

Taxation of Cigarettes in the Bloomberg Initiative Countries: Overview of Policy Issues and Proposals for Reform

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(December 2009)²

“...tax measures are an effective and important means of reducing tobacco consumption...” (WHO 2003)

To reduce the demand for tobacco, excise tax increases and the resulting higher prices are a proven effective measure that governments can adopt as part of an overall strategy of tobacco control. The higher excises will induce some smokers to quit; reduce consumption by continuing smokers; prevent others from starting; and reduce the number of ex-smokers who resume. Empirical studies have found that a 10 percent cigarette price increase will reduce consumption by 4 percent in high-income countries and 8 percent in low- and middle-income countries, as people with lower incomes are more responsive to price increases (World Bank, 1999). Though consumption is reduced, government revenue increases.³

Excise burdens as a percentage of the retail price vary widely in the world. Figure 1 gives for each country the excise burden for the most widely consumed brand. The countries are assigned to four groups according to the World Bank classification – high income, upper middle-income, lower middle-income, and low income.⁴ The variation in excise burdens is much greater for middle and low income countries than for high income countries.

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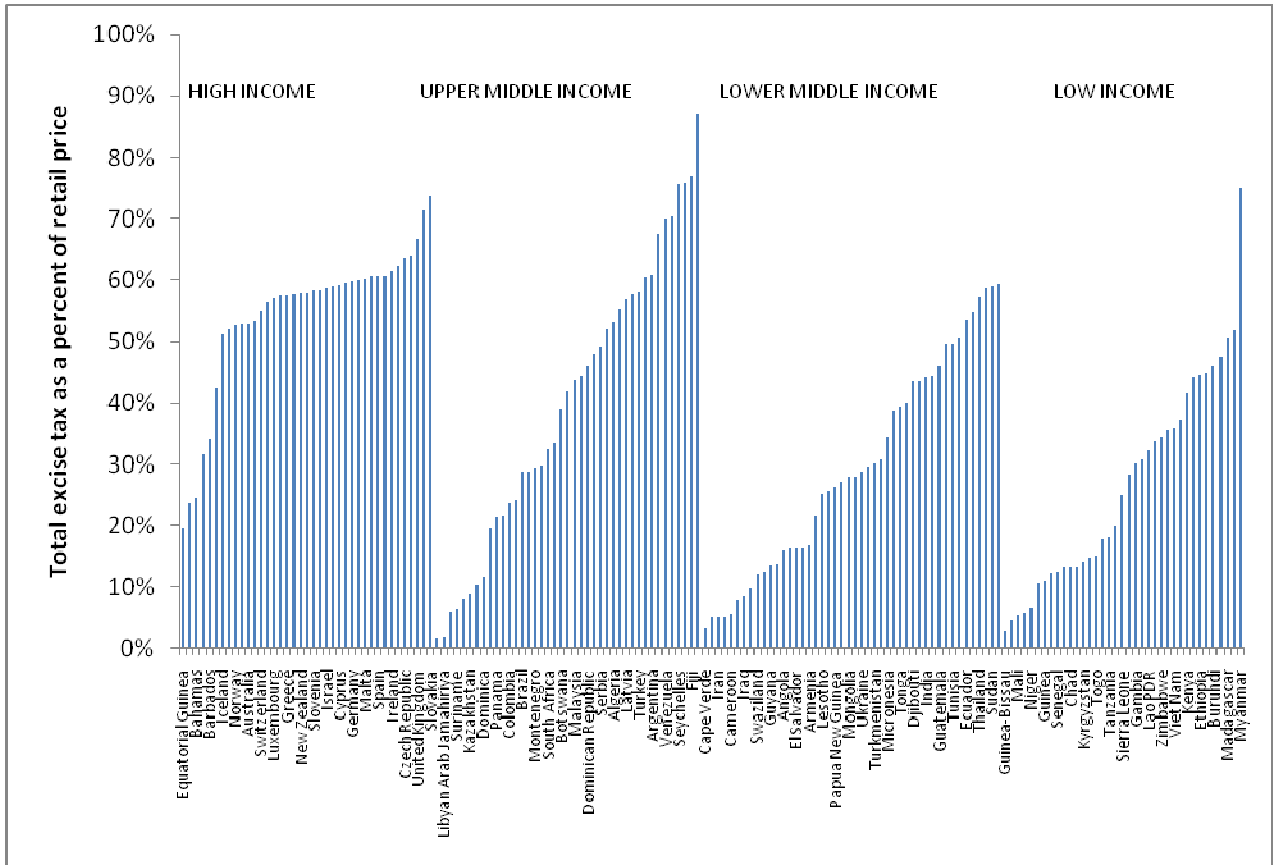
² The final draft was submitted on December 9, 2009. The paper surveys the excise regimes in the Bloomberg countries as of July 31, 2009 (the cut-off date).

³ Annex 1 provides a simple analytic framework of how increasing the excise on cigarettes can both reduce consumption and increase government revenue.

⁴ The WHO data only includes national or federal excise taxes. Canada and the United States are omitted from Figure 1, as these countries levy most of their excises taxes as the sub-national level. A number of assumptions were required to compute the tax burdens, particularly when the taxes were ad valorem levies. The original data can be found in the 2009 WHO Report on the Global Tobacco Epidemic (in press).

Cigarette excise regimes also vary widely in the world. Some countries levy specific excises (based on the quantity of cigarettes) and other countries levy ad valorem excises (most often based on the ex-factory value or the retail price).⁵ Still other countries levy both specific and ad valorem excises (mixed regimes). Countries may levy a single rate excise on all cigarettes or levy multiple rates, usually based on price bands. The excise regime may favor small producers (as in Indonesia) or non-filter cigarettes (as in Indonesia, Russia and Ukraine).

Figure 1. Excise Burden in Selected Countries, 2008



Source: Corné van Walbeek and 2009 WHO Report on the Global Tobacco Epidemic

In addition to increasing the excise rate(s) on cigarettes, reforming the excise regime itself may be an important tobacco control measure. This paper therefore first outlines specific considerations in designing a cigarette excise regime that should be considered before excise increases are recommended. The paper then reviews the excise regimes in the Bloomberg

⁵ Annex 2 provides a glossary of terms.

Initiative countries⁶ and makes recommendations of how these regimes could be reformed taking into account international best practices and the starting point for the reform; that is, the country's current excise regime. The final section concludes.

This paper primarily addresses excises on cigarettes, as cigarettes are the most important tobacco product and generally account for over 90 percent of the revenue from tobacco excises. It is customary, however, for countries to tax all types of tobacco—cigarettes, cigars, roll-your-own tobacco, pipe tobacco, snuff, or chewing tobacco—although the tax rates on tobacco products other than cigarettes are typically lower. All tobacco products compete with each other and all have health effects that warrant a tax. A tobacco excise regime that imposes lower taxes on some tobacco products and, consequently, results in significant differences in prices, can lead consumers to substitute away from relatively higher priced products towards those with lower prices. For example, if roll-your-own tobacco is lightly taxed, as in Thailand and many European countries, some smokers will shift from higher-taxed cigarettes to roll-your-own tobacco.

I. OVERVIEW OF POLICY ISSUES

A. Excises, Import Duties, and General Consumption Taxes

As a preliminary matter, it is important to distinguish the roles of the major indirect taxes: (i) excises, (ii) import duties and (iii) a general tax on consumption. While *excises* are imposed primarily to raise revenue, they also are the normal way of applying supplementary taxes on goods the consumption of which governments wish to discourage, for example for health or environmental reasons. A clear advantage of excises is that they are easier to administer than broad-based consumption taxes or direct taxes on income. The main economic functions of *import duties* are to protect domestic production and to raise revenue. As these taxes have lower administrative costs than domestic taxes, countries constrained by the limited resources they can devote to tax administration and a lack of qualified personnel and accounting sophistication of taxpayers resort to import duties as a straightforward way to raise revenue. The purpose of a *general tax on consumption*, for example, a value-added tax (VAT), is to raise revenue from domestic consumption. Ideally, it should be imposed with a single rate on as much domestic consumption as possible. Typically, the VAT will have a standard rate and one or more lower rates that apply to specific goods and services. The trend in the world is for countries to reduce their reliance on import duties and increase their reliance on a broad-based consumption tax.

⁶ The Bloomberg Initiative to Reduce Tobacco Use, funded by Bloomberg Philanthropies, is committed to reducing tobacco use in developing countries. The Initiative is focusing on 15 large low- and middle-income countries that account for two-thirds of the world's smokers.

Under the General Agreement on Tariffs and Trade, imports shall not be subject, directly or indirectly, to internal taxes or internal charges in excess of those applied, directly or indirectly, to like domestic products (Terra 1996). This requirement ensures that internal taxes, which include excises that apply to both imports and domestic goods, are not used for protectionism. If a country wants to protect its local production, the best way to do this is by imposing a customs duty on imports. However, if the country is a WTO member, its tariff rate may be bound; that is, subject to a maximum rate.

The most common practice is for excisable goods also to be subject to the general consumption tax. Some countries, however, do not apply their general consumption tax to cigarettes. For these countries, the excise on cigarettes can be viewed as comprising two components: (i) the general consumption tax at the standard rate and (ii) a true excise, equal to the amount of the tax in excess of the general consumption that that would otherwise be applied. Other countries (e.g., India) do not apply an excise to cigarettes, but apply a higher than standard rate to cigarettes under their general consumption tax.

The best international practice is for import duties to be included in the base for any ad valorem excise tax. Although following this procedure appears to result in a tax on a tax, it ensures that a customs duty of, say, ten-percent will raise the cost of an imported good by ten-percent even when the imported good is subject to the excise tax. To illustrate, if the customs value is 100, a ten-percent customs duty increases the cost to 110. If the customs duty is included in the base of the excise tax, a 20 percent excise tax will increase the cost further to 132. This cost is ten-percent higher than the cost would be if the import were only subject to the excise tax (that is, 132 is ten percent higher than 120). Similarly, most countries that impose general consumption taxes impose them on a base that includes any excise tax and customs duty. A ten-percent VAT, for example, will raise the cost of the good by ten percent, even when the good is subject to an excise tax and/or a customs duty (Sunley, Yurekli, and Chaloupka 2000).

B. The Appropriate Level of Taxation

How high should be the excise burden on cigarettes? Cigarette taxes are often justified in terms of charging for the external costs of smoking, which would include the direct externalities experienced by other individuals, such as annoyance and health damage caused by passive smoking, and the collectively borne costs of publicly funded medical treatment for smoking related conditions (Smith 2007). Offsetting the negative externality is society's financial benefit from the shorter lives of smokers; namely, reduced life-time benefits paid to smokers under public pensions or social insurance schemes. Some empirical studies have concluded that tobacco taxes exceed the external costs to society (Gravelle and Zimmerman 1994). Other studies have concluded that tobacco taxes do not cover external costs to society (Sloan et. al. 2004).

Individuals, however, may not be well informed of the addictive nature of tobacco, and this may justify higher tobacco taxation. Gruber and Kőszegi (2008) conclude that tobacco taxes should exceed the level of pure externalities because failures of individual self-control lead to excessive smoking relative to desired levels. Tobacco taxes can combat failures of self-control.

The World Bank's Yardstick

Given the problems of quantifying the various social costs and offsets, particularly for developing countries with limited data, the World Bank urged that countries, which want to adopt comprehensive tobacco control policies, should use, as a yardstick, a rule that tax should account for two-thirds to four-fifths of the retail price of a pack of cigarettes (World Bank 1999). This yardstick, which should be viewed as a floor or goal and not as a ceiling, has become widely used in discussions of tobacco control.

It would have been better if the World Bank's yardstick had referred to excise taxes and not total taxes. The reason that an excise yardstick would be preferred is that cigarette excises raise the price of cigarettes relative to the prices of other consumer goods. In contrast, a general consumption tax at a standard rate does not change relative prices and thus will have a minimal effect on smoking. Consider two countries that have a total tax burden on cigarettes of 70 percent of the retail price. Country A has a 60 percent excise and a 10 percent VAT; Country B has a 45 percent excise and a 25 percent VAT. Country A's tax regime will increase the relative price of cigarettes more than Country B's tax regime. Country A's tax regime, therefore, will discourage smoking more than Country B's tax regime. It is not clear from the World Bank report whether it intends its yardstick to apply to every pack of cigarettes, the most popular brand, or only "on average" to all cigarettes.

Affordability

Various measures of affordability of cigarettes are an alternative to the World Bank's yardstick. These measures take into account income and the price of cigarettes. The two most common measures of affordability are: (i) median minutes of labor to purchase a pack of cigarettes, and (ii) the percentage of per capita GDP required to purchase 100 packs of cigarettes (Blecher and Walbeek 2008). Either measure of affordability can be calculated across countries or over time for a single country.

If cigarettes are becoming more affordable in a country, which has been the pattern in many developing countries, this may suggest that cigarette excises should be raised. It is not clear whether affordability can be an absolute standard; that is, affordability must never increase. If a country's GDP in real terms doubles from one year to the next due to an increase in oil prices, should cigarette excises be increased to ensure that cigarette prices double? Suppose next year oil prices fall?

Cross country comparisons are also frequently made by looking at the price of the most popular brand in each country or the price of a pack of Marlboro cigarettes.⁷ These comparisons may be done using the market exchange rate or the purchasing power parity for each currency.⁸ Which rate is more appropriate to use may depend on the purpose of the comparison. If the purpose is to determine whether there is an incentive to purchase tax-paid cigarettes in a low-price country and smuggle the cigarettes into a high-price country for resale, then the market exchange rate is the appropriate rate to use, as the bootlegger will need to purchase the cigarettes in one currency and sell the cigarettes in another currency. However, if the purpose of the comparison is to gauge affordability of cigarettes, purchasing power parity rates should be used, if possible, as they reflect the purchasing power of the different currencies. One problem of using purchasing power parity rates is that they are available only on an annual basis and not on a daily basis. They are also not available for the current year.⁹

C. Specific vs. Ad Valorem Excise Regimes

Excises on cigarettes can be specific levies or ad valorem levies. Most specific excises are per cigarette or per 1,000 cigarettes. However, historically, weight based specific levies were quite common, particularly in countries with historic ties to the United Kingdom. Australia switched in 1999 to a per cigarette excise, in part, because under the prior weight-based system, manufacturers minimized taxes due by reducing the weight of each cigarette and packaging more cigarette in larger packs. Under Australia's current system, cigarettes are taxed based on quantity or weight, depending on the weight category they fall into. If the weight is less than or equal to 0.8 kg per 1,000 cigarettes, the tax is a per cigarette levy. If the weight is greater than 0.8 kg per 1,000 cigarettes, the excise is weight based. As cigarettes generally weigh less than 0.8 gram per stick, the excise for most cigarettes is a per cigarette tax. Weight-based excises remain quite common for tobacco products other than cigarettes.

Ad valorem excises can be based on the ex-factory price, the wholesale price, or the retail price. When the excise is levied on the ex-factory price, the rate is usually a tax-exclusive rate – the base does not include the tax.¹⁰ When the excise is levied on the retail price, the rate may be a tax-inclusive rate – the base includes the tax – or the rate may be a tax-exclusive rate.¹¹

⁷ The price of the cheapest cigarette sold in the market could be used as the relevant benchmark for purposes of measuring affordability, but most studies only refer to Marlboro and the most popular brand.

⁸ A purchasing power parity exchange rate equalizes the purchasing power of different currencies in their home countries for a given basket of goods.

⁹ It is for this reason the foreign exchange rate is used in Table 1 to calculate the retail sales price in US dollars.

¹⁰ Thailand is an exception. It levies a tax inclusive rate on the ex-factory price.

¹¹ If t_n is the tax inclusive rate and t_e is the tax exclusive tax rate, both expressed in percentage terms, then $t_n = t_e / (1 + t_e)$ and $t_e = t_n / (1 - t_n)$. For example a 25 percent tax exclusive rate is equal to a 20 percent tax inclusive rate.

Many countries that use the retail price as the base for the ad valorem excise require that manufacturers print the maximum retail price on each pack of cigarettes. If cigarettes are sold above that price, the tax authority may be allowed to impose an excise surcharge. A drawback of using the retail price for the ad valorem tax is that it requires the manufacturer to set the price for a transaction between two parties further down the chain and competition rules normally disallow this. However, the Treaty of Rome, which established the European Economic Community in 1957, foresaw this anomaly. Article 90.2 provides that a government can break the competition rules in order to carry out the fiscal functions.

Ad valorem excises levied on the ex-factory price are common when there are state-owned tobacco companies that enjoy a monopoly (e.g., China, Thailand, and Vietnam). These state-owned companies have control over pricing and therefore the ad valorem tax base. If the cigarette market is opened up to private companies, the government may want to shift to applying its ad valorem rate to the retail price. Otherwise, there will be a risk that companies may manipulate the ex-factory prices by selling to related distributors.

The Case for a Specific Excise

A strong case can be made for countries adopting a specific tax regime for cigarettes. First, if a primary purpose of the cigarette excise – in addition to raising revenue – is to discourage consumption, the tax should be levied on the characteristic to be discouraged; that is, the number of cigarettes consumed. The social costs of smoking are primarily a function of the number of cigarettes consumed.¹² There is no empirical evidence that cheap cigarettes have lower social costs. A lower excise burden per stick on cheaper brands cannot be justified by health concerns.

Second, an ad valorem excise has a multiplier effect, which leads to larger price differentials between high- and low-priced cigarettes, which in turn encourages brand switching to cheaper brands whenever the ad valorem rate is increased. To illustrate the multiplier effect, assume that a high-priced brand has a cost before excise of US\$2.00 a pack and a low-priced brand has a cost of US\$1.00. A specific excise of US\$1.00 per pack will increase the consumer price to US\$3.00 for the high-priced brand and US\$2.00 for the low-priced brand, assuming full pass through. In contrast, a 100 percent ad valorem excise will increase the consumer price to US\$4.00 for the high-price brand and US\$2.00 for the low-priced brand.

¹² Some countries (e.g., Brazil) vary the rate of the specific excise by length of cigarette. There is a case for a higher tax on longer cigarettes – to reflect the higher “puff-count”. What is most important in practice, however, is to close the loophole whereby a company can manufacture an extremely long cigarette, which can be cut into several normal length cigarettes, and have it only taxed as one cigarette. The EU has a rule to close this loophole – every 9 cm of tobacco rod pays the tax of one cigarette.

Third, ad valorem rates may encourage price wars, as the government shares in any price reduction through lower tax revenues. In contrast, when the rate is specific, the amount of excise paid is not reduced when prices are cut.

Fourth, specific excises are also easier to administer because it is only necessary to determine the physical quantity of the product taxed; it is not necessary to determine its value.

Fifth, if specific excises are used, the tax revenue does not fluctuate with the exchange rate or pricing variables, providing a more stable and reliable source of revenue.

Inflation adjustment

One drawback of specific excises is that they need to be adjusted periodically to keep pace with inflation and possibly the growth of real incomes.¹³ The adjustment for inflation should be automatic; i.e., by an administrative order and not require a decision by an executive agency or approval by a legislative body. Both Australia and New Zealand have automatic inflation adjustments for their cigarette excises. Australia adjusts its cigarette excises every February and August based on the six-month change in the Consumer Price Index (CPI). New Zealand adjusts its cigarette excise annually on the first of December. Automatic indexing does not rule out periodic increases, possibly to reflect growth of real income. For example, in May 2000, New Zealand increased its indexed rate by 22.8 percent due to health concerns.

Progressivity

Some favor an ad valorem excise, as it is more progressive, relative to income, than a specific excise (Burki et. al. 2009). Others argue that the excise burden on low-priced cigarettes must be kept low to protect low-income consumers from spending more on tobacco and less on food and other necessities. Gruber and Kőszegi (2008) conclude that if lower-income individuals are more price sensitive, excises on cigarettes have a larger benefit for them in reducing over consumption and therefore tobacco taxes are less regressive than traditional analysis suggests – and perhaps even progressive. In addition, many countries help low-income tobacco users through increased support to cessation programs and mass awareness campaigns that are often funded by higher taxes. In this regard, it is clear that governments have more effective ways of helping low-income consumers than providing cheap tobacco products.

¹³ The author is not aware of any country that automatically adjusts its excises each year for the growth of real income.

D. Mixed Regimes, Multi-Tier Regimes, and a Minimum Rate

Mixed Regimes

The trend in the world is for countries to adopt a specific tax regime. Within the Asian region, for example, Australia, India, Japan, Korea, the Maldives, New Zealand, and Philippines have all switched to a specific regime since 1997 (Sunley 2007b). However, many countries have a mixed regime that includes both an ad valorem levy and a specific levy. The EU requires all its Member States to adopt a mixed regime, which is described further in the section on Poland. The EU adopted its mixed regime in the early 1970s as a compromise between northern European countries that favored a specific regime and countries that wanted to provide “protection” for their local tobacco manufacturers that produced low-quality, cheap cigarettes from locally grown tobacco. Keen (1998) concludes that there is no unambiguous conclusions as to the optimal balance between specific and ad valorem excises, which proves quite sensitive to the particular characteristics of the market at issue. Ad valorem regimes are more attractive in markets characterized by monopolistic output restrictions. Specific regimes are more attractive where product quality is a particular concern and/or some negative externality can be linked to the quantity consumed.

For countries with a mixed regime, the policy question should be whether the country should switch to a specific regime or whether the weight of the specific tax should be increased relative to the ad valorem tax.

Multi-Tier Regimes

Many countries have multi-tier regimes. The tiers can depend on the price of cigarettes, the length of cigarette, the type of cigarette (filter vs. non-filter, kretek vs. white cigarettes), type of packaging, or levels of production. Tiered systems have the inherent weakness in that they require a definition of the tiers and such definitions tend to be subject to interpretation. Examples of difficult to define tiers would include box pack vs. soft pack; small manufacturer vs. big manufacturer.

Countries have adopted multi-tier specific regimes with price bands to increase the progressivity of the excise. At one level, these regimes are similar to single-rate ad valorem regimes, as the excise burden as a percentage of the retail price can be maintained (or even increased) across the various price bands. Multi-tier regimes are also similar to ad valorem regimes in that they encourage brand switching to lower-taxed brands when tax rates are increased. However, within a band, the amount of tax is not reduced when prices are cut. Inherent in having multi-tier specific regime with price bands is the discontinuity between tiers. As the price rises from one tier to the next, the tax increases to the next higher specific rate. As a result, it is not surprising that tobacco companies, operating in a country with a multi-tier specific regime, price their cigarettes so as to be near the top of a tier.

A Minimum Tax

Countries that have multi-tier regimes, mixed regimes, or a simple ad valorem regime with a single rate may want to consider adopting a minimum tax, which is usually expressed as a minimum monetary amount. Manufacturers and importers would pay the higher of the regular excise rate(s) or the minimum tax. By adding a minimum tax, a country's excise regime becomes a specific regime for all (lower-priced) cigarettes subject to the minimum tax. This may be an attractive option for countries that want to retain an ad valorem rate for the higher-priced brands.

E. Transition

Countries with low tax burdens on tobacco products need to adopt significant tax increases to reduce tobacco consumption. A critical issue is whether the change should be phased in over a period of years or implemented overnight. Some health ministries may argue for the “big bang” as the announcement effect of a “doubling” or “tripling” of cigarette prices may induce smokers to quit or potential smokers not to start. The big bang, however, may provide an opening for organized criminal groups to supply the market with contraband or counterfeit product, particularly in a weak enforcement environment. The issue of how to transition reform is a topic that needs empirical research and case studies.

F. Illicit Trade

Illicit trade comprises four distinct sources of supply: (i) smuggled untaxed genuine product, (ii) smuggled tax-paid genuine product (bootlegging), (iii) counterfeit production (usually smuggled), and (iv) untaxed domestic production. Illicit trade not only reduces government revenue but it has serious health consequences, particularly if the illicit product is of low price and readily available to the young, who might otherwise not purchase cigarettes.¹⁴

High excises on cigarettes and sharp differentials in excise burdens and cigarette prices across countries increase the reward from, and therefore encourage, illicit trade. For example, Vietnam imposes a 65 per cent excise tax and a 10 per cent value-added tax on cigarettes, and imposes a high import duty on imported cigarettes, while Cambodia only imposes a 10 per cent excise

¹⁴ “Cheap whites”, which can be smuggled genuine product and/or undeclared local production, are a growing international problem. Cheap whites include Jin Ling (manufactured in Russia and widely available on the illicit market in Western Europe), “baggies” in Canada (sold in plastic baggies often without health warnings), Texas 5 (manufactured in Malaysia) and Jet and Hero (manufactured in Indonesia, legally imported into Cambodia, and smuggled into Vietnam).

tax, 10 per cent VAT and 7 per cent duty on imported cigarettes. As a result, smuggling duty-paid cigarettes from Cambodia to Vietnam is on the rise (Sunley 2007b).

To fight illicit trade, countries need to disrupt its supply and distribution chain and increase its risks. A country's tax authority and its border agency should first estimate the extent of illicit trade and its primary sources and, on the basis of these estimates, develop a joint strategy to tackle the illicit cigarette trade, which takes into account its sources. The appropriate strategy is different if the primary source of illicit trade is large scale smuggling of genuine product – containers going missing from the port – or if the primary source is untaxed domestic production. The recent UK report, *Tackling Tobacco Smuggling Together*, is a possible model strategy paper that countries may want to consider (HM Revenue & Customs and UK Border Agency 2008). Moreover, the UK has made good progress in reducing its illicit trade in cigarettes from 20 percent of the market to 13 percent in 2006-07.

To disrupt the supply chain of illicit cigarettes, the Parties to the WHO Framework Convention on Tobacco Control (FCTC) are negotiating a protocol on illicit trade in tobacco products. The current draft of the protocol covers seven measures: (i) licensing, (ii) customer identification and verification, (iii) tracking and tracing, (iv) record-keeping, (v) security and preventive measures, (vi) sales by internet and telecommunication, (vii) free trade and duty free sales (World Health Organization 2009). The final text of the draft protocol may be agreed to in 2010 and then will be submitted to the FCTC Conference of Parties.

To fight illicit trade, countries, such as Pakistan, have adopted minimum price per pack of cigarettes. The minimum price would be set at a level so that the (reasonable) presumption would be that any cigarettes selling below the minimum price are illicit. A minimum price will be effective in deterring illicit cigarettes only if the authorities are willing to put some effort into confiscating cigarettes that are being offered for sale below the minimum price.

Fighting smuggling will require cooperation between tax authorities and the major cigarette companies, as stressed in the recent UK report (HM Revenue & Customs and UK Border Agency 2008). Prior to the UK launching its anti-smuggling strategy, the illicit market was predominantly made up of genuine cigarettes that were manufactured in the UK, exported, and then smuggled back into the UK. The government entered into a memorandum of understanding with the tobacco manufacturers in 2002 to restrict the availability of cigarettes to smugglers by tracking forward the movement of cigarettes through the supply chain. This has been a successful program, as Customs seizures of genuine UK brands has fallen to less than 6 percent of total seizures, and the size of the illicit cigarette market has been cut from a 20 percent share to 13 percent.

II. EXCISE REFORM IN THE BLOOMBERG INITIATIVE COUNTRIES

The Bloomberg Initiative countries have adopted a variety of excise regimes (Table 1).¹⁵ The retail price and tax burden for cigarettes varies widely among the Bloomberg Initiative countries (Table 2). The cheapest brand costs only US\$0.14 a pack in Russia, US\$0.16 in Philippines, US\$0.20 in Vietnam, US\$0.21 in Bangladesh, US\$0.24 in Pakistan, and US\$0.30 in China. For the most sold brand in each country, the total tax burden ranges from 32 percent of the retail price in Russia to over 84 percent in Poland (Figure 2). For the most sold brand, Poland, Thailand, and Turkey all meet or exceed the World Bank yardstick – total taxes two-thirds to four-fifth of the retail price.

In this section, we survey the various regimes (as of July 2009) and suggest directions for reforms, taking into account the current regime for each country. A reform that would be appropriate for one country may not be appropriate for another country starting from a different place. In addition, a reform appropriate for one country may depend on what is politically doable, and this may depend, for example, on whether the lower-priced cigarettes are manufactured locally and the higher-priced cigarettes are imported, or whether maintaining employment in the tobacco sector is given greater weight in political decisions than the health of smokers and potential smokers.

Table 1: The Cigarette Excise Tax Regime in the Bloomberg Initiative Countries, July 31, 2009

	Quantity (specific rates)	Value (ad valorem rates)
Single Tier		Mexico Thailand Turkey 1/ Vietnam
Multi-Tier	Brazil Egypt India Indonesia Philippines	Bangladesh
Mixed Regime (specific and ad valorem rates)		China Pakistan Poland 1/ Russia 1/ Ukraine1/

1/ Also apply a minimum tax

¹⁵ Annex 3 provides greater detail of the cigarette tax regime in each Bloomberg Initiative country.

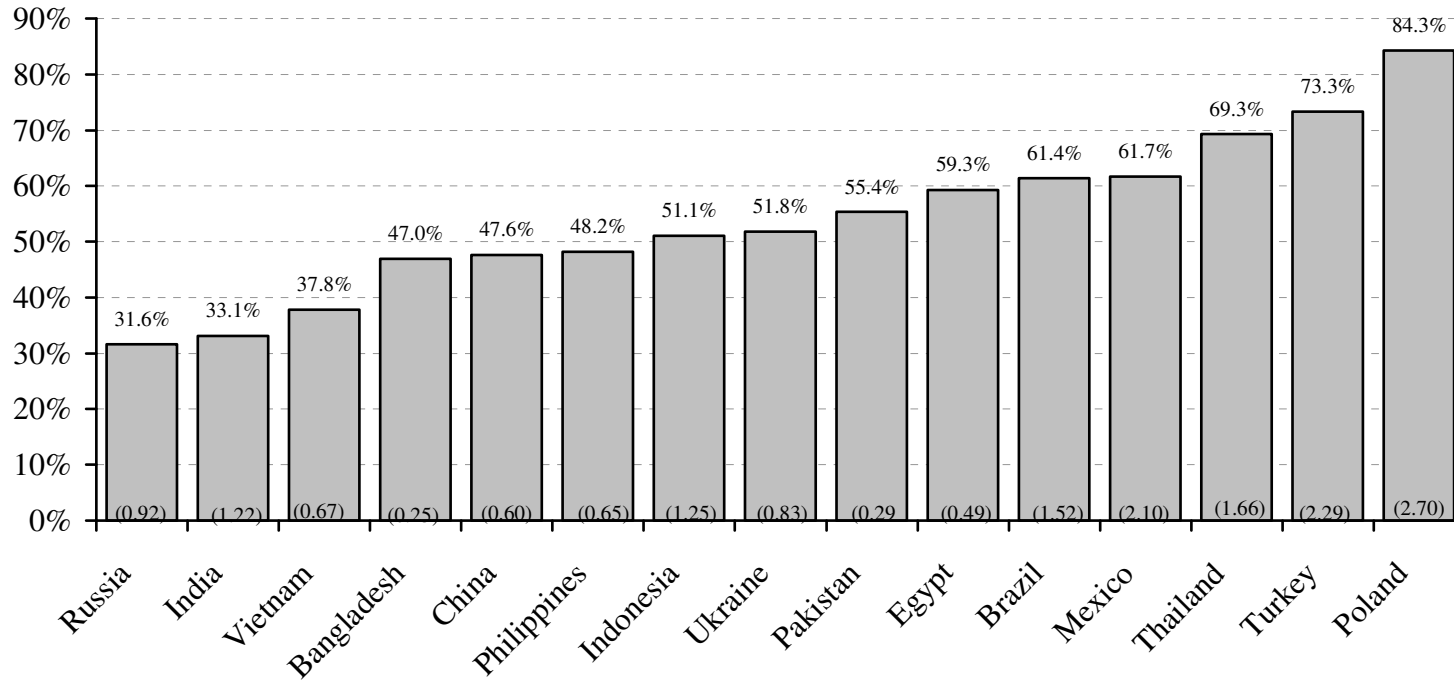
Table 2: Retail Sales Price, Excise Burden and Total Tax Burden for Bloomberg Initiative Countries, July 31, 2009

Country	X-rate (LC/\$)	Retail Sales Price (US\$/20)			Total Excise Burden (as % of RSP)			Total Tax Burden (as % of RSP)		
		Premium Brand (Marlboro)	Most Sold Brand	Cheapest Brand	Premium Brand (Marlboro)	Most Sold Brand	Cheapest Brand	Premium Brand (Marlboro)	Most Sold Brand	Cheapest Brand
Bangladesh	69.02	1.34	0.25	0.21	57.0	32.0	32.0	72.0	47.0	47.0
Brazil	1.97	2.16	1.52	1.02	26.7	25.5	38.2	62.7	61.4	74.2
China	6.82	2.20	0.60	0.30	42.7	29.7	31.6	62.2	47.6	49.8
Egypt	5.56	1.53	0.49	0.49	38.2	55.6	55.6	39.4	59.3	59.3
India	49.12	1.83	1.22	0.51	39.1	27.3	65.5	61.8	33.1	71.0
Indonesia	10,520	1.01	1.25	0.64	43.4	42.7	22.2	51.8	51.1	30.6
Mexico	13.34	2.10	2.10	1.27	48.6	48.6	48.6	61.7	61.7	61.7
Pakistan	80.67	0.79	0.29	0.24	55.5	41.6	49.1	69.3	55.4	62.9
Philippines	47.22	0.65	0.65	0.16	37.5	37.5	32.9	48.2	48.2	43.6
Poland	2.94	3.38	2.70	2.11	59.2	66.3	76.1	77.3	84.3	94.1
Russia	31.57	1.33	0.92	0.14	13.1	16.3	41.3	28.4	31.6	56.6
Thailand	34.94	2.15	1.66	1.20	61.6	58.4	51.1	73.2	69.3	62.6
Turkey	1.48	3.50	2.29	2.04	58.0	58.0	64.1	73.3	73.3	79.3
Ukraine	7.86	1.02	0.83	0.37	31.7	35.1	41.4	48.3	51.8	58.0
Vietnam	17,780	0.96	0.67	0.20	31.7	29.5	30.8	40.0	37.8	38.7

X-rate = foreign exchange rate; LC/\$ = local currency/US\$

Source: Philip Morris International

Figure 2: Total Tax Burden as a Share of Retail Sales Price for Most Sold Brand, end-July
2009
(US Dollar price per pack of 20 cigarettes is in brackets)



A. Asia

China

China is the largest consumer of tobacco in the world; it accounts for roughly 30 percent of the world's total consumption of cigarettes. Almost all (legal) cigarettes consumed in China are manufactured by the state-owned company, the China National Tobacco Company (CNTC), which enjoys a monopoly position. It is the largest manufacturer of tobacco products in the world.

China levies two excises on cigarettes at the factory level – an ad valorem excise and a specific excise. The ad valorem excise has two tiers. If the gross ex-factory price (GEFP)¹⁶ is less than RMB 7 per pack (of 20 cigarettes), the ad valorem excise is 36 percent of the GEFP; if the GEFP is greater or equal to RMB 7 per pack, the ad valorem excise is 56 percent.¹⁷ Most cigarettes sold are in the 36 percent tier. The specific excise is RMB 0.06 per pack or less than US\$0.01 per pack – a de minimis levy. From May 2009, China also levies a 5 percent tax on the wholesale price – the price the wholesaler sells to the retailer inclusive of excises. In addition to the excises and the wholesale tax, cigarettes are subject to the 17 percent value-added tax (VAT) and several miscellaneous taxes (Appendix 3).

The current rate schedule applies from May 1, 2009. From 2001 to May 2009, the ad valorem rates were 30 and 45 percent and the price band separating the two tiers was RMB 5 per pack. In May 2009, a new 5 percent excise was added at the wholesale level. The de minimis specific excise was not changed.¹⁸

China does not publish data on excise taxes paid by tobacco companies. Instead CNTC publishes its contribution to government revenue, which comprises both distributed profits and the cigarette excise tax. In 2005, cigarette tax and distributed profits of CNTC were 7.6 percent of government revenue (Hu, Mao, Shi, and Chen 2008).¹⁹ However, in calculating the tax burden on cigarettes, the profit of the state tobacco company, whether retained or distributed,

¹⁶ The GEFP is the price at which the factory sells to the distributor excluding VAT and the excise tax. The GEFP includes product costs, the factory's margin and local tax costs (construction tax and educational surcharge).

¹⁷ For imported cigarettes the base of the ad valorem excise is the customs value.

¹⁸ The 2009 tax increase in China has not been passed on to the consumer, according to State Tobacco Monopoly Administration (Xinlei 2009). The increase was essentially a transfer from CNTC to the Ministry of Finance.

¹⁹ Some (unpublished) reports suggest that both retained and distributed profits of CNTC are included in government revenue (and that CNTC retains most of its profits). This would be contrary to normal government accounting, under which government revenue does not include retained earnings of state-owned.

should not be considered a tax payment, as it represents a return on the government's investment in the state-owned enterprise.

The total tax burden as a percent of the retail price is 35 percent of the retail price for the most sold brand (Table 2), which is significantly below the World Bank yardstick of two-thirds to four-fifths of the retail price.

Hu, Mao, Shi and Chin (2008) suggest that a way forward would be to increase the specific tax from RMB 0.06 per pack to RMB 1 per pack with further increases to RMB 4 per pack. This approach would retain the mixed system of ad valorem and specific levies, but increase the weight of the specific levy. Once the specific rate reaches RMB 4 per pack, it would be adjusted annually for inflation.

An alternative approach would be to retain the ad valorem excise, repeal the de minimis specific excise, and enact a specific excise that would be a minimum tax. Companies would pay the *higher* of the ad valorem excise or the specific excise. The rate of the minimum tax would be set to ensure that the total tax burden, including VAT, on the most popular brand of cigarettes would be at least 65 percent of the retail price. The minimum tax would be adjusted annually for inflation.

Both alternatives would increase the total tax burden on cigarettes and shift towards a greater reliance on specific excises. Both alternatives would reduce smoking prevalence. The minimum tax alternative would shift most cigarettes to the specific tax regime – the minimum tax, and thus result in a larger tax increase for low-priced cigarettes.

As noted above, the current ad valorem excise is levied on the GEFP. As the “official distributors” are controlled by CNTC, the GEFP may not be an arm's length price.²⁰ This suggests that the base of the ad valorem excise collected at the factory level should be shifted to the wholesale price, as this is a price at which cigarettes are sold to unrelated retailers. If China opens its cigarette market to private companies, the base of the ad valorem tax should be shifted to the retail price, which would be printed on each pack of cigarettes. The printed retail price would be the maximum price at which the pack could be sold. The tax would continue to be collected at the manufacturing or import stage. The 5 percent tax now levied on the wholesale price should also be shifted to the retail price.

²⁰ It is understood that when the excise was increased in May 2009, CNTC squeezed the margins of the distributors – GEFPs were increased, but the distributors were not allowed to increase the prices at which they sell to retailers.

India

The Indian market for smoking tobacco is dominated by bidis (also known as beedis and biris). A bidi consists of shredded tobacco which is hand rolled in a tendu leaf secured with a colorful string at one end. They are smoked primarily by men, especially in rural areas. Roughly 8 bidis are consumed for each cigarette. Far more Indians die from smoking bidis than from cigarettes (Gupta and Asma 2008). Bidis are under-taxed compared to cigarettes taking into account the health risks of each, and therefore, on health grounds, a strong case can be made for increasing the excise burden on bidis (Sunley 2007a and John et. al. 2009). However, the Indian government appears to have kept the tax rate on bidis low to provide cheap smokes to the poor and perhaps also due to the difficulties in collecting the tax on bidis.

India imposes specific excises (per 1,000 sticks) on both bidis and cigarettes. For bidis, the rates depend on whether the bidis are handmade or machine-made – almost all bidis are handmade. Bidis produced by manufacturers producing less than 2 million sticks a year without machines are exempt from the excise.²¹ Tax compliance is low in the bidi sector, as there are thousands of bidi manufactures.

For cigarettes, the excise rates vary by the length of the cigarette. Prior to 2008, the excise rates were lower for non-filter cigarettes than for filter cigarettes. The 2008 Finance Bill raised the rate on non-filter cigarettes to be on par with the rates on filters of the same length. Under this reform, the rate on micro non-filter cigarettes (≤ 60 mm in length) was increased 387 percent and the rate on regular non-filter cigarettes (>70 mm-70mm in length) was increased 142 percent. The rates on filter cigarettes and bidis were not increased.²² According to Udayan Lal, Director of the Tax Institute of India, the 2008 reform with higher rates on non-filter cigarettes is inducing consumers to shift to cheaper forms of tobacco consumption like bidis and chewing tobacco (Expressindia 2009). The counteraction for this should be an increase in the tax on bidis and non-smoking tobacco products.

The excises on bidis and cigarettes are imposed under India's central value-added tax (CENVAT). Bidis and cigarettes are not subject to the 8 percent standard rate that applies to most manufactured goods.²³ The CENVAT is a VAT-like levy that applies only through the manufacturing stage. States also levy a VAT on goods through the retail level, but cigarettes are not taxed at the state-level.

²¹ To produce more than 2 million bidis in a year requires only six rollers making 1,000 bidis a day.

²² In the budget speech for the 2009/10 (July 6, 2009), the government of India did not increase the excise rates on cigarettes or bidis, in part, because the government adopted an expansionary fiscal policy to stimulate economic growth.

²³ The CENVAT rate was reduced from 14 to 10 percent in December 2008 and to 8 percent in February 2009, as part of stimulus packages adopted to fight the world-wide fiscal crisis.

As the excise rate on handmade bidis is less than 2 percent of the rate on micro-cigarettes (purchased by the poor), the priority reform for India should be to sharply increase the excise rate on bidis (Sunley 2007a). Both the distinction between handmade and machine-made bidis and the small producer exemption should be eliminated.²⁴ Any substantial increase in the excise rate on bidis will need to be accompanied by administrative measures to improve compliance. First, there should be no unbranded bidis sold to consumers. The identity of the manufacturer should be required to be printed on the bidi wrapper. Second, each person selling processed bidi tobacco to a manufacturer or a manufacturer's representative should be required to report all sales and each bidi manufacturer should be required to report all purchases of tobacco.

During the annual budget speech for 2007/08, the Union Finance Minister announced the intention to introduce a national goods and service tax (GST) or VAT, effective from April 2010. This tax will replace CENVAT and the services tax at the central level and replace the state value-added taxes. Introduction of a national GST presents the best opportunity to rationalize and simplify the taxation of tobacco products (but without decreasing the tax burden on tobacco products). They should be subject to the national GST, as is the normal international practice. They would also be subject to a separate excise, which would be included in the base for the GST. There should be a single specific rate for cigarettes and initially a lower specific rate for bidis. Over time, the rate of excise on bidis should be increased to the rate for cigarettes. The rates should be adjusted annually for inflation.

Bangladesh

The Bangladesh market for smoking tobacco is dominated by bidis – about 75 percent of the sticks smoked are bidis (Barkat et. al., 2008). They are subject to a 20 percent ad valorem tax, which is levied on the pre-tax retail price, and even this low tax is often evaded. Like in India, bidis are produced by many small producers.

For cigarettes, Bangladesh has a multi-tier ad valorem regime with four retail price bands and rates of 32, 52, 53, and 57 percent of the maximum retail price which is printed on the pack. The 32 percent rate for the very lowest-priced cigarettes was set, in part, because these cigarettes compete with bidis. Cigarettes are subject to the 15 percent VAT (13 percent on a tax-exclusive basis). The total tax burden for cigarettes ranges from 47 percent of the retail price for the cheapest brand to 72 percent for Marlboro.²⁵

²⁴ Alternatively, the small producer exemption could be limited to truly small manufacturers. The term “manufacturer” for purposes of this exemption would include all companies that are owned or controlled directly or indirectly by the same interests.

²⁵ The street price for cigarettes is lower than the maximum retail price. If the street prices were the same as the maximum retail price, the total tax burden would be 45 percent for the cheapest brand and 70 percent for Marlboro.

The priority reform for Bangladesh should be to impose a reasonable level of tax on bidis; for example, a specific tax that would be equal to 30 to 40 percent of the retail price of the most popular brands of bidis. This will require adoption of administrative measures to ensure that the tax is collected and public education campaigns emphasizing that bidis are as harmful as cigarettes. For cigarettes, the top three tiers of the rate schedule could be combined, as there is very little difference in the rates applied. If Bangladesh wishes to retain a multi-tier regime, it should consider switching from ad valorem to specific rates for each tier (with automatic adjustments for inflation). This would retain the progressive feature of the current tax regime, but would ease administration of the tax and ensure that the government does not share in the cost of any price cuts.

Indonesia

Indonesia is the leading producer of kretek cigarettes, which are sweet-smelling clove-flavored cigarettes that comprise over 90 percent of the domestic cigarette market of which about 40 percent are handmade and 60 percent machine-made. Kretek cigarettes are about two-thirds tobacco and one-third cloves, and they usually contain another additive such as cinnamon. Although handmade kreteks dominate the low-end of the market for smoking tobacco, there are handmade kretek, machine-made kretek and white cigarette brands positioned in all segments of the market for smoking tobacco. The dominant premium kretek brand is hand-made.

Indonesia is the only country which differentiates its excises on cigarettes based on the producer's annual production.²⁶ In general, countries want to limit the number of cigarette producers to ensure high tax compliance, health standards, work conditions in the factory, etc. Indeed, Indonesia eliminated the very small producer tier (less than 6 million sticks) for handmade kreteks in 2008, as the number of companies in this tier had proliferated.

Under current law, the production tiers apply company by company for each type of cigarette although two companies may be under common control. This allows a large company in the top production tier, which may want to introduce a new brand, to set up a related company that could be a wholly-owned subsidiary, and have the related company's production taxed under the rates for "small" companies. This tax planning technique should be eliminated if production tiers are retained.

Prior to the 2008 reform, which was effective from February 1, 2009, Indonesia may have had the most complex set of cigarette excises than any country in the world (Barber et. al. 2008). Indonesia had a mixed regime with both an ad valorem tax and a specific tax. The rates for both

²⁶ Myanmar differentiates its excise based on the producer's sales value.

of these taxes varied by type of product (white cigarettes, machine-made kreteks, handmade kreteks without filters, and handmade kreteks with filters) and levels of production (lower rates for small manufacturers). The ad valorem rates were based on the banderole price, which was generally higher than the retail or street price.²⁷

Beginning February 2009, Indonesia has adopted a multi-tier specific regime. The specific rates for domestic cigarettes vary by type of product, production levels and the banderole price (Table 3). In addition to the excise, Indonesia imposes its 8.4 percent VAT on the banderole price, which is collected from the manufacturer.²⁸

The new rate structure is a significant simplification and reform of the prior regime. It should be the first step of a broader reform. As a percent of the banderole price, the specific rates favor handmade kreteks without filters. For these kreteks, which are a significant segment of the market for smoking tobacco, the excise is about 27 percent of the banderole price.²⁹ For other types of smoking tobacco, the excise is about 43 percent of the banderole price.³⁰ The VAT adds about an additional 8.4 percentage points to the effective tax rate.

Indonesia has room to increase the specific rates to raise revenue and to reduce smoking prevalence, and the government of Indonesia is developing a roadmap for reform of its excises on white and kretek cigarettes, which is expected to be adopted in January 2010, but could be modified before final approval.³¹

²⁷ Increases in banderole prices are often mandated by the government. Prior to 2009, if a company wanted to raise the street price above the banderole price, the company must increase the banderole price for the brand. Beginning in 2009, brands can be sold in the market at prices up to 5 percent above their banderole price. When this happens, the producer is expected to inform the government and purchase new banderoles, as the banderole is a fiscal stamp with the banderole printed on it.

²⁸ Indonesia levies its VAT on cigarettes at a single-stage; thus for cigarettes the VAT is not collected at each stage of production and distribution. The VAT is 8.4 percent of the banderol price. This is a tax-inclusive VAT rate. For goods subject to Indonesia's standard VAT rate of 10 percent, the tax-inclusive rate is 9.1 percent. Presumably, the VAT rate is lower for cigarettes than for goods subject to the standard rate because it applies to the banderole price, which is higher than the actual retail price.

²⁹ The banderole prices, however, are higher than the street prices so the effective tax rates are somewhat higher.

³⁰ Excluding incense clove cigarettes and cornhusk-wrapped cigarettes, which are only a minor part of the market.

³¹ Under the Excise Law, the Ministry of Finance has discretion to promulgate regulations that set tax rates (either ad valorem or specific) and change the structure of excises (for example, introduce new tiers; differentiate by levels of production, type of cigarette, etc.). His discretion is constrained by the Excise Law, which limits the total excise burden for any brand to 57% of the banderole price. Most ministers of finance do not have such broad discretion.

Table 3: Indonesia: Excise Rates on Domestic Production of Cigarettes and Kreteks, 2009

Product Type	Tax Tier	Production Volume (in billions)	Banderole Price (per stick in IDR)	Specific Rate (in IDR per stick)	Excise as Percent of Banderole price 1/	
Machine-made white cigarettes	I	≥ 2.0	>600	290	48	
			451-600	230	44	
			375-450	185	45	
	II	<2.0	>300	170	57	
			255-300	135	49	
			217-254	80	34	
Machine-made kreteks	I	≥ 2.0	>660	290	44	
			631-660	280	43	
			600-630	260	42	
	II	<2.0	>430	210	49	
			381-430	175	43	
			374-380	135	36	
Handmade kreteks with filters 2/	I	≥ 2.0	>660	290	44	
			631-660	280	43	
			600-630	260	42	
	II	<2.0	>430	210	49	
			381-430	175	43	
			374-380	135	36	
Handmade kreteks without filters 3/	I	Not Applicable	>590	200	34	
			551-590	150	26	
			520-550	130	24	
	II	Not Applicable	>380	90	24	
			350-379	80	22	
			336-349	75	22	
	III	Not Applicable	=234	40	17	
	Cornhusk-wrapped cigarettes	Not applicable		>250	25	10
				180-250	18	8
Incense-clove cigarettes	Not applicable		+180	17	9	
Addendum: US\$1 = IDR 10.520						

1/ Mid-point banderole price used when there is an upper and lower limit.

2/ Includes handmade white cigarettes with filters

3/ Includes handmade white cigarettes without filters

Source: Barber and Ahsan 2009.

The initial focus of the reform will be on government tax revenue, and over time, the reform will give greater weight to health concerns and a lower weight to maintaining low-paid employment in producing handmade kreteks. From 2016, once the new regime is fully phased in, there would be only two specific rates (as yet undetermined): (i) a rate for white cigarettes and machine made kreteks and (ii) a lower rate for handmade kreteks. During the transition period to 2016, the differential rates that depend on the level of production and the banderole price would be eliminated in steps. A strong case on health grounds can be made for eliminating the lower rate for handmade kreteks, but this would be difficult to achieve, as the kretek manufacturers are strong politically and there are over 250,000 full-time equivalent employees in tobacco manufacturing – about 0.3 percent of total employment (Barber et. al., 2008). The reduced rate for handmade kreteks should be set at as low a level as politically feasible. If the narrowing of the differential between handmade and machine-made kreteks is phased in over a reasonable period of time, the loss of employment in the hand-made segment can be absorbed by other sectors of Indonesia’s dynamic economy.

The Parliament in 2009 approved an additional tobacco tax, called the cigarette tax, which will be equal to 10 percent of cigarette excises collected by the government.³² This tax, which will be effective from 2014, will be collected by the central government at the manufacturing level (and import stage) and the revenue distributed to the provinces based on population.³³ At least 50 percent of the revenues from the cigarette tax, whether allocated for the province or the districts, shall be earmarked to fund public health services and law enforcement by authorized officials. This new central government tax is essentially a form of revenue sharing with the provinces. With regards to revenue sharing, the Government already redistributes 2 percent of tobacco excise revenue to the provinces that generate the revenue based on manufacturer location (East, Central and West Java, North Sumatra and Yogyakarta).

Pakistan

In Pakistan, domestic cigarettes are classified into three tiers, for excise purposes, based on the retail price before VAT. Each tier is subject to a different excise regime. From July 2009, cigarettes in Tier I (the lowest-priced cigarettes) are subject only to a specific excise (PKR 9.50 per pack or US\$0.12 per pack of 20 cigarettes). Cigarettes in Tier II (cigarettes in the mid-price range) are subject to mixed regime comprising a specific excise and an incremental 70 percent ad valorem excise on the retail price before VAT. The ad valorem tax is incremental in that it applies only to the retail price before VAT in excess of the price bracket between the first and second tiers (PKR 20.00 per pack of 20 cigarettes). Cigarettes in Tier III (the highest-priced

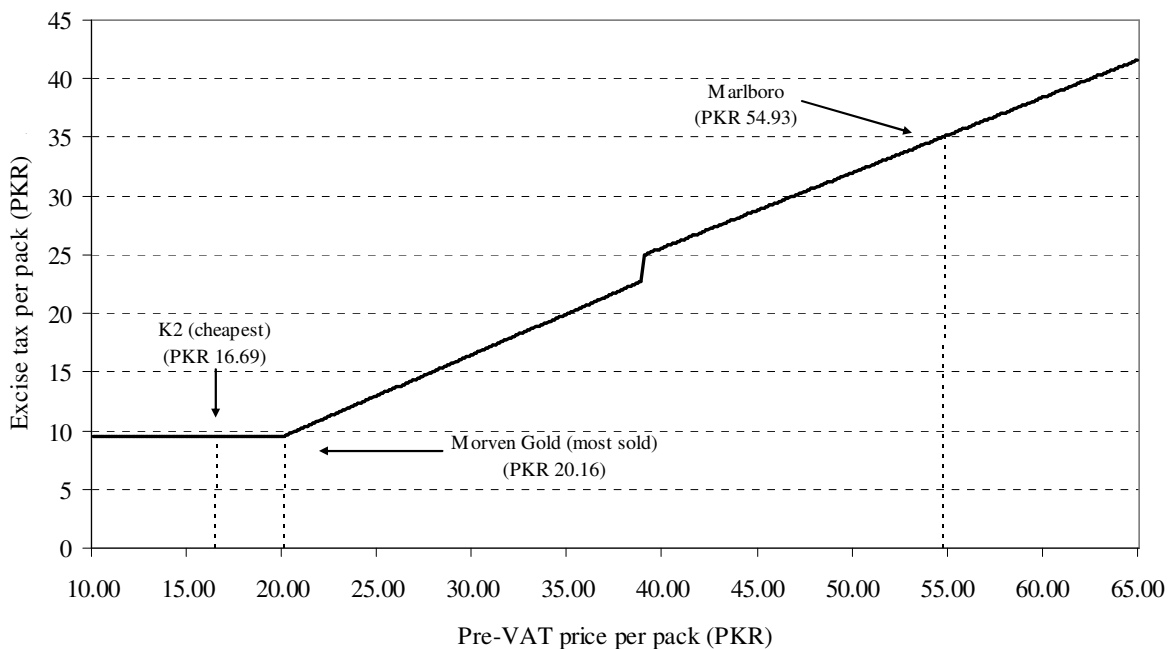
³² Articles 26-31 of the Law Concerning Regional Taxes and Levies

³³ Whether the new cigarette tax will result an additional tax burden on consumers will depend on how the government adjusts its own rates from the beginning of 2014.

cigarettes) are subject only to a 64 percent ad valorem excise on the retail price before VAT (Figure 3). Imported cigarettes – less than 3 percent of the market – are subject to a 64 percent ad valorem excise on the retail price before VAT.³⁴ Cigarettes are subject to the 16 percent VAT collected at each stage of production and distribution. In addition, there is a 1 percent special excise duty applied to retail price before VAT for all brands.

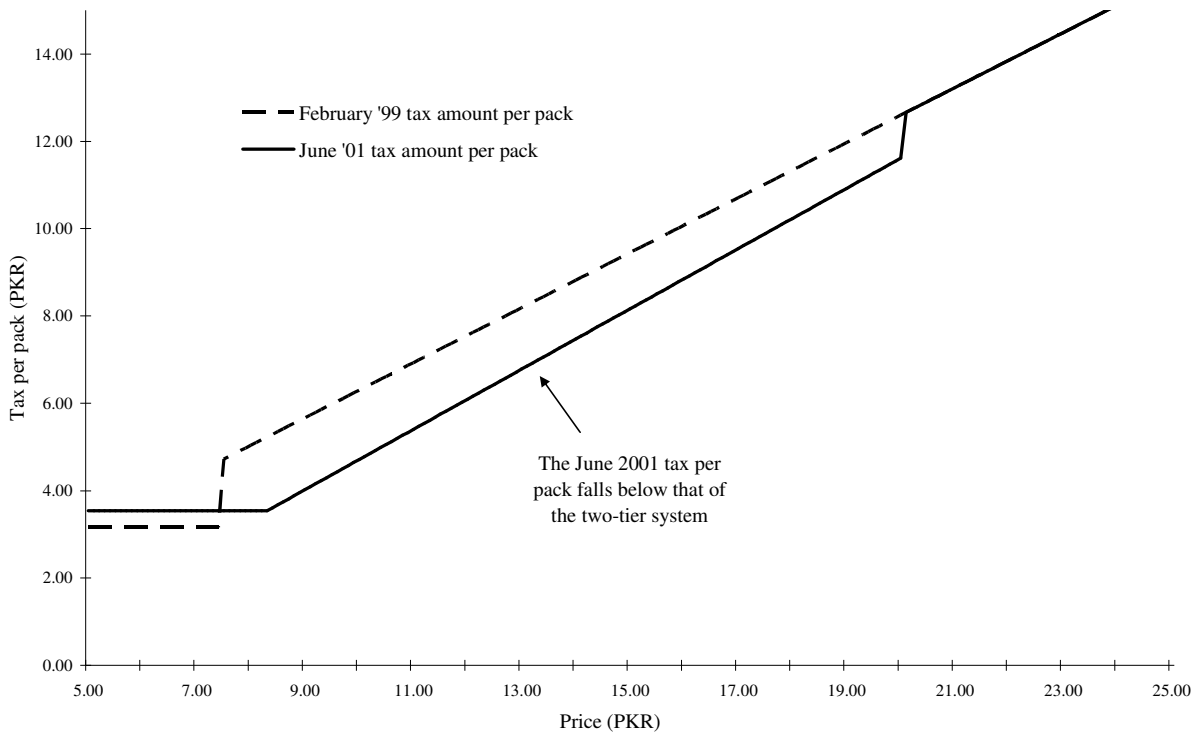
Annual consumption of cigarettes has increased from 292 cigarettes per capita in 1994 to 406 cigarettes per capita in 2007. During this same period, tobacco excise revenue fell from 0.5 percent of GDP to 0.3 percent. The decline in revenue is primarily due to excise rates not keeping pace with growth of per capita income, and to adding a new tier in 2001, which reduced the tax on cigarettes in the mid-price range (Figure 4).

Figure 3. Pakistan: Excise per pack of cigarettes and current prices before sales tax, July 2009



³⁴ This could raise a WTO issue, as Pakistan's cigarette excise discriminates against low-valued imported cigarettes.

Figure 4. Pakistan: Excise per pack before and after the introduction of the three-tier system



To reduce consumption, increase government revenue, and simplify the excise regime, Pakistan should return to the two-tier regime (Petit and Sunley 2008), which was abandoned in 2001. The specific rate for the first tier would be increased substantially to reflect inflation since 1994. Under this proposal, over 80 percent of all cigarettes would be subject to the Tier I specific excise. Only the highest-priced cigarettes would be subject to the 64 percent ad valorem excise, allowing the government to tap some of the up-market value.

Assuming the excise tax is fully passed through to consumers, adoption of this proposal will lead to a 50 percent increase in the price of the most popular brands and more than double the excise tax on these brands. Consumption of cigarettes will decline by 18 percent, providing significant health benefits, and the government's revenue from cigarette excises will increase by 47 percent (Petit and Sunley 2008).

Philippines

Prior to 1997, Philippines levied ad valorem excises on tobacco products based on their ex-factory price, in the case of domestic production (or import values, in the case of imported products). Philippines switched to specific levies, in part, because domestic manufacturers were

selling cigarettes to related distributors at artificially low prices thus reducing their excise liabilities. The tax authority was not able to control this abusive transfer pricing.³⁵

Philippines' 1996 excise reform included a 4-tier system of price bands for machine-made cigarettes, each with its own specific rate, ranging from PHP 1.00 to PHP 12.00 per pack. In addition to the specific excise on cigarettes, Philippines imposes its 12 percent VAT on cigarettes.

There is a major problem with the system of price bands as applied in Philippines (Sunley 2007b). For brands sold in October 1996 (old brands), the excise rate is established with reference to its October 1996 price. However, new brands shall be classified according to their current "net retail price." Given inflation since the beginning of 1997, old brands are taxed artificially low compared to new brands that are selling at about the same current price (before excise and VAT). This anomaly should be fixed.

The Philippines is an excellent example of what can happen when a government is inhibited politically from adjusting specific rates for inflation. During the legislative consideration of the 1996 excise legislation, the government proposed that the specific rates be indexed for inflation. However, the final legislation only provided for a one-time 12 percent increase in the tax rates on cigarettes at the beginning of 2000.

The rates were not increased again until RA 9334 was adopted at the end of 2004 (effective January 1, 2005). The specific rates for the various types of brands were increased from 13 to 86 percent for the initial year (Table 4).³⁶ The highest percentage increase was for the premium brands. The next highest increase was for the low-price brands, which had an unreasonably low excise rate under prior law and had 44 percent of the market in 2004. The 2004 legislation also provides that excise rates will increase by 3.6 percent plus PHP 0.16 per pack every two years until 2011 in lieu of indexation. The scheduled rate increases have not kept pace with inflation. Between 2005 and 2007, consumer prices rose 17.2 percent. The cigarette excise, however, increased only 12 percent for the lowest-priced brands and between 4 and 6 percent for the medium to high-priced brands.

³⁵ At the beginning of 1997, Philippines switched the excises on both cigarettes and alcoholic beverages from ad valorem to specific rates. The excises on petroleum products were already specific rates.

³⁶ To restore the real value of these specific rates to their January 1, 1997 levels, the rates would have had to be increased by 54 percent.

Table 4: Philippines: Structure of the Excise Tax on Cigarettes
(PHP per pack of 20s)

Type of Cigarettes	Rates prior to RA 9334	Rates under RA 9334			
		2005	2007	2009	2011
Cigarettes Packed by hand:	0.40	2.00	2.23	2.47	2.72
Cigarettes Packed by machine:					
If the net retail price per pack of 20					
a.) over P10.00	13.44	25.00	26.06	27.16	28.30
b.) over P6.50 but not over P10.00	8.96	10.35	10.88	11.43	12.00
c.) P5.00 but not over P6.50	5.60	6.35	6.74	7.14	7.56
d.) below P5.00	1.12	2.00	2.23	2.47	2.72
Addendum: US\$1 = PHP 47.83					

The lowest-tier cigarettes in the Philippines are taxed at less than US\$0.05 per pack. Abolishing the lowest tier would be a significant reform. In 2009, the World Bank country director backed a single specific rate for all cigarettes.³⁷ This would be a major reform, but politically very difficult, as Fortune Tobacco, the major domestic manufacturer, produces the lower-priced cigarettes. In 2004, Senator Enrile introduced a bill that would have simplified the Philippine cigarette excise tax system through variable increases in the tax rates for the different price bands, leading to a convergence into a single tax rate of PHP 13.50 per pack within a six-year period. After the phase-in of a single specific rate, it would be adjusted annually based on changes in the CPI (Sunley 2007b).

The main criticism of the Enrile bill was that it would increase the tax burden on low-priced cigarettes. This criticism was answered in an open letter to the Honorable Members of the Philippine Senate, which was signed by Roberto F. de Ocampo, former Secretary of the Department of Finance, and Milwida M. Guevara, former Undersecretary of the Department of Finance, among others. They concluded, “if the poor smoker reduces his cigarette consumption because of this, isn’t he and his family better off as a result?”

Like many countries, reform of cigarette taxation is very political. Health concerns seem to take a back seat to local growers of tobacco and a major local manufacturer. Given the recent history, the minimum reform should be to adjust the current rates annually for inflation so they do not fall back in real terms. Eliminating the lowest-tier should be the next highest priority. A plan to phase in a single rate for all cigarettes, along the line of the Enrile bill should be the medium-term goal.

³⁷ www.gmanews.tv/story/83625/WB-back-plan-for-single-tax-rate-on-all-cigarettes-brands; assessed May 31, 2009.

Thailand

Thailand, which has strong anti-smoking laws, levies a single-rate, 85 percent ad valorem excise on cigarettes.³⁸ The base of the tax is the ex-factory price (in the case of domestic production) or the import value plus import duties (in the case of imported cigarettes). The 85 percent rate is a tax inclusive rate. Therefore, the excise is equal to 566 percent of the ex-factory price ($85\% / (100\% - 85\%)$).³⁹ All cigarettes are subject to the 7 percent VAT based on the maximum retail selling price established by the Ministry of Finance. The brand-specific retail prices that are set by the government for imported cigarettes may be significantly above their actual retail prices.⁴⁰

Domestic manufacturing and distribution of cigarettes is controlled by the Thai Tobacco Monopoly (TTM), a state-owned enterprise run directly by the Ministry of Finance. By law, private companies are not allowed to manufacture cigarettes in Thailand. Prior to 1990, Thailand's Tobacco Act effectively prohibited the importation and sale of foreign cigarettes, except on the very restricted duty free market. In 1990, after Thailand was found in violation of its obligations under the General Agreement on Tariffs and Trade (GATT), it lifted its ban on foreign cigarettes. Since 1990, imported international brands have increased their penetration of the Thai market. By 2008, over 20 percent of the country's cigarette sales were imports, primarily imports from Philippines.

Thailand has increased its cigarette excise more rapidly than inflation. In January 1992, the rate was set at 55 percent of the ex-factory price. In steps, the rate was increased to 85 percent of the ex-factory price. As these rates are tax-inclusive rates, the rate was increased from 1.22 times the ex-factory price to 5.6 times the ex-factory price in 2009. Thus the excise has increased by over 365 percent between 1992 and 2009.

Thailand's total tax burden on cigarettes meets the World Bank yardstick; namely, taxes should account for two-thirds to four-fifths of the retail price. For the most sold brand (Krongthip), the total tax burden is 69.3 percent of the retail price.

³⁸ Thailand also levies a health tax on cigarettes, which is 2 percent of the excise tax paid on cigarettes, and a television tax, which is 1.5 percent of the excise tax paid on cigarettes. These levies are de minimis.

³⁹ Fine cut tobacco for the rolling of cigarettes is virtually untaxed and comprises about half of the tobacco market.

⁴⁰ Most imported cigarettes are manufactured in the Philippines. The Philippine government has formally complained to the WHO that Thailand's treatment of foreign cigarettes violates global trading rules (WT/DS371). As of January 2009, WTO has convened a panel to investigate the complaint (WT/DS/OV/34).

An attractive feature of Thailand's cigarette excise regime is its single rate, albeit an ad valorem rate. A major weakness of the regime is that the base for the ad valorem tax is the ex-factory price (or the CIF value plus import duties). In case of domestic production, this may not be a problem, as the TTM can set the ex-factory price. But as Thailand moves towards an open and competitive market, the government will lose control over pricing and therefore over the ad valorem tax base. The base of the ad valorem excise then should be moved from the ex-factory price to the retail price that would be printed on each pack of cigarettes.

Thailand should consider moving to a single specific rate for all cigarettes, which would eliminate the problem of valuing the cigarettes. Adopting a single specific rate would raise the tax on lower-priced cigarettes and lower the tax on higher-priced cigarettes. An alternative approach would be to impose a minimum specific tax, which would raise the excise on low-priced brands. If Thailand wants to retain a single-rate ad valorem regime, the rate should apply to the maximum retail price, which would be printed on each pack of cigarettes.⁴¹ The maximum retail price would be set by the importer or the domestic manufacturer, with appropriate penalties if cigarettes are sold at a price above the maximum price. VAT could continue to be collected as a single stage; namely when cigarettes are released by the manufacturer or imported into Thailand.

Vietnam

Tobacco manufacturing in Vietnam is dominated by the Vietnam Tobacco Corporation (Vinataba) and its subsidiaries. Foreign brands are produced by Vinataba under licensing agreements. This makes it easy for Vietnam, like other countries with state tobacco monopolies, to administer an ad valorem tax regime based on the ex-factory price, as the government controls the price.

Prior to January 2006, Vietnam levied a three-tier ad valorem tax on cigarettes (Guindon et. al. 2009). For filter cigarettes, the tax was 45 percent of the ex-factory price if the local leaf content of the cigarette was greater than 50 percent; and 65 percent if the local leaf content was less than or equal to 50 percent. For non-filters cigarettes, the tax was 25 percent of the ex-factory price. To meet WTO requirements that excises treat imports and domestic production alike, including the inputs used in the production of excisable goods, and in preparation for joining the WTO in 2007, Vietnam adopted a single ad valorem rate for all cigarettes from the beginning of 2006: 55 percent of the ex-factory price in 2006 and 2007, and 65 percent from the beginning of 2008. In addition to the excise on cigarettes, known as the special consumption tax, Vietnam imposes its 10 percent VAT on cigarettes – a 9.1 percent tax-

⁴¹ When the tax base is expanded to the retail price, the tax rate should be adjusted accordingly.

inclusive rate. The VAT, however, is applied on the distributor price and not on the final retail price, and therefore the effective VAT burden is lower than 9.1 percent.

Prior to January 2007, imported cigarettes were banned. Under current law, only Vinataba may import cigarettes and the import duty is quite high – 150 percent of the import value for imports from most favored nations (other WTO countries) and 225 percent for imports from other countries. The high import duty constitutes a de-facto import ban.

The total tax burden (excise plus VAT) is about 37 to 40 percent of the retail price (Table 1). It is much lower than the sum of the excise rate plus the VAT rate because they are tax exclusive rates.⁴² In addition, the 65 percent excise applies to the ex-factory price not the retail price and thus its base does not include the distribution margin.

Guindon et. al. (2009) recommend that the 65 percent ad valorem rate for cigarettes should be increased annually by 20 percentage points and a specific tax, indexed for inflation, should be introduced to increase the prices of the lowest-priced cigarettes. An alternative would be to introduce the specific tax as a minimum tax. The excise on cigarettes would then be the higher of the ad valorem tax or the specific tax.

If Vietnam liberalizes its market for cigarettes, it should shift the base of the ad valorem tax from the ex-factory price to the retail price.

B. Europe

Poland

Poland joined the EU in May 2004, and as a consequence had to increase its excises on tobacco products, alcoholic beverages, and petroleum products to meet EU requirements. With respect to cigarettes, the EU requires that each Member State's excise must contain both a specific and an ad valorem element (Cnossen 2007). The following conditions must be met: (i) the total excise burden must be at least 57 percent of the retail price (including all taxes) of the most popular price category (MPPC) of cigarettes sold;⁴³ (ii) the specific element must represent between 5 and 55 percent of the total tax burden (i.e. excise plus VAT) on cigarettes; and (iii) the total excise on the MPPC cannot be less than 64 euro per 1,000 cigarettes. Under the EU rules, countries may impose a minimum excise duty up to 100 percent of the total excise

⁴² Tax-exclusive rates apply to a base that excludes the tax. In contrast, the total tax burden is measured as a percentage of the retail price, which includes the taxes.

⁴³ A Member State with an effective excise charge of at least 101 euro per 1,000 cigarettes is not required to meet the 57 percent requirement.

burden on the MPPC. The EU also requires that each Member State imposes a VAT with a standard rate of at least 15 percent (13 percent on a tax inclusive basis). Thus if a Member State meets the 57 percent requirement for its cigarette excise, the total tax burden (excise plus VAT) will be at least 70 percent of the retail price.

The EU does not require automatic adjustments of the specific excises for inflation, but as the price of the MPPC increases due to inflation or the most popular price category shifts to higher-priced brands as smokers' real income rises, a Member State will need to adjust the specific and/or ad valorem rates to ensure that the 57 percent requirement continue to be met.

Poland's MPPC is 1.70 euro per pack, which is low compared to Germany (4.71 euro per pack) but slightly above neighboring Lithuania (1.77 euro per pack). Poland's cigarette prices, particularly for the cheapest brands, are significantly higher than prices in Russia and Ukraine (Table 1), which also share an international border with Poland.⁴⁴

Even with its low MPPC, Poland meets the EU requirements for excises on cigarettes. Poland's specific tax was 49.4 percent of the total tax.⁴⁵ As of January 2009, its excise yield is 67.66 euro per 1,000 cigarettes (European Commission 2009). Its total excise burden (specific plus ad valorem) on the MPPC is 79.6 percent of the retail price, the highest total rate for any Member State. The total tax burden (excise plus VAT) on the MPPC is 97.6 percent of the retail price.

Poland has the highest total tax burden for any Member State and the highest tax burden for any Bloomberg Initiative country.⁴⁶ The total tax burden significantly exceeds the World Bank recommendation that taxes should account to two-thirds to four-fifths of the retail price. Like 20 of the 27 Member States, Poland imposes a minimum excise duty (also known as minimum tax). Poland's minimum tax is equal to 100 percent of the excise burden on the MPPC.

There is not much room to increase the overall excise burden. Also, given that Poland must meet the various EU requirements for cigarette excises, reform options are limited. Poland,

⁴⁴ In this section we use European Commission data, as Poland must meet EU requirements. The MPPC for July 2009 was PLN 5.75 per pack. In Table 1, the retail price of the most sold brand in July 2009 was US\$2.70 or PLN 7.95 per pack. As the MPPC was much lower than the price of the most sold brand, the 79.6 percent total excise burden (specific + ad valorem) on the MPPC was higher than the 66.3 percent total excise burden on the most sold brand (see Table 2).

⁴⁵ Within the EU, specific element ranges from 5 percent of the total tax (Spain and Italy) to 55 percent (Ireland and Slovak Republic).

⁴⁶ The high tax burden as a percent of the retail price in part reflects the effect of Poland's competitive market for cigarettes, past price wars, and the low cigarette prices in neighboring countries.

however, could increase its reliance on the specific element and reduce its reliance on the ad valorem element.

These reforms would raise the tax burden on lower-priced cigarettes. The shift to greater reliance on the specific element would reduce the total excise on higher-priced cigarettes. These reforms would be consistent with the direction in which the EU appears to be moving. In July 2008, the European Commission proposed a new tobacco excise directive (European Commission 2008). Under this proposal, the band for specific excises would be widened from 5-55 percent to 10-75 percent, and countries could implement any minimum tax rate.⁴⁷

Turkey

Turkey has made significant progress in adopting progressive tobacco control measures. Subsidies to tobacco farmers have mostly been removed, and the government is providing financial assistance to farmers to grow other crops on land previously used for to growing tobacco. TEKEL, the state-owned tobacco company, which monopolized production and distribution, has been privatized and sold to BAT. In 2008, Turkey adopted comprehensive measures to reduce tobacco use, including a ban on smoking in public places, bans on most forms of tobacco advertising, and prominent warning labels on cigarettes packs (Yurkeli, et. al. 2009).

Turkey has rationalized and simplified its excise regime. In 2000, cigarettes were subject to multiple levies in addition to the 17 percent VAT. Some were specific taxes; others were ad valorem taxes based on the factory price, and still others were ad valorem taxes based on the retail price. In 2004, Turkey imposed both an ad valorem and a specific excise. The rate of the specific excise depended on the retail price of the cigarettes and the proportion of oriental tobacco used in the cigarette.⁴⁸ The regime was simplified in 2005. The current excise regime for cigarettes comprises two components: (i) a 58 percent ad valorem tax based on the retail price and (ii) a minimum specific tax of TRY 2.05 per pack (US\$1.31 per pack). The minimum tax, which was increased from TRY 1.5 to TRY 2.05 in June 2009, ensures that the most sold brand and all lower-priced brands are taxed under the minimum tax regime. Turkey imposes its 18 percent VAT on cigarettes.

⁴⁷ In addition to the proposals described above, the European Commission proposes that the minimum excise duty per 1,000 cigarettes would be increased from 64 euro to 90 euro from January 2014; the requirement that the total excise burden be 57 percent would be increased to 63 percent; the MPPC would be abolished as the benchmark for minimum requirements and the new benchmark would apply in accordance with weighted average prices (WAP), which should be lower than the MPPC in most Member States. Under the proposal, Poland would not have to meet the 90 euro requirement until January 2015.

⁴⁸ Oriental or Turkish tobacco is locally grown. It is sun cured and highly aromatic.

For higher-priced cigarettes subject to the ad valorem tax, the total tax burden is 73.25 percent (58 + 15.25 tax-inclusive VAT).⁴⁹ For lower-priced cigarettes subject to the minimum tax, the total tax burden as a percent of the retail price is higher than 73.25 percent. Turkey thus meets the World Bank yardstick that total taxes should be between two-thirds and four-fifths of the retail price. It also meets the EU requirement that excises on cigarettes must be at least 57 percent of the retail price. Among the Bloomberg Initiative countries, only Poland has a higher total tax burden than Turkey (Table 1).

Turkey has applied to accede to the EU and accession will require it to adopt the EU excise regime for cigarettes, described above in the section on Poland.⁵⁰ Although the overall excise burden meets the 57 percent requirement, Turkey will be required to have both a specific and an ad valorem excise.

Yurekli et. al. (2009) recommended that the rate for the ad valorem tax should be increased to 63 percent, which would be higher than the ad valorem rate in any EU member state. Alternatively, the minimum rate could be increased to TRY 3.15 per pack. Yurekli estimates that both alternatives would generate about the same amount of additional tax revenue. The increase in the minimum rate would lead to a greater reduction in the price differential between low-priced and high-priced cigarettes.

An additional alternative would be for Turkey to restructure its excise regime by introducing a specific tax (which will be required for EU accession) while retaining (or increasing) the minimum tax. This could be structured so as to increase the average excise yield and reduce the price differential between high- and low-priced cigarettes that encourages product substitution. The new specific tax and the minimum tax would be adjusted annually for inflation.

Russia

Russia's excise regime for cigarettes has gone through a number of transformations. In 1992, Russia had an ad valorem regime, but very little revenue was collected from the cigarette excise. In 1995, Russia had adopted a specific tax on imports while retaining the ad valorem regime for domestic production. The import tax was expressed in European Currency Units (ECUs), which was a basket of European currencies used as a unit of account before the euro was introduced in 1999. The assumption was that by setting the specific rate in terms of ECUs, the specific rate would maintain its real value in terms of rubles. In 2003, Russia had adopted an excise regime

⁴⁹ World Health Organization estimated that Turkey's excise burden on the most widely consumed brand is 36 percent (Table 2.4.1 in WHO (2008)). This must be a mistake as the burden is at least 58 percent.

⁵⁰ The earliest Turkey could join the EU is 2013, but Brussels has refused to agree to a 2013 deadline for accession. Accession is more likely not to occur before 2021.

that treated imports and domestic production alike.⁵¹ Both were subject to a mixed regime – an ad valorem and a specific tax. The base of the ad valorem tax was the wholesale price. In 2007, Russia switched the base for the ad valorem tax from the wholesale price to the maximum retail price and added a minimum specific tax, in part, because of concern about abusive transfer pricing.

In 2008 Russia announced scheduled tax increases through 2010. The ad valorem rate is the same for both non-filters and filters, but the specific rate and the minimum rate are about 50 percent lower for non-filter than for filter cigarettes. In addition to the excise tax, Russia levies an 18 percent VAT.

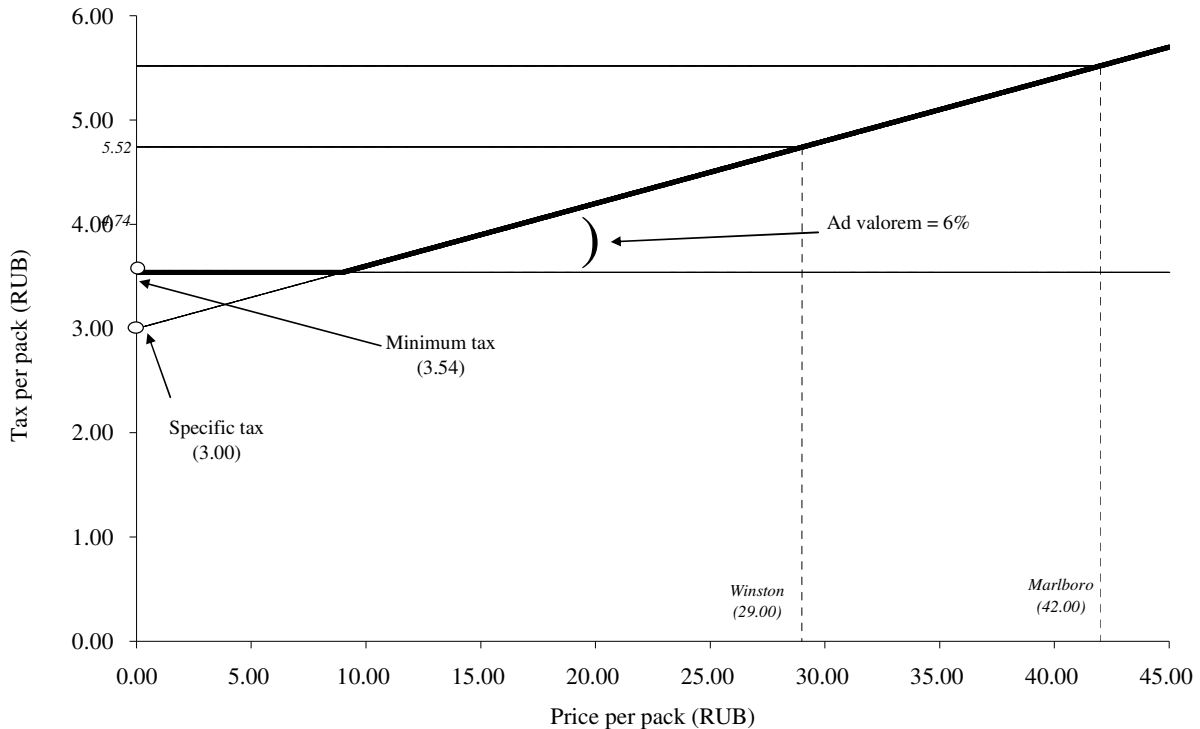
In 2009, the specific rate is RUB 3.00 per pack for filters; the ad valorem rate is 6 percent of the maximum retail price (including tax); and the minimum rate is RUB 3.54 per pack (US\$0.10) (Figure 5). For filter packs selling for less than or RUB 9.00 per pack, the minimum rate would apply. For the most sold brand (Winston filters), the retail price is RUB 29.00 per pack (US\$0.82 per pack). The tax burden is 31.6 percent of the retail price, which is the lowest total tax burden for the most sold brand for any of the Bloomberg Initiative countries. The cheapest brand (Prima non-filters) sells for RUB 4.50 per pack (US\$0.14 per pack), and the total tax burden is 56.6 percent of the retail price.

To increase the tax level on cigarettes, Ross, Shariff, and Gilmore (2008) recommend raising both the specific and ad valorem rates. As an initial step, they would increase the specific rate 20 percent and the ad valorem rate 10 percent. In May 2009, the Russian government announced its key tax policy plans for 2010-2012. With respect to the excises on cigarettes, the government expects to increase the specific rates by more than inflation and to increase the ad valorem rate by 0.5 percentage points per year. The rates increases – specific and minimum rates – for non-filter cigarettes is greater than filter cigarettes though lower rates will remain for non-filters in 2012. The rates for other excisable goods will be increased by the forecast rate of inflation (ITIC 2009).

As a first step in reforming the excise on cigarettes, Russia should abolish the lower rates for non-filters, as India did in 2008. To further strengthen the excise regime, two alternatives could be considered, both of which would shift the excise regime further toward a specific regime. First, Russia could raise the minimum rate so as to shift more brands to the minimum specific regime. Second, Russia could significantly raise the specific rate and lower the ad valorem rate. The reduction in the ad valorem rate could be limited to ensure that no brand of cigarette would have a reduction in excise burden.

⁵¹ In the early 1990s, all international brands were imported into Russia. Today, most international brands are manufactured locally by international companies. Filter cigarettes dominate the market.

Figure 5. Russia: Excise and price per pack of filter cigarettes, July 2009



Ukraine

Like Russia, Ukraine's excise regime for cigarettes has gone through a number of transformations. From 1993 to 1995, Ukraine imposed an ad valorem excise, which was based on the wholesale price. From 1996 to 1999, Ukraine switched to a specific tax with the rate in ECU, as the local currency, the hryvnia, was subject to high inflation rates. In 2000, Ukraine adopted a mixed regime with the ad valorem tax levied on the wholesale price and the specific rate in hryvnia. From 2000 to 2003, Ukraine returned to a specific regime with the rate in hryvnia. Finally, from 2004, Ukraine has had a mixed regime for cigarettes.

Until May 2009, the ad valorem tax was levied on the maximum retail price net of tax (excise + VAT). From May 2009, the base for the ad valorem tax is the maximum retail price net of VAT (and the ad valorem rate was increased from 16 to 20 percent). Beginning in 2005, Ukraine has also imposed a minimum tax, which initially was set equal to a percentage of the maximum retail price net of taxes, but is now a minimum specific excise. Also like Russia, Ukraine imposes a lower excise burden on non-filter than filter cigarettes by having a lower specific rate for non-filters. Ukraine's 20 percent VAT applies to cigarettes.

For filter cigarettes, following two tax increases in 2009, the ad valorem excise is 20 percent of the retail price net of the value-added tax; the specific tax is UAH 60 per 1,000 cigarettes, and

the minimum excise is UAH 100 per 1,000 cigarettes. For cigarettes selling for less than UAH 4.80 per pack (US\$0.60 per pack) the minimum rate will apply.⁵² Currently there are a small number of filter brands for which the minimum rate applies. No non-filter brands are subject to the non-filter minimum rate. The total tax burden in Ukraine is 48.3 percent for Marlboro, 51.8 percent for the most sold brand, and 58.0 percent for the cheapest brand, Kozak, which costs only UAH 2.90 per pack (US\$0.36 per pack).

Ross, Shariff, and Gilmore (2009) recommend that Ukraine's excise regime for cigarettes could be reformed along the following lines with the goal of increasing the total tax burden to 70 percent of the retail price: First, to achieve maximum public health benefits from the reform, the specific tax should be increased. Second, if the ad valorem component is retained, its base should be switched from the wholesale price to the retail price so as to limit the potential for abusive transfer pricing when manufacturers sell to related distributors.⁵³ Third, the lower rates for non-filter cigarettes should be abolished. Fourth, the specific rate should be indexed for inflation.⁵⁴ In addition to the reforms recommended by Ross, Shariff and Gilmore, the minimum specific excise tax could be increased.

C. Middle East

Egypt

The Eastern Tobacco Company, which is majority-owned by the government, has a monopoly position in the manufacturing and distribution of cigarettes. It manufactures both its own brands and international brands under license. With high import duties on cigarettes, imports account for only a small part of the domestic market. Tobacco leaf used in manufacturing Egyptian cigarettes is all imported, as Egypt bans tobacco farming. The import duty on tobacco leaf is quite low.

Egypt's 10 percent general sales tax applies to most commodities – some commodities are taxed at a reduced rate of 5 percent or a “luxury” rate of 25 percent. However, cigarettes are given special treatment under the general sales tax – they are Schedule 1 goods. They are subject to a multi-tier specific tax regime with eight tiers and not further subject to the general

⁵² The difference between the minimum rate (UAH 2.00 per pack) and the specific rate (UAH 1.20 per pack) is UAH 0.80 per pack. For the 20 percent ad valorem rate to exceed UAH 0.80 per pack, the retail price net of VATs must be UAH 4.00 per pack or UAH 4.80 per pack including VAT and the minimum excise.

⁵³ This reform is moot now that the tax base has been changed to the retail price net of VAT.

⁵⁴ From January 2010, the specific rates and the minimum rates are adjusted annually for inflation (law of March 2009).

sales tax. The price bands for each tier are ex-factory prices net of taxes,⁵⁵ and the specific rates, from May 2008, range from EGP 1.08 per pack for the lowest tier to EGP 3.25 per pack for the highest tier. Most cigarettes consumed in Egypt are priced in the middle four tiers, with rates from EGP 1.25 to EGP 1.75 per pack. The government did not adjust the rates from 2002 to May 2008, and the May 2008 adjustment did not fully offset inflation since 2002 (Hanafy et. al. 2009). In addition to the “excise” imposed under the general sales tax, Egypt levies a health tax on cigarettes, which is equal to EGP 0.10 per pack.

In Egypt, Cleopatra is the most sold brand; it is also the cheapest brand (EGP 2.75 per pack or US\$0.49 per pack). The total tax burden on Cleopatra is 59.3 percent of the retail price. As Cleopatra is in the fifth tier of the 8-tier rate schedule, the lower four tiers could be abolished.

Hanafy et. al. (2009) propose that: (i) the tax burden on cigarettes should be increased to 70 percent of the retail price at the top end of each price tier by raising the specific rate in each tier; (ii) the rates should be adjusted annually for inflation and for the growth of real per capita income, and (iii) the long-term goal should be to abolish the tiers and impose a single specific rate. As a first step in moving to a single specific rate for all cigarettes, Egypt should abolish the lower tiers. Egypt also could consider enacting a separate excise law and making tobacco products subject to the general sales tax at the 10 percent rate. If the market is liberalized to allow private companies to manufacture cigarettes, Egypt should move away from using ex-factory prices in defining the price bands for each tier, as ex-factory prices may be manipulated when the manufacturer sells to a related distributor.

D. Western Hemisphere

Brazil

Until June 1999, Brazil levied an ad valorem excise on cigarettes. The rate for this tax was 41.25 percent of the retail price. From July 1999, Brazil has levied a multi-tier specific excise. The rates vary by cigarette length (lower or greater than 87mm) and by the presentation of the package; namely, whether the packaging is only a soft pack for the brand (the cheaper cigarettes), a soft pack with a box pack for the same brand (more prestigious cigarettes), or a box pack (generally the most expensive and prestigious cigarettes). The current rates per pack are as follows:

⁵⁵ The Sales Tax Law provides that the price bands are “apart from sales tax.” As the tax is paid by the manufacturer, the price bands are based on manufacturer’s price (that is, the ex-factory price) apart from sales tax.

	<u><87 mm length</u>	<u>>87 mm length</u>
Soft pack	BRL 0.764	BRL 0.900
Soft pack with box pack for the same brand	BRL 1.004	BRL 1.266
Box pack	BRL 1.135	BRL 1.397

The specific rates were adjusted 10 percent in 2002, 20 percent in 2004, 30 percent in 2007, and 23.5 percent in 2009. The adjustments in 2002 and 2004 did not offset inflation since the prior adjustment. The 30 percent adjustment in 2007 was greater than inflation during 2004-2006, which was just about 19 percent, and the 2009 adjustment was significantly greater than inflation during 2007-2008. In addition to the excise on cigarettes, Brazil imposes two federal social security related taxes, COFINS and PIS, levied on gross receipts, which are equivalent to 8.75 percent and 2.22 percent of the retail price respectively, and a state-level VAT (ICMS), with rates that vary by state and are high by international standards, averaging around 25 percent of the retail price.

For the most sold brand, the excise burden is about 26 percent of the retail price and the total tax burden is about 61 percent of the retail price.

The current excise regime for cigarettes taxes low-priced cigarettes less than high-priced cigarettes and therefore is “progressive” like an ad valorem regime. However, for a given type of cigarette (length and packaging), the tax does not vary by price. This limits price wars and ensures that the government does not lose excise revenue if a manufacturer reduces cigarette prices.

Iglesias et. al. (2007) endorse higher cigarette taxes and outline three alternative reforms that Brazil could adopt: (i) increase the specific tax, (ii) switch back to an ad valorem tax, and (iii) establish a mixed regime as in the EU. The paper does not make a recommendation as to which of the three options should be pursued. A more sweeping reform would be to move to a single specific rate for all cigarettes. Another alternative would be to abolish the lower rate for brands that have only a soft pack. The specific rate for brands of regular-sized cigarettes with only a soft pack is 24 percent lower than the rate for a soft pack brand with a box pack for the same brand. For king-sized cigarettes, the corresponding soft pack rate is 29 percent lower. If abolishing the rates for brands that have only a soft pack cannot be accomplished, the rates for brands with only soft pack should be increased to narrow the rate differential between brands with only soft packs and soft pack brands with a box pack for the same brand. The specific rates should be adjusted annually for inflation.

Mexico

Mexico levies a single-rate ad-valorem excise on cigarettes.⁵⁶ The rate for 2009 is 160 percent of the wholesale price (i.e., the retail price excluding VAT, the excise tax, and the retail margin).⁵⁷ It was 150 percent in 2008 and 140 percent in 2007. In addition to the excise tax, Mexico levies its 15 percent VAT on cigarettes.

The excise burden is about 49 percent of the retail price and the total tax burden (excise plus VAT) is about 62 percent, assuming a retail margin of 25 percent of the wholesale price before tax (Table 5).

Table 5. Estimate of the Tax Per Pack, 2009

Retail price (most sold brand - Marlboro)	MXN 28.00
Less 15% VAT	3.65
Equals VAT base	24.35
Less 160% excise 1/	13.67
Less 25% retail margin 2/	2.14
Equals wholesale price before taxes	8.54
Excise tax as % of retail price	49%
Total tax as % of retail price	62%

1/ 160% of 8.54

2/ 25% of 8.54

Mexico could increase the total tax burden on cigarettes by increasing the ad valorem excise rate, in steps, possibly to 225 percent. The total tax burden would then be just under 70 percent of the retail price, assuming full pass through of the tax increase and a 25 percent retail margin. There are a number of other alternatives that could be considered. Mexico could introduce a mixed regime by adding a specific excise to the ad valorem excise and possibly reducing the ad valorem rate at the same time. This would reduce the price differential between the high-priced and low-priced brands. Instead of levying both a specific and an ad valorem excise, Mexico

⁵⁶ In contrast to the excise on cigarettes, Mexico collects its excise on alcoholic beverages at each stage of production and distribution. All producers, distributors, and retailers of alcoholic beverages are required to register for excise and account for excise on sales. The alcohol excise is, in effect, an additional or parallel VAT. This multi-stage collection of the alcohol excise must lead to additional tax evasion, particular at the informal retail level where cheaper tequila brands are sold. This multi-stage scheme should not be extended to cigarettes.

⁵⁷ Ad valorem excises on cigarettes are usually levied on the ex-factory or the retail price. Mexico levies its ad valorem excise on the wholesale price. Each January, or at the time of any price or margin change, manufacturers must present an affidavit to the tax authority which includes the retail sales price, the net ex-factory price, the price to the distributor and the price to the retailer. The price to the retailer becomes the taxable base for the excise tax until further changes or until January the following year.

could introduce a minimum specific tax, to increase the tax burden on the lower-priced brands and make these brands only subject to the minimum tax. Mexico could also shift its ad valorem excise from the wholesale price to the retail price and adjust its tax rate to account for this change in the tax base.⁵⁸

III. SUMMARY AND CONCLUSIONS

The excise regimes, total tax burdens, and cigarette prices vary widely among Bloomberg Initiative countries. In some countries (Russia, Philippines, Bangladesh, and Vietnam) cigarettes cost US\$0.20 or less per pack for the cheapest brands. On the other hand, Poland, Thailand, and Turkey meet the World Bank yardstick that total taxes should be between two-thirds and four-fifths of the retail price.

If the primary purpose of levying an excise on cigarette is to discourage tobacco consumption, a strong case can be made for a single-rate specific regime. This would recognize that the social costs of smoking are primarily a function of the number of cigarettes consumed. However, among the Bloomberg Initiative countries, no country has a single-rate specific regime. Most have a multi-tier specific regime or a mixed regime comprising both specific and ad valorem rates. Mexico, Thailand and Vietnam have single-rate ad valorem regimes, and Bangladesh has a multi-tier ad valorem regime.

Multi-tier specific regimes can increase the progressivity of the excise compared to a single-rate specific regime. These regimes often have very low rates on low-priced cigarettes, and the authorities (for example, in Philippines) usually justify this by the need to ensure the poor can afford to buy cigarettes. The low rates may also protect a local manufacturer of low-priced cigarettes. A pro-health strategy for reform in countries with multi-tier specific regimes should be to eliminate the lowest tiers in addition to raising the specific rates.

A few countries still have lower rates for non-filter cigarettes (Indonesia, Russia and Ukraine). On health grounds, these rates cannot be justified and their repeal should have high priority.

Ad valorem excises can be levied on the retail price or the ex-factory price (and less commonly on the wholesale price). Among the Bloomberg Initiative countries, the countries that levy ad valorem excises on the ex-factory price all have state monopolies – China, Thailand, and Vietnam. A state monopoly can control the ex-factory price and therefore the ad valorem tax base. However, if these countries should open up their domestic market to private companies,

⁵⁸ In November 2009, as the final draft of this paper was being prepared, Mexico adopted a specific excise on cigarettes of 2 pesos per pack, which will be levied in addition to the 160 percent ad valorem excise. The specific excise will be phased in (0.8 pesos per pack in 2010, 1.2 pesos in 2011, 1.6 pesos in 2012, and 2 pesos from the beginning of 2013).

they should shift their ad valorem excises to the retail price. Otherwise there is a risk that the private companies may manipulate the ex-factory prices by selling to related distributors.

For a country with an ad valorem regime or a mixed regime, a pro-health strategy for reform should be to introduce a minimum specific tax (as adopted in Poland, Russia, Ukraine, and Turkey). The minimum tax should be adjusted annually for inflation. For the lower-priced brands subject to the minimum tax, the excise regime would become, in effect, a specific regime. The addition of a minimum tax would allow the country to retain the ad valorem rate for the higher-priced brands.

In most countries in the world, cigarettes dominate the tobacco market, and for this reason this paper has focused primarily on cigarette excises. India and Bangladesh, however, are exceptions, as the dominant tobacco product in these countries is bidis, not cigarettes. Bidis are under-taxed compared to cigarettes, given their health risks. There are many manufacturers of bidis, and tax compliance is very low. Any reform of the taxation of bidis will have to be accompanied by administrative measures to improve compliance.

In addition to revenue and health concerns, a country's excise regime may reflect additional (competing) goals, including protection of local growers of tobacco and protection of the poor from excessive taxation. The Brazilian regime with its specific rates varying with the presentation of the package favors domestic brands (and low-priced cigarettes). The Indonesian excise regime favors small producers and handmade kreteks. Indonesia's planned reform of cigarette excises gives greater weight to health concerns. Once the reform is phased in, Indonesia will have simpler regime with a single specific rate for whites and machine-made kreteks, and a lower specific rate for handmade kreteks. The differential between the two rates should be minimized to the extent politically feasible.

A Simple Analytic Framework

As excises are increased, cigarette prices increase, as taxes are shifted to consumers. Consumers reduce their consumption. How much consumption is reduced depends on the price elasticity of demand.⁵⁹ If the elasticity of demand is -0.6, a 10 percent price increase will reduce consumption by 6 percent.⁶⁰ Government revenue also increases even though consumption is reduced.

Consider the following example. The initial conditions are:

- Retail price per pack 110
- VAT (10%) 10
- Price before VAT 100
- Excise per pack 30
- Before-tax price 70
- Consumption 1,000 packs
- Excise revenue $30,000 = 30 \times 1,000$

If the excise is increased from 30 to 40, the new conditions are:

- Retail price per pack 121 (10% price increase)
- VAT (10%) 11
- Price before VAT 110
- Excise per pack 40
- Before-tax price 70
- Consumption 940 packs (6% decrease)
- Excise revenue $37,600 = 40 \times 940$ (25.3% increase)

Consumption has decreased 6 percent and revenue has increased 25 percent. The greater the price elasticity of demand, the greater will be the reduction in consumption and the smaller will be the increase in government revenue.

⁵⁹ The price elasticity of demand is defined as the percentage change in the quantity demanded of a good per percentage change in the price of the same good.

⁶⁰ The assumption of a constant elasticity of demand may not hold for very significant tax increases, or when the overall tax and price level is very different from the past.

Glossary of Terms

Abusive transfer pricing	Transfer pricing inconsistent with the prices that would be charged in an open market on sales between unrelated parties
Ad valorem excise	Excise based on the value of the good (usually the ex-factory or retail price)
Banderole price	Price printed on a strip glued to the pack of cigarettes; the banderole price may differ from the actual retail price.
CIF value	Import value including cost, insurance, and freight
Distributor margin	Difference between the retail and the ex-factory price; both prices tax exclusive
Excise	Tax charged on the manufacturing, importation or sale of a particular good
Ex-factory price	Price at which the manufacturer sells to the distributor; also called the manufacturer's price
Indirect tax	Tax levied on production, consumption or expenditure and not on income or property. Indirect taxes include customs duties, excises, sales, and value-added taxes
Manufacturer's price	See ex-factory price
Specific excise	Excise based on the quantity of the good (e.g., per 1,000 cigarettes or per kilogram of tobacco)
Tax-exclusive price	Price excluding indirect taxes
Tax-inclusive price	Price including indirect taxes
Transfer pricing	Pricing of goods and services between related or associated parties (see abusive transfer pricing)
Wholesale price	Price at which a wholesaler sells to a retailer

Cigarette Taxes in the Bloomberg Initiative Countries, July 31, 2009

Country and Excise System	Rates	Other Taxes
Bangladesh Multi-tier, priced based ad valorem	For domestic products: (price bands per 10 cigarettes) BDT 6.50 to 7.50, = 32% of RSP BDT 13.25 to 14.25, = 52% of RSP BDT 21.00 to 28.00, = 53% of RSP BDT 41.00 or above, = 57% of RSP	VAT: 15%
Brazil Multi-tier, length and presentation based, specific	<87mm and soft pack only, = BRL 0.764 per pack; >87mm and soft pack only, = BRL 0.900 per pack; <87mm and soft pack and same brand box pack exists, = BRL 1.004 per pack; <87mm and box pack, = BRL 1.135 per pack; >87mm and soft pack and same brand box pack exists, = BRL 1.266 per pack >87mm and box pack, = BRL 1.397 per pack	Volume control system: BRL 0.032 per 20 sticks Stamp cost: BRL 0.03344 per 20 sticks PIS: 2.22% of RSP and COFINS: 8.75% of RSP minus stamp cost ICMS (VAT): 25% of RSP
China Multi-tier, gross ex-factory based, ad valorem + single-rate specific	Gross ex factory \geq RMB 70/carton, = 56% + RMB 3/000 Gross ex-factory < RMB 70/carton, = 36% + RMB 3/000	VAT: 17% Wholesale tax: 5% of price wholesalers sell to retailers, inclusive of excise Education tax: 3% of (VAT + excise) City construction tax: 7% of (VAT + excise)
Egypt Multi-tier, NEFP price based, specific	NEFP (per 1,000) 0 to 32.5, = EGP 54.0/000 NEFP >32.5 to 36.5, = EGP 56.0/000 NEFP >36.5 to 42.0, = EGP 62.5/000 NEFP >42.0 to 47.5, = EGP 70.0/000 NEFP >47.5 to 53.0, = EGP 76.5/000 NEFP >53.0 to 150.0, = EGP 87.5/000 NEFP >150.0 to 212.5, = EGP 157.5/000 NEFP > 212.5, = EGP 162.5/000	Health tax: EGP 5 per 1,000 cigarettes
India Multi-tier, length based, specific	Non-filter: \leq 60 mm, = INR 819/000 >60-70 mm, = INR 1,323/000 Filter: \leq 70 mm, = INR 819/000 >70-75 mm, = INR 1,323/000 >75-85 mm, = INR 1,759/000 >85 mm, = INR 2,163/000	Education cess: 3% of (import duty + excise tax) Additional education cess for imports: 3% of excise Octroi (local tax): 7.07% of price to stock list

Country and Excise System	Rates	Other Taxes
Indonesia Multi-tier specific rate based on production volume and price	See Table 2	VAT: 8.4% of banderole price
Mexico Single-rate ad valorem	160 percent of the wholesale price (= retail price – VAT – excise – retail margin)	VAT: 15%
Pakistan Domestic: Multi-tier specific and ad valorem Import: ad valorem	Domestic: RSP ≤ PKR 1,000/000, = PKR 475/000; RSP > PKR 1,000/000 to 1,950/000, = PKR 475/000 + 70% per incremental PKR; RSP > PKR 1,950/000, = 64% of RSP before sale tax Import: 64% of retail price 1% special excise duty on retail price less VAT	Domestic: Sales Tax = 16% of printed retail price Import: Sales Tax = 16% of customs value + Import and Excise duty
Philippines Multi-tier, price-based specific rate	Tax per pack of 20s Net RRSP (PHP/pack): ≥ PHP 10.0, = PHP 27.16 ≥ PHP 6.5 -10.0, = PHP 11.43 ≥ PHP 5.0 - 6.5, = PHP 7.14 < PHP 5.0, = PHP 2.47 Net RRSP = RRSP - excise tax - VAT	VAT: 12%
Poland EU mixed system	Ad valorem: 31.41% of retail price Specific: PLN 138.5/000 Minimum excise: PLN 228.8/000	VAT: 22%
Russia Mixed system	Ad valorem: 6 percent of maximum retail price Specific: RUR 150/000 for filters RUR 72/000 for non-filters Minimum excise: RUR 177/000 for filters RUR 93/000 for non-filters	VAT: 18%

Country and Excise System	Rates	Other Taxes
Thailand NEEP / CIF based ad valorem	85% tax inclusive rate Calculation domestic: (Ex-factory price) x (85% / (100% - 85%)) = 567% of ex-factory price Calculation imports: (CIF + Import Duty) x (85% / (100% - 85%)) = 567% of (CIF + import duty)	VAT: 7% Provincial Tax = Range from THB 0.908 to THB 1.87 per pack (except Bangkok) Health Tax: 2% of excise TV tax: 1.5% of excise
Turkey Ad valorem + minimum excise	Ad valorem: 58% of retail price Minimum excise: YTL 2.05 per pack of 20	VAT: 18%
Ukraine Mixed system	Ad valorem: 20% of retail price net of VAT Specific: UAH 60/000 for filters UAH 35/000 for non-filters Minimum excise: UAH 100/000 for filters UAH 50/000 for non-filters	VAT: 20%
Vietnam Ad valorem	Calculation domestic: 65% of ex-factory price	VAT: 10%

Source: Philip Morris International and author

NEFP: net ex-factory price; RSP: retail selling price (for Indonesia RSP is the banderole price); RRSP: recommended retail selling price

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