

24 SEPTEMBER 2018

133 Molesworth
Street
PO Box 5013
Wellington 6140
New Zealand
T+64 4 496
2000

Susie Keegan
Senior Manager
Infrastructure Advisory Services
Ernst and Young Transaction Advisory Services Ltd

Dear Susie

Feedback on the draft report for the Evaluation of Tobacco Excise Increases as a Contributor to Smokefree 2025

Thank you for the draft report provided to us on Friday 14 September and for your presentation on Friday 21 September. The comments below reflect those that you have heard over the past week, including from officials during last Friday's discussion.

Our main concern is that the report must directly address the questions set out in the CSO for the sub-populations of interest to the Government. While we are also interested in the broader insights you have gained into potential tobacco control initiatives, our primary use of your findings will be to report to Ministers on what impact the excise increases have had, and are likely to have in future, for Māori (and specifically for Māori women), Pasifika, young people and low-income earners (measured by deprivation).

We would like you to pull together the findings across the various inputs to address these questions. We consider that the quantitative aspects of the work could be given more prominence and would like you to be courageous in making calls as to whether the policy is working for these groups and whether we would expect to see it work into the future.

More specific feedback is set out below.

Ministry of Health

Based on the draft report, we have some concerns about the quality of the literature review and data analysis. Detailed comments are attached in tables 1 and 2.

I noted your comments on Friday that much of this was covered in the work, but is not visible in the final report. Where this is the case, we consider that it would be helpful to readers if you were to be explicit about what you have not included and why.

The Treasury

The report mentions targeted interventions without really referring to international examples (some of the recommendations are too broad eg, education and awareness).

Some recommendations on stockpiling provisions would be helpful (again looking at international best practise eg, average inventory levels).

From our discussion on the interaction between tobacco and alcohol consumption, some cross correlation / elasticities would be helpful to explain the substitution or complementary nature of other goods that are consumed in relative proximity to tobacco.

Customs NZ

We note that in respect of the illicit market, EY's evaluation sought to address the following objectives (specified at pg17):

1. determine unintended societal consequences of increasing the tobacco excise such as increased robberies and illicit trade
2. explore the likely future trajectory of these consequences with further increase in tobacco excise.

We note in the literature review (at pages 35-36) the conclusions of the IARC review in respect of illicit markets for tobacco, that there is:

- *sufficient evidence* to show that tax avoidance and tax evasion reduce but do not eliminate the public health and revenue impact of tobacco tax increases
- *strong evidence* to show that a coordinated set of interventions that includes international collaborations, strengthened tax administration, increased enforcement and swift, severe penalties reduces illicit trade in tobacco products.

The illicit market in New Zealand

We agree with EY's conclusion that past studies of the illicit market in New Zealand have weaknesses. By world standards the share of the total New Zealand market made up of illicit supply is small.

However, we do not agree with the report's conclusion that there is no evidence that the illicit market is growing. Customs accepts there are limitations in the data which make it hard to draw hard conclusions. However, our view is that there is some evidence that the illicit market is growing (off a low base). An indicator of this is that the gap between seizures of commercial-scale amounts is shortening. Customs agrees that the evidence is not sufficient to say what that growth rate is.

Future trajectory of the illicit market in New Zealand

Customs notes that the report makes no observations at all about the *likely future trajectory of the illicit market* as EY were asked to do in the project brief. This is a major shortcoming of the report.

Tobacco has several characteristics that indicate an ongoing high risk from a border protection and government revenue perspective:

- high prices in relation to the source price due to different taxation treatments
- readily available in low cost countries
- easily transportable across international borders
- sizable potential home market.

The profits to be made mean there is every incentive for criminals to service the market. The risk is likely to remain high even if the proportion of smokers in New Zealand falls with future increases in excise (ie, there is a risk of growing the illicit market if there proves to be a "persistent hard-core" of smokers who are determined to smoke and are willing to engage with an illicit market).

We would ask that EY draw a conclusion about the future trajectory of the illicit market. We note that through the focus groups EY learned about consumer attitude to the illicit market and the ease with which some are able to purchase illicitly (pg 123). From this, the New Zealand data on the illicit market, and the overseas literature review, we think EY should at least comment on questions such as:

- Are smokers prepared to engage with an illicit market; are smokers actively seeking illicit supply?
- Are there any particular interventions to counter the illicit market that need to be strengthened in the New Zealand context such as increased enforcement or higher penalties for illicit supply/trading?
- Given the estimates of the health benefits into the future, is there a level that the illicit market would reach where you could argue that the government's smokefree objectives would be measurably endangered? How likely is this?

Other agencies

As of this afternoon (Monday 24 September), I have received no other feedback but am expecting comments from the Health Promotion Agency. I will forward these as soon as I can.

I have thoroughly enjoyed working with you over the past few months and look forward to receiving the final report.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Jane Chambers".

Jane Chambers
Manager, Tobacco Control Programme

Table 1. Assessment of how well the evaluation meets its objectives and suggested improvements

Group	Evaluation objective	Assessment	Suggested improvements
The impact of the tobacco excise in changing people's behaviours and perceptions	Explore changes in smoking behaviours –quitting, reducing consumption, substitution, changed household spend	<p>The elasticity estimates provided do not properly separate changes in smoking behaviour attributable to the excise increase, and the changes due to changing social norms and other factors. This means they are unreliable, and likely overestimate the effect caused by the excise.</p> <p>EY admits this weakness in its report, but makes no attempt to control for these other factors. We made clear early on that causality was an important part of this evaluation.</p> <p>EY also provides no measures of statistical significance, so the estimates could be due to noise in the data.</p>	<p>Many statistical techniques can control for trends: interrupted time series, using other countries as control groups. Many techniques are described in EY's own proposal.</p> <p>EY could look at which groups use RYO tobacco, as this had a larger tax increase in 2010.</p>
	Consider which groups are impacted and by how much	As above, estimates are unreliable, and are unintuitive (Māori more price sensitive, Pacific peoples less).	The above techniques can be applied to subgroups.
	The perceptions of affordability following increases in tobacco excise		
	Consider whether past changes in behaviour will continue with future increases	Little analysis of whether past relationships will hold in future, even though throughout the paper, reference is made to a “tipping-point”. EY cites that there is no clear pattern in elasticities over time when calculated year-on-year. However, these tests likely have very little statistical power,	Could analyse how the population of smokers will change, and what this implies for average elasticity. Could look at other commodities (eg, fuel, electricity, illicit drugs).

Group	Evaluation objective	Assessment	Suggested improvements
Impact of tobacco excise as a regressive tax	Consider the impact of the tax excise increases on equity given that the prevalence of smoking is generally higher among low income groups	The report gives only qualitative discussion of this point. No attempt is made to quantify the impact, or place in any context.	Estimate average excise tax payments by income quintile, ethnicity and other factors. What sort of income tax change is this equivalent to? How would this affect measures like P20:P80 ratio? What is a good way of describing these impacts in a way that decision makers understand?
Other unintended social consequences	Determine unintended societal consequences of increasing the tobacco excise such as increased robberies and illicit trade	The report merely points out that these exist. Some survey data on the extent of illicit trade. Report essentially 'gives up' on measuring extent of robberies, as data is not collected. This is simply not good enough.	Look at total dairy robbery statistics. Is there an increasing trend recently? Is this in areas where smoking more prevalent? In the worst case scenario that all of this is due to excise increases, what is the magnitude of this cost?
Explore the likely future trajectory of these consequences with further increases in tobacco excise		Report has no analysis on this point. Some comments from stakeholders that things may get worse.	Extrapolate above analysis. Could try to model illicit trade and robberies by assuming profit motivated crime.
Tobacco industry response	Identify past and possible future strategies to be employed by the tobacco industry in response to increases in the tobacco excise	Mentions one paper on keeping budget brands cheaper. Otherwise only anecdotal evidence to support this point.	Does Stats NZ's quarterly data on tobacco collect prices on budget and premium brands separately?
	Determine the impact of these strategies	States that it mitigates the impact of the excise tax, but no data provided.	Can we estimate the price gap between budget and premium brands? How does that price gap compare to the very large

Group	Evaluation objective	Assessment	Suggested improvements
Cost and benefits of further excise increases	Better understand / quantify the expected benefits and costs of future excise increases on previously assessed impacts	No quantification of any costs or any benefits. This means decision makers have no idea of the magnitude of any of the costs and benefits. There isn't even a short table summarising all of them.	<p>BODE3 can give data on health benefits (scaling to account for differences in elasticities).</p> <p>Can use Atkinson measures of inequality to give rough costs of the regressive effect.</p> <p>Can use fiscal cost data on crime to quantify cost of robberies.</p>

Table 2. Assessment of how well the evaluation matches the plan set out by EY and suggested improvements

Proposals or comments in consultancy services order (emphasis added)	Assessment	Potential improvements
“ Detailed review of evidence from New Zealand and overseas, ensuring our review appropriately weights the most important and relevant findings, based both on rigor and application to the New Zealand context”.	The review is not detailed. In total, there are two sources of elasticity estimates (Tony Blakely, and the Treasury) and both of these are secondary sources (ie, they did not estimate those elasticities themselves).	<p>EY states that there is a lot of literature review work that wasn't included in the report. This is good to hear. We would expect the following from this review:</p> <ul style="list-style-type: none"> • An assessment of the rigor (ie, causal methods) of the papers reviewed. • A review of papers that separately measure effects for different populations (income, age, ethnicity, smoking history etc.) <p>There is very little discussion of the rigor or application of these elasticity estimates. No attempt is made to ‘weigh’ or summarise the literature.</p>

Proposals or comments in consultancy services order (emphasis added)	Assessment	Potential improvements
	<ul style="list-style-type: none"> ● A review of papers that consider if tobacco taxes are still effective at high price levels. ● At least a summary of the key insights from the literature to be included in the final report. <p>New data sources and statistical techniques mean that past studies may not be as valuable.</p>	<p>EY states there were no valuable insights from this work, so it wasn't included in the report.</p> <p>We would be interested in seeing this work, and seeing whether elasticities were related to the level of prices, and whether those on low incomes were actually more price sensitive.</p>
<p>“Triangulating tobacco analysis with New Zealand price elasticity information for other consumables to test our conclusions from point (1).”</p>	<p>There is no analysis of the elasticity of other consumables.</p>	<p>Treasury’s tax modelling is discussed, but there is no assessment of the performance of their forecasts.</p>
<p>“Working with the Treasury to understand the long term performance of their tax forecasting modelling around excise increases.”</p>	<p>“Applying our professional judgement based on experience with other sectors, on how future disruption and availability of substitutes will impact on price elasticity.”</p>	<p>Core judgement is: “there appears to be no compelling evidence to support claims of reducing average price elasticity over the period of analysis (2010 to 2016)”. However, this judgement is driven primarily by the low quality of evidence provided in the evaluation, rather than experience in other contexts.</p>

Proposals or comments in consultancy services order (emphasis added)	Assessment	Potential improvements
“There is extensive existing New Zealand and international literature and recent studies examining tobacco price responsiveness in the New Zealand and international context.”	The review covers very little of the existing literature and few recent studies are cited.	EY has stated this work was completed but not included in the report. Outlined earlier are our expectations for this work.
“We will look to draw on and combine different sources of evidence to model elasticities for the overall population and for different subgroups, including how price elasticities will change over time .”	While different sources of data are used, there is little attempt to draw these together into a cohesive picture. There is no modelling of how elasticities are likely to change in the future.	It would be easy to model how elasticities change based on how the population of smokers is expected to change. For example we have data on casual vs daily smokers. If remaining smokers are less responsive, there will be a decrease in the elasticity of the total population.
“Using vector autoregressive models (or similar) we can work to establish changes over time due to price shocks and test findings about the nature of price elasticity over time and between groups.”	The analysis makes little effort to isolate the causal impact of price shocks using vector autoregression or any other method.	Could use: VARs, one or more other countries as a ‘control’ group, interrupted time series analysis. Could use data on attitudes to smoking to control for social norms. There are many options, and we would expect these to be thoroughly explored.
“New Zealand and Australia have similar cultural elements, therefore using an ‘income, age, urban, ethnicity adjusted’ Australia as a reference point analysis can be conducted to understand the isolated impact of price even in an environment of otherwise decreasing consumption .”	The evaluation makes no comparison with smoking rates in Australia. Little effort is made to control for the environment of otherwise decreasing consumption.	Smoking rates from other developed countries could be used to create a ‘counterfactual’ smoking rate for New Zealand in the absence of tobacco excise increases above inflation.
“We are prepared to examine mortality, import statistics (derived from New Zealand Customs Service data), and changes in the type of tobacco consumed to understand how the nature of	None of these data sources are used.	Import data publicly is available on the Stats NZ website. Type of tobacco consumed is collected in the Household Economic Survey, and in the New Zealand Health Survey.

Proposals or comments in consultancy services order (emphasis added)	Assessment	Potential improvements
consumption has changed since the introduction of annual tobacco excise increases in 2010 (to the extent that information is available to us)."		Income data is available within the HES, and could be easily linked to smoking data. Analysis of the incidence of taxation and equity effects could be performed using the HES or other data sources.
"This may include considerations such as: incidence of taxation , the equity effects of taxation, and whether the tax has similar impacts across different income groups ."	The evaluation does not calculate the incidence of tobacco excise. It does not quantify the effect of tobacco excise on equity (or the after-tax income distribution). The effect on different quintiles of deprivation is consider in the price elasticity analysis, but not in the household expenditure analysis.	EY states this analysis was performed but not included in the final report. Our expectations for this analysis are set out above.
	The evaluation cites no studies looking at the elasticity of other products.	
	"We would look to use a range of these [government studies of price elasticities] studies, but would most likely focus on those that analyse essential products . The most robust work includes transport (e.g. fuel and public transport) and energy ."	Assessing the performance of tobacco excise forecasts would require two things: tax receipts from tobacco excise, and Treasury's forecast of tobacco excise. Both these things exist and could be accessed relatively easily.
	"Forecast performance over successive excise increases, relative to tax receipts, will provide valuable information on which to test international evidence and its application to New Zealand."	The evaluation states this information does not exist.
	"To complement the foregoing analysis we would also look to access contemporary research, along with Police intelligence data in respect of illicit trade and robberies "	The evaluation states there is no reliable source of data on tobacco-related crime. No attempt is made to use proxies to estimate the scale of tobacco-related crime. No analysis is performed.

