

China has raised the tax on cigarettes: what's next?

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ABSTRACT

The Chinese government raised tobacco tax on 10th May 2015, 10 years after the ratification of the WHO Framework Convention on tobacco control. The increase in the resulting tax rate as a percentage of the retail price from 49% to 56% is still relatively low compared to the WHO-recommended benchmark, which is about 70% of the retail price. Therefore, ample room remains for the Chinese government to further increase the tax on cigarettes.

INTRODUCTION

The Chinese government ratified the WHO Framework Convention on Tobacco Control (FCTC) in 2005. On 10 May 2015, 10 years after the ratification, the Chinese Ministry of Finance officially raised the tax on cigarettes, and China's State Tobacco Monopoly Administration (STMA) passed the tax on to retail price of cigarettes. This was a significant step for the tobacco control agenda in China. To understand the significance of this policy initiative, it is useful to briefly describe the role of China's tobacco industry, the cigarette pricing mechanism and the tobacco tax structure in the Chinese economy.

The Chinese tobacco industry is a government-owned national monopoly, the State Tobacco Monopoly Administration. In 2013, STMA produced more than 2.0 trillion cigarettes, which contributed 816 billion RMB (US\$130 billion), or about 6.3% of China's central government tax revenue.¹ Owing to the importance of the tobacco economy in China, STMA has the advantage of being able to work with the central and local governments. STMA's goal is to promote the industry, even though the harmful health effects of smoking are now well known in China.

According to the 1983 STMA tobacco monopoly law and regulations, STMA is responsible for the centralised management of cigarette factories, cigarette companies and retailers, and it determines the cigarette prices. Cigarette factories decide the cigarette producer prices, cigarette companies decide the cigarette wholesale prices (the producer prices and wholesale prices need to be reported and to be approved by the State Administration of Taxation), and cigarette retailers decide the retail price of cigarettes by adding a regulated market profit margin set by STMA to the wholesale price.

The Chinese government collects five different taxes from the tobacco industry: tobacco leaf tax, value added tax (VAT), excise tax and urban construction/educational supplemental tax. The VAT is not tobacco-specific, but has a uniform rate (17%) across all products. Within these five types of taxes, only the excise tax directly influences the margin of the retail price of cigarettes. During

all past tobacco tax adjustments in China, the Ministry of Finance focused on the excise tax, which has two tax bases: the producer price and the wholesale price. Within each tax base are two types of taxes: a specific excise tax based on the product quantity, and an ad valorem tax based on the product price. China does not have an excise tax at the cigarette retail level. Thus, all government tax adjustments occur at either the producer level or the wholesale price level, with either a specific excise tax or ad valorem tax, or both taxes at the same time.

Before 10 May 2015, the specific excise tax at the producer price level was 0.06 RMB (US\$0.01) per pack, and the ad valorem tax was 56% for cigarettes that cost (producer price) 7 RMB (US \$1.03) or more and 36% for cigarettes costing (producer price) less than 7 RMB per pack, as shown in [table 1](#). A 5% ad valorem tax per pack was levied at the wholesale price level. After 10 May 2015, the Ministry of Finance imposed a specific excise tax of 0.10 RMB (US\$0.017) per pack at the wholesale level and increased the ad valorem tax at the wholesale price level from 5% to 11%. STMA announced that these tax increases at the wholesale level would let retailers pass along the increase to consumers. By shifting these increased taxes to the retail level, these combined excise tax rate changes will increase the average retail price of cigarettes in China by close to 1 RMB (\$0.16) per pack, raising the total share of taxes from 51.02% to 54.82% of the average retail price of cigarettes and representing an average 7.27% increase in the retail price, depending on the estimated price elasticity of the demand for cigarettes, which ranges between -0.15 and -0.40. The China National Tobacco Company has predicted that its sales could be reduced by 2 billion to 2.25 billion packs of cigarettes.²

SIGNIFICANCE

The May 2015 tax increase is welcome news for tobacco control communities. Assuming a 7.27% increase in the retail price, a 40% price elasticity of the demand for cigarettes of -0.15 as quitting elasticity, and 365 million current smokers in 2014, this tax increase would result in about 1.6 million smokers quitting ($0.06 \times 0.0727 \times 365 \text{ million} = 1.6 \text{ million}$).³ Therefore, this tax increase is a win-win policy for government revenue and population health.

China had already implemented a tobacco tax adjustment in 2009; however, its sole purpose was for the government to raise tax revenue from STMA. The additional tax was absorbed by tobacco companies rather than passed on to consumers. To maintain the size of the tobacco sales market in China, the tax adjustment in 2009



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Commentary

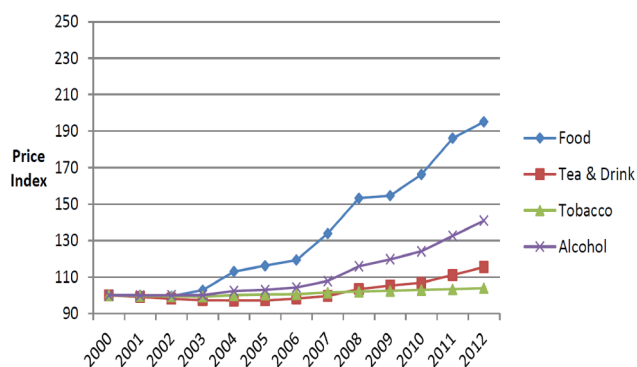
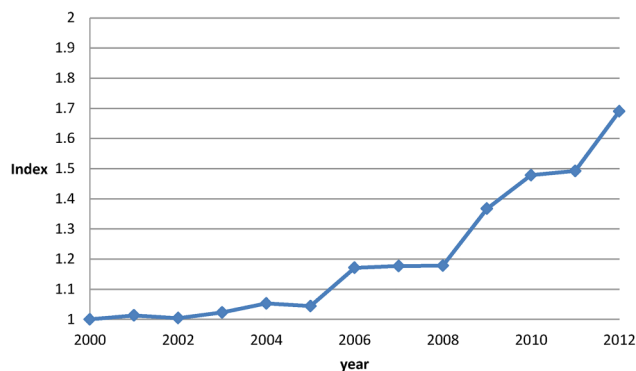
Table 1 Comparison of Chinese tobacco excise tax structure before and after 10 May 2015

	Before 10 May 2015	After 10 May 2015
At the Producer price level		
Specific excise tax (per pack)	0.06 RMB	0.06 RMB
Ad valorem tax		
≥7 RMB	56%	56%
<7 RMB	36%	36%
At the Wholesale price level		
Specific excise tax (per pack)	0	0.10 RMB
Ad valorem tax	5%	11%

specifically indicated that STMA would not shift the tax increase to the cigarette retail price.⁴ The 2015 tax increase reflects the Chinese government's commitment, explicitly indicated, to comply with Article 6 of the FCTC, which calls for raising the tobacco tax and shifting the increase to the retail price level.

Unlike the 2009 tax adjustment, China's recent (2015) tax adjustment has moved the increase from the tax base at the wholesale price level to the retail price level, as shown in [table 1](#). Since the current Chinese tax system includes no excise tax at the retail level, increasing the excise tax at the wholesale price level rather than at the producer price level brings STMA one step closer to shifting the tax to the retailer.⁴ Furthermore, the Chinese government has adopted a specific excise tax at the wholesale price level, instead of at the producer price level, although the amount of the increase is quite minimal. The WHO Tobacco Tax Administration Manual has suggested that the use of a specific excise tax is more efficient for tax collection and more effective for tobacco control than the use of an ad valorem tax.⁵

The prices of China's hundreds of cigarette brands range from 1.5 RMB (US\$0.25) to more than 100 RMB (US\$16.00) per pack. The higher the price brand, the higher the profit margin for the industry. With the tax increase in 2015, the profit for the tobacco industry from the cheapest cigarettes is much less than the profit from the higher priced brands. The ultimate result will be that the cheapest brand group eventually will be eliminated from the market. Raising the price across all brands will increase the overall price of cigarettes by 7.27%, from 11.74 RMB per pack to 12.82 RMB per pack.⁶

**Figure 1** Retail prices of tobacco and other foods in China (Year 2000 as a base index = 100).**Figure 2** The Affordability index of cigarette consumption (2000–2012).**CHALLENGES AND THE WAY FORWARD**

Using a tobacco tax as an instrument for tobacco control is a significant step for the Chinese government. However, the increase in the resulting tax rate as a percentage of the retail price, from 49% to 56%, is still relatively low compared to the WHO-recommended benchmark, which is about 70% of the retail price. Cigarette prices in China have not increased much during the past decade. According to the China National Statistical Yearbook,^{1 7} from 2000 to 2012 the price index of cigarettes rose by just 4% (year 2000=100, 2012=103.9). In contrast, food prices doubled (2000=100, 2012=195.1), the alcohol price index increased by 40% (2000=100, 2012=140.90), and the price of tea and soft drinks went up by 15% (2000=100, 2012=115.5) (see [figure 1](#)). Therefore, the rate of increase of cigarette prices in China is way behind that of many food products.

Furthermore, China made rapid economic growth between 2000 and 2012, with an annual rate of GDP growth of more than 9%. To address the affordability of cigarettes, one can divide per capita income by the price per pack of cigarettes each year. Then, using the base year (year 2000) rate as a decrement for each subsequent year (eg, 2000, 2001, 2002, etc), one can determine an affordability index. As shown in [figure 2](#), the affordability index of cigarette consumption in China increased from 1.00 in 2000 to 1.69 in 2012, an almost 70% increase in purchasing power.^{1 7} In other words, cigarettes in China are now about 70% more affordable than they were in the year 2000. Therefore, ample room remains for the Chinese government to further increase the tax on cigarettes.

As shown in [table 1](#), China has a very complicated tobacco excise tax structure. The Ministry of Finance is still undertaking overall excise tax reform. Following the WHO Tobacco Tax Administration guideline,⁵ the next round of tobacco tax reform in China hopefully will simplify the country's tobacco tax structure by (1) raising the specific excise tax at the wholesale price level from 0.1 RMB to 1.00 RMB per pack, and (2) converting the tiered ad valorem tax rates into a uniform tax rate at the producer price level, perhaps raising the tax rate from 36% to 56% for all classes of cigarette products. With these suggested additional tax adjustments, China would be reaching towards the WHO recommended benchmark of close to 70% of the retail price.

Finally, it will be very important to conduct empirical evaluations of the impact of this recent tobacco tax increase on changes in cigarette consumption, smoking behaviour, retail cigarette prices, market structure of brand shares and changes in government revenues. The findings of such analyses would be useful for the next round of tobacco tax policy adjustment in China.

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Collaborators XZ, RZ.

Contributors T-wH originated the idea for this paper and drafted the manuscript. XZ provided data sources and reviewed and edited the draft. RZ analysed the data and reviewed and edited the draft.

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