

Submission to the New Zealand Government Consultation on Policy  
Options for the Regulation of Electronic Cigarettes

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## Introduction

The New Zealand government recently announced a public consultation into the regulation of electronic cigarettes. The over-arching policy objectives are:

- The reduction of harm from tobacco smoking
- The prevention of harm from electronic cigarettes
- Product safety

To that end the New Zealand government is looking to introduce regulation that will meet those objectives while providing a regulatory framework that is currently lacking in the area.

This submission addresses the policy objectives and makes recommendations for a regulatory framework that targets nicotine consumption more generally where cigarettes, e-cigarettes, nicotine gum, nicotine patches, nicotine lozenges, and the like are all seen as delivery mechanisms or alternate technologies to facilitate nicotine consumption.

Implicit within the consultation document is the notion of “good nicotine” and “bad nicotine”. “Bad nicotine” apparently is sourced from the extant tobacco industry:<sup>1</sup>

There are indications that tobacco industry involvement in the production and marketing of e-cigarettes has been increasing over the last few years. ... A report on e-cigarettes to the sixth WHO FCTC Convention of Parties in 2014 included observations and considerations of the role of the tobacco industry and expressed concern about their growing involvement.

By contrast, “good nicotine” comes from other sources:<sup>2</sup>

On the other hand, the long-term use of small quantities of nicotine in approved nicotine replacement therapy (NRT) products (such as gum, patches or lozenges) is considered to be safe.

Policy should target harm and not industry. Nobody would ever express concern about the airline industry or automobile industry making its product safer – neither should the tobacco industry be criticised for making its product safer. Nowhere in the consultation document is there an explanation provided, or a logical argument advanced, as to why electronic cigarettes should be considered any different from any other nicotine delivery technology. It is simply assumed that electronic cigarettes are similar to combustible cigarettes and that they are dissimilar to as gum, patches, or lozenges. The consultation document asserts:<sup>3</sup>

It has been suggested that the availability of these products could undermine current tobacco control initiatives.

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<sup>1</sup> Ministry of Health, 2016, *Policy options for the regulation of electronic cigarettes: A consultation document*, Wellington, Ministry of Health, pg. 9.

<sup>2</sup> Ministry of Health, as above, pg. 3.

<sup>3</sup> Ministry of Health, as above, pg. v.

To the extent that almost anything is possible this statement is trivially true. Yet the existence of other nicotine delivery technologies has not undermined tobacco control. In fact, they are considered to be integral to tobacco control. What electronic cigarettes are likely to do, however, is undermine the tobacco control industry. Those individuals and institutions that earn their living from combatting “bad nicotine” or exist to combat “bad nicotine” while promoting “good nicotine” face technological disruption just as have the print media, the taxi industry, the accommodation industry, and so on. Incumbents resisting new innovation and technology is not rare nor unknown.<sup>4</sup>

In the next section I provide an institutional theory of tobacco control – defined as cigarettes (combustible technology). I then apply that institutional theory to the case of electronic cigarettes and highlight the differences between the two technologies. That leads me to making several recommendations that address the public consultation questions.

### An Institutional Theory of Tobacco Control

The tobacco control lobby views tobacco (combustible cigarettes) consumption from a disease perspective. The World Health Organization, for example, talks about the “Global Tobacco Epidemic”. From this perspective it may be entirely sensible to wish to totally eliminate or eradicate tobacco consumption. This is, however, a normative assessment. Economics strives to be a positive science that investigates human action and choice. It is only through a careful analysis of incentives, constraints, costs, and benefits that choices and decisions can be fully understood. Economics provides a coherent and consistent framework to investigate the totality of any policy choice or decision. It provides, in principle, for a full accounting of the costs and benefits under differing institutional frameworks of different choices and decisions.

From an economic perspective, tobacco consumption is much like consuming any other good or service. There may be an informational asymmetry that results in market failure associated with the consumption of tobacco, but once that information asymmetry is overcome there is no further basis, in *economic* theory, for government intervention. Any additional tobacco control policies are likely to impose unnecessary costs on the economy and distract attention from the primary policies that are likely to be successful.

While the tobacco control lobby may wish to reduce tobacco consumption to zero, from an economic perspective that may not be an appropriate policy objective. The point being that reducing tobacco consumption to zero may reduce the health costs associated with tobacco consumption, but may also impose higher social costs or economic costs.

In a series of papers Andrei Shleifer (and various co-authors) has developed an institutional theory that posits (efficient) regulation as emerging from societal trade-offs between the costs of private disorder, and the costs of government dictatorship.<sup>5</sup> “Disorder” relates to the ability of private individuals to inflict harm on others, while “Dictatorship” relates to the ability of government and its

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<sup>4</sup> Calestous Juma, 2016, *Innovation and Its Enemies: Why People Resist New Technologies*, Oxford University Press.

<sup>5</sup> Djankov, S., E. Glaeser, R. La Porta, F. Lopez de Silanes, and A. Shleifer, 2003, The new comparative economics, *Journal of Comparative Economics*, 31(4): 595-616.

Shleifer, A. 2005, Understanding regulation, *European Financial Management*, 11: 439 – 451.

bureaucrats to inflict harm on citizens. Behavioural responses to government intervention should also be classified as “Dictatorship” costs.

Depending on the relative costs of disorder and dictatorship, different regulatory approaches are more or less appropriate in different circumstances, for different industries, and for different goods and services. What is important to recognise is that government has a role to play in reducing private disorder when private solutions are unavailable, or too costly; subject, of course, to not imposing too high dictatorship costs itself.

This institutional model of regulation, following in the “new comparative economics” literature (see Djankov et al 2003), develops the notion of an “Institutional Possibility Frontier” that maps the various trade-offs in any set of institutions (which could be regulations or policies) aimed at social control in pursuit of some socially desirable end. These socially desirable ends could include, for example, Business Regulation to address negative externalities (Shleifer 2005), Productivity reform (Davidson 2013), Environmental Policy (Davidson 2014), Media Regulation (Berg and Davidson 2015), or Innovation Policy (Davidson and Potts 2015, 2016).<sup>6</sup> In this submission I apply the same model to Tobacco Control.

The Djankov et al. model frames social losses due to state expropriation and private expropriation on the x and y axes of Figure 1 below, and with four institutional orderings for social control (private orderings, independent judges, regulatory state, and state ownership) mapped along the Institutional Possibilities Frontier (IPF). The position and shape of the IPF is given by the levels of “civic capital” in the relevant society and the relative transactions and governance costs of the various institutions. A 45-degree line represents points of total loss minimization and the equilibrium tangency with the IPF therefore represents an “efficient” institutional solution.

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<sup>6</sup> Berg, C. and S. Davidson, 2015, Media Regulation: A Critique of Finkelstein and Tiffen Available at SSRN: <http://ssrn.com/abstract=2669271> or <http://dx.doi.org/10.2139/ssrn.2669271>

Davidson, S. 2013. Productivity enhancing regulatory reform, In Australia adjusting: Optimising national prosperity, – the Committee for Economic Development of Australia.

Davidson, S. 2014. Environmental protest: an economics of regulation approach, *Australian Environment Review*, 29(10): 283 – 286.

Davidson, S. and J. Potts, 2016a, Social Costs and the Institutions of Innovation Policy. *Economic Affairs*. Forthcoming.

Davidson, S. and J. Potts, 2016b, A New Institutional Approach to Innovation Policy, *Australian Economic Review Policy Forum: Research and Innovation*, 49(2): 200 – 207.

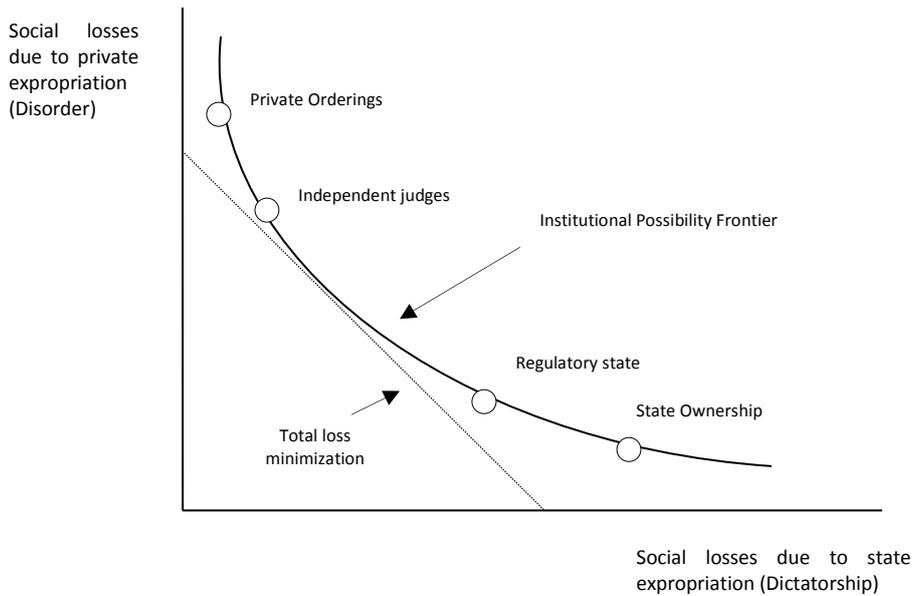


Figure 1. Institutional Possibilities  
Source: Djankov et al 2003

Recognising that there are no costless solutions to societal problems or social control is the main feature of this model. It forces analysts to think carefully about the various trade-offs and opportunity costs that any institution of social control imposes. This model makes it very clear that there is no such thing as a perfect or costless institutional form, and that any institution represents some set of compromises between the risks of private expropriation (net of private benefits) and the risks of state expropriation (also net of possible benefits).

In figure 2 I apply the model to Tobacco Control.

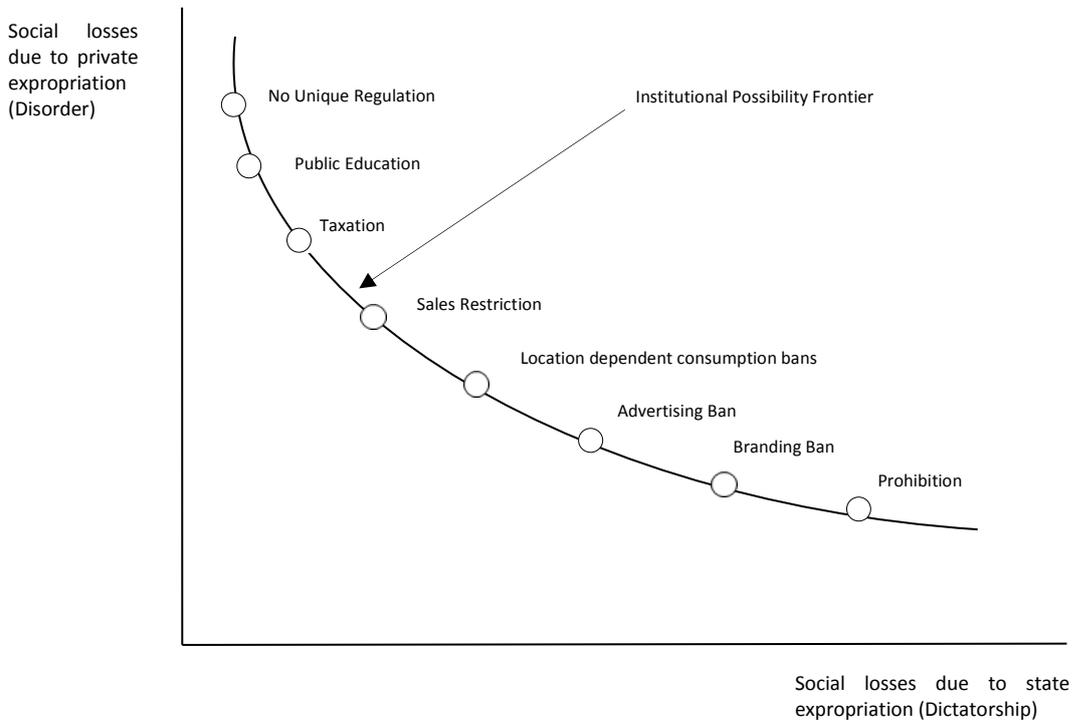


Figure 2: Institutional Possibilities of Tobacco Control

In the first instance we can imagine a situation where there is no unique tobacco control regulation. In this situation the manufacture and sale of tobacco products would be simply regulated as any other generic good or service in the economy. Given the externalities and internalities associated with tobacco consumption, the Disorder costs associated with this regulatory regime could be high.

Tobacco consumption is associated with several medical conditions, including various cancers, heart disease, and emphysema. Consumers may suffer from information asymmetry; either under-estimating the health risks of tobacco consumption generally, or under-estimating the probability of adverse health consequences for themselves. Furthermore, some tobacco consumers may have very high discount rates and undervalue the future costs of their tobacco consumption relative to their current consumption. These considerations can be described as being internalities.

Externalities occur when tobacco consumers impose costs of others through, for example, second-hand smoke. Given the potential for externalities and internalities associated with tobacco consumption a *prima facie* case can be made for government intervention. In the very first instance a government information campaign as to the dangers of tobacco consumption would very likely lower the disorder costs associated with tobacco consumption but would not increase the dictatorship costs associated with government intervention by very much.

Two forms of taxation need to be distinguished. In the first instance tobacco could (and should) be subject to Ramsey taxation. The so-called Ramsey Rule suggests that goods and services should be taxed in inverse proportion to their elasticity of demand. To the extent that tobacco products have a somewhat inelastic demand curve, they should be taxed at higher rates. This is a straight forward revenue raising exercise. Any use of taxation to discourage tobacco consumption would constitute a Pigouvian tax. This is the second form of taxation that we need to consider. While Pigouvian taxation may well raise substantial revenue, the objective of the tax involves social engineering. Here the government wishes to impose a different set of preferences on society than those the society has freely chosen. Here the costs of dictatorship start becoming large – not only in terms of foregone consumer utility but also in terms of behavioural responses to potentially excessive Pigouvian taxes. The most obvious example would be smuggling.

Up to this point, the Tobacco Control measures have been associated with low social costs of dictatorship. The provision of information is a public service and the use of the price mechanism to ration tobacco consumption does not necessarily involve the coercive powers of the state.

Sales restrictions would represent the first major use of coercive state power. Here the state would restrict the sale and consumption of tobacco products to, say, individuals over the age of 18, or restrict where tobacco products may be sold. To ensure compliance the state needs to engage in acts of surveillance and entrapment. While these measures may have the effect of reducing tobacco consumption amongst target groups (for example, underage smoking) it also may also reduce the profitability of tobacco products, divert law enforcement activity away from violent crime, and impose surveillance costs on law-abiding citizens.

Having first restricted who may consume tobacco products and where they might be sold, the state then restricts where tobacco products may be consumed. It is somewhat ironic that the state has chosen to ban the consumption of tobacco products in private locations before banning the consumption of tobacco products in public locations. Tobacco product consumption has been banned in workplaces, private restaurants, clubs, pubs and the like under the guise that these institutions are “public places” despite the fact that they are very often private property. Such abrogation of private property constitutes a massive incursion of state power into the economy. The state has also began

to ban the consumption of tobacco products on public property (where it does have ownership – but long after banning the consumption of tobacco products in private property). Again the social costs of compliance, surveillance, entrapment, and re-allocation of law enforcement activities constitute major costs.

Having restricted the Who, and Where of tobacco consumption, the state then restricts How tobacco products are marketed through advertising bans. These bans range from bans on advertising in particular media, to bans on advertising of sporting events, to point of display bans, and so on. The costs here include restricting the universe of potential sponsors for major events. While major sporting events continue to receive sponsorship from the alcohol, fast food, and gambling industries, it is also the case that many smaller sporting events are unable to garner sponsorship from either these industries or the tobacco industry. This policy restricts the livelihoods of the advertising industry, restricts the quantum of sponsorship dollars in the economy and imposes compliance, surveillance and entrapment costs on the economy.

Having restricted advertising, bans on branding are an obvious next step. In the first instance naming rights could be limited. Words such as “Light” or “Extra Smooth” or “Low Tar” could be prohibited. In addition a standardised packaging policy could be adopted. In Australia this policy is known as “Plain Packaging”. Dictatorship costs here are very high – this is an abrogation of private property in the form of intellectual property. To the extent that private property rights are perceived to become insecure, the resultant loss of investment flows into the economy could be substantial.

Finally there is prohibition. Prohibition can take many forms. For example, the Australian government does not allow the cultivation of tobacco within Australia. Extant tobacco production licences were bought out and no new licences will be issued. The cost here is the loss of economic activity, the potential for permanent job losses in rural areas, the loss of manufacturing capacity and employment, and so on. Alternatively, specific types of tobacco product could be prohibited. Many countries, for example, ban snus or menthol flavoured tobacco products.

Prohibition is associated with a range of costs and adverse consequences. Meadowcroft (2008) has summarised those costs and consequences as follows:<sup>7</sup>

- Prohibition places markets into the hands of criminal enterprises.
- Prohibition increases the risks of already risky activities.
- Prohibition criminalises people who would not otherwise be criminals.
- Prohibition diverts law enforcement resources away from conduct that harms third parties.
- Prohibition increases public ignorance.
- Organised interest groups are crucial to the introduction of prohibitions.
- Prohibition almost never works and is almost always counterproductive.

There are two additional points that need to be emphasised when considering the costs of prohibition. First many of those costs begin to be incurred well before prohibition occurs. Secondly, the social costs of prohibition are *very* high. Consider, for example, alcohol prohibition in the United States. It is

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<sup>7</sup> Meadowcroft, J. (ed), 2008, Prohibitions, Institute of Economic Affairs, Profile Books.

popularly believed that this policy was a failure leading ultimately to its repeal. That is not entirely correct:<sup>8</sup>

Drinking habits underwent a drastic change during the Prohibition Era, and Prohibition's flattening effect on per capita consumption continued long after Repeal, as did a substantial hard core of popular support for Prohibition's return.

Alcohol prohibition in the United States was ultimately repealed because the social costs of enforcing the policy relative the benefits were too high.

When it comes to tobacco products, every element of the marketing mix (product, price, place, promote) is very highly regulated by the state. All of these regulations impose varying degrees of dictatorship costs upon tobacco product consumers, tobacco product producers, tobacco product retailers, and the general community. The question of interest is whether these (dictatorship) costs are worth incurring to reduce or eliminate the (disorder) costs associated with tobacco consumption.

In a world of perfect compliance, actions taken by the state to reduce or even complete prohibit tobacco consumption would be entirely successful. In a world where there is somewhat less than perfect compliance there are behavioural responses to state action that undermine those actions. For example, tobacco consumers may substitute other products that may be associated with a different range of social costs, or consumers may continue to consume tobacco product but source these products on the illicit market. Yet other tobacco consumers may simply continue to consume tobacco.

#### Implications for Electronic Cigarettes

As the consultation document makes very clear, the externalities and internalities associated with electronic cigarettes are much lower than the externalities and internalities associated with combustible cigarettes. The disorder costs are lower. At the same time the dictatorship costs associated with tobacco control are high – including restricted access to nicotine. Electronic cigarettes allow dictatorship costs to be reduced without contributing to high disorder costs.

At a very minimum this is a compelling argument for the legalisation of electronic cigarettes *and* nicotine fluid. The advantages of legalising nicotine fluid include:

- Consumer safety – known quality, quantities and dosages of nicotine
- Regulatory compliance with standardisation which should include child – proof packaging
- Ongoing research into the long-term effects of electronic cigarettes would benefit from standardisation
- Tax revenue
- An additional tobacco cessation tool

The important question, however, is the appropriate regulation of electronic cigarettes. Given the decline in disorder costs associated with electronic cigarettes relative to combustible cigarettes the trade – off between disorder costs and dictatorships is very different for the two products. Under the assumption that tobacco control exists to target the harm caused by combustible tobacco consumption and not to impose harm on the tobacco industry, it seems that the lower level of

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<sup>8</sup> Blocker, J., Jr. 2006, Did Prohibition Really Work?: Alcohol Prohibition as a Public Health Innovation, American Journal of Public Health, 96(2): 233 – 243.

externalities and internalities associated with electronic cigarettes implies a much lower level of regulation for electronic cigarettes. Product safety features should be regulated consistent with other electronic devices.

Nicotine is a stimulant that is safe for consumption in small quantities. Public education campaigns warning individuals of excessive consumption of stimulants is warranted. So too an argument can be made for the prohibition of sale to minors. Nicotine should be taxed. The irony is that “bad nicotine” is very highly taxed, whereas some forms of “good nicotine” are subsidised via the health system. Government should develop a coherent policy framework to tax all nicotine on a similar basis. It may well be the case that combustible cigarettes be subject to Pigouvian taxation – but that argument does not apply (as much) to electronic cigarettes.

It isn't clear, however, why there should be a legislative ban on location dependent consumption. Of course, there is nothing stopping private individuals or organisations from banning the use of electronic cigarettes on their private property. There is no ban on the use of nicotine gum or lozenges in private or public spaces and a similar argument can be made for electronic cigarettes. There is no basis for a branding ban. To the extent that government would want to promote electronic cigarettes over combustible cigarettes (given the reduced levels of harm), branding and advertising should be encouraged just as nicotine gum and lozenges are branded and advertised.

There can be no argument for graphic health warnings on electronic cigarettes. This would, in the first instance, constitute false and misleading advertising; the long – term consequences of electronic cigarettes are not fully known and any photographs used in the graphic warnings would have to relate to a different product, viz. combustible cigarettes. In any event other nicotine products do not have graphic health warnings associated with them.

#### Recommendations and Conclusion

Combustible cigarettes are being subject to technological disruption – with the effect of making nicotine consumption a lot safer than has been historically the case. In turn this implies that tobacco control policy is being disrupted and, more importantly, the tobacco control industry is being disrupted too. As such we can expect to observe attempts to regulate electronic cigarettes much like combustible cigarettes and not like other nicotine delivery technologies such as gum and lozenges.

To the extent that it is now widely accepted that the health risks associated with electronic cigarettes are much lower than combustible cigarettes it is clear that regulating the two products (delivery technologies) in a like manner would be inappropriate. This regulatory approach would not benefit nicotine consumers, nor contribute to government revenue, nor would it target harm. The only beneficiaries of such a regulatory approach would be to benefit the tobacco control industry – it would in effect be a subsidy to those individuals and organisation that earn a living or justify their existence from tobacco control activities.

The primary role of regulation should be to target harm. The disorder costs associated with nicotine consumption relate to asymmetric information and the various externalities and internalities that result from combustible cigarettes. The disorder costs associated with electronic cigarettes are lower than those associated with combustible cigarettes implying a different approach to regulation and a much lower level of regulation.

It is true that the long term consequences of electronic cigarettes are unknown. This does not justify the so – called precautionary principle. The long term consequences of many new technologies is

unknown or unclear. The important point, however, is that new technology could be either benign or malign. If government does feel the need to regulate electronic cigarettes in a similar fashion to combustible cigarettes then sunset clauses should be introduced to ensure that regulations are easily updated as new research becomes available.

At present minors cannot legally access nicotine products and there is no compelling case to modify that restriction. A ban on vending machines is consistent with that restriction. Nicotine delivery technologies should be regulated relative the harm they cause. Less harm should imply lower levels of regulation. More generally tobacco control should target harm and consumers, not provide industry subsidies to the control industry. Nicotine products should be taxed consistently and coherently according to the Ramsay principle with Pigouvian taxation applied in the event of externalities. Advertising and branding should be encouraged and there is no truthful case to be made for graphic health warnings.

#### About the Author

Sinclair Davidson is Professor of Institutional Economics in the School of Economics, Finance and Marketing at RMIT University, a Senior Research Fellow at the Institute of Public Affairs, and an Academic Fellow at the Australian Taxpayers' Alliance. He has published in academic journals such as the European Journal of Political Economy, Journal of Economic Behavior and Organization, and the Cato Journal. Sinclair is a regular contributor to public debate. His opinion pieces have been published in The Age, The Australian, Australian Financial Review, Daily Telegraph, Sydney Morning Herald, and Wall Street Journal Asia.

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