One billion fewer cigarettes, 100,000 fewer smokers

In early 2013, 100,000 smokers could successfully quit cigarettes if Parliament adopts a proposal from leading tobacco control experts and organisations to increase tobacco excise by 40% on 1 January 2013.

Strong submissions from the health sector are required to change the Draft Bill from 10% annual increases to a 40% increase on 1 January, then 20% annually thereafter.

The Excise Bill Budget has proposed 10% increases in excise during 2013–16, beginning 1 January 2013, and the Bill is available online at Parliament’s website for the Finance and Expenditure Committee. Submissions close 22 June 2012.

Aim

To explain the issues facing the Government Finance and Expenditure Committee as it hears submissions on the Customs and Excise Amendment Bill.

Method

(1) The Bill’s Regulatory Impact statement (RIS) was examined and its price-excise ratio estimates adopted.  
(2) Cigarette prices were derived from consumer price indices.  
(3) Tobacco manufacturers returns provided annual sales data back to 1996.  
(4) Price elasticity was based on 2010–11 prices and sales.  
(5) Half of reduced cigarette sales were attributed to fewer smoking and half to smokers smoking fewer per day.  
(6) Income per capita were examined but for 2011 varied less than 0.5% from 2010.  
(7) Various tax increases were modelled out to 2025.  
(8) Estimates were based on standard cigarettes (factory-made under 0.8 g, or hand-rolled estimated to contain 0.7 g tobacco).

Results

Price elasticity or responsiveness—In 1984–91, price elasticity for cigarettes and tobacco was -0.44.

During 2003–10, price elasticity was -1.73 in response to the Smokefree law.

During 2010–11, price sensitivity was -0.96.  

This is the elasticity we used below:

Baseline for trajectories—An estimated 584,000 smokers, 16.5% of adults smoked an mean estimated 12 cigarettes daily in 2012; an estimated 756 cigarettes were smoked annually per adult, smoker or not.
The target—The 2025 Smokefree Nation goal\(^6\) is achieved when smoking prevalence is \(<5\%\), and cigarette sales per adult are 95\% reduced below the 2012 estimate.

**Options and trajectories**—**Option A.** The 2012 Budget estimates on tobacco\(^2\) forecast revenue of $528 million by 2016 whereas our calculations predict $139 million—a $389 million shortfall.

Treasury used a traditional price elasticity (responsiveness) measure of -0.5, implying that 10\% increase in cigarette price would lower sales 5\%. Also Treasury relied on tax revenue data\(^5\) which were subject to large trade fluctuations obscuring the steady sales trends at retail level.

Ten percent annual increases as drafted into the Bill would, if adopted by Government, be most unlikely to achieve the Government’s 2025 Smokefree Goal by 2025—though it might perhaps by around 2050.

Applying the -0.96 price elasticity to the 10\% excise increases proposed in Budget 2012 and extended thereafter, the trajectory would be so gradual that the 2025 Smokefree Nation goal\(^6\) of under 5\% would not be achieved on time. New Zealand would trail behind other countries, including Australia. By 2016 the 10\% excise increases in the Bill would achieve only 20\% of the distance to reduce smoking prevalence to under 5\%.

**Options B and C.** Option B (25\% annual increases) and Option C (40\% increase in 2013 then 20\% annually) would both by 2016 reduce cigarette sales by over 60\% and reduce smoking prevalence by 36\%. Option B would increase revenue *$42 million* and Option C would decrease $87 million.

**Conclusions**

A 40\% increase in tobacco excise in 2013 would reduce cigarettes sold by 1 billion during 2013, over a one-third decrease below estimated 2012 cigarette sales.

From early 2012, 100,000 smokers would be expected to successfully quit.

Heart attack hospital admissions would be expected to noticeably decrease from early 2013 onwards.

Quitting smoking halves the excess risk of early death from coronary heart disease within 1 year, and 10 to 15 years without smoking abolishes the excess all-cause mortality compared to never-smokers of the same age.\(^7\)

First, the Bill must be changed. As drafted, the Bill does not put New Zealand on track to achieve the Government’s own 2025 Smokefree Nation goal, developed in response to the Māori Affairs Select Committee Tobacco Inquiry.

The 2013–16 tax trajectory set by this Bill will almost certainly determine whether or not the 2025 goal is achieved on time.

The 40\% excise increase in 2013 will ensure that 100,000 smokers successfully quit smoking making for a healthier workforce, and preventing half of these persisting smokers from dying many years early from smoking.
The high price sensitivity of smokers since the smokefree law of 2003 means that further increases in excise taxes will usually generate some revenue though less than expected. Smokers can no longer be relied on to provide large revenues.

Conversely the potential public health gains and reductions in smoking from increases in tobacco tax are now much higher than in the 20th Century.

Indeed, tobacco taxation is now much more a health issue than a revenue issue.

Conflict of interest: None declared..

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(*This figure was corrected on 11 June 2012 after the author's notification)

References: