

# Government Pricing Policy and Behavioral Consumption of Tobacco

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## Abstract

This research examines the impact of tobacco tax on government revenues and consumer's behavior towards price increases. In this examines historical trends of tobacco tax hikes in Malaysia and consumer's reaction towards anticipated price increases. Methodology consisted of qualitative and quantitative data collection for triangulation in addition to review reports and studies of governmental and independent agencies. Findings suggest that price increases has a minimal affect on consumption habits. Addiction is the primary factor causing smokers to adapt to any anticipated price hikes. Youth below the age of 18 are the most sensitive segment of the smoker population to any price increases. This is attributed to lack of disposable income amongst Malaysia youth. Findings further shows that price increases in the form of taxes are in actuality means of generating extra revenue streams.

*Key words: smoking, habits, price increase, Malaysia*

## Background

Tobacco consumption has reached epidemic state according to the global tobacco report published by the World Health Organization "WHO" (WHO, 2015). Tobacco consumption has been in steady increase since WHO first report (WHO, 1996) in the developing world and particularly in Asia. Tobacco products according to WHO are products made either hundred percent or partially by tobacco leaf as raw material, which are intended to be smoked, sucked, chewed or snuffed. Although smoking is prohibited in government buildings and public facilities in Malaysia, such as shopping malls and university buildings, yet smokers is in the increase in percentage bases according to the Malaysian National Health and Morbidity Surveys carried out between 1996 and 2002. Tobacco contains nicotine, which is highly addictive psychoactive ingredient. WHO further confirms that tobacco use is one of the main risk factors for a number of chronic diseases, which include cancer, lung diseases, and cardiovascular diseases. This is relatively common phenomenon throughout the world. Currently many countries are introducing various legislations restricting tobacco advertising, consumption age, tax schemes on tobacco sales, and regulating public areas for smokers and non-smokers. Malaysia is one of those countries that has been busy regulating tobacco consumption areas and new tax schemes. Although Malaysia government has implemented tobacco control policy in 1993, the prevalence of tobacco is still rising. The importance lies in two areas; health and income generation. Hence, examining consumer's behavior towards tobacco pricing and the effectiveness of price increase policies through taxation is needed. Hence, in light of constant tobacco policy revision and steady tax increases, the problem examined in this research is to determine whether such policies are effective in reducing tobacco consumption and how the consumer reacts to such policies.

### Research questions

RQ1. Is health of the general public is the primary concern of government when increasing taxes on tobacco?

RQ2. Would consumers change their consumption habits if tobacco prices increase?

### Methodology

Research instruments consisted of questionnaire and interview in addition to review of most recent data published by various agencies and governmental reports. In this research questionnaire is chosen as the research instrument. The questionnaire was prepared in two languages, Malay and English language. Each of the others is proficient in one or two of the languages. The questionnaire consisted of structured and unstructured questions. 90% of the questions were structured while only 10% were unstructured questions, allowing respondent to present their points of view. Over 500 questionnaires were distributed in shopping malls and two university campuses in Johor Baharu “JB” and Kuala Lumpur Malaysia. Questionnaire distribution process targeted smokers in smoking areas of the shopping malls, including smoker’s section of Starbucks and other outlets. In total, only 486 questionnaires were usable out of 497. About 11 questionnaire were discarded for non-completion or missing data. Interviews with open-ended questions were conducted totaling 40 for triangulation purposes. Out of which, 25 interviews were conducted in Kuala Lumpur and 15 were conducted in JB. Two months prior to data collection, a pilot study was conducted to cross check questions for effectiveness, comprehension and clarity. Data collection was conducted in JB and Kuala Lumpur simultaneously. Statistical Package Social Science (SPSS) V.17 software was used to run statistical analysis. Review of various governmental reports and studies conducted by agencies in Malaysia including time series analysis to determine effectiveness of price increases overtime in relation to number of smokers. Theoretical framework is as following; this research aimed at assessing the extent to which consumer would react to prices and whether such price change influences consumption habits. Hence, the nature of study had to include analysis of available governmental data, studies and record. Al-Sadat and other studies conducted time-series analysis to determine the price elasticity and impact of price increases.

### Literature review

Mondha et al. (2009) found that incremental tax increases did contribute to significant lower consumption of tobacco. Al-Sadat (2005) measured tobacco prices and elasticity of demand in Malaysian between 1990 and 2004. Al-Sadat found that any increases in tobacco prices of 10% would yield only 3.8% reduction in consumption. The Malaysian Control of Tobacco Products Regulations (CTPR) 1993 provides the legal framework for regulating smoking in public areas, and the advertising and promotion of tobacco. In 1995, the National Fatwa Council announced that smoking is “Haram” or forbidden according to Islam doctrine. Although this Fatwa (religious decree) caused public debate for several months, yet it failed to eliminate the growth of young smokers. Eventually, the Fatwa ended up as educational campaign. Since Malaysia joined the WHO Framework Convention on Tobacco Control in 2005, the government banned all forms of tobacco advertising including television and billboard advertisement. However, given that the term “tobacco promotion” lack of definition under current laws, numerous tobacco

promotions takes place since it is not covered under the ban (Shin, 2012). Al-Sadat also found that an increase in 10% in income would result in 10% increase in tobacco consumption. Malaysia is however a country of rapidly increasing income. It is estimated that over 40% of Malaysian male are smokers (GATS, 2011). The percentage of youth smokers however is considered to be the growing segment caused by booming population under the age of 25 years old.

Although every country differs in their type of taxes levied in tobacco. The tax imposed in Malaysia from 1990 until 2004 was specific excise taxes, which is calculated based on weight. Malaysia imposed specific excise tax per stick starting from year 2005 for easier manipulation. By doing this, weighting is not required, but only to count the number of stick (Ahsan et al, 2013). Norashidah et al. (2013) and Prabhat and Richard (2014) concur that the Malaysia government is expected to continuously raise the excise tax for tobacco to discourage smoking in order to promote healthy lifestyles and to reduce high-risk diseases. However, young price-sensitive smokers were expected to use illicit cigarettes that are cheaper in price and more affordable. Tobacco companies in Malaysia presented data to the government showing an increase rate in smuggling of cigarettes in Malaysia and it is estimated that the current smuggling rate of cigarettes is about 40%. This caused The Confederation Malaysia of Tobacco Manufacturers (CMTM) to persuade the Malaysia government not to drastically raise the tax on cigarettes. However, the 2010 ITC SEA Wave 4 survey findings in Malaysia established that the tobacco industry’s estimate of the smuggling rate is over inflated, and the actual smuggling rate is roughly about 20%. These research findings were given to the Malaysian Ministry of Finance to provide the necessary evidence supporting future increases in tobacco tax hikes (Wave 4 ITC SEA Technical Report, 2010).

### Analyses and findings

Analysis confirms that an increase in tobacco pricing does not constitute less consumption of tobacco when considering new smokers being added to the market place.

Year	Import tax	Nominal excise tax	Sales tax
	RM/kg or RM/stick	RM/kg or RM/stick	%
1990	85/0.08	13/0.013	15
1991	135/0.12	14/0.014	15
1992-1998	162/0.15	28.60/0.028	15
1999-2000	180/0.16	40/0.039	15
2001	180/0.16	40/0.039	25
2002	216/0.2	48/0.047	25
2003	259/0.24	58/0.056	25
2004	200/0.18	58/0.056	25
2005*	0.20	0.081	25
2006	0.20	0.12	25
2007	0.20	0.15	25
2008	0.2	0.18	25
2009	0.2	0.225	25
2010	0.2	0.26	25

\*Specific tax per stick was introduced (1 kg = 1100 sticks)  
 Source: Royal Custom Malaysia and Confederation of Malaysia Tobacco (CMTM), various years.

Table 1: Cigarette Taxes of Malaysia Government from 1990 – 2010

Significant percentage of respondents 55% showed lack of concern towards the new price increase and viewed such price hikes as an anticipated event. This means the consumers are factoring in their budgets the anticipated increase in tobacco prices and hence, they are making adjustments accordingly. Findings further shows that governmental policies are not hampering total tobacco sales by manufacturers because of the new regular addition of smokers to the total marketplace as an intended outcome of advertising. This research further finds that governmental policies are geared towards generating additional revenue streams in the form of taxes on tobacco. This also confirms Al-Sadat (2005) findings that a 3.8% reduction in tobacco consumption is inelastic. The Malaysian annual budget (October 23, 2015) further supports this finding, as alcohol and tobacco prices will further increase in Malaysia to generate the desperately needed income to balance a budget deficit. This research further confirms the findings of Sylvain (2008) that price increase of tobacco does not amount to reduction in consumption. This further confirms the assertion that tobacco is inelastic commodity. This is highly attributed to the addiction factor of smoking. This research further confirms DeCicca et al. (2002) and Yong K. C., Balkish (2012) findings that most reduction in tobacco consumption is amongst the young segment of the market. 55.17% of respondents under the age of 18 showed willingness to reduce or quit smoking if prices increase. This is attributed to the lack of disposable income amongst Malaysian youth allowing them to finance the smoking habit.

Country	2005	2006	2007	2008	2009	2010	2011
Brunei Darussalam	No data	No data	No data	No data	14,139,272	21,627,906	9,612,403
Cambodia*	5,100,000	6,200,000	7,800,000	11,100,000	13,100,000	22,260,500	16,443,500
Indonesia	3,548,913,043	4,017,391,304	4,726,086,957	5,426,086,957	6,019,565,217	6,556,188,503	7,591,921,284
Lao PDR	3,321,341	4,239,634	4,923,659	9,525,732	11,967,927	20,091,439	26,623,414
Malaysia	892,857,143	857,142,857	964,285,714	1,071,428,571	1,107,142,857	No data	1,645,569,620
Philippines	512,987,013	580,086,580	500,000,000	595,238,095	523,809,524	720,909,090	590,840,909
Singapore	510,093,057	444,366,500	501,073,729	568,002,863	666,857,552	683,923,076	749,689,922
Thailand	1,157,363,636	1,080,333,333	1,267,393,939	1,267,636,364	1,331,393,939	1,779,366,666	1,906,533,333
Vietnam	380,200,000	378,800,000	395,600,000	444,700,000	521,100,000	576,999,896	649,420,725

\*Tobacco tax revenue from domestic tobacco products only

Table 2: Government revenue from tobacco tax from 2005 – 2011 (figures in USD)\*  
 Source: Southeast Asia Tobacco Tax Report Card – Regional Comparisons and Trends, May 2013

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