases with a change agenda.	decrease/increase: affordability; accommodation; acceptability; availability; costs; consumption; restrictions; acceptability
Worldview	The objectives of the system and the beliefs and values that underpin these from different perspectives	Objectives held within the system depict the culture and politics of tobacco and alcohol production, consumption and regulation.	short, medium and long-term customer, actor, owner and societal goals
Owners	The people who exert control over interventions in the system	Individuals or organisations with the power to begin or end actions or monitoring activities that influence goals.	local, national and international government; industry manufacturers, marketeers; controllers of public health practice
Environment	The external factors which may influence but do not control the system	The debate that surrounds deliberation among policy options for achieving goals, usually combined with ‘regulate’ or ‘invest’.	regulate product access; invest in support access; regulate treatment access; investment in health promotion activities; illicit trade regulation; cooperatively or disruptively regulate industry regulation; regulate industry fiscally; invest in non-health policies (e.g. neighbourhood regeneration); regulate product promotion and features

Thick descriptions and conceptual diagrams of tobacco and alcohol system components

Actors and Owners

Government

In general, Government policymakers and institutions produce and enforce legislation and commission actions related to public health. For example, Government can introduce levies, fines on industry for not complying with regulation, economic incentives e.g. for healthier products, taxes, minimum unit pricing, bans on promotion, and can combat illicit supply of tobacco and alcohol. The political will within government for certain policies can be influenced in part by lobbying by industry and public health advocates, and by research evidence or awareness of similar policies being introduced in different contexts. This political will is related to how policymakers perceive and understand the status of alcohol and tobacco as products that benefit/harm individuals, and the alcohol and tobacco industries e.g. their economic contribution vs. generation of health harm. These factors also affect the degree of industry vs. public health expert involvement in policy formation and in the design and delivery of public health actions e.g. messaging on products, in adverts and in public health information campaigns.

European Union

EU legislation comes in the form of directives that act to limit the scope of legislation at national and local government levels (governments can set their own rules on e.g. tax within the limits set by the EU directives). The EU periodically introduces new directives and renegotiates existing ones with member states, which includes public consultation.

For tobacco there are the:

- Tobacco Products Directive (including setting a minimum pack size, requiring large graphic health warnings and limiting product specification e.g. banning menthol cigarettes).
- Tobacco Tax Directive (including setting minimum rates of tax and rules on how that tax is applied e.g. in proportion to the amount of tobacco vs. the industry set price of the product).
- Tobacco Advertising Directive (covering advertising that crosses national borders, e.g. press, radio or internet advertising, and sponsorship of sport but does not apply to indirect advertising, e.g. brand-sharing, or advertising within member states, e.g. on billboards).
- The Alcohol Tax Directives harmonise the structural basis of alcohol duties across the EU and set minimum rates for excise duty on a range of alcohol product categories [4, 5].

United Kingdom

National government comprises all government departments and the Cabinet. The government is obliged to implement European Union directives, and operates within these directives to set national legislation relating to tobacco and alcohol. For example, regulating alcohol sales through the Licensing Act, setting tax, or introducing legislation that public indoor spaces should be smoke-free. Government also has control of the structure and funding of health services e.g.

through the Quality Outcomes Framework that includes financial incentives for primary care practitioners to identify smokers and offer them advice. Since national government also has control of policies such as the rules around the receipt of welfare benefits, they could affect tobacco and alcohol use indirectly by changing the social determinants of product use. Through these actions national governments contribute to “social norms” around tobacco and alcohol use, and could influence the lifetime use of tobacco and alcohol by young people. Changing social norms around tobacco and alcohol use can force government to act by changing their motivation with respect to certain policy options. National government are working in partnership with the alcohol industry under the Public Health Responsibility Deal, and allow the alcohol industry to deliver public health messaging on their products and in advertisements. National government interaction with the tobacco industry is regulated by international agreement under the Framework Convention on Tobacco Control. However, industry can still influence national government covertly, for example, via gifts and hospitality.

Local authorities

Local government are responsible for public health. Each local authority has a public health team and a director of public health, who convenes the local Health and Wellbeing Board. Local governments look to understand the needs of their communities with respect to smoking and drinking, and then to support or introduce appropriate policies.

Enforcement agencies

Agencies who enforce the rules around tobacco and alcohol sales and consumption, e.g. trading standards or the police. For example, investigating and conferring penalties for illicit sales (i.e. of cheap untaxed products) through imposing fines or removing retail licenses. Enforcement agencies can also play a monitoring and education role e.g. on legal compliance with regulations on labelling or advertising and product displays at the point-of-sale.

Industry

‘Industry’ refers to businesses, transnational corporations and other organisations in the private sector who set strategy for tobacco and/or alcohol supply, e.g. choose what products are on the market, manufacture them, and control marketing, e.g. how are products priced, advertised and promoted. Industry is therefore heterogeneous with regard to the size of organisations and their ability to influence the tobacco and alcohol markets at local, national and international levels. Industry is comprised of a network of relationships among organisations, including for example, linkages between manufacturers and retailers, who might be part of the same organisation or cooperate closely. By controlling supply and marketing, industry have a strong influence on social norms in the use of tobacco and alcohol, e.g. they influence demand by engaging with consumers through social media. Since maintaining demand is essential for profits, industry have an incentive to counteract public health activities that aim to reduce demand, e.g., when the alcohol industry highlights insufficiencies in the evidence that their marketing activities increase harmful drinking, or try to deflect responsibility for harmful drinking to the individual drinker rather than their products and marketing. In doing so, industry trend to keep their strategies secret and act through third party organisations, e.g. alcohol education organisations, who have greater credibility. Industry are constantly adapting to the new realities created by the evolution of consumer trends, and of government regulation of the market. For example, industry can modify the effects of

taxation by changing profit margins on certain products and cross-subsidising brands, e.g. to maintain ultra-cheap products and entry point products in high consumer demand. Industry also aim to influence government to limit regulation, e.g., through direct lobbying and more covert third-party hospitality aimed at changing the political will for public health oriented policies that would reduce tobacco and/or alcohol consumption. There is a clear respectability divide between the tobacco and alcohol industries, with the alcohol industry tending to work cooperatively with government, whilst the tobacco industry is precluded from doing so by the FCTC. The alcohol industry therefore has a greater influence over the formation and delivery of public health activities.

Industry - marketing and advertising

The segment of industry that controls product marketing and advertising tactics and actions e.g. linking product use to desirable lifestyles, and managing public health messaging in advertising and packaging (alcohol) that can include strategic ambiguities that help to market products, such as “drink responsibly”, which includes the imperative to drink. Industry marketers are typically better resourced than public health promotions managers, and are therefore better able to disseminate their messages to the public. The marketing and advertising industry segment might also look for ways to subvert government introduced marketing restrictions e.g. by simulating a price promotion through branding or by using viral marketing over social media.

Industry - importers

Those actors whose role is limited to importing, and who are largely separate entities from the corporations that also manufacture etc.

Industry - retailers

In general, these are businesses whose role it is to sell and present/market products within the retail environment that they control. The type of business can vary greatly e.g. selling from a physical premises vs. online, selling a wide range of products vs. only tobacco and/or alcohol, large supermarkets vs. small shops. Alcohol is sold by both the off-trade (supermarkets, shops, online) and on-trade (pubs, bars, clubs). Businesses vary by their location, e.g. urban vs. rural, or areas dominated by the night-time economy, that brings with it certain customer demographics. Retailers are subject to a range of regulations that limit what and how they sell, their hours of sale, and smoking on-premises e.g. on-trade alcohol retailers no longer sell cigarettes in vending machines and smoking is restricted to designated outdoor areas. Retailers in the alcohol sector are regulated via licensing, with a limited supply of licenses used to manage the number or density of retailers in certain areas, and penalties for breaking the license terms e.g. selling to minors. Tobacco retailers are strongly regulated under national legislation e.g. limits on product displays at the point-of-sale.

Industry - third parties

Organisations either core funded by industry to represent their interests or with financial links to industry including organisations that accept advertising revenue for harmful products. These organisations act on behalf of industry e.g. to provide industry-led education programmes, lobbying activities, corporate social responsibility initiatives, advertising and public engagement on social media platforms and online (e.g. viral marketing). They might also assist industry in lobbying government through covert routes.

Health Sector

Public health practice controllers

Public health practice controllers are organisations and individuals with responsibility to inform, design and deliver public health activities at a non-governmental level, to meet certain objectives e.g. the reduction of inequalities in health, given limited budgets. They include Clinical Commissioning Groups and NHS Trusts. They are potential targets for industry influence and collaboration, although suggestions of collaboration with industry could damage their credibility. Part of their role in delivering public health messaging is to counter industry messaging e.g. by informing the public about the marketing tactics used by industry, and using their credibility to objectively communicate evidence about product harms to health.

Healthcare practitioners

Primary care practitioners include GPs and nurses. Part of their role is to identify alcohol or tobacco problems, and provide brief advice to motivate individuals to reduce use, and general support and information to individuals who are motivated to reduce use. They refer individuals who need additional support to reduce use to specialist services (e.g. alcohol dependence treatment, stop smoking services). Healthcare practitioners also provide support, and make efforts to increase access to support, to individuals with mental health issues, which is important as alcohol and tobacco use are often increased in times of distress. Healthcare practitioners can be required/financially incentivised by Government to identify and provide brief advice on tobacco and alcohol use, and these incentives are needed due to limited time and budgets.

Public health experts and advocates

Experts in the academic and non-governmental sectors who generate and synthesise evidence to support decision-making or advocate for certain decisions, and develop and pass on the skills for others to do so. This includes design, appraisal and evaluation of policy, interventions and campaigns. Public health experts and advocates operate in a network through which they can learn from each other about what actions are effective and why, share relevant data, evidence and knowledge of data gaps, wishes and plans for future activity. Evidence includes the economic case - the potential cost savings from, or cost-effectiveness of certain interventions. It also includes the use of data on industry behaviour and marketing to inform policy and practice. Public health experts have to consider whether they want to work with industry due to potential conflicts of interest. Public health experts might also have to defend their opinions and evidence from challenge and the putting forward of alternative opinions and evidence by industry.

Treatment service managers

Manage the day-to-day practicalities of and limited finances for delivering specialist treatment services e.g. stop smoking services or treatment for alcohol dependence. They might have some flexibility to decide how services are delivered e.g. on the degree of support for people with mental health conditions, using digital technology to make services more accessible, or offering support to reduce drinking whilst focusing on stopping smoking, and vice versa.

Local public health practitioners

People in charge of delivering public health within their local area who include Public Health teams and Health and Wellbeing Boards, which are located within local government in England. They look to understand the needs of their local populations and design public health actions suited to the needs of their community.

Community & society

A diverse collection of individuals and organisations whose actions are not directed by government, the tobacco/alcohol industries or public health practice, but who nonetheless have an influence on tobacco and alcohol consumption.

Celebrities

Could be affected by regulations around the depiction of smoking and drinking in media e.g. film. Could use their celebrity status to be a healthy role model, and to promote open debate about addiction e.g. from their own experience.

Community group organisers

Organisers of groups within communities that provide peer-to-peer support to reduce smoking and/or drinking. Whilst these groups can help local government authorities to learn about the needs of their communities, they might also seek to distance themselves from public sector organisations and professionals.

Directors of school curriculum and activities

Providers and users of school-based programmes or multimedia tools to promote young people's health and to improve mental wellbeing, resilience, self-control and social and personal competence skills e.g. when faced with advertising or offers of tobacco or alcohol.

Workplace managers

People who regulate the work environment, and are in charge of initiatives to support health e.g. occupational health campaigns that include smoking and drinking.

Industry - whistle-blowers

Industry insiders who decide to report malpractice e.g. illicit, bribery, manipulation or misrepresentation of evidence on health impacts. They can provide insights to support public health and industry regulation.

Managers of online, film and media environments (OFMEs)

Managers and developers of media through which people come into contact with and share product marketing, discuss product use, see health warnings and campaign messages. Managers of OFMEs can help regulate the online retail environment, and publication of material which generates perceptions of tobacco and alcohol products, consumption, and healthy role models. They can monitor and enforce rules of direct and indirect marketing on social media platforms e.g. viral marketing. They might also be aware of 'grey areas' in regulation, which they might exploit.

Non-industry social venue providers

Any business, physical or online space that is smoke-free and/or not alcohol centred. These include the interiors or exteriors of cafes or bars, public spaces e.g. parks, or virtual venues e.g. social

networking sites. An important characteristic of these providers is their target demographic and accessibility including opening times. For example, non-alcohol centred social venues that are open in the evenings, that have young adults as their target customers and could influence social norms around abstinence from smoking/drinking.

Customers and consumers

COM-B components of behaviour

To what level an individual consumes and how this is done. For either smoking or drinking, the level of consumption depends on the frequency of consumption, and the quantity consumed at each consumption occasion. Consumption might be further described by the typical pattern of consumption on certain days, e.g., a generally low level of alcohol consumption with a tendency to binge drink on a Friday night, or a different pattern of smoking on weekdays compared to weekends. Descriptions of the combined pattern of consumption across smoking and drinking, in their simplest form are statistics such as the proportion of smokers who are harmful drinkers (and whether smoking or drinking is the bigger problem). More detailed descriptions of the combined pattern might be how often smoking and drinking are done on the same occasion e.g. smoking whilst at the pub. In addition to the characteristics of where individuals drink or smoke, are what products they consume (e.g. defined by types of tobacco or alcohol product, brand, unit size, price, and from where the product was purchased). An individual's typical consumption might therefore be to drink wine with a meal out, lager at a football match, smoke hand-rolled cigarettes at home and e-cigarettes in public. Consumption behaviour can also be described by the social context e.g. if someone smokes or is drunk in front of children, or is drunk in public and goes on to reckless or anti-social behaviour.

Behaviour is also characterised by whether individuals are attempting to stop or reduce their consumption of tobacco and/or alcohol, how they are attempting this, and their success. For example, does someone making use of stop smoking services also have a tendency to binge drink, or does a drinker in treatment also smoke, and how does this affect the outcome.

Capability in terms of skills, knowledge, capacity for understanding, resilience, self-control, social/personal competence and mental wellbeing. For example, individuals in the general population and policymakers/government vary in their health literacy that includes awareness of the links between tobacco and alcohol consumption and health e.g. the alcohol–cancer link. Variation in understanding of the health and wider societal effects of tobacco and alcohol, and by extension of their industries, might relate to the extent to which tobacco and alcohol are seen as a social good. Variation in awareness and understanding of industry marketing tactics might relate to the influence of marketing over individual consumption. These factors, and others such as resilience, self-control and how individuals cope with life difficulties, might affect the ability of individuals to resist influences to initiation certain consumption practices. Smoking and alcohol use is relatively high in people with mental health conditions and this might be explained in part by factors related to capability.

Various aspects of capability might also affect the ability of consumers who have decided to quit or reduce consumption to follow-through successfully on that decision, i.e., to avoid relapse. For

example, variation in mental health (including stress) might change the likelihood of relapse by affecting whether individuals feel able to access support for behaviour change. For individuals who both smoke and drink and who are attempting to reduce or cut down on one, the use of or addiction to the other substance might reduce success, e.g. by providing a primer or trigger to consume. Individuals might also vary in their need to compensate for reduced consumption of one substance by increasing their consumption of another.

Motivation is a combination of automatic processes (involving emotional reactions, drives and habits) and reflective processes (involving self-conscious planning, analysis and decision-making). Either might be affected by an individual's perceptions, aspirations, lifestyle, self-image, attitude e.g. feelings about smoking or drinking causing harm to others, desire to fit with peer-group, be fashionable, rebel. For example, individuals might have developed certain habits in product use because these are part of their self-image and how they want to present themselves to the world, e.g. a status symbol. They might therefore view decisions about consumption through an aspirational filter. They might also have developed habits of consuming in certain ways in certain contexts e.g. drinking beer at a football match or wine with Italian food. An individual's motivation is therefore responsive to and generates/maintains social norms e.g. in the locality of consumption, the acceptable image of drunkenness, or smoking around friends. Motivation to consume can also vary momentarily e.g. with stress levels that might make some individuals more likely to smoke or drink to cope. Motivation is central to the extent to which individuals tend to do certain behaviours together e.g. having a drink and a smoke at the pub might be either an automatic or planned behaviour.

The motivation to reduce consumption can vary momentarily e.g. with the aspiration to become healthier, including New Year's resolutions or following changes in an individual's state of health. This could have knock-on effects for the motivation to seek support for behaviour change – with the particular method sought, e.g. nicotine patches vs. e-cigarettes, also influenced by individual variation in automatic and reflective processes. A general motivation to become healthier might lead individuals to attempt to reduce alcohol consumption at the same time as quitting smoking. Motivation can also modify how quitting smoking affects drinking, and vice versa – the response will likely depend on personal circumstances and how ingrained each behaviour is. The mechanisms of cross-over effects between changes in smoking and drinking include: (1) how individuals adjust the risk to their health that they face through doing certain behaviours (depending on the level of risk that is acceptable to them) e.g. if haven't smoked in two weeks, they might decide it is ok to drink more (risk swapping); (2) how individuals assess their disposable income and decide how to balance their spending across certain products e.g. decisions to drink rather than eat, or spending more on alcohol if saving money by quitting smoking

Opportunity is the aspects of an individual's physical environment (e.g. where they live or the shops they go to) or social environment (e.g. their social networks or their chosen sources to keep up to date with news and culture i.e. where they get their ideas from) that provide a trigger for or promote initiation, reduction or the maintenance of smoking or drinking.

A main component of the physical environment is access to products at retail outlets, which can be described by 5 domains [6]: affordability (e.g. product price might vary among locations or due to promotions), accessibility (e.g. distance from home or travel links), accommodation (e.g.

convenient opening hours or ability to get served), acceptability (e.g. the look, products and other customers fit with an individual's preferences), availability (e.g. how easy it is to find products).

The main components of the social environment are exposure to tobacco and alcohol marketing e.g. sports advertising, and social influences e.g. from friends. For example, young people who move from a rural location to go to university in a city are likely to experience a large shift towards increased access to alcohol, and in their exposure to marketing and peer pressures. If an individual lives in an area with a high density of off-license shops selling alcohol, then this ready availability might lead to a higher frequency of buying alcohol to drink at home. People might also differ in the extent they encounter alternative choices for alcohol e.g. alcohol free venues or outlets that sell reduced strength beer. For smoking, people might differ in the extent to which they socialise in the places that smoke-free air laws apply, e.g. how often they go to pubs vs. socialise at home, and in the extent to which their friends smoke.

Individuals can differ in their access to sources of encouragement and support for behaviour change, e.g. to marketing messages designed to promote public health. The impetus and support for behaviour change is often given by healthcare practitioners, but individuals differ in their likelihood of being asked about their smoking or drinking, and in what services are available to them if they are identified as potentially benefitting from help. A factor in how willing/reliant individuals feel towards seeking help with their smoking or drinking is whether they have mental health issues or are experiencing distress, and how severe this is. Access to support for these individuals is likely to depend on the availability of services that are designed to accommodate individuals with mental health issues or individuals experiencing distress. Individuals are also likely to differ in the extent to which their social networks, e.g. friendship groups, encourage and support an attempt to reduce smoking or drinking. Some individuals live in communities that have been empowered to provide tailored support to individuals, e.g., they might raise critical health literacy [7] in a peer-to-peer context within the community, rather than in a healthcare setting, and such community groups might better accommodate and be more acceptable to some individuals.

Individual and community level factors

Several individual and community level characteristics correlate with variation in the prevalence or level of tobacco and alcohol consumption, and with the details of behaviours in product use. Individual characteristics include socio-economic status, state of physical and mental health, disposable income, ethnicity, maternity status, migrant status. Community characteristics include the location and relative deprivation / need for regeneration of the neighbourhood in which they live. For example, low socio-economic status was suggested to be associated with higher access to tobacco and alcohol e.g. as the availability of different outlet types and the affordability of products varies geographically. Socio-economic characteristics in general also explain variation in state of health (which in part will be explained by the variation in consumption). Poor health might motivate individuals to reduce consumption, but individuals might also be part of the "worried well" who are already healthy and reduce consumption in a bid to become healthier.

The same individual and community characteristics are likely to correlate with access to incentives and support for behaviour change. Individual socio-economic characteristics in general were thought to explain variation in the extent to which individuals use the available support for behaviour change e.g. specialist services. The "rich" were considered more likely to access this

support. “Disadvantaged groups” were considered more likely to drop out, which might lead to variation in rates of relapse to past consumption. There is also socio-economic variation in the extent to which individuals have access to support for behaviour change e.g. variation in the likelihood of receiving brief advice from a GP to help reduce consumption. For example, this might depend on the extent to which local authorities have invested in stop smoking services and treatment for alcohol dependence.

Age

Age is important because the distributions of consumption behaviour vary among the youth, young adult, adults, e.g., in young adults it might be more likely that if you drink you also smoke, and vice versa. Age is also important because consumption behaviours are initiated at young ages and can then remain for life. Interventions targeted towards the young therefore often focus on preventing them trying smoking or drinking, progressing to regular use and then normalisation of smoking and drinking (which is the opposite of tobacco and alcohol industry interests), or at least preventing harmful behaviours in product use e.g. pre-loading on alcohol at home before a night out. Interventions targeted towards the old tend to be focused on reducing, replacing or ceasing product use. A key consideration in understanding differences in the effects of policies by age is that young vs. old have different trends in where and how they socialise, e.g. time spent socialising in town centres in the evening. Young vs. old are likely to differ in their exposure and susceptibility to influences to smoke and drink, including from their parents, from advertising in sports, use of social media, and product placement in films. Young people might also be more sensitive to changes in product price, for example, because they tend on average to have lower disposable income.

Disposable income

Anything relating to relative wealth or amount of disposable income. For everyone in the population disposable income is involved in a feedback with spending decisions, particularly in decisions around the affordability of products. For those with relatively low income, changes in spending e.g. through reduced smoking are more likely to be reflected in increased spending on other products, because the proportional change to disposable income is greater. The feedback between disposable income and spending decisions is likely to vary by individual, e.g., variation in their opinions of what is “sufficient funds”, and context, e.g. some people might consider certain alcoholic beverages more or less affordable when at a football match vs. a dinner out. Variation in disposable income correlates with variation in smoking and drinking, with the cultural place of smoking concentrated among people with little disposable income, and the cultural place of alcohol extending to people with higher disposable incomes. Falls in disposable income might lead to adjustments in product use e.g. to the intensity and frequency of consumption that is usual in a day, or to the brands purchased or location of purchase. The reasons why reductions in disposable income do not necessarily mean reductions in smoking and drinking include the good feelings gained from smoking/drinking, which individuals might particularly value if life is difficult/stressful, e.g. due to having little disposable income. Individuals for whom smoking/drinking is strongly habitual might choose to drink rather than eat, given limited disposable income, and the impetus to drink or smoke despite low disposable income could drive people to purchase illicit (cheaper, untaxed) products. The desire to gain disposable income can also be a motivation for people to quit or reduce their smoking/drinking, or to replace their current habits with cheaper ones, e.g. switching from cigarettes to e-cigarettes if perceived to be cheaper.

People at low disposable income might be considered / consider themselves penalised by taxation rises, that cause increases in the cost of maintaining their smoking/drinking habits, and might make some products inaccessible to them. This “regressivity” is frequently a criticism of public health policies relating to product price, although this sentiment could be mitigated if the government revenue gains from tax rises were then used to address social inequalities. Those with high disposable income are likely to be relatively insensitive to variations in their day-to-day spending, but that could also be explained by certain spending habits being important in defining personal image (this might be true at all levels of disposable income, but the particular spending habits and desired personal image might vary by disposable income).

Addiction status

The degree to which an individual is dependent on product use, including physiological addiction. For tobacco, the majority of smokers would benefit from specialist services to encourage and support them to quit, also potentially including pharmaceuticals. For alcohol, dependent alcohol users are a minority and differ from others in requiring structured specialist treatment services, including pharmaceuticals. Individual focused interventions may be more suitable for a dependent drinker, rather population level approaches e.g. mass media health promotion campaigns, which may be more suitable for regular drinkers. Variation in the degree of dependence can affect how easy an individual finds it to reduce or cease smoking/drinking and, for example, the effects of price rises will work differently depending on level of dependence. There might also be cross-over effects, where individuals with alcohol dependency find it harder to quit smoking, or smoke more when they are recovering from their addiction (swapping addictions).

Environment

Price

Policies that aim to reduce access to tobacco and/or alcohol by raising the retail price and hence reducing the affordability of certain products. The primary targets are ‘ultra-cheap’ products and brands, which provide an easily affordable option that help the initiation and maintenance of consumption for people with limited disposable income. One effect of price rises focused on the cheapest products is to reduce the price variation in the market, which limits the cheaper options available for consumers who want to avoid the additional cost of a price rise on their usual brand.

Main options are:

- Tax
- Minimum unit pricing
- Restrict price-based promotions
- Set a minimum for the amount of product sold in one unit
- Tackle the illicit trade

Tax is implemented by the government at a UK national level, but the scope of tax change is limited by the need to comply with EU directives governing tax. Minimum unit pricing and tackling the illicit trade could be implemented by UK national government, devolved national governments or local government.

Tax is defined by:

- **structure**, e.g., whether taxation is applied in proportion to pre-tax product value (*ad valorem* duty) or content (specific duty);
- **level**, i.e. at what rate.

Tax is a granular system that has different structures and levels for different product categories. For tobacco, hand-rolling tobacco is taxed at a lower rate than pre-rolled cigarettes, e-cigarettes are not subject to additional duty and nicotine replacement therapy is taxed at 5% like any over the counter medicine. For alcohol, taxation is broken down by cider, beer, wine, spirits and each product category has a different tax structure. There can also be rules applied to taxation that set minimum levels for the amount of duty to be applied. For example, government can introduce thresholds that set minima or maxima for the amount or percentage of the retail price composed of duty and VAT.

Minimum unit pricing is targeted more specifically to raise the retail price of the cheapest products. A key difference to tax is that the additional revenue from the rise in the retail price goes to industry rather to government. MUP sets a minimum retail price for a specific amount of product. For alcohol this is per unit of pure ethanol. For tobacco this might be per gram of tobacco or per cigarette stick.

Reducing price-based promotions will affect availability and access to alcohol and tobacco products, and reduce bulk purchasing. The regulation of sales promotions entails restrictions on, for example, price marked discounted packs and multi-buy, buy one get one free deals on alcohol products (banned in Scotland), restrictions on happy hour promotions or cheap doubles. Multi-buy restrictions on alcohol have been modified in Scotland by large retailers allowing online purchasers access to multi-buy deals despatched from England. Licensing can be used to reduce happy-hours.

Regulation of the amount of product sold in one unit is likely to affect sales price, e.g. restrictions on pack size for cigarettes, and serving/bottle size for alcohol. For example, packs of less than 20 cigarettes are now illegal in the UK under the EU Tobacco Products Directive, which has effectively introduced a higher product price. Elsewhere in the world (e.g. Africa) small servings of wine at very low cost are banned.

Tackling the illicit trade reduces the supply of products that are cheaper because the retail price does not include duty. This requires improving the ability of enforcement agencies (e.g. Trading Standards) to clamp down on illicit tobacco sales, which should benefit legitimate retailers and close down routes for illicit alcohol.

Place

Place based policies aim to limit access (c.f. the domains of access [6]) to products for purchase primarily by restricting:

- their availability by restricting the number or density of outlets
- the accommodation of hours of sale

- the accessibility of products to minors (via age and proxy purchase restrictions and penalties and proof of age initiatives)

Place based policies can also put limit on where consumption can take place e.g. recommendations and restrictions on smoking in bars/homes/cars.

The interventions tend to be focused on particular areas e.g. near schools or where existing oversupply, or for drinking, town centres with high frequency of binge drinking and associated harms, such as acute illness, violence (domestic, in the street), litter and disorder.

Further, place based policies can act to increase availability of healthier alternative products e.g. low alcohol beer, and to increase the availability of venues where drinking and smoking does not take place e.g. encourage establishment of non-alcohol venues for a night out e.g., cafes, leisure facilities.

Place based policies tend to be implemented by local and central government (making rules locally-specific vs. once size fits all). New regulation needs to fit with existing legislation e.g.

- sales licensing contributes to local authorities' cumulative impact policies (CIPs) which relate to outlet density (Police Reform and Social Responsibility Bill 2011).
- the 2003 Licensing Act requires specific harm to be linked to individual premises, which means that only really acute harm (i.e. resulting from violence, acute illness) is relevant.

The terms of licenses can include many things. At the moment alcohol licensing targets “problem drinkers” and “problem venues” but the scope could be broadened to consider the whole population. For example, alcohol might be banned from sale in supermarkets, or licenses could be linked to sales volume so that high sales breaches the licence.

In some areas retail saturation is so high that licensing restrictions would have little impact.

Licenses come at a cost to the retailer, and that cost could be increased.

There is potential for further regulation of venues featuring co-consumption of tobacco and alcohol e.g. smoke-free could be extended to external areas of drinking venues, or prohibition on sale of tobacco in pubs and clubs.

Tobacco retailers are not currently licensed, but could be (in Scotland there is a tobacco retailers register). There could be either a system of consistent or joint licensing. Licensing costs would need to be more than additive: the cost to hold two licenses should be more than the cost of each license (e.g. £500, £500, £2000) – comprising a public health levy for selling both.

Effective implementation can require managerial good practice and training of staff. Enforcement officers would need education and resources to ensure compliance. For example, vendors are expected to demonstrate good practice, including age checks. If they are found to be making underage sales, then the penalty could be a fine or loss of license. It is illegal in the UK to sell alcohol, tobacco or nicotine inhaling products (England and Wales) to anyone under 18. Alcohol

vendors can experience £5000 fine and loss of license, tobacco vendors can be subject to up to £2500 fine and restricted sales orders which stop them from selling tobacco products for up to a year.

Person

Person focused policies aim to strengthen the system that helps people to quit or cut down consumption in the long term, including:

- Increase access to general support and information e.g. leaflets, online, apps, available to individuals who want to reduce use.
- Identification of people who need advice, e.g., using a screening tool, followed by a few minutes of advice on the harms of consumption and how to reduce consumption, or referral to specialist treatment services. Often in the context of a GP visit but could occur in a range of settings.
- Provide treatment services to support heavy consumers / addiction to quit or reduce consumption; introduce innovations to make treatment more effective.
- Increase access to chemical aids to reduce consumption. Often as part of engagement with GPs or specialist services, but might also be over-the-counter at pharmacies or other retailers.
- Increase the support available (e.g. in the community or clinically) for mental health issues. This may give individuals the capacity to reduce use and/or reduce the need for use as a coping mechanism.
-

They can be implemented by:

- technology and online developers
- pharmacies
- primary care professionals (e.g. GPs)
- treatment service providers
- community groups

Practitioners need to be trained and incentivised to identify people who would benefit from support to reduce their smoking and/or drinking, and to offer advice and/or refer to specialist treatment services. This could take place during routine appointments.

Brief advice to support smokers to quit could be given at the same time as advice to reduce drinking and vice versa. Specialist services could also integrate support for smoking and drinking reduction. For those drinking and smoking, a joint intervention would likely require the prioritisation of the most significant factor by the patient and practitioner. This may impact on the speed of interventions.

Uncertain whether specialist services should intervene in tobacco and alcohol sequentially or simultaneously where relevant - doubt as to which is the more effective approach, with evidence on this being mixed and lack of knowledge of the cross-over effects. But “certainly better to treat one than neither” and to counter the idea of not being able to intervene in one because the other is the problem. Suggestion for a “seamless” link from one service to the next.

Treatment services may involve financial incentives e.g., vouchers for attending, which might increase engagement with treatment and therefore increase success. People could also be charged for not attending treatment services e.g. welfare benefits contingent on attending. Positive incentives such as vouchers are likely to attract more buy-in than negative incentives such as welfare cuts.

Community organising can include peer-based interventions, which take into account individuals' social histories and perhaps draw out the reasons why tobacco and/or alcohol have become their coping mechanism i.e. an approach that doesn't view the addiction in isolation. Community organising can help provide a social network to support behaviour change. Community empowerment and action is also important as behaviour is not only an individual choice but is influenced by community [7].

Promotion

Promotion policies aim to promote healthy choices and provide information on the links between product use and health in the public domain (i.e. outside the health system), through:

- Health promotion campaigns which may include mass or social media marketing, conveying the dangers of consumption and options for support to reduce or quit consumption. Content needs to be flexible so it can be configured to the needs of local practitioners.
- Expand school based initiatives that aim to teach about the harms of product use, and improve the cognitive skills that will help to resist influences for product use e.g. learning about marketing.
- Improve product labelling for consumer information through public health led design and/or regulation of labelling for consumer information e.g. calories, sugar, units, ingredients.
- Improve the reach and efficacy of health warnings e.g. embedded in industry marketing, the start of films or social media.

Initiatives can be funded and developed by the UK national government, devolved governments, local government, non-governmental public health organisations, and either directly or indirectly (e.g. via third parties) by the tobacco/alcohol industries.

The design of promotion could:

- 1) Promote healthy choices and provide information on the links between product use and health:
 - Provide healthy role models could promote non-smoking and sensible drinking – reducing acceptable image of consumption.
 - Convey scientific knowledge; resolve the tension between different agencies and actors giving different advice which is often conflicting e.g. between community organisers and local public health practitioners.
 - Expose and challenge policy narratives and social norms around tobacco and alcohol.
 - Combine messages about tobacco and alcohol use.

- Convey information about the negative physiological interactions between alcohol and smoking.
- Focus on health outcomes with a common tobacco and alcohol cause e.g. frailty in old age, cancer risk.
- Draw on harm to others as a theme in alcohol public health messaging similar to smoking. For example, drinking every day in front of children influences their perception that daily drinking is normal.

2) Target specific groups (flexibly) to better reflect the context of drinking and smoking in individuals' lives (c.f. the nuanced segmentation of commercial marketing):

- People who have a tendency to transgress (go against the norm or recommended behaviour).
- People with low health literacy.
- People more susceptible to social or peer-based considerations ("don't smoke because of your friends").
- Youth - school-based programmes particularly aim to improve mental well-being, resilience, self-control and social and personal competence skills.
- Single sectors of the workforce e.g. through occupational health.
- People with certain characteristics/levels of consumption e.g. direct messages at non-smokers and light/moderate drinkers to emphasise benefits in a positive way, rather than focus on prohibition. Different public health messaging may be required for heavy drinkers vs. less heavy drinkers.

3) Act as a counterweight to industry messaging:

- Expose industry marketing tactics and conduct counter-marketing.
- Share knowledge of covert and overt corporate social responsibility and sponsorship practices.
- Design public health messages to specifically counter the messages by industry that certain levels or practices of consumption are normal or safe. This includes industry activities that cast doubt on the scientific evidence that consumption causes harm. Part of this could include things like the Truth Campaign in the United States, which focused on exposing tobacco industry marketing tactics. [https://en.wikipedia.org/wiki/Truth_\(anti-tobacco_campaign\)](https://en.wikipedia.org/wiki/Truth_(anti-tobacco_campaign)).
- Counter industry's message that policy should only focus on heavy drinkers/smokers and that these can be tackled by individually-targeted information and education.
- For smoking, denormalisation and the idea of an "end game" form seemingly powerful public health messages.
- Show health inequalities (e.g. that tobacco and alcohol are a social harm by having worst effect on people in disadvantaged conditions).
- Frame the alcohol and tobacco industries in common terms. Alcohol messaging could focus on the alcohol industry, which could be reframed more like tobacco, as an 'unhealthy industry' selling products which are "not an ordinary commodity". The narrative could be along the lines of: this industry is exploiting you; the 'alcohol industry' is "hoodwinking" the world that drinking is "dancing with Rihanna and not about oesophageal cancer". Use

of quotes from industry documents, as with tobacco, can be powerful as are court cases e.g. “they’ll drink bucket loads” [8].

Prescriptive

Prescriptive policies aim to limit exposure – especially among young people – to commercial marketing and in doing so to reduce the influence of that marketing on social and policy norms around consumption. A particular focus is to reduce youth uptake of consumption at all or of certain consumption practices.

Options are:

- To regulate direct advertising via TV, print, film, online, social media, and billboards.
- To regulate indirect advertising in media i.e. industry tactics that do not explicitly market their products but are still planned marketing activities. Could be brand placement, subliminal advertising or sponsorship.
- To regulate indirect advertising relating to sports sponsorship.
- To regulate marketing so that messages are not designed to target particularly susceptible groups, such as children, people who are stressed or have mental illness.
- To regulate sales promotion via product packaging e.g. standardised packaging and limits on the descriptions that can be used.
- To regulate sales promotion at the point of sale.

Regulation is introduced by the UK and devolved national governments.

Tobacco advertising is heavily regulated (starting in 1967 with the ban on TV ads) so most of the room for new regulation is with alcohol.

For tobacco direct advertising restrictions currently include a full ban on tobacco advertising and a partial ban on e-cigarette advertising (under the EU Tobacco Products Directive). Alcohol direct marketing is currently regulated under self-regulatory and co-regulatory codes of practice¹ with the current regulatory system criticised for failing to protect young people. This means the alcohol industry currently maintain a dominant marketing voice which serves to drown out public health messaging around alcohol. Participants discussed the extension of the stricter tobacco-style regulations to alcohol marketing.

Advertising via social media, e.g. viral marketing, is currently under-regulated for tobacco and alcohol companies.

¹http://www.alcoholconcern.org.uk/wp-content/uploads/woocommerce_uploads/2014/12/stick_to_the_facts_report.pdf,
<http://www.ias.org.uk/uploads/pdf/Factsheets/Marketing%20and%20alcohol%20FS%20May%202013.pdf>

Tobacco and alcohol indirect advertising could be regulated under a common framework.

Restrictions need monitoring for effects and modification by industry. Enforcement of advertising regulation is important. This might include greater policing of the online and social media environments.

Restrictions could be introduced on the way that product use is portrayed in media, including film, online and social media, which might act to change the way that tobacco and alcohol are seen as contributing to an aspirational lifestyle. Restrictions might include the frequency of smoking and drinking as criteria for age classification of films, restrictions on subliminal advertising, regulation of cookies in online environments, restrictions on 'flogs', time-based restrictions on when tobacco and alcohol use can be shown in media, to reduce exposure of young people.

Regulating indirect advertising in sports has been implemented for tobacco but not for alcohol. There is uncertainty around what marketing restrictions would target. Alcohol advertising in sport includes advertisements linked to and sponsorship of sport events. Sports sponsorship by the alcohol industry is not covered by EU regulations.

Packaging typically features brands, promotions, images, logos. Branded packaging has been shown to have appeal and to be designed to appeal to specific market segments. Labelling and packaging can be regulated via mandatory or recommended requirements for labelling content and size, packaging size, shape, colour and style. Restrictions on glassware (shape, design, logos) in pubs could also be included here. Packaging restrictions will reduce consumers' brand exposure and thereby reduce brand recognition. Tobacco is more regulated than alcohol in terms of packaging. Standardised packaging, introduced May 2016 in the UK, has been shown to reduce the visibility of products as well as their appeal.

Industry regulation

Industry regulation aims to limit the political influence of industry and its interference with public health advice, and to recoup the costs to society generated by industry. It is implemented by Government at all levels.

Options are:

- To strengthen regulation on the alcohol industry so as to treat the tobacco and alcohol industries the same (move away from tobacco exceptionalism).
- To expose and disrupt industry political activity and coalitions e.g. by public health corporate capture, industry monitoring, exposure of the activities of industry third party organisations.
- To reduce the extent that government allows industry to have influence on the formation of public health policy.
- To review industry-funded research for quality e.g. systematically review the quality and conflicts of interest of sources used to inform government policymaking processes.
- Stop industry communicating public health advice (as this can skew the public health message to suit industry marketing purposes and thereby weaken it).

- Tax industry imports or profits e.g. an industry levy where the revenue might be used by government to recoup or mitigate the costs of consumption to society.
- Engage with non- tobacco or alcohol industry businesses to encourage them to end their partnerships with the tobacco or alcohol industries e.g. supermarkets (retail) or football clubs (sponsorship).

The tobacco industry is currently subject to stronger regulation than the alcohol industry. The alcohol control community needs to learn more from the tobacco control community. Alcohol measures in the style of FCTC article 5.3 could be adopted to limit alcohol industry influence over policymaking, bringing it into line with tobacco - for example, local authorities could reduce their interaction with alcohol companies.

The tobacco and alcohol industries could be regulated under a common framework to be applied to “harmful industries”. A common framework could include:

- Monitoring of industry interference with information on health harms
- Limiting industry involvement in the formulation and implementation of local, national and international policy.
- Disrupting coalitions across tobacco, alcohol and marketing industries.
- Excluding psychoactive substances from trade agreements.
- Third party organisations should be required to openly declare funding from tobacco and alcohol companies when lobbying government on tobacco and alcohol policy. Disrupting coalitions or co-ownership of tobacco, alcohol and advertising companies might prevent the industries sharing resources, tactics and lobbying power.

Tobacco and alcohol industry involvement in the formation and implementation of local, national and international policy could be further restricted. Industry initiatives could be systematically excluded from any public health policy mechanism. Or if included, increase the awareness among policymakers that industry can provide biased public health advice (de-normalise government advice seeking from industry), and increase government awareness of corporate social responsibility initiatives from industry and their third party organisations.

The alcohol industry is trusted to communicate public health messages (e.g. labelling: “drink responsibly”; CSR initiatives: Drink Aware) even though they have a vested interest in higher consumption and research shows their narrative is designed to give individuals a mandate to drink. Government consent to and support this under the Public Health Responsibility Deal. In this way, government and industry have blurred the lines of alcohol-health messaging. Alcohol-health campaigns outsourced to industry can use nuanced differences and strategic ambiguity in their messaging. Industry health messaging can build trust in the message, brand and company over time with an accumulation of effect. Monitoring of interference with information on health harms and mandated independent development and evaluation of public health messaging by non-industry health experts would prevent industry from setting the tone. Take editorial control of public health messaging on labelling and in advertisements away from industry.

A levy to be imposed on industry, revenue from which would be hypothecated for spending on addressing related harms and/or prevention (c.f. a polluter pays tax on tobacco and alcohol

companies). This tax could be proportional to the amount or profits from annual sales across the country. However, a levy would be difficult to implement due to jurisdictional limitations e.g. where companies are transnational. A levy could instead be imposed on retailers (both online and in shops) who sell tobacco and/or alcohol products - this would be easier to apply and could take the form of a license or be integrated into business rates (as with the public health levy in Scotland - calculated by square footage of alcohol and tobacco products per premises). Importers could also be subject to a levy - this might be a way to target manufacturers. A combined 'public health levy' could be imposed across the tobacco and alcohol industries and even extended into producers and retailers of unhealthy foods. A joint retail license (see 'Place' would effectively comprise a public health levy. The cost of any levy to industry could be passed onto the consumer in the form of a retail price rise. The money raised could be hypothecated for public health services (e.g. stop smoking services) or could be hypothecated for spending on disadvantaged communities.

Government could engage with non-alcohol/tobacco industries regarding their relationships with these industries (divide the corporate community, so not just homogenous business). Football clubs, for example, sponsored by alcohol companies, could be asked to consider: what's your corporate social responsibility and image, e.g. to fans and particularly children. Retailers could be encouraged to consider the impact of tobacco and alcohol on absenteeism in their industry - why should they pay the costs imposed by another industry?

Worldview

Consumers – outcomes for consumption

The primary outcome from a public health perspective is reduction in the consumption of tobacco and/or alcohol and by extension to reduce the population's exposure to their harmful effects:

- Reducing the probability of an individual trying, initiating regular consumption or initiating/progressing to certain behaviours in product use.
- Reducing the amount of regular consumption (quantity and frequency of consumption) among current consumers, including prompting individuals to quit consumption altogether.
- The main aim for smoking is to encourage quit, but cutting down would reduce exposure to harmful effects.
- The main aim for drinking amongst the general population is to reduce regular intake and the frequency of binge drinking (preferably to within national guideline levels i.e. a small amount of drinking is ok).
- For very heavy and dependent drinkers, the aim is to support individuals to quit drinking at that quantity/frequency.
- Reducing the rate of relapse to past consumption behaviour amongst consumers who have cut down / quit, and if relapse occurs then increasing the rate at which individuals make fresh attempts.
- Reducing the exposure of people other than the consumer to second hand smoke or to the effects of drunkenness.

Among people who both drink and smoke:

- Drinking and smoking might be reduced at the same time e.g. as part of a general drive to become healthier.
- The extent to which both behaviours are done together in certain contexts might change e.g. altering the co-occurrence of drinking and smoking in particular locations.
- Positive interactions between changes to smoking and drinking could facilitate further outcomes e.g. reducing the level of alcohol consumption might make it more likely that someone who drinks and smokes could quit smoking successfully.
- Negative interactions between changes to smoking and drinking e.g. individuals might replace smoking with increased alcohol consumption, and vice versa.

Consumers – outcomes for disposable income

The secondary outcome for consumers is the effect that changes in consumption have on their disposable income. Disposable income would decrease if product price increases but individuals do not decrease their consumption. Disposable income would increase if consumption is reduced (so long as this reduction is not compensating for a price rise). The proportional effect of these changes on disposable income is likely to be higher for consumers with lower income. The effect on disposable income of changes in tobacco price and consumption will depend on the extent to which consumers change their alcohol consumption as a result, and vice versa (i.e. cross-over effects in consumer spending on tobacco and alcohol are important).

Government

Government values affect the likelihood that certain types of policy will be implemented. For example, regulating access to products by changing price must consider that government values are set against a background of austerity (do things that power economic recovery). This might affect the relative value that policymakers place on different outcomes of the same policy e.g. increased taxation has outcomes for industry finances (e.g. manufacturers) and government revenue, consumers (e.g. reductions in disposable income in disadvantaged groups) and on fairness in society (inequalities in consumption/harms). The UK Government has a history of giving a higher priority to tobacco as a public health issue than it does to alcohol. One outcome would be to raise alcohol in priority as a public health issue in the minds of policymakers e.g. resulting in greater funding for alcohol prevention programmes. This might also make some of the policies used for tobacco (e.g. plain packaging, advertising bans) more believable/realistic as options for alcohol. A change in how Government prioritises smoking vs. drinking as public health issues might have further outcomes for how Government interacts with the tobacco and alcohol industries (e.g. a change to treating harmful industries the same). This could result in tighter limits on the influence that industry has on the formation of policy (that can erode the public health benefit in favour of business interests), and on the communication of public health messages and information e.g. design of labels (that can weaken the public health effect).

Industry

The primary outcome for industry is the effect on the profits that stem from effects on the market for tobacco and alcohol.

Part of the market is consumer perceptions of tobacco and alcohol products and the producing industries. International public health action on tobacco has cast tobacco and the tobacco industry as harmful to health, and as profiting from health harms. Alcohol and the alcohol industry is more respectable as an integral part of society, which cooperates with government e.g. through the Alcohol Responsibility Deal. Some participants suggested that there would be a benefit to public health from decreasing the respectability of alcohol to bring it more in line with tobacco, and limiting government cooperation with the alcohol industry.

Government can restrict industry marketing activities to promote smoking and drinking and the sales of specific products. For example, government could restrict industry sponsorship of sports or product placement in films. Public health messaging might also reduce the effectiveness of industry marketing e.g. by showing it is trying to manipulate people into unhealthy behaviours. However, industry is likely to adapt to new realities with new tactics that circumvent regulations and adapt to changing consumer perceptions.

Government can alter consumer access to products. Participants mainly discussed the effects of changes to the licensing rules on retail premises, which are currently used mainly to control the density of certain types of alcohol outlets in certain areas. Participants were concerned that new or stricter licenses for the sale of tobacco or alcohol would have a greater negative effect on small business than on larger ones e.g. supermarkets. If licenses are expensive or fines have to be paid, then business might be forced to increase prices or close if profits reduce, with a negative effect on local areas. Alternatively, licensing might affect whether retailers choose to sell tobacco and/or alcohol. If the rules around licensing were made easier for retailers to understand and comply with, then they might be better able to continue to sell tobacco and/or alcohol within the rules.

Government can attempt to control product price but might do so with differing aims depending on circumstances and political outlook e.g. prioritising public health by reducing demand, revenue from taxation, or industry profits and hence national economic growth. Public health advocates want government to raise product price to reduce demand, particularly for the cheapest tobacco and alcohol (thereby reducing price variation in the market). Related to direct price controls are government regulations that set a minimum pack size and hence limit the availability of small, cheap items (e.g. the EU Tobacco products directive sets a minimum cigarette pack size of 20 per pack). If increases in product price decrease sales, then this creates a fiscal pressure on industry to mitigate the loss of profits. One strategy is for industry to cross-subsidise products or brands. For example, industry could mitigate the effects of tax rises on demand for the cheapest brands by reducing profit margins on those brands and instead increasing profit margins on premium brands (manipulating tax pass-through to retail price). One effect of the introduction of standardised packaging is to weaken brand identities and this might affect price variation in the market and the ability for industry to cross-subsidise cheap with premium brands. Multiproduct retailers might respond to increased tax on tobacco and/or alcohol by raising the price of food to maintain profits across their product range. Another strategy might be to increase demand in the face of an increase in product price by increasing promotion. Pack size/volume is related to the price per pack and so

reducing pack size (if allowed by regulation) could mitigate the effect of a tax rise on the per item price.

Community & society

First is the effect on inequalities i.e. the socioeconomic gap. The socioeconomic gap can be defined in a variety of terms including health (mental and physical) and wealth (disposable income). Whether an intervention (including how it is delivered or made accessible to the population) is expected or observed to widen or narrow the gap is important because values in society generally favour actions that narrow the gap (i.e. are progressive rather than regressive). For example, an argument against a minimum unit price for alcohol is that if it does not decrease consumption, then it would penalise those on low income, who tend to drink the cheapest alcohol. For taxes or industry levies, government could mitigate any regressive effects by hypothecating the revenue to support tobacco and/or alcohol treatment and public health services, or in general to support communities in acting to reduce inequalities and their negative impacts.

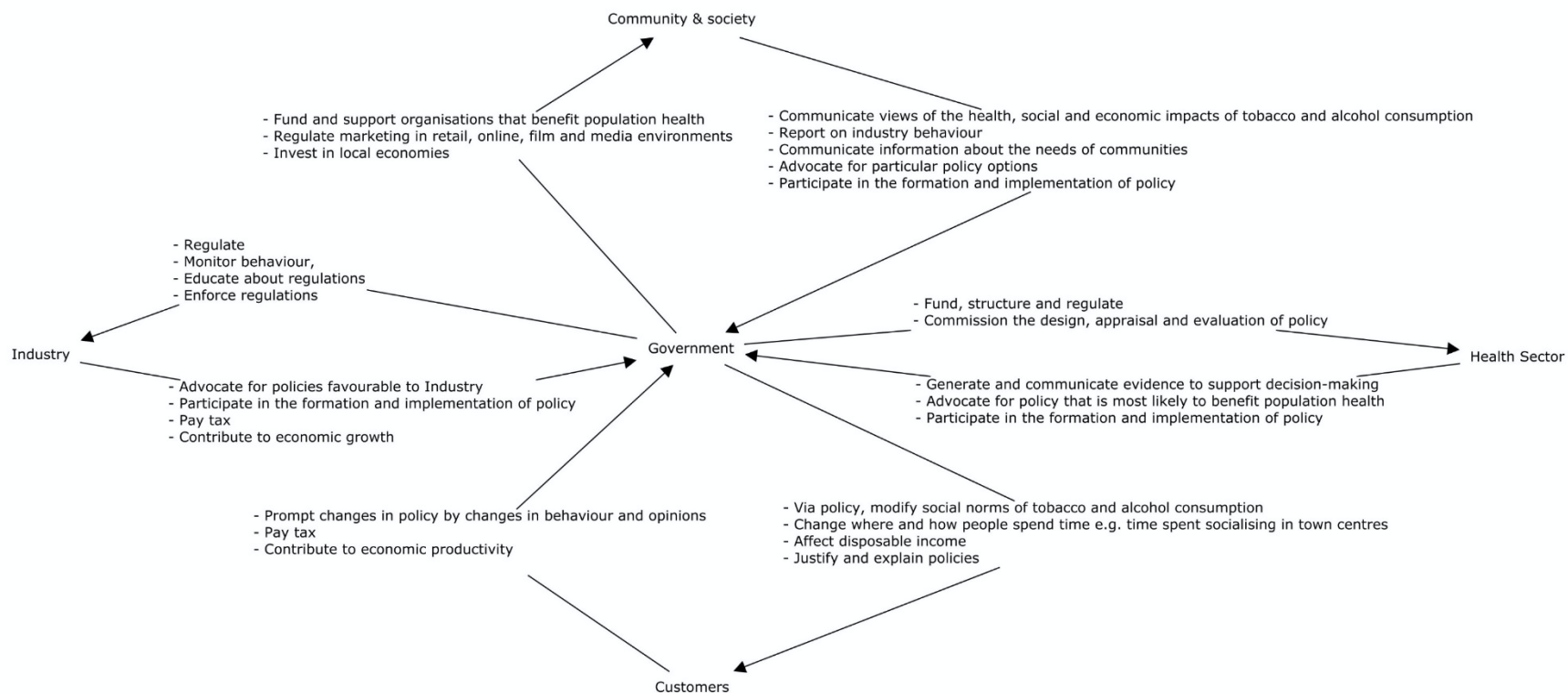
Second, it might be considered unethical to make tobacco and/or alcohol unaffordable for people who are on low income. If smoking or drinking helps people to cope with difficulties in life, then their mental health might suffer or they might seek alternative forms of coping. Making products unaffordable might cause individuals to steal or buy illegal/counterfeit products. It might also cause individuals to spend money on smoking or drinking rather than food or family.

Third is the effect on the culture (the societal narrative) around smoking and drinking and on the consequences of that culture for others. For example,

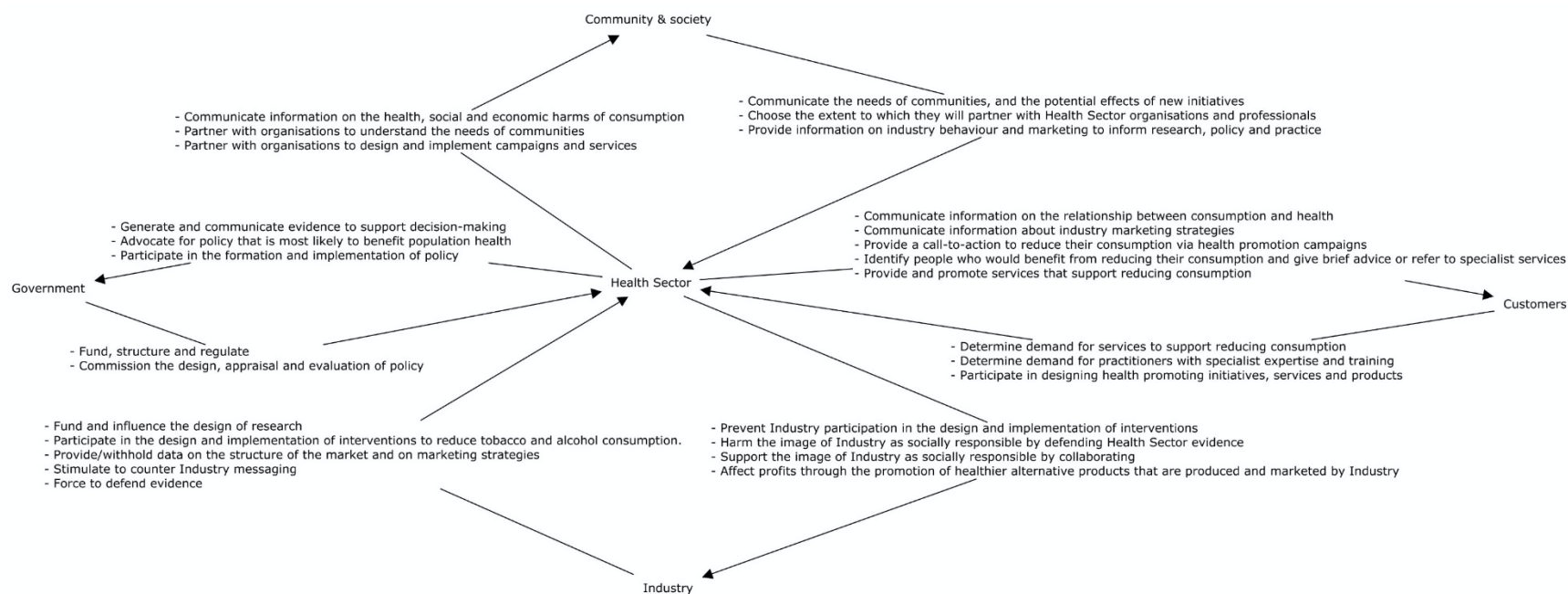
- If binge drinking became less popular/socially acceptable, then violence and public disorder might become less frequent.
- Smoke-free air laws affected the social norm of drinking and smoking at the same time.
- If prices change so that supermarket alcohol is cheaper than in bars, then young people might start to pre-load at home, and are more likely to smoke there, and be exposed to second-hand smoke, than if were in a bar.
- A change in how tobacco or alcohol use/certain behaviours in product use are seen as a status symbol e.g. what you choose to drink is part of your image and what you present to the world about yourself.
- New habits might also be created e.g. by smoke- or alcohol-free social venues creating new norms that these venues can be visited without smoking or drinking. This outcome is important partly because smoking and drinking behaviours can be transmitted socially, including to children. Small changes in culture could amplify socially over time, resulting in a changed social context for smoking and drinking in communities. For example, if parents stop smoking and drinking in front of their children, then that influences their children's perception that daily consumption is normal.

Transformation

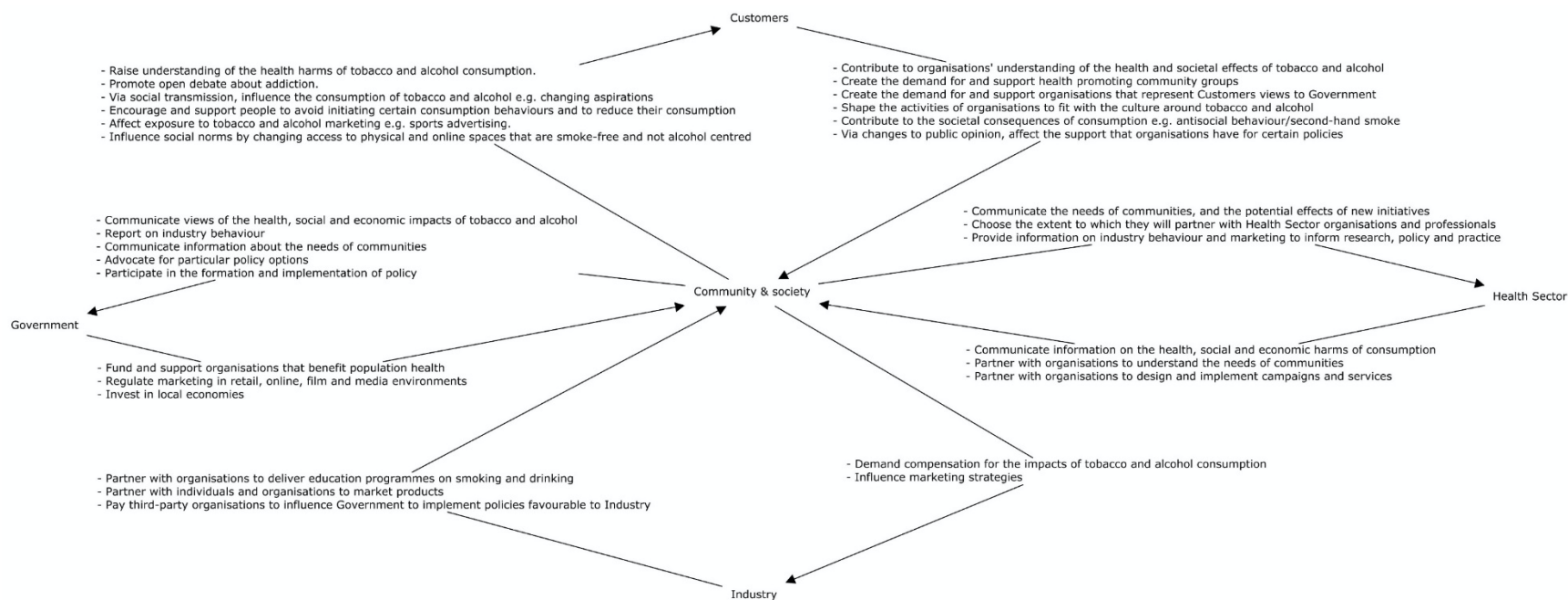
Here we show our main conceptual diagrams of the relationships between the main groups in society. We constructed these linkages by taking an overview of our entire dataset. See Annex 1 below for details of the linkages that were specifically referred to by participants.



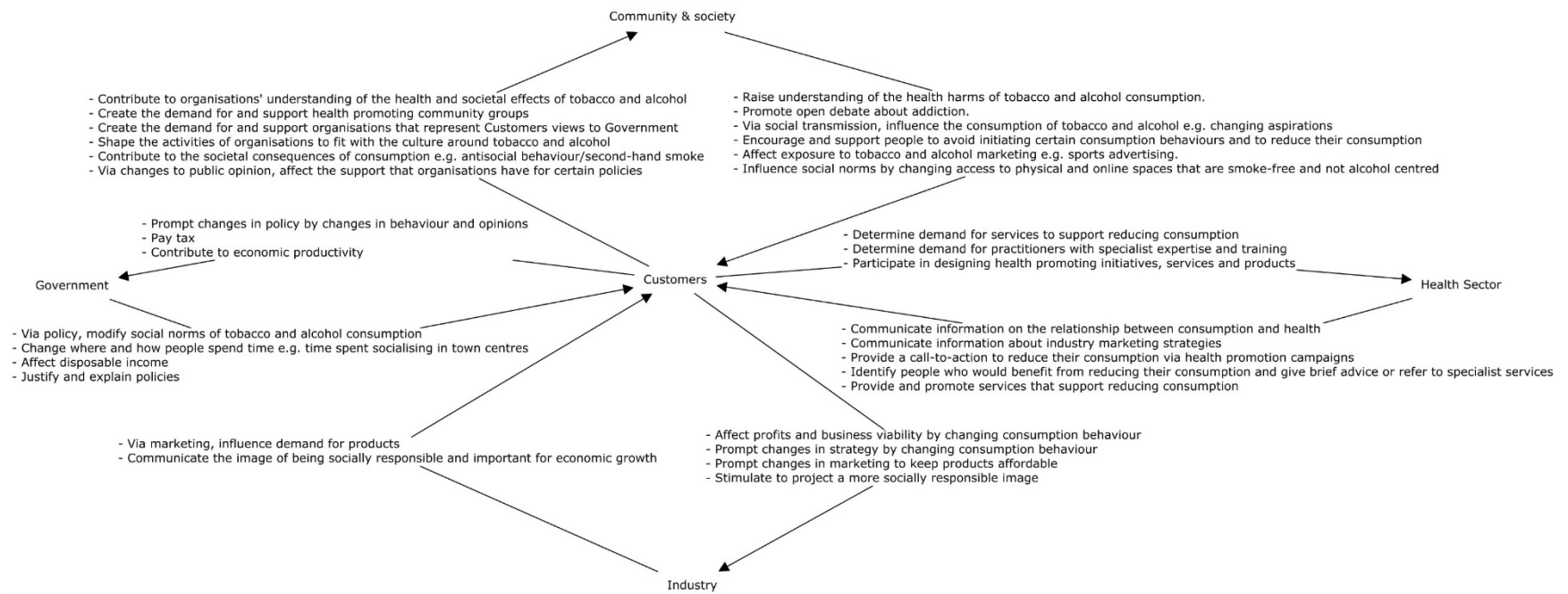
Government focused



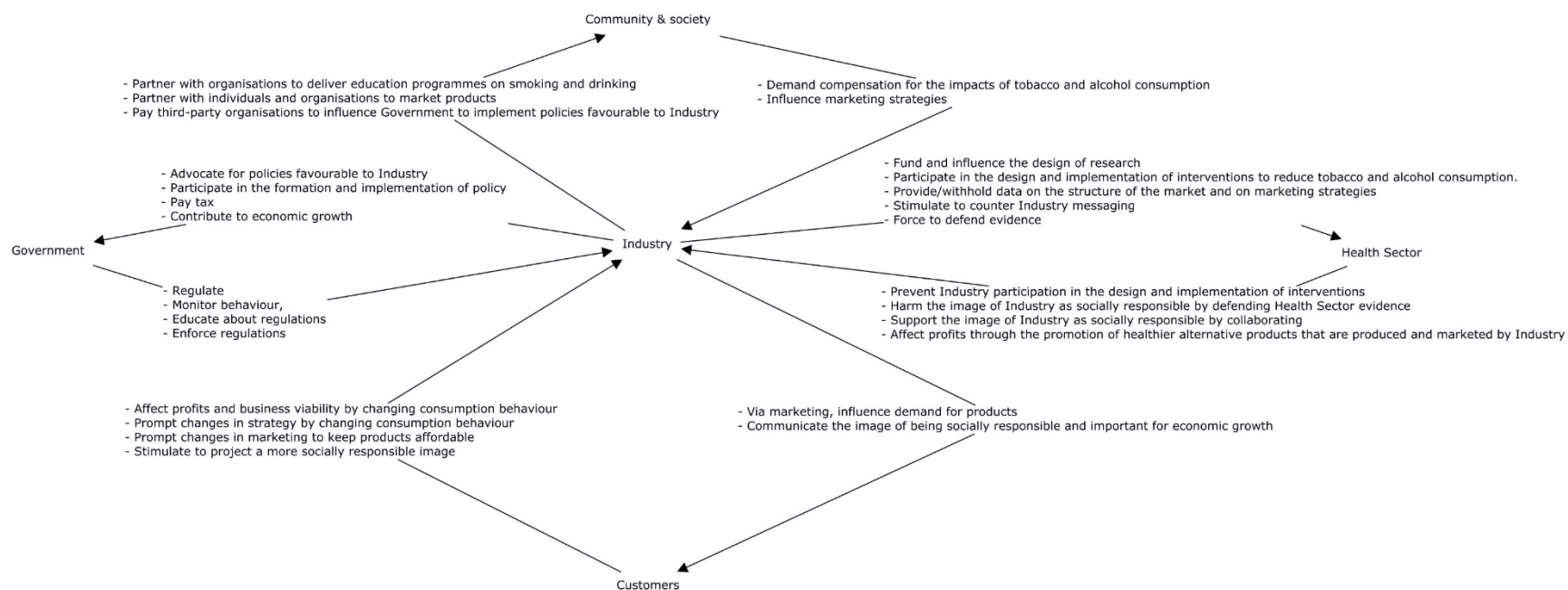
Health Sector focused



Community & Society focused



Customer focused



Industry focused

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ANNEX 1 – Mechanisms to effect or Transformation

Codes	Subject	Verb	Object	Codes
Consumers Behaviour Context of consumption Drinking in private settings	Increases in the extent to which individuals smoke and/or drink in private settings e.g. at home or at parties. This could include 'pre-loading' at home before a night out.	increases	Smoking around others such that exposure to second hand smoke increases.	Community/society Outcomes for society Consequences of consumption Exposure of others to second-hand smoke
Consumers Behaviour Context of consumption Drinking in private settings	Increases in the extent to which individuals smoke and/or drink in private settings e.g. at home or at parties. This could include 'pre-loading' at home before a night out.	increases	Alcohol binges and in general increases alcohol consumption e.g. due less regulated measures of alcohol (larger).	Consumers Behaviour Quantity and frequency of consumption Amount drunk on a single occasion
Consumers Behaviour Context of consumption Drinking in private settings	Drinking in a setting where smoking is unrestricted e.g. at home	increases	Smoking as an automatic behaviour e.g. if smoking is usually done in that setting, then there will be an expectation to smoke drinking might also trigger smoking	Consumers Motivation Expectations Chance of smoking
Consumers Behaviour Quantity and frequency of consumption Amount drunk on a single occasion	Decreased prevalence of acute drunkenness	increases	Anti-social behaviour, risk taking, violence etc.	Community/society Outcomes for society Consequences of consumption Anti-social behaviour, risk taking, violence etc.
Consumers Behaviour Quantity and frequency of consumption Amount drunk on a single occasion	Drinking to the point of intoxication	decreases	Inhibitions that would otherwise prevent someone from smoking	Consumers Capability Self-control Inhibitions that would otherwise prevent someone from smoking
Consumers Behaviour Quantity and frequency of consumption	Fall in demand for tobacco and alcohol	increases	Income of retailers. This might particularly affect small multiproduct retailers that sell tobacco and alcohol.	Industry Outcomes for industry Industry revenue

Consumers Behaviour Success in reducing consumption	Success in reducing consumption e.g. in overcoming physiological addiction or engrained habits of consumption	increases	Likelihood of reducing consumption of other substances e.g. due to an increase in mental or physical capability, and/or self-belief	Consumers Motivation Self-belief Desire to reduce consumption of other substances
Consumers Behaviour Success in reducing consumption	Success in or ongoing attempt at reducing consumption e.g. in overcoming physiological addiction or engrained habits of consumption	increases	Likelihood of consuming other substances to compensate for the loss of the focal substance. This might result in increased consumption of tobacco, alcohol or other products such as sweets	Consumers Motivation Underlying need to consume Need to compensate for reduced consumption
Consumers Capability Chemical aids Use of pharmaceutical aids to reduce consumption	The use of pharmaceuticals to help reduce the strength of cravings	increases	Likelihood that a smoker making a quit attempt is likely to succeed or a dependent drinker will be able to successfully reduce their alcohol consumption	Consumers Behaviour Success in reducing consumption
Consumers Capability Mental health	Increased mental well-being, resilience, self-control and social/personal competence skills	increases	Ability to resist social influences to consume	Consumers Capability Self-control Ability to resist influences to consume
Consumers Capability Mental health Stress	Increased stress e.g. due to changes in life circumstances	decreases	Susceptibility to advertising (especially advertising that portrays product use as a coping mechanism)	Consumers Capability Self-control Ability to resist influences to consume
Consumers Capability Mental health Stress	Increased stress e.g. due to changes in life circumstances	increases	Likelihood that individuals will smoke or drink as a coping mechanism	Consumers Motivation Underlying need to consume Consumption as a coping mechanism
Consumers Capability Receipt and use of knowledge Trust in information on health harms	Increases in the confidence that individuals have that the information and advice they receive is valid and trustworthy (e.g. from GPs or in materials that provide information on the harms of smoking and drinking)	increases	Likelihood that the individual is motivated to change consumption behaviour as a result	Consumers Motivation Reducing consumption Desire to reduce consumption
Consumers Capability Self-control	Decreased inhibitions due to drinking	increases	Likelihood of relapsing to smoking among people who are making a quit attempt	Consumers Behaviour Success in reducing consumption

Consumers Motivation Expectations Restrictions on smoking around public drinking venues	If a smoker is drinking in or near a smoke-free area, then they might choose not to take a smoking break	increases	Time spent in alcohol venues drinking	Consumers Behaviour Context of consumption Time spent in public drinking venues
Consumers Motivation Product preferences Brand loyalty	A decrease in the affinity of someone to a particular product or brand (decreased consumer brand loyalty)	decreases	Likelihood that a consumer will switch brands e.g. in response to a rise in the price of their usual brand	Consumers Behaviour Brand switching
Consumers Motivation Reducing consumption Desire to reduce consumption	Increased desire to reduce tobacco and/or alcohol consumption as part of becoming healthier	increases	Likelihood that an individual will make an attempt to reduce consumption and as part of this attempt seek support and information	Consumers Motivation Reducing consumption Use of support to reduce consumption
Consumers Motivation Reducing consumption Use of support to reduce consumption	Increased motivation to engage with support for behaviour change e.g. to make good use of specialist services	increases	Likelihood that reduced consumption will be sustained	Consumers Behaviour Success in reducing consumption
Consumers Motivation Underlying need to consume Need to compensate for reduced consumption	A need to compensate for a decrease in consumption for tobacco and/or alcohol e.g. because the cravings or habit to consume still remains, or to try and replace the enjoyment that stemmed from consumption	increases	Consumption of other products. This might include increases in drinking after quitting smoking, and vice versa. It might also include increases in eating or drug use.	Consumers Behaviour Cross-over effects to consumption of other substances Consumption of other substances
Consumers Motivation Underlying need to consume Strength of addiction	The extent to which an individual's consumption behaviour is stable or ingrained in their lives (e.g. strength of habit)	decreases	Sensitivity of consumption to changes in product price	Consumers Behaviour Success in reducing consumption
Consumers Opportunity Physical environment influence on consumer behaviour Acceptability of public drinking venues	Changes to on-trade drinking venues to make them more attractive or acceptable (the major past change being the ban on smoking indoors)	increases	The time that people spend drinking at on-trade alcohol venues	Consumers Behaviour Context of consumption Time spent in public drinking venues
Consumers Opportunity Physical environment influence on consumer behaviour Accommodation	Expansion of smoke-free areas e.g. to areas around pubs or other public places	increases	Attractiveness of on-trade alcohol venues to non-smokers, which might increase the amount drunk by non-smokers	Consumers Opportunity Physical environment influence on consumer behaviour Acceptability

Consumers Opportunity Physical environment influence on consumer behaviour Accommodation for purchasing off-trade alcohol	Limiting access to off-trade alcohol at key times and locations e.g. late at night in town centres	decreases	Likelihood that people drink outside late at night, and hence frequency of drunkenness related anti-social behaviour	Consumers Outcomes for society Consequences of consumption Anti-social behaviour, risk taking, violence etc.
Consumers Opportunity Physical environment influence on consumer behaviour Accommodation for smoking and drinking in general	Reduced opportunity to smoke/drink at moments when otherwise consumption would help the consumer to cope with hardship / life difficulties	decreases	Consumer wellbeing	Consumers Capability Mental health Consumption as a coping mechanism
Consumers Opportunity Physical environment influence on consumer behaviour Accommodation for smoking when and where a smoker wants	Restrictions on where and when alcohol and tobacco can be consumed, including the expansion of smoke-free areas	decreases	Likelihood that smokers will drink and smoke on the same occasion e.g. location or social context, with the knock-on effect that societal values and norms move away from certain behaviours in product use	Consumers Behaviour Context of consumption Chance of smoking and drinking at same time
Consumers Opportunity Physical environment influence on consumer behaviour Accommodation for smoking when and where a smoker wants	Expansion of smoke-free areas e.g. to areas around pubs or other public places	increases	Likelihood that smokers choose to spend their time in places where smoking is still allowed e.g. spend time socialising and drinking at home rather than in or outside pubs. This could reduce profits for businesses affected by the expansion of smoke-free	Consumers Behaviour Context of consumption Drinking in private settings
Consumers Opportunity Physical environment influence on consumer behaviour Accommodation for smoking when and where a smoker wants	Expansion of smoke-free areas e.g. to areas around pubs or other public places	decreases	Expectation of smokers that they can smoke in certain places or contexts, which therefore results in reduced smoking in those contexts	Consumers Motivation Expectations Chance of smoking
Consumers Opportunity Physical environment influence on consumer behaviour Accommodation for smoking when and where a smoker wants	Limits on the extent to which individuals can smoke and drink at the same time e.g. due to smoke-free public spaces	decreases	Enjoyment gained from drinking because drinking and smoking is now no longer possible in certain contexts, with the effect that both tobacco and alcohol consumption might fall	Consumers Outcomes for society Consequences of consumption Enjoyment gained from drinking because drinking and smoking is now no longer possible

Consumers Opportunity Physical environment influence on consumer behaviour Affordability	Increases in the retail price of a product that is usually bought by a customer	increases	<p>Likelihood that a consumer will switch brands to a cheaper product type rather than quitting or reducing consumption e.g. switching from machine-rolled to hand-rolled cigarettes or to e-cigarettes, or switching from on-trade beer to on-trade wine. The location of alcohol purchase might switch from the on-trade to the off-trade in response to a rise in the retail price of on-trade alcohol, causing people to spend more time drinking in private locations such as at home or at parties</p> <p>Likelihood that a consumer will switch to products that are cheaper because they have not had the duty paid on them e.g. illegitimate/counterfeit/illicit products</p>	Consumers Behaviour Brand switching
Consumers Opportunity Physical environment influence on consumer behaviour Affordability	Increases in the retail price of a product that is usually bought by a customer	decreases	Spending on other products to maintain enough disposable income to continue to consume the product whose price has just risen to the same extent as before the price rise. This could include a reduction in spending on other alcohol and/or tobacco products, or spending on food etc.	Consumers Behaviour Cross-over effects to consumption of other substances Other spending
Consumers Opportunity Physical environment influence on consumer behaviour Affordability	Reduced consumption due to a price increase, on the basis of affordability	increases	Likelihood that a consumer will change how they consume to mitigate the effects of reduced consumption e.g. by smoking 'harder' or drinking alcohol in a shorter time to increase the level of intoxication. For example, an increase in on-trade alcohol prices might increase the likelihood of preloading at home before a night out to take advantage of cheaper supermarket alcohol	Consumers Behaviour Quantity and frequency of consumption Intensity of consumption

Consumers Opportunity Physical environment influence on consumer behaviour Affordability	Decreased affordability of tobacco and/or alcohol. This might be due to a rise in the retail price (e.g. from a tax rise) or a fall in an individual's disposable income	decreases	Likelihood that an individual will purchase a product that they otherwise have the motivation to buy The amount of that product that is purchased	Consumers Behaviour Quantity and frequency of consumption
Consumers Opportunity Physical environment influence on consumer behaviour Affordability	Increases in the retail price of a product that is usually bought by a customer, combined with the customer continuing to purchase that product to the same extent	decreases	Disposable income of the customer	Consumers Opportunity Risk of or actually reduced disposable income
Consumers Opportunity Physical environment influence on consumer behaviour Affordability by restricting price promotions	Restricting price promotions for on-trade alcohol e.g. happy hours	decreases	Prevalence of acute drunkenness	Consumers Behaviour Quantity and frequency of consumption Amount drunk on a single occasion
Consumers Opportunity Physical environment influence on consumer behaviour Affordability due to MUP	Minimum unit price induced increases in the retail price of a product that is usually bought by a customer, combined with the customer continuing to purchase that product to the same extent	increases	Profit to industry	Industry Outcomes for industry Industry revenue
Consumers Opportunity Physical environment influence on consumer behaviour Affordability due to tax changes	Changing the structure of taxation on tobacco/alcohol to a fully specific system (where tax is proportional to the amount/concentration of tobacco or pure ethanol) from an ad valorem system (where tax is proportional to the pre-tax price of the product)	increases	The ability of industry to maintain cheap products in the market by manipulating the pre-tax price of products across the range of products they control. The industry practice of making a loss on cheap products to keep them affordable but then ensuring that profits are maintained by raising the pre-tax price of premium products is known as manipulating the pass-through of tax to the retail price	Industry Industry behaviour Shape market Industry adjustment of the market to maintain affordable products

Consumers Opportunity Physical environment influence on consumer behaviour Affordability due to tax changes combined with the customer continuing to purchase that product to the same extent	Tax induced increases in the retail price of a product that is usually bought by a customer, combined with the customer continuing to purchase that product to the same extent	increases	Tax revenue to government	Government Outcomes for government Government revenue
Consumers Opportunity Physical environment influence on consumer behaviour Availability	Restrictions on where and when alcohol and tobacco can be bought, including limits on the number or density of retailers	decreases	Likelihood that smokers will drink and smoke on the same occasion e.g. location or social context, with the knock-on effect that societal values and norms move away from certain behaviours in product use	Consumers Behaviour Context of consumption Chance of smoking and drinking at same time
Consumers Opportunity Physical environment influence on consumer behaviour Availability of alcohol to intoxicated drinkers	Prevent serving to people judged to be above a certain threshold of intoxication	decreases	Prevalence of acute drunkenness	Consumers Behaviour Quantity and frequency of consumption Amount drunk on a single occasion
Consumers Opportunity Physical environment influence on consumer behaviour Availability of alcohol to minors	Greater restrictions / enforcement on selling to minors	decreases	Rates of initiation of smoking/drinking and of transition to regular harmful behaviours in product use	Consumers Behaviour Quantity and frequency of consumption Rates of initiation of smoking/drinking and of transition to regular harmful behaviours in product use
Consumers Opportunity Physical environment influence on consumer behaviour Availability of healthier alternatives (reduced harm options)	Increased availability of healthier alternatives (e-cigs, non-alcoholic beverages) i.e. more choice	increases	Likelihood that consumers will use healthier alternatives	Consumers Behaviour Cross-over effects to consumption of other substances Use of reduced harm products
Consumers Opportunity Physical environment influence on consumer behaviour Availability of non-alcohol centred venues for a night-out	More non-alcohol centred venues for a night-out	decreases	Peer-pressure felt by young people to drink and smoke to fit-in with social group. i.e. social trigger to drink, or to drink in certain ways, because friends are doing so	Consumers Opportunity Social environment influence on consumer behaviour Norm for alcohol consumption on a night-out

Consumers Opportunity Physical environment influence on consumer behaviour Availability of public drinking venues	Decreased access to on-trade alcohol through decreased availability	increases	Frequency that individuals consume in private settings e.g. buying cheaper alcohol in the off-trade and then spending the entire social occasion at home, or pre-loading on alcohol at home before going out to socialise without drinking.	Consumers Behaviour Context of consumption Drinking in private settings
Consumers Opportunity Risk of or actually reduced disposable income	Reduced disposable income	increases	Societal inequality because price rises and the reductions in disposable income that result if consumption remains the same will have a larger proportional effect on low income groups	Community/society Outcomes for society Inequality Social inequality
Consumers Opportunity Risk of or actually reduced disposable income	Reduced disposable income, or threat this might happen due to price rise	increases	Consumer activity in changing / adapting the products or brands that they typically consume, with the aim of maintaining the level or pattern of consumption they would like with lower disposable income	Consumers Behaviour Brand switching
Consumers Opportunity Risk of or actually reduced disposable income	Following a rise in the price of tobacco and/or alcohol, consumers might be prompted to consider the potential effect of continuing their current pattern of consumption on their disposable income	decreases	Likelihood that consumers will change their behaviours in product use accordingly e.g. their intensity and frequency of consumption, or preferred types and price of product Consumption that is usual in a day (intensity / frequency) e.g. reducing the frequency and intensity of binge drinking, which is likely to reduce the prevalence of people whose average weekly alcohol consumption is at hazardous or harmful levels	Consumers Behaviour Quantity and frequency of consumption
Consumers Opportunity Risk of or actually reduced disposable income	Reduced disposable income, or threat this might happen due to price rise	decreases	Consumer expectations that they will drink or smoke e.g. if someone has this lower expectation, then they might be less likely to respond to an opportunity to consume	Consumers Motivation Expectations Chance of drinking or smoking

Consumers Opportunity Social environment influence on consumer behaviour Health promotion vs. Industry marketing	Reduce the public's exposure to marketing that portrays certain tobacco/alcohol products or consumption behaviours as part of normal life and something to be desired/aspired to e.g. imagery of social drinking in media and sports sponsorship	decreases	Likelihood that people, especially young people, will initiate consumption or transition to certain behaviours in consumption that might be more harmful. This could then have a knock-on effect on the social norms of how we consume e.g. expectations/motivation that individuals feel on how they should behave	Consumers Behaviour Quantity and frequency of consumption
Consumers Opportunity Social environment influence on consumer behaviour Health promotion vs. Industry marketing	Stop the tobacco/alcohol industries communicating health advice to the public, and have all public health advice independently verified Monitoring and prevention of industry interference with information on health harms, potentially including stopping industry communicating and funding public health messages, and introducing independent verification of information about the health effects of smoking/drinking	increases	Individual confidence that advice is valid or trustworthy Likelihood that individuals receive accurate and understandable information, and see that information as credible	Consumers Capability Receipt and use of knowledge Trust in information on health harms
Consumers Opportunity Social environment influence on consumer behaviour Health promotion vs. Industry marketing	Reducing industry dominance over messaging that influences the social norms of consumption e.g. the aspirational lifestyle messages associated with consumption. This is influenced by increased funding for public health social media campaigns, stronger regulations on industry marketing, and monitoring and prevention of industry circumvention of regulations on marketing	decreases	How people (especially young people) view the desirability of smoking or drinking above guideline levels	Consumers Motivation Aspirations Desirability of smoking or drinking above guideline levels
Consumers Opportunity Social environment influence on consumer behaviour Health promotion vs. Industry marketing	Increased restrictions on industry marketing or involvement in public health policy formation and delivery	increases	Likelihood that industry will adopt new strategies to adapt to and overcome the new restrictions, thereby decreasing the effectiveness of these restrictions at reducing tobacco/alcohol consumption	Industry Industry behaviour Compliance with / Circumvention of restrictions Industry activity to adapt to and overcome the new restrictions

Consumers Opportunity Social environment influence on consumer behaviour Industry marketing restrictions	Further marketing restrictions on tobacco e.g. via plain packaging	increases	Likelihood of similar restrictions for alcohol (e.g. restricting how the alcohol industry can represent their products to young people through sports advertising, subliminal or imperceptible advertising) because if the policy is enacted for tobacco, then the idea of restrictions is more imaginable or realistic to policymakers	Government Government behaviour Policy formation Chance of further marketing restrictions
Consumers Opportunity Social environment influence on consumer behaviour Industry marketing restrictions	Introduction of plain, standardised packaging for tobacco products	decreases	Brand identity i.e. the visual distinction between certain brands. It is possible that the removal of brand identities will mean that consumers become less faithful to a single brand i.e. decreasing consumer brand loyalty	Industry Outcomes for industry Marketing Brand identity
Consumers Opportunity Social environment influence on consumer behaviour Industry marketing restrictions	Restrictions on advertising of particular products	increases	Space for advertising of other products that might be harmful, which might then lead to the unintended negative consequence of increasing the consumption of these other products	Industry Outcomes for industry Marketing Marketing of other products that might be harmful
Consumers Opportunity Social environment influence on consumer behaviour Norms of certain consumption behaviours	Increases in the frequency of certain consumption behaviours among the people that an individual comes into contact with (change to the social norms of consumption)	increases	Likelihood that an individual will perform similar consumption behaviours in certain contexts (social contagion) e.g. binge drinking on a night out, drinking at a football match, when at an Italian restaurant, or somewhere that sells speciality beers	Consumers Motivation Expectations Chance of following these norms
Consumers Opportunity Social environment influence on consumer behaviour Norms of certain consumption behaviours	Changes in the prevalence of behaviours in tobacco/alcohol consumption among an individual's friendship group, or more widely in the social environment that they encounter	increases	Social / cultural pressure on someone to change their tobacco/alcohol consumption to conform to their social environment	Consumers Opportunity Social environment influence on consumer behaviour Pressure to follow these norms
Consumers Opportunity Social environment influence on consumer behaviour Norms of certain consumption behaviours	Declines in the acceptability of tobacco smoking or harmful alcohol consumption (shifting social norms)	increases	Industry activity in changing / adapting the products, pricing and branding etc. available on the market	Industry Industry behaviour Shape market Industry adaptation of the market to compensate

Consumers Opportunity Social environment influence on consumer behaviour Perceptions of harm	Increase in the extent to which individuals perceive the tobacco and alcohol industries as harmful (producing and using marketing tactics to sell harmful products)	decreases	Individual response to being exposed to industry marketing with a change (or maintenance) of their consumption behaviour	Consumers Capability Self-control Sensitivity to industry marketing
Consumers Opportunity Social environment influence on consumer behaviour Perceptions of harm	Shift the framing of policy narratives/social norms around alcohol, in the same way that has already been seen around tobacco	increases	Priority given to reducing drinking from a public health perspective by government when introducing policies that might affect social norms of alcohol consumption (i.e. increasing the public health priority of alcohol relative to tobacco)	Government Government behaviour Policy formation Benefit of policy to public health
Government Government behaviour Policy formation Priority given to public health in policy	The political decision to hypothecate government revenue from tax or "polluter pays" levies on industry to fund public health initiatives and treatment	increases	Funding for public health initiatives and treatment and hence the falls in smoking/drinking that result	Health sector Outcomes for the health sector Public health funding
Government Government behaviour Self-regulation Limits on industry involvement in public health related policy formation and delivery	Limit the access of industry to government for lobbying, including via 3rd parties Increased belief among policymakers that the tobacco/alcohol industries should not be involved in the formation or delivery of policy related to public health	increases	Likelihood that new policy is favourable to industry and less good for public health Influence that industry has over policy and public health messages	Government Government behaviour Policy formation Benefit of policy to public health
Government Outcomes for government Perceptions of harm	Increased perception in government that the tobacco and alcohol industries are producing and marketing products that are harmful to the public, and that this is something to reduce	decreases	Likelihood that new policy is favourable to industry and less good for public health	Government Government behaviour Policy formation Benefit of policy to public health
Health sector Behaviour of health sector Communication to employers Communication to employers to increase awareness of health harms and impact on productivity	Increase in communication to employers (especially employers involved in the tobacco/alcohol supply chain) to make them aware of the negative impacts of tobacco/alcohol consumption e.g. on work attendance due to ill health	increases	Likelihood that employers will initiate/support activities to improve the health of their workforce. If employers are involved in the tobacco/alcohol supply chain, then they might be more likely to end that involvement	Community/society Outcomes for society Workplace health initiatives and social responsibility

Health sector Behaviour of health sector Communication to government Communication to employers to increase awareness of health harms and effective policy	Increase in public health messages targeted at policymakers e.g. containing information about the health harms of consumption, or about industry marketing tactics. This could also clarify the scientific evidence on the most effective policies for public health e.g. counter the message by industry that policy should: - be targeted to heavy drinkers only, i.e., that low levels of alcohol are not necessarily bad for you and so individuals that consume to low levels should not be affected by regulations - focus on individually-targeted information and educational approaches (that are less effective than other approaches)	increases	Likelihood that new policy is favourable to public health and less good for industry e.g. due to altered government perspectives on tobacco/alcohol, increasing the resilience of policymakers to lobbying by industry, or increasing motivation to monitor industry activity and enforce regulations. In particular, changing the status of alcohol and of the alcohol industry in the minds of policymakers might increase the priority given to public health when forming alcohol policy, bringing alcohol policy more into line with the strong public health priority in tobacco policy	Government Government behaviour Policy formation Benefit of policy to public health
Health sector Behaviour of health sector Communication to public Communication of target behaviours for health	Increased public receipt of information that clarifies the target behaviour for health, e.g. what is the threshold for low-risk drinking, and resolves uncertainty about the scientific evidence on the health harms of consumption	increases	Peoples' knowledge of the relationship between consumption and health, and hence what they should be aiming for in reducing consumption and why	Consumers Capability Receipt and use of knowledge Receipt and use of knowledge to adjust consumption
Health sector Behaviour of health sector Communication to public Communication of industry marketing tactics	Education of the public, especially young people, about the marketing techniques employed by industry e.g. https://www.thetruth.com/about-truth http://www.itsthe drinktalking.co.uk/youth-campaign-groups/yaac/	decreases	Effect on consumers of industry marketing messages, sponsorship etc.	Consumers Capability Self-control Sensitivity to industry marketing
Health sector Behaviour of health sector Communication to public Communication of narratives about healthy consumption	Increase the public's exposure to health messaging and improve its design. This could arise from an increase in the availability of independent funding for public health campaigns, and innovations in how campaigns can use new media and content to have a greater effect on consumer behaviour. For example, alcohol messaging might learn from tobacco in how to shape the language of the narrative e.g. of industry conspiracy and marketing tactics	increases	Ability of public health messages to compete with the better resourced product marketing messages from industry. This should affect decisions on whether or how to consume, especially youth initiation	Consumers Opportunity Social environment influence on consumer behaviour Influence of health promotion vs. Industry marketing

Health sector Behaviour of health sector Design and provision of treatment Availability of support tailored to people with mental health conditions	Increased availability of support for people with mental health conditions of all levels/types e.g. helping people to deal with distress or other conditions	decreases	Likelihood that people use alcohol and tobacco consumption as a way of coping	Consumers Motivation Underlying need to consume Consumption as a coping mechanism
Health sector Behaviour of health sector Design and provision of treatment Availability of support tailored to people with mental health conditions	Improvements to the design of tobacco and alcohol interventions to make them more accessible or effective for people with mental health conditions	increases	Likelihood that people with mental illness feel able to seek treatment for smoking and drinking, and benefit from it when received	Health sector Behaviour of health sector Design and provision of treatment Use of support to reduce consumption in people with mental health conditions
Health sector Behaviour of health sector Design and provision of treatment Provision of support to reduce consumption in routine medical care e.g. GPs, hospitals etc.	Incentivise and train medical professionals to identify people who would benefit from support to reduce smoking, drinking or both, and to either deliver effective brief advice or to refer people to specialist services	increases	Support available to individuals to initiate and sustain a reduction in tobacco or alcohol consumption	Health sector Behaviour of health sector Design and provision of treatment Use of support to reduce consumption
Industry Industry behaviour Shape market Industry adjustment of the market to maintain affordable products	Industry changing profit margins on certain products in response to a tax change, modifying the pass-through of tax to an increased retail price	decreases	Effectiveness of tax policy to reduce the affordability of the cheapest products/brands	Consumers Opportunity Physical environment influence on consumer behaviour Effect of tax rises on product affordability
Industry Outcomes for industry Cost of selling Cost of licenses to sell products	More expensive licences	decreases	Likelihood that access to tobacco and alcohol changes so that it is more likely to be available at big retailers who can afford the license rather than small retailers who cannot and might be forced to close as a result	Consumers Opportunity Physical environment influence on consumer behaviour Availability of products from small retailers
Industry Outcomes for industry Cost of selling Cost of licenses to sell products	Expansion of licensing to sell alcohol and/or tobacco, including increased cost of existing licenses, and expanding licensing from alcohol to tobacco either in a joint license or separate licenses with similar rules	increases	Revenue to government from retailers buying licenses	Government Outcomes for government Government revenue

Industry Outcomes for industry Cost of selling Cost of licenses to sell products	Expansion of licensing to sell alcohol and/or tobacco, including increased cost of existing licenses, and expanding licensing from alcohol to tobacco either in a joint license or separate licenses with similar rules	increases	Likelihood that retailers will respond to maximise the profitability of their business by changing whether they sell only tobacco or alcohol, or both	Industry Industry behaviour Shape market Industry adaptation by changing the products they sell
Industry Outcomes for industry Industry revenue Sales at multiproduct retailers due to price increases e.g. due to a tax rise	Increased price of tobacco/alcohol, leading to a decrease in sales at multiproduct retailers	increases	Likelihood that multiproduct retailers will respond to maintain profits e.g. by increasing the price of other staples	Industry Industry behaviour Shape market Industry adjustment of the price of other products to maintain profits
Industry Outcomes for industry Rules on selling Cost of breaking rules on selling	Increased cost of breaking restrictions of licence and tighter enforcement of terms of license Expand licensing to tobacco or educating tobacco retailers on the law e.g. on age of sale	increases	Retailer compliance with licensing rules e.g. on point of sale promotions, or under-age / proxy sales Status of tobacco in the minds of retailers as an age-restricted product, and the ability of Trading Standards to prevent illicit tobacco sales	Industry Industry behaviour Compliance with / Circumvention of restrictions Compliance with rules