

CONFRONTING ILLCIT TOBACCO TRADE:



A GLOBAL REVIEW OF COUNTRY EXPERIENCES

TOBACCO TAX ADMINISTRATION: A PERSPECTIVE
FROM THE IMF

TECHNICAL REPORT OF THE WORLD BANK GROUP
GLOBAL TOBACCO CONTROL PROGRAM.

EDITOR:
SHEILA DUTTA



TOBACCO TAX ADMINISTRATION

22

TOBACCO TAX ADMINISTRATION

A Perspective from the IMF

Janos Nagy¹

Chapter Summary

Illegal cultivation, production, and trade are a widespread problem associated with tobacco products, given their easy portability and the high profit margins. A single container or truckload of illegal cigarettes can yield up to US\$2 million in profits. The annual revenue loss in tobacco taxation worldwide is estimated at roughly US\$40 billion–US\$50 billion, that is, the equivalent of about 10 percent of global cigarette consumption.

Tobacco products are susceptible to bootlegging, smuggling, and fraud, especially excise fraud, which extends from standard customs and commercial fraud to undeclared activities such as the diversion of legally produced cigarettes from international transit routes directly to retail markets, the illegal domestic production and sale of cigarettes, and legal or illegal production for export.

Illegal trade is a context-specific activity, and administrative and control measures need to be tailored to this context. Understanding the size, characteristics, and patterns of illegal production and trade is a prerequisite to developing effective antifraud strategies. Regional and international coordination can substantially improve the efficiency of national efforts.

The central concern in the administration of value added taxes and excise taxes on tobacco is to control the import, production, and distribution of taxed products tightly. This control

¹Fiscal Affairs Department, International Monetary Fund (IMF).

should be exercised at all points of the supply chain, from the fields where tobacco is grown or the port of entry to the final purchase by the individual consumer. Excise stamps as well as other markings affixed to the packs of cigarette can facilitate the collection of excise taxes, as well as audits and enforcement actions at various stages of distribution. The stamps should be furnished with strong security features similar to those used with banknotes and passports.

Legislation should define compulsory requirements, guarantees, and safeguards under which tobacco products can be imported or produced and distributed. Only licensed economic operators should be involved. Licenses should be issued based on concrete physical, administrative, and financial conditions.

General Considerations

Given heightened incentives for fraud because of the higher tax rate and portability of tobacco products, the central concern in the administration of tobacco taxes is to tightly control the import/production and distribution of excised products. Although perfectly controlling the supply chain cannot realistically be a pre-requisite to start increasing excises, given that incentives to fraud are broadly related to the tax wedge, increasing taxes should go hand in hand with tighter controls. This control should as much as possible be exercised at all points of the supply chain, from the fields where tobacco leaves are grown or port of entry, to the final purchase by the individual consumer of the product². Such controls need a clear legal framework and dedicated services or functions in the revenue administration.

The legal framework needs to contain some key elements. The categories and particular tobacco products subject to excise taxation must be clearly defined, keeping in mind possible substitution patterns. Guiding taxation principles, the base, the rates, the method of calculation, and the exact point of taxation in the production/supply and distribution chain³ also need to be clearly defined. The legislation must also serve as the basis for the special excise administration and control measures designed to mitigate this increased risk of fraud. Administrative and control measures need to be tailored to the specifics of the local context, for each stage of the processing and distribution.

In most countries, excise taxes are due to central government, and a centrally organized excise administration is responsible for the management and collection of excise taxes,

Note: Excerpted from IMF How To Note 16/03, "Fiscal Policy: How to Design and Enforce Tobacco Excises." © International Monetary Fund. Reprinted with permission. The views expressed in this paper belong solely to the authors. Nothing contained in this paper should be reported as representing IMF policy or the views of the IMF, its Executive Board, member governments, or any other entity mentioned herein.

² Controls of cultivation are looser as illegal farming is more difficult to conceal than trade of final products.

³ Excises should be collected as early as possible in the distribution chain (for example, at the time of import processing and at domestic tobacco factories) in order to keep the number of taxpayers as low as possible, and therefore the controls simple, inexpensive, and effective.

including tobacco taxes⁴. Excise administrations are often part of the tax administration, although the customs administration sometimes collects both import and domestic excise taxes. In most countries, the customs administration collects excise taxes on imported excisable goods together with customs duties. In rare cases, if excise revenue is high or the taxation system is peculiar, countries might have an excise service separate from the tax and customs administrations (as for example in the United States).

In low-compliance environments, more physical and onsite checks should be performed by the excise administration (for example, inspection of inventories) and corresponding administrative capacity is required. In a highly compliant environment, company audit capacities are often adequate.

Specific Administrative and Control Measures

Only licensed and strictly controlled economic operators should be involved at any stage of import, production, and distribution (including retail). Legislation should define compulsory requirements, guarantees, safeguards, and related controls, under which tobacco products can be imported or produced and distributed. The license should include concrete physical, administrative, and financial conditions, and adherence to these conditions must be regularly controlled and non-compliance severely penalized, including by suspending or withdrawing the license.

Clear and complete records should be kept, and information supplied seamlessly to the excise administration. Operators need to keep up-to-date records of the flows of materials used for production and of inventories. The content and the format of the records need to be defined by law and in the license. These records should be reported at prescribed intervals and/or kept available to the excise authority for remote and/or onsite control purposes. The records should reflect and correspond with the actual physical status of inventories. It is important that the records and the information supplied by the economic operator facilitate the controls for both the operator and the authorities. If the concentration of the industry allows or the fiscal risks justify, the production plant can be supervised on site by the excise administration on a permanent basis.

Excise stamps as well as other markings affixed to the packs of cigarette can facilitate the collection of excise taxes and controls, as well as audits and enforcement actions at various stages of distribution. A tax stamp (or "banderole") is issued by the excise authority at the value of the excise tax. It is purchased by the producer or importer and applied on each product sold as a proof of payment of the excise tax on that product (and the VAT in certain

⁴ In certain countries, in addition to federal or central government taxes, local governments (in the case of the United States, both state and local governments) are also entitled to impose excise duties on tobacco products using their own tax/excise services. Such arrangements require close coordination among the different levels of government.

countries). For this reason, stamps should have strong security features similar to those used for banknotes and passports. The high cost of such stamps and consequent use of low-quality stamps has often led to counterfeit stamps and fraud in many countries, hence a general concern about the efficiency of stamps as a proof of payment for taxes. For these reasons, many countries have replaced tax stamps by fiscal stickers that contain or give access to product-specific useful information (often through bar codes). While fiscal stickers do not aim to prove the payment of taxes (as stamps do), they are useful for taxation, control, and auditing purposes⁵. Some countries require pre-printed indication of duty paid status of tobacco for the specified markets (for example, the United Kingdom, France) on the pack itself. The burden and cost of applying markings always rests with the producer/importer except the cost of production and sale of the excise stamp. During periods of forestalling (for example, prior to excise rate change) the quantity and therefore the costs of printing and distributing tax stamps may significantly increase and governments should ensure that the excise administration has sufficient funds to cover such extra costs, although forestalling should altogether be prevented in the first place through appropriate regulation.

Sophisticated marking systems can go all the way to track and tracing. This process would require producers to apply appropriate signs on packs and packages (master cartons) to track every product along the distribution chain. The date, time, and place of production; origin; intermediaries; intended destination; and taxation status can therefore be identified and controlled to determine the genuineness and point of diversion of smuggled tobacco products (basic information such as the taxation status should also be made easily understandable to consumers). Track and tracing systems require heavy infrastructure and must be able to deal with complex transactions and distribution chains and are therefore costly. Given the need to adapt to changing commercial practices, the system should be operated by a dedicated organization in coordination with the industry, and all contained information should remain accessible to the excise administration at all times.

The point of payment and related conditions must be clearly defined in the law. Points of payment and methods are established after consideration of risks, technology, liquidity, and costs. Usually, the point of taxation is when the product leaves the factory premises (or customs/tax warehouse in case of imports), before retail distribution. The number of such producers and importers are typically limited and they are well known to the excise authorities. Usually, the producers and importers file their declaration and pay the taxes periodically, on a monthly basis on a pre-defined day of the month following the removal of tobacco products from the warehouses. The excise legislation should prevent the excessive forestalling, accumulation, and sale of stocks using earlier and lower-value tax stamps, and regulations should limit the

⁵ Tax stamps must include a maximum retail price if an ad valorem excise on the final price is applied, otherwise the effective ad valorem rate would be lower than the statutory rate. This might in turn require additional legal and regulatory guidelines on price controls, as well as the administrative means to implement the controls or at least monitor the retail conditions. Fiscal stickers may also in these cases include a maximum price, but not necessarily.

quantities and/or time allowed for the sale of such stocks. Specific procedures should be defined for damaged stocks, returns, and other special events.

Transit, warehouse, and free zone operations entail elevated risks of fraud and adequate special measures should be applied. Financial guarantees commensurate with the amounts of all duties and taxes due can be demanded. The quantities produced and transacted can also be limited and special physical control measures applied, such as the separation of processing operations from the sealed storage of taxed and untaxed products. Physical and direct control by the officials of the excise authority during a part or the whole operation can be applied (for example, physical escort of the transit consignment from border to border by individual trucks or in a convoy, application of radio or satellite tracking systems to goods or conveyances/vehicles/containers).

Authorities should impose severe restrictions on duty free and internet sales. In principle, duty free shops exist to facilitate the sale of products for export at a low risk, and convenient place and time. Therefore, it is recommended that duty free shops be licensed only at the exit sides of airports and seaports and to sell tobacco only for outbound passengers⁶. Sales of excisable products in duty free shops at land borders and inland within the country are not recommended. Consideration should be given to reduce duty free allowances within the limits of international standards if deemed necessary and practical. Sales of tobacco over the internet and similar difficult-to-control channels should be subject to strict control, and consideration given to prohibiting them⁷.

Due diligence, appropriate responsibility, and care should be legally mandated for the licensed operators. This includes the design and operation of their own internal control systems to prevent fraud and make their processes transparent. Operators should also be legally bound to report any suspicious cases and cooperate fully with the authorities in the investigation of fraud cases including sharing internal information on processes and business operations.

Fighting Tobacco-Related Excise Fraud

Given their light weight, small size, and high value, tobacco products are susceptible to fraud through illegal trade, production, and cultivation. The latter is usually a small problem, and significant clandestine factories are limited to countries where enforcement capabilities are generally weak and/or corruption high. On the other hand, illegal trade and production of final products is a widespread problem, given the high profit margins: a single container or truckload of illegal cigarettes can yield up to US\$2 million in profits. The consensus among experts puts the annual revenue loss in tobacco taxation within the European Union at roughly €10 billion, and worldwide at US\$40–50 billion—that is, about 600 billion sticks, or

⁶ Duty free allowances should be limited by frequency, length of absence from the country, and quantity.

⁷ See article 11 of the Protocol to Eliminate Illicit Trade in Tobacco Products.

10 percent of global consumption (ITIC, 2013; Merriman, 2001; Joossens, 2011; European Commission, 2013; Euromonitor, 2015).

Illegal trade is a context-specific activity that has various modus operandi and therefore requires multi-dimensional context-specific solutions (Box 1). There are two types of such trade. *Bootlegging* is the illegal resale outside the country of origin of legally purchased duty-paid cigarettes. It is the textbook illegal trade of classical international trade theory, but it is marginal for tobacco (although potentially a significant problem in Europe). Bootlegging is generally caused by wide tax differences between neighboring countries with weak or no border controls (for example, internal borders between member states in customs unions). It can also be related to abuse of international travelers' allowances, cross-border shopping, and so forth. *Smuggling* is the cross-border trade in untaxed cigarettes. Smuggling is by far the most significant type of illegal trade: up to 90 percent of the total. In general, excise fraud extends from standard customs/commercial fraud (for example, mis-declaration of quantities, values, origin, and classification) to undeclared activities such as (1) the diversion of legally produced cigarettes from international transit routes directly to the retail market, (2) illegal domestic production and sale of cigarettes, and (3) legal or illegal production for export. In the last two cases, illegal production might also involve counterfeit cigarettes (for example, branded cigarettes illegally produced by non-owners of the brand, abusers of industrial and intellectual property rights)⁸. Tax exemptions are also often linked to smuggling (for example, loose transit and transshipment systems, free zones). Because smuggling involves untaxed cigarettes, it generally remains largely unaffected by mild to moderate decreases in taxes and responds more to controls and repression.

Bootlegging, and smuggling even more so, generally involves criminal networks. The complexity of smuggling operations requires carefully designed and well-orchestrated plans that only sophisticated criminal networks can undertake. For this reason, detection, seizure, and elimination of illegal products must be accompanied by thorough and systematic investigations (often with undercover methods) and successful criminal prosecution including forfeiture of proceeds from crime to uproot entire networks. Organized groups active in these trades are often also active in other illegal activities—such as illegal migration or smuggling of arms, drugs, and illegal medicines—and can be very dangerous, hence the need for an appropriate security apparatus.

Sound and coherent VAT, excise and criminal laws, and regional and international coordination are important first steps to minimize the incentives and opportunities for smuggling and bootlegging. Clear policy rationales; well-defined administrative procedures; regional coordination on matters of rates, base, and trade (for example, personal allowances); comprehensive, stringent, and coherent excise regulations (as opposed to scattered customs and criminal procedures) with strict and direct/unconditional tax liability; and so forth

⁸ Illegal production can take place in illegal production facilities (often semi-mobile units), or in legal facilities, with or without the knowledge of the facilities' managers.

all contribute to fighting fraud. In addition, international coordination (notably through the WHO Framework Convention on Tobacco Control and the related Protocol to Eliminate Illicit Trade in Tobacco Products) can significantly improve the efficiency of national efforts. Smuggling and in particular smuggling of tobacco products should notably be criminalized, with adequate level of penalties and other sanctions including confiscation of proceeds of tobacco-related crime.

It is essential to gather information on both legal and illegal trade and production, movement, import, and export of tobacco products, including the raw materials and equipment/material used in production⁹. This includes public information, industry, own data, and informants, as well as the exchange of information with other government agencies and with international partners (for example, regional organizations like the European Anti-Fraud Office). Analyzing the information helps governments understand the situation and trends, define the risks, and from there identify measures to tackle the problems. Standard control measures can then be adjusted at every step, from pre-arrival controls to post-clearance audits. The faster this process takes place, the greater the chances to minimize revenue loss. At a broader level, understanding the size, characteristics, and patterns of the illegal production and trade is a pre-requisite to developing effective anti-fraud strategies and actions; strategies to fight smuggling in countries where it has a 2 percent share of the market will not be the same as those used in countries where it has a 10 percent share (for example, Europe) or a much larger share (for example, Brunei).

Border controls are a first line of action. Depending on the modus operandi, revenue risk, and available human and material resources, officers with required qualifications and experience should be assigned to border controls. Front-line officers should be supported by appropriate intelligence, background support and service, guidance and supervision from management, and technical aids to enforcement. The format and the integrated control technology as well as the cooperation with other agencies at the border station are important factors in effective controls.

Mobile excise control units stopping vehicles and verifying the legality of excisable goods within the country are often useful. Inland mobile controls should be carried out along important transport corridors, communication centers, and bottlenecks like bridges, ferries, and passes. Such inland mobile controls can detect illegal imports and unauthorized domestic products while they are transported inside the country. Support to these operations requires tight coordination among police, border guards, and other such services (for example, joint patrols). Controls along the green borders (that is, between two official border crossings) should be organized in coordination with border police and customs services of neighboring countries.

⁹ For example, tobacco leaves, cut and fine-cut tobacco, cigarettes and other tobacco products, materials used for producing cigarettes like paper and filters, and those used for packing.

Investing in appropriate equipment is necessary. Most general anti-smuggling equipment like X-ray scanners (including scanners for small parcels, containers, trucks, and trains), endoscopes, mirrors, night vision equipment, cameras, automatic license plate readers, and mobile offices can also be used to support the detection of illegal tobacco shipments. In many low-income countries, basic equipment such as rifles, communication devices, motorcycles, utility vehicles, and small speedboats might be prioritized. Specific tools include tobacco detector equipment and tobacco scenting dogs. The same dogs can be trained to detect both tobacco and narcotic drugs.

Excise administration staff will require dedicated training. Special emphasis should be given to tobacco processing technologies, distribution methods, taxation principles, rules, practices, inward processing relief, and illegal trafficking patterns. Training staff to resist threats and bribes from criminals is equally important and is most effective if pursued through the implementation of a professional anti-corruption program supported by a code of conduct, disciplinary measures, and proper human resource management. Resource allocation should take into account the revenue weight, revenue risks, and special requirements of dealing with tobacco.

Seizure, storage, and destruction of illegal tobacco should be mandatory for excise and customs authorities. This generally involves burning, grinding, and depositing at waste management plants. As for legitimate tobacco, the storage, transport, and destruction of seized and confiscated goods require extra care and caution, as well as transparent and documented processes. This can also create significant and unexpected additional expenses, in particular at times of massive and successful law enforcement operations, and authorities should plan for the necessary budget resources.

BOX 1. REVENUE RAISING, INCREMENTAL TAX ADJUSTMENTS, AND ILLEGAL TRADE: THE CANADIAN CASE

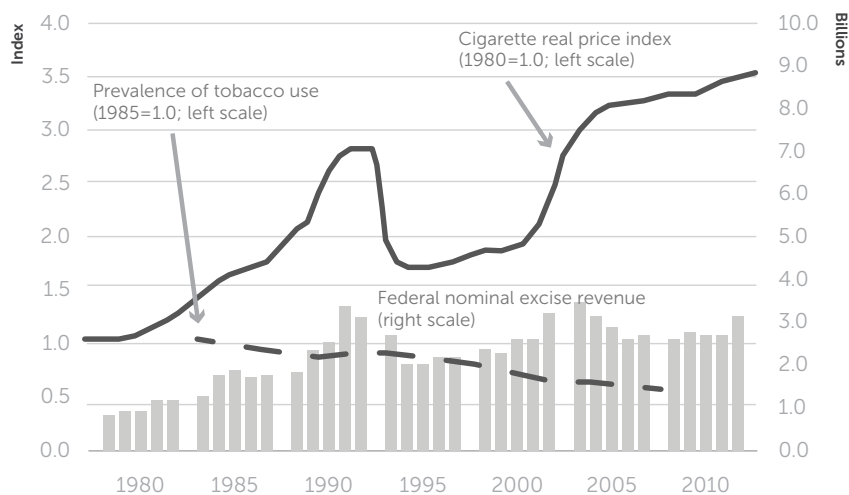
The Canadian federal and provincial governments gradually increased cigarette taxes so as to almost triple the real (that is, inflation-adjusted) retail price between 1980 and 1992/1993. Federal nominal revenue surged from Can\$0.7 billion to Can\$3.3 billion over this period (Figure 1). The increase did not result in smuggling until the early 1990s, when previously almost non-existent untaxed exports of Canadian cigarettes to the United States surged and re-entered Canada as duty not paid (DNP) cigarettes (Figure 2.2). In 1993, it was estimated that roughly one-third of the Canadian market consisted of DNP cigarettes.

Tough measures against tobacco manufacturers and their employees involved in the scam (Austen, 2008; Canada Revenue Agency, 2008), significant but temporary tax cuts, new export taxes, and tougher police controls allowed the government

to control the situation and paved the way for taxes to increase again. This time, the tax increases took place at a much faster pace given the political acceptability of the tax and a good understanding of the demand (Figure 2.1). Revenue surged again to previous levels, despite a sharp decrease in the prevalence of smoking. Large-scale illegal trade, however, came back after 2004 with actual production of new brands on the same indigenous reservations that had been used in the 1990s by smugglers to re-import cigarettes, because of their peculiar legal and geographical characteristics. This triggered a second wave of enforcement efforts by Canadian authorities (including an enhanced stamping regime), and revenue increased again from 2010.

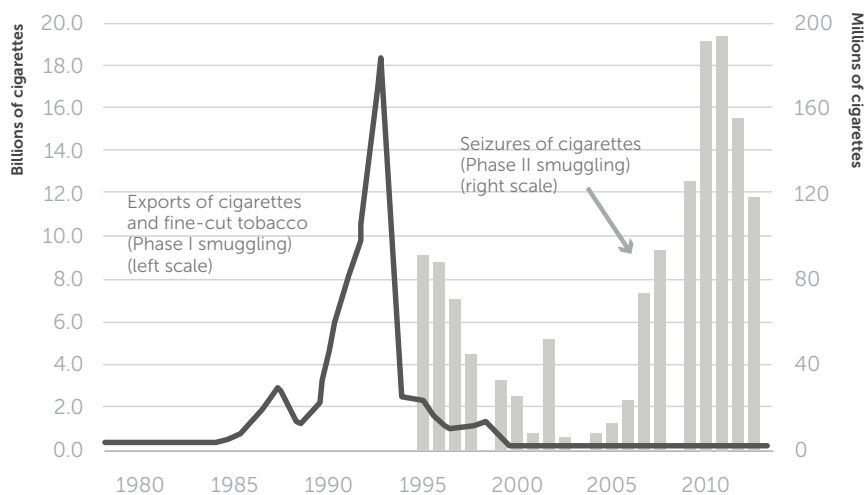
No two countries are alike, but the Canadian case illustrates a few key points. First, the revenue increase has been substantial despite smuggling. In Canada, real (inflation-adjusted) tobacco-related revenue was roughly 50 percent higher in 2011 than in 1980, despite a 50 percent lower prevalence rate and significant illegal trade. However, the social cost of smuggling (for example, rising crime) can be high, especially among communities closely affected by it, and the attitude toward paying taxes more generally can also greatly suffer. Second, gradually raising rates is an efficient way of understanding the demand and market reactions to higher prices, as can be seen from the faster increases after 2000. Third, tight control over the tax base is a key element of any revenue-raising strategy in any country. Situations in which parts of the country come under a different legal regime or are beyond the reach of the law make it difficult to enforce high excises, whether this is related to jurisdictional peculiarities, political reasons, war, logistics, and so forth. Fourth, once in place, criminal networks are hard to dismantle and require a multi-pronged strategy that extends beyond simple repression (royal Canadian Mounted Police, 2008). Many individuals involved in the mid-2000s Canadian smuggling episode learned the trade in the early 1990s and took over old distribution networks, to the dismay of tobacco manufacturers, whose activities led to the initial growth in contraband (Canada Revenue Agency, 2008; Marsden, 2009; Imperial Tobacco Canada, 2009; Kembal, 2009). Finally, understanding the nature of smuggling is crucial to fighting it: even in a single country, solutions that worked once may not work twice.

Figure 1. Canada: Tobacco Price and Federal Excise Revenue



Sources: Statistics, Canada, Health Canada.

Figure 2. Canada: Estimated Smuggling and Seizures



Sources: Statistics Canada, Royal Canadian Mounted Police.

References

- Anderson, S. P., A. de Palma, and B. Kreider. 2001. "Tax Incidence in Differentiated Product Oligopoly." *Journal of Public Economics* 81(2):173–92.
- Austen, I. 2008. "Canadian Companies Settle Cigarette Smuggling Case." *New York Times*, August 1.
- Barber, S., A. Ahsan, S. M. Adioetomo, and D. Setyonaluri 2008. *Tobacco Economics in Indonesia*. Paris: International Union Against Tuberculosis and Lung Disease.
- Barendregt, J.J., L. Bonneux, and P. J. van der Maas. 1997. "The Health Care Costs of Smoking." *New England Journal of Medicine* 337(15): 1052–57.
- Bird, R. M. 1997. "Analysis of Earmarked Taxes." *Tax Notes International* 14(25): 2095–2116.
- , and J. Jun. 2005. "Earmarking in Theory and Korean Practice." ITP Paper 0513, University of Toronto. Canada Revenue Agency. 2008. "Comprehensive Settlement Agreements between Federal and Provincial Governments and Imperial Tobacco Canada Ltd. and Rothmans, Benson & Hedges Inc." (<http://www.cra-arc.gc.ca/gncy/tbcc/menu-eng.html>).
- Chaloupka, F. J. 2008. "The Effects of Pricing and Tax Policies on Youth Tobacco Use." Paper presented at the Global Consultation on Effective Youth Tobacco Control Policy Interventions, World Health Organization, Geneva.
- , and K. Warner. 2000. "The Economics of Smoking." In *Handbook of Health Economics*, edited by A. Culyer and J. Newhouse, 1539–1628. Netherland: Elsevier.
- Christiansen, V., and S. Smith. 2012. "Externality-Correcting Taxes and Regulation." *Scandinavian Journal of Economics* 114(2): 358–83.
- Crossen, S. 2006. "Tobacco Taxation in the European Union." CESifo Working Paper 1718, CESifo Group, Munich.
- Crawford, I., M. Keen, and S. Smith. 2010. "Value Added Tax and Excises." In *Dimensions of Tax Design: The Mirrlees Review*, edited by the Institute for Fiscal Studies. Oxford: Oxford University Press.
- Crawford, I., and S. Tanner. 1995. "Bringing it All Back Home: Alcohol Taxation and Cross-Border Shopping." *Fiscal Studies* 16(2): 94–114.
- Delipalla, S., and M. Keen. 1992. "The Comparison between Ad Valorem and Specific Taxation under Imperfect Competition." *Journal of Public Economics* 49(3):351–61.
- . 2006. "Product Quality and the Optimal Structure of Commodity Taxes." *Journal of Public Economic Theory* 8(4):547–54.
- Delipalla, S., and O. O'Donnell. 2001. "Estimating Tax Incidence, Market Power and Market Conduct: The European Cigarette Industry." *International Journal of Industrial Organization* 19(6):885–908.
- Euromonitor. 2015. "Global Tobacco: Key findings, Part 1: Cigarettes—The Ongoing Quest for Value." *Euromonitor International*, July.
- European Commission. 2004. *Tobacco or Health in the European Union: Past, Present and Future*. Luxembourg: Office for Official Publications of the European Communities.

Confronting Illicit Tobacco Trade: A Global Review of Country Experiences

- . 2013. "Stepping Up the Fight against Cigarette Smuggling and Other Forms of Illicit Trade in Tobacco Products—A Comprehensive EU Strategy." Communication from the Commission to the Council and the European Parliament, COM(2013) 324, Brussels, June.
- Gruber, J., and B. Koszegi. 2001. "Is Addiction Rational? Theory and Evidence." *Quarterly Journal of Economics* 116(4):1261–1303.
- . 2008. *A Modern Economic View of Tobacco Taxation*. Paris: International Union Against Tuberculosis and Lung Disease.
- Hanson, A., and R. S. Sullivan. 2008. "The Incidence of Tobacco Taxation: Evidence from Geographic Micro-level Data." Research Paper Series 08-30, Andrew Young School of Policy Studies, Georgia State University, Atlanta.
- Hu., T.W., Z. Mao, J. Shi, and W. Chen. 2008. *Tobacco Taxation and Its Potential Impact in China*. Paris: International Union Against Tuberculosis and Lung Disease.
- Hu, T. W., X. Xu, and T. E. Keeler. 1998. "Earmarked Tobacco Taxes: Lessons Learned." In *The Economics of Tobacco Control: Towards an Optimal Policy Mix*, edited by I. Abedian, R. van der Merwe, N. Wilkins, and P. Jha, 102–18. Cape Town: Applied Fiscal Research Centre, University of Cape Town.
- Imperial Tobacco Canada. 2009. *What's Wrong with This Picture?* Montreal: Imperial Tobacco Canada.
- International Tax and Investment Center (ITIC). 2013. *The Illicit Trade in Tobacco Products and How to Tackle It*. 2nd ed. Washington, DC: International Tax and Investment Center.
- Jha, P., and F. Chaloupka. 1999. *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. Washington, DC: World Bank.
- John, S. 2008. "History and Culture of Bidis in India: Production, Employment, Marketing and Regulations." In *Bidi Smoking and Public Health*, edited by P. C. Gupta and S. Asma, 1–12. New Delhi: Ministry of Health and Family Welfare. Government of India.
- Johnson, T. R. 1978. "Additional Evidence on the Effects of Alternative Taxes on Cigarette Prices." *Journal of Political Economy* 86(2):325–28.
- Joossens, L. 2011. "Pricing Policies and Control of Tobacco in Europe (PPACTE), Work Package 5, Deliverable 5.2: Illicit Tobacco Trade in Europe: Issues and Solutions." August.
- Keen, M. 1998. "The Balance between Specific and Ad Valorem Taxation." *Fiscal Studies* 19(1):1–37.
- Kemball, B. 2009. "Tobacco in Canada: An Inconvenient Truth." Speech to the Canadian Club of Montreal, June 1.
- Laffer, A. B. 2014. *Handbook of Tobacco Taxation: Theory and Practice*. San Francisco: Laffer Center at the Pacific Research Institute.
- How to Design and Enforce Tobacco Excises? International Monetary Fund | November 2016
- Lightwood, J., D. Collins, H. Lapsley, and T. E. Novotny. 2000. "Estimating the Costs of Tobacco Use." In *Tobacco Control in Developing Countries*, edited by P. Jha and F. Chaloupka. Washington, DC: World Bank.
- Manning, W. G., E. B. Keeler, J. P. Newhouse, E. M. Sloss, and J. Wasserman. 1989. "The Taxes of Sin: Do Smokers and Drinkers Pay Their Way?" *Journal of the American Medical Association* 261:1604–09.
- Marsden, W. 2009. *Canada's Boom in Smuggled Cigarettes: Indian Tobacco Factories, Organized Crime Control a Billion-Dollar Black Market*. Washington, DC: Center for Public Integrity.

- Merriman, D. 2001. "Tool 7, Smuggling: Understand, Measure and Combat Tobacco Smuggling. Economics of Tobacco Toolkit, World Bank, Washington, DC.
- Rasmussen, S. R., E. Prescott, T. I. A. Sørensen, and J. Sjøgaard. 2004. "The Total Lifetime Costs of Smoking." *European Journal of Public Health* 14(1):95–100.
- Royal Canadian Mounted Police. 2008. "2008 Contraband Tobacco Enforcement Strategy." Ottawa.
- Royal College of Physicians. 1962. *Smoking and Health*. London: Pitman Medical.
- Salti, N., J. Chaaban, and N. Naamani. 2014. "The Economics of Tobacco in Lebanon: An Estimation of the Social Cost of Tobacco Consumption." *Substance Use & Misuse* 49(6):735–42.
- Skeath, S. E., and G. A. Trandel. 1994. "A Pareto Comparison of Ad Valorem and Unit Taxes in Noncompetitive Environments." *Journal of Public Economics* 53(1):53–71.
- Stern, N. 1987. "The Effects of Taxation, Price Control and Government Contracts in Oligopoly and Monopolistic Competition." *Journal of Public Economics* 32(2):133–58.
- Sunley, E. 2007. "Tobacco Excise Taxation in Asia: Recent Trends and Developments." Paper presented at the Fourth Meeting of the Asia Tax Forum, Hanoi, Vietnam.
- United States Department of Health, Education and Welfare. 1964. *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*. Washington: Public Health Service, United States Department of Health, Education and Welfare.
- United States Department of Health and Human Services. 2014. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- Verguet, S., C. L. Gauvreau, S. Mishra, M. MacLennan, S. M. Murphy, E. D. Brouwer, R. A. Nugent, K. Zhao, J. Prabhat, and D. T. Jamison. 2015. "The Consequences of Tobacco Tax on Household Health and Finances in Rich and Poor Smokers in China: An Extended Cost-Effectiveness Analysis". *The Lancet: Global Health* 3(4):e206–e216.
- Warner, K. E., F. J. Chaloupka, P. J. Cook, W. G. Manning, J. P. Newhouse, T. E. Novotny, T. C. Schelling, and J. Townsend. 1995. "Criteria for Determining an Optimal Cigarette Tax: The Economist's Perspective." *Tobacco Control* 4(4):380–86.
- Whitman, G. 2006. "Against the New Paternalism: Internalities and the Economics of Self-Control." Policy Analysis 563, Cato Institute, Washington, DC.
- World Health Organization (WHO). 2008. *WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package*. Geneva.
- . 2010. *WHO Technical Manual on Tobacco Tax Administration*. Geneva.
- . 2016. "Fiscal Space, Public Financial Management and Health Financing: Sustaining Progress towards UHC. Implementation of the Collaborative Agenda. 26–28 April 2016, Montreux, Switzerland." WHO/HIS/HGF/HFWorkingPaper/16.2; Health Financing Working Paper No. 2, World Health Organization, Geneva. <http://apps.who.int/iris/bitstream/10665/250127/1/WHO-HIS-HGF-HFWorkingPaper-16.2.pdf>.
- Yach, D., and H. Wipfli. 2006. "A Century of Smoke." *Annals of Tropical Medicine and Parasitology* 100(5–6):465–79.

COVER QUOTE SOURCES

ⁱ WHO Framework Convention on Tobacco Control Press Release, June 28, 2018.
<https://www.who.int/fctc/mediacentre/press-release/protocol-entering-into-force/en/>

ⁱⁱ World Health Organization Press Release, July 19, 2017.
<https://www.who.int/en/news-room/detail/19-07-2017-who-report-finds-dramatic-increase-in-life-saving-tobacco-control-policies-in-last-decade>

ⁱⁱⁱ Combatting illicit trade in tobacco products: Commissioner Andriukaitis' Statement on the EU's adoption of an EU-wide track and trace system. European Commission Press Release, December 15, 2017.
http://europa.eu/rapid/press-release_STATEMENT-17-5269_en.htm

^{iv} How to design and enforce tobacco excises? International Monetary Fund, October 2016
<https://www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2016/12/31/How-to-Design-and-Enforce-Tobacco-Excises-44352>

^v World Bank Group: "Global Tobacco Control: A Development Priority for the World Bank Group", Preface of WHO Global Tobacco Report 2015.
http://www.who.int/tobacco/global_report/2015/timevansandworldbankforeword.pdf?ua=1

“To tackle illicit trade is to tackle accessibility and affordability of tobacco products, to be more effective on the control of the packaging and to reduce funding of transnational criminal activities whilst protecting the governmental revenues from tobacco taxation.”ⁱ

– **Dr. Vera Luiza da Costa e Silva**
Head of the Secretariat of the WHO Framework Convention on Tobacco Control

“Governments around the world must waste no time in incorporating all the provisions of the WHO Framework Convention on Tobacco Control into their national tobacco control programmes and policies. They must also clamp down on the illicit tobacco trade, which is exacerbating the global tobacco epidemic and its related health and socio-economic consequences.”ⁱⁱ

– **Dr. Tedros Adhanom Ghebreyesus, Director-General**
World Health Organization

“Tobacco still remains the biggest avoidable cause of premature death in the EU, and the illicit trade in tobacco facilitates access to cigarettes and other tobacco products, including for children and young adults. In addition, millions of euros in tax revenues are lost every year as a result of the illicit trade.”ⁱⁱⁱ

– **Commissioner Vytenis Andriukaitis**
Health and Food Safety / European Commission

“Given their light weight, small size, and high value, tobacco products are susceptible to fraud through illegal trade, production, and cultivation. . . . Illegal trade is a context-specific activity that has various modus operandi and therefore requires multi-dimensional context-specific solutions.”^{vi}

– **Patrick Petit (Senior Economist) & Janos Nagy (Senior Economist)**
Fiscal Affairs Department / International Monetary Fund

“Effective tobacco tax regimens that make tobacco products unaffordable represent a 21st century intervention to tackle the growing burden of noncommunicable diseases. We are convinced that, working together with WHO and other partners in support of countries, we will be able to prevent the human tragedy of tobacco-related illness and death, and save countless lives each year.”^v

–**Dr. Tim Evans (Senior Director) & Patricio V Márquez (Lead Public Health Specialist)**
Health, Nutrition and Population Global Practice / World Bank Group

