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Smoking Out Illicit Trade: How Some Policies Intended to Limit Smoking Drive Illegal Trade

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The World Health Organization (WHO) states that smoking cigarettes is the largest cause of preventable premature death globally. The WHO Framework Convention on Tobacco Control (FCTC) entered into force in 2005 with an aim to lower the death toll.

FCTC has adopted a policy of encouraging developing nations to follow the demand reduction strategy of mature markets in raising taxes and introducing and then expanding regulation on tobacco products. In many cases such policies result in the rise of illicit tobacco (either counterfeits or legally produced smuggled cigarettes), especially where policy changes are implemented rapidly and enforcement capacity is limited. According to KPMG, illicit tobacco makes up roughly 10 percent of the global cigarette market, and the figure is rising.

This paper reports on a novel empirical assessment of smoker opinion and availability of illicit whites (smuggled legally produced cigarettes), which shows a sizeable minority of smokers bought illicit whites in most cases because they are far cheaper. It is also established (across 10 cities) that illicit whites are easily available in most markets, even in the wealthy markets of London and Singapore. Low education levels are correlated with widespread illicit white availability.

Reacting to the spread of illicit tobacco, WHO established the Protocol to Eliminate Illicit Trade in Tobacco Products (ITP) under the FCTC in 2012. While sound in principle, the ITP faces numerous challenges in implementation. The ITP's primary objective is to control the supply chain of tobacco products, which necessitates a very high level of international and commercial cooperation. The spillover effects of production and trade in tobacco require most if not all jurisdictions to share aims and ambitions; without that, coordination is likely to fail. Yet WHO has no expertise in trade policy or overcoming economic objections to health priorities. WHO also has zero experience in combatting organized crime, whose representatives will undermine coordination. ITP has some excellent guidelines, but it is incumbent on individual governments to control demand and police free trade zones (FTZs), where illicit activity of all kinds proliferates.

Voluntary support for the protocol is patchy. For example, the UK, Russia, India, and China are parties to the Framework Convention, but have not ratified the protocol; the US is not even party to the convention (United Nations 2003).

Since 2004, cigarette manufacturers and the European Union have cooperated in comprehensive systems, including "track and trace" operations, aimed at limiting illicit activity. These agreements have drastically reduced smuggling of major brands. Better control of the major cigarette supply chain has changed the nature of the illicit market. Studies of illicit activity demonstrate that illegal operations are highly dynamic and respond swiftly to deterrent measures. It is likely that only with the cooperation of the entire supply chain (including the major cigarette companies and governments that currently allow smuggling) will illicit tobacco be controlled.

However, WHO's FCTC utterly rejects these agreements due to the involvement of industry. Cigarette manufacturers and any group that has ever worked with them is explicitly excluded from implementation of the protocol, including Interpol (World Health Organization 2016a), which received funding from Philip Morris International.

WHO's constitution states that it should seek assistance from other UN bodies, yet FCTC is not collaborating fully with the World Customs Organization, which has an explicit role in enforcement, nor with the UN Office on Drugs and Crime, which already operates and enforces agreements that would be fundamentally useful to FCTC (Sou and Preece 2013).

None of these negative consequences needs to happen. The ITP is demanding policies for signatories, sometimes requiring significant changes in domestic laws, so implementation will take time, especially in poorly resourced emerging markets. After four years, only 20 countries have ratified ITP, which means ITP is probably many months even years from entering into force, which occurs when 40 have ratified. Meanwhile, the illicit tobacco market is flourishing. The trade in illegal cigarettes, particularly through free trade zones and sometimes with the collusion of governments, is huge, lucrative, and sophisticated. Without assistance from international security experts and producers and without funds to offer signatories in technical assistance, the WHO's Illicit Trade Protocol has only a slim chance of being implemented in emerging markets, even if nations ratify it.

The World Health Organization regards smoking cigarettes as the largest source of preventable premature death. To combat this problem, it has worked with member states to develop and implement the Framework Convention on Tobacco Control (FCTC) (WHO 2005).

The FCTC has encouraged less wealthy nations to follow the demand reduction strategies adopted by wealthier nations, including high taxes on tobacco products. At the same time, member states behind the FCTC are committed to reducing illicit trade. Yet it is well known that high taxes encourage the supply of illicit tobacco (either counterfeits or legally produced smuggled cigarettes).

Many questions exist about the demand for, and availability of, illicit tobacco; the size of the illicit market; whether the political will exists to combat illicit tobacco; whether anti-illicit trade policies are effectual where enforcement capacity is limited; and whether the WHO has the expertise and capacity to oversee coordination of illicit trade policies.

This paper attempts to answer some of these questions. It includes some original work empirically assessing the availability of illicit tobacco products in 10 cities, and includes a brief survey of smokers in two cities, to understand whether smokers are aware of such illicit products and whether and why they buy any. Given the findings, I discuss some of the key policy issues facing WHO and its member nations as they try to combat the burgeoning trade in illicit tobacco.

Taxation and the Many Forms of Illicit Tobacco

Taxation of legal but personally or societally harmful activity has obvious economic benefits. It discourages such activities and raises revenue for government services that does not need to be raised from nondetrimental activities, such as employment. Consequently, governments tax "harms" through what are often known as "sin taxes," but they are aware that imposing excessive taxes on these activities risks losing revenue to criminal activity, such as unlicensed manufacturing, smuggling, and even violent organized crime. This is true for tobacco products. What is illicit tobacco?

 Smuggling. The simplest form of tax avoidance is to buy a well-known brand of cigarettes in a low-tax location and smuggle it into a high tax location. This can happen between nations, such as from Andorra to the UK, or within them, from North Carolina to New York. As some jurisdictions raised taxes over the past 30 years, smuggling became more pervasive. In some instances, large tobacco manufacturers turned a blind eye to this practice (WHO 2005).

- 2. Counterfeiting. A more complicated practice, with potentially very high returns, is the counterfeiting of brands. Although only a small percentage of the market, counterfeit products have proliferated over the past few decades. A related form of counterfeiting is the forging of tax stamps or other unique identifiers on packaging to pretend the products were legally imported into or produced in the country sold. One could have a legally manufactured and smuggled product with fake tax stamps or manufactured fake products with fake tax stamps.
- 3. Illicit (cheap) white production. Arguably the most significant illicit tobacco product on the market today is the illicit white or cheap white. These are products manufactured (legally) for export in certain low-tax jurisdictions. Unlike major cigarette brands that comply with domestic content and packaging requirements (including warning labels, where required) and pay taxes in each jurisdiction, illicit whites are not sold domestically, have no legal foreign markets, and typically make no attempt to comply with any packaging requirements; they are deliberately smuggled into higher-tax jurisdictions without paying any of the requisite duties. (For photos of two illicit white brands, see the box on Paraguay.)
- 4. Other forms of tobacco. Other forms of illicit tobacco, such as loose or raw tobacco that can be used in "roll your own" cigarettes, are increasingly popular in many advanced markets such as UK and Australia, where taxes are high and efficient customs limit illicit white availability. Loose tobacco may also be cheaper in markets where tobacco is grown directly by users or those in their neighborhoods.

Tax: How High Is Too High?

Even relatively modest tax rates create an incentive to avoid and evade the tax; illicit trade is an inevitable consequence of policies designed to limit tobacco use. Whether it succeeds depends on several factors. To demonstrate these factors, we consider a couple of examples and then draw on some original empirical analysis of the availability of illicit tobacco.

The world's leading brand of cigarette is Marlboro. We can observe the price differential dynamics by comparing the US dollar equivalent price of a pack of 20 Marlboros across a few selected nations (Mahapatra 2014). In Australia, which has some of the highest tobacco taxes in the world, the price can reach over \$16. With the exception of Singapore (\$10), Australia's prices are much higher than in other Southeast Asian countries: 20 Marlboros cost \$4.20 in Malaysia, slightly over \$2 in China, \$1.25 in Indonesia, and less than a dollar in Vietnam, Cambodia, Philippines, and Myanmar. It is no surprise that people attempt to smuggle cigarettes from these lower-tax jurisdictions into Australia.

Halting Illicit Trade: Two Examples. In spite of the cigarette price differential, Australia has managed to restrict the illicit market quite effectively.

According to a KPMG study (2015), the price of both counterfeit and contraband cigarettes has increased by over 300 percent in Australia over the past six years, far exceeding the 60 percent tax increase on legitimate cigarettes. This has led to a reduction in overall tobacco use, but an increase in illicit varieties (especially unbranded tobacco—illegal loose-leaf tobacco—either home rolled or illicit whites) from under 10 percent of total consumption seven years ago to 14.5 percent in 2015.

But according to the Australian Institute of Health and Welfare National Drug Strategy Household Surveys of 2007, 2010, and 2013, there has been greater success in implementing programs to combat counterfeit and contraband tobacco.

It is probably too early to tell the exact impact on illicit trade from Australia's recent anti-tobacco policies, but it certainly shows that a rich, organized, and geographically isolated nation can push tax rates very high, reducing overall smoking, but with quite a significant increase in illicit tobacco trade.

Brazil has similarly increased taxes on tobacco over the past decade. The price of a pack of Marlboros is roughly \$2.7, still much lower than in Australia, but higher than in many neighboring states, and unlike Australia, Brazil shares long and porous borders with several other nations, notably Paraguay. An Oxford Economics study (Oxford Economics 2015) found that 27 percent of tobacco consumed in Brazil in 2008 was illicit. Beginning in 2008, efforts were undertaken to secure the supply chain of legitimate tobacco with specially designed tax stamps required on legitimate products. Nevertheless, Oxford Economics estimates that by 2013, slightly more (28 percent) consumed tobacco was illicit.

Hana Ross of University of Cape Town agrees that total smoking has fallen in Brazil, but with a lower increase in illicit tobacco smoked (mainly smuggled from Paraguay) than found by Oxford Economics (Ross 2015).

Part of the problem is that counterfeiters can fake tax stamps. (Brazil's were faked within weeks of being introduced.) In Figure 1, the photo on top is the real stamp, and the one on the bottom is a fake. Additionally, when neighboring countries do not assist, let alone prioritize, combatting illicit tobacco, then success can be hard to achieve. As will be discussed in the policy section of this paper, Paraguay benefits from illicit tobacco (the stamp on the bottom was probably made in Paraguay).

Figure 1. Brazil Tax Stamps, Real and Fake



Source: Field research team.

In addition to these two examples, one could add Canada, where high taxes resulted in significant smuggling (Furtick et al. 2014). Successfully securing the supply chain and limiting illicit tobacco depends on multiple factors, not all of which can be controlled by one country alone.

Every market has different issues, but as tax rates have risen over the past decade, Oxford Economics has seen a significant increase in the illicit white market globally, with a small reduction in smuggled brands.

Euromonitor (2016) and KPMG (Cartwright et al. 2014) have also collated a lot of interesting data on the amounts of illicit tobacco available in numerous countries around the world. I wanted to understand whether the best public policies would likely remove the problem. As such, I endeavored to assess whether there was significant consumer demand for illicit tobacco and, if so, how easy consumers could access it.

Empirical Findings

My research team has undertaken dozens of medicine samplings over the past decade to assess the prices of counterfeit and substandard products. There are similarities between pharmaceutical drugs and cigarettes in that neighboring nations may have significantly differentiated pricing of the same products. Whereas drug price differentials are due to tiered pricing by manufacturers, with cigarettes the differential is largely due to taxes. Health advocates have repeatedly stressed that fake medicines are partially caused by high drug prices, so it would seem logical that high cigarette prices are a cause of illicit tobacco.

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Following the protocol used to assess illicit pharmaceuticals, I decided to assess the availability of illicit whites. For the details of the approach taken to monitor the availability of illicit whites, a preliminary model, and findings, see the Appendix.

Illicit White Availability. Although they are illegal, we found that illicit whites were easily available in most cities. In a few places, such as Istanbul and Delhi, most outlets stocked them. Even in the richer cities assessed,

Table 1.	Prices of	[:] Legal and	lllegal	Cigarettes
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Country SampledAvg. Price Marlboro (\$US)Avg. Price IW (\$US)Illicit White Brand NameIllicit White ManufacturerArgentina2.820.29RodeoTabesaBrazil2.701.04EightTabesaIndia3.211.71Gudang GaramPT Gudan GaramJordan2.691.41ManchesterJSS LimitedParaguay1.79-*Singapore10.014.2Gudang GaramPT Gudan GaramTurkey3.801.54PrestigeBulgartabacUAE2.700.27Top MountainunknownUnited Kingdom12.54.11FestGrodno TabaccoIndonesia1.530.4LuffmanLeaton Tobacco International unknown*					
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Paraguay1.79-*Singapore10.014.2Gudang GaramPT Gudan GaramTurkey3.801.54PrestigeBulgartabacUAE2.700.27Top MountainunknownUnited Kingdom12.54.11FestGrodno TabaccoIndonesia1.530.4LuffmanLeaton Tobacco International	India	3.21	1.71	Gudang Garam	PT Gudan Garam
Singapore10.014.2Gudang GaramPT Gudan GaramTurkey3.801.54PrestigeBulgartabacUAE2.700.27Top MountainunknownUnited Kingdom12.54.11FestGrodno TabaccoIndonesia1.530.4LuffmanLeaton Tobacco International	Jordan	2.69	1.41	Manchester	JSS Limited
Turkey3.801.54PrestigeBulgartabacUAE2.700.27Top MountainunknownUnited Kingdom12.54.11FestGrodno TabaccoIndonesia1.530.4LuffmanLeaton Tobacco International	Paraguay	1.79	_*	_	_
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United Kingdom12.54.11FestGrodno TabaccoIndonesia1.530.4LuffmanLeaton Tobacco International	Turkey	3.80	1.54	Prestige	Bulgartabac
Indonesia 1.53 0.4 Luffman Leaton Tobacco International	UAE	2.70	0.27	Top Mountain	unknown
	United Kingdom	12.5	4.11	Fest	Grodno Tabacco
Malaysia 4.22 0.8 John unknown*	Indonesia	1.53	0.4	Luffman	Leaton Tobacco International
	Malaysia	4.22	0.8	John	unknown*

*Paraguay is the only place where illicit whites are not readily available, simply because there is massive local and cheap production with very low excise tax rates.

Source: Field research team.

such as London and Singapore, they were available. Table 1 shows the difference between the average price of the leading brand and the average price of the top-selling illicit white in the city. The price differences are significant everywhere; in a couple of places, illicit white prices are only 10 percent of the price of the leading brand, and in most well under half the price.

I do not put a formal model together on the causes of illicit white availability, since sample sizes so far are too small to develop significant and robust results for most of the variables we suspect are relevant. Some variables that matter are very hard to estimate, such as corruption in customs agencies. (I use customs efficiency as a proxy variable.) But I do establish what some of those variables are likely to be and find one initial robust result: the availability of illicit whites is negatively correlated with levels of education in the country (significant at 5 percent). In other words, based on data collected so far, less literate societies are exposed to (and probably consume) more illicit whites, which is an opportunity and a challenge for education programs.

Consumer Demand. In my experience of dozens of studies on medicine quality, we found that no one wants a fake, but people do buy cheap products they can afford in the hope that they will work. So there is some level of consumer complicity in buying inferior medicines. Consumer demand for illicit tobacco is therefore an important condition for the successful outcome of any policy decision.

It is difficult to know whether every buyer knows that they are buying an illicit product, but the massive price differential should be a signal to most buyers. In my survey of smokers in London and Buenos Aires (see the Appendix), about 20 percent of those asked said they had bought illicit whites, and the main reason was the price—a few Londoners were angry at excise tax levels. One even volunteered that he didn't buy illicit whites, but did buy raw tobacco to roll his own since it avoided tax.

If consumers are annoyed at the artificially high price of legal tobacco products (due to taxation) and crave cheaper products, awareness campaigns against buying them may well backfire.

Given consumer demands and the widespread availability of illicit whites, efforts by WHO to establish a protocol to eliminate illicit tobacco are warranted but may be hard to implement.

Illicit Tobacco and Attempts to Combat It

In the previous section of this paper I documented the desire for, and availability of, illicit tobacco products in many cities around the world, drawing on some original

empirical work, and briefly described the implications of this trade.

I now discuss the main drivers of illicit tobacco: free trade zones and rogue nations, as well as government and private-sector attempts to stop illicit trade. After that I briefly discuss the strengths and weaknesses of the WHO, the case for an illicit trade protocol within the FCTC, the expertise required to ensure such a protocol succeeds, the likely direction a protocol will take, and the impact on illicit tobacco.

Free Trade Zones and Rogue Nations. Free trade zones are regions where national customs laws regarding import duties and taxes do not apply (Global Agenda Council on Organized Crime 2012). There are roughly 3,500 free trade zones located in 130 countries, hosting over 68 million jobs and \$500 billion in direct trade-related value (Farole and Akinci 2011). Usually, these zones are established in underdeveloped parts of the host country to attract employers to the region, reduce poverty and unemployment, and stimulate the area's economy. FTZs are often used by multinational corporations to produce goods (such as cars, clothing, or shoes) or to repackage products for different markets, especially where local languages are demanded by public safety laws (such as cigarettes and pharmaceuticals).

FTZs enhance world trade and development, but FTZs can also allow autocratic regimes to perpetuate illiberal societies by employing pockets of capitalism to generate wealth, possibly even strengthening their governments. There are other inherent dangers in poorly managed FTZs. If a host nation's legal, customs, and security apparatus does not pay sufficient attention to their own FTZs, problems ranging from counterfeiting and smuggling to money laundering and terror financing may occur.

In US-based FTZs, laws against fraud, counterfeiting, corruption, and terrorism, as well as laws in favor of protecting labor and the environment, are generally enforced. There are a few concerns, however, such as the St Regis-Mohawk Reservation in New York State, which is a major transit point for smuggling high-value, high-tax, and easily transported products such as cigarettes (Spencer 2011).

Akwesasne and Contraband Tobacco. Ottawa's Macdonald-Laurier Institute held a conference on March 26, 2013, to discuss how to combat contraband trade across Native American reservations, especially those inhabited by the Mohawk peoples.¹ Illicit cigarettes tend to find their way to the reservations, originating mainly in China and imported through Vancouver. These illicit whites are often sold side by side with smuggled tobacco products. Numerous academic and security experts discussed reasons for the unique problems encountered on the reservations, which possibly account for most of the contraband trade between the US and Canada (see Ivison 2008). A critical reason for the massive contraband smuggling across the reservations was Native American opinion that their trade is legal because historic treaties granted them the right to trade products such as tobacco.

So while tobacco smuggling is a criminal issue for the Canadian police, politicians in Ottawa, and the US, the Mohawk peoples believe it is a political issue to be resolved through negotiations. The discrepancy is further complicated since, according to at least one security expert at the MLI conference, the organized crime operations that benefit from the trade in the reservations pay a tithe (estimated at 10 percent of their trade) into a community fund. Since this money has been invested into building schools and helping home ownership, all the Mohawk people that I spoke with thought the trade had significant upsides even while acknowledging that the dangers of smoking and the criminal enterprises fall on others outside of their communities.

This small example points toward huge problems in combatting trade in illicit tobacco. After all, if the users of illicit tobacco want cheaper products (and everyone spoken to did) and many of those trading in them see themselves as legitimate traders, control is always going to be difficult.

United Arab Emirates and Paraguay. There are numerous other concerns related to organized crime in numerous free trade zones, but tobacco is particularly important in the United Arab Emirates and Paraguay.

The Jebel Ali FTZ in Dubai has dozens of manufacturers of illicit whites. Roughly a fifth of the exports from Jebel Ali are cigarettes (Bouyamourn 2015), while Ciudad del Este² in Paraguay has myriad producers, too. In our

¹ This meeting was held under the Chatham House rule, so although comments can be reported, they cannot be attributed to individual persons.

² Technically speaking Ciudad del Este is not a free trade zone, but more of a border zone. Paraguay almost acts like one large free trade zone.

investigation of Paraguay we found 21 cigarette factories in and around Ciudad del Este and 20 around the capital Ascunción. Private investigators tell us that there are dozens more across the country, with a capacity to make 100 billion cigarettes a year, although output is probably closer to 60 billion. Just one of the companies, Tabesa, makes over 30 brands and perhaps up to 30 billion cigarettes a year (see the text box).

Turkey. Not only is there a lot of global illicit white production, there is also faking of major brands and faking of tax stamps, which are added to fake cigarettes to give the impression that the correct taxes have been paid in the countries of purchase.

Turkey is known as a point where East meets West, and it is a large transit economy with several FTZs and major transit points for illicit tobacco, such as the FTZ in Mersin, Turkey's largest port. Officials and operators there are well aware of EU regulations, which demand that drugs and cigarettes are packaged to service the 24 official languages of the EU's common market. As we saw in Brazil, tax stamps in Turkey are easily copied, too. In Figure 2, the real stamp is on top; the fake—probably made in Jebel Ali—on the bottom.

Figure 2. Turkish Tax Stamps, Real and Fake



Source: Field research team.

Domestic terrorist groups in Turkey, such as the PKK and Turkish Hezbollah, are known to have diversified from narcotics trafficking to smuggling and counterfeiting consumer goods such as tobacco.

The legitimate tobacco industry, customs and security officials, and especially health authorities see these as unacceptable practices. But as described above, the existence of FTZs serves a myriad of legitimate purposes, as well as providing havens for actors that pose dangers more violent than economic loss (RAND 2009). Combatting illicit trade in tobacco through them will not be easy, and it will be a priority for only a few. Political interest from high levels in the nations hosting FTZs is required, and so far Paraguay, UAE, and others are not prioritizing it.

Efforts to Halt Illicit Trade in Tobacco. While many of the governments behind the FTZs implicated in illicit tobacco trade have not prioritized combatting illicit trade, some governments have.

The most significant effort was an agreement between the European Union and the large cigarette manufacturers. Big cigarette manufacturers did not track where their products were going, which enabled them to sell cigarettes in low-tax locations (such as Paraguay) and not worry if they were smuggled into higher-tax locations (such as Brazil). Such practices were prevalent across Europe. Fifteen years ago the EU sued Philip Morris International and subsequently other cigarette companies for benefitting from illicit trade. The EU lost the case, but it was obvious that combatting smuggling made sense for all parties, since the tobacco industry suffered reputational harm from enabling smuggling and EU governments were losing important revenue.

The initial agreement was between PMI and the EU, signed in 2004 for 12 years. The aim was to prevent or at least limit trade in illicit PMI products, with financial penalties against PMI if it did not secure its supply chain. Agreements with other companies followed in subsequent years.

To control smuggling of PMI products, PMI established a track and trace system called Codentify. Tracking is the ability to monitor finished products through a supply chain. Tracing is the ability to recreate a product's path through the supply chain to find the point that it was diverted illegally. The basis of the T&T system is marking packages with unique identifiers that can be processed rapidly and are easy to standardize, so that overseeing those identifiers throughout the supply and distribution system is relatively simple.

Codentify tracked more than 500 million master cases, each containing 10,000 cigarettes. In addition to technical tracking of packaging and establishing forensic laboratories to find fake products, this involved preventing cash payments, forecasting demand and limiting oversupply to prevent diversion, and other methods to make it harder

Paraguay

A ccording to Bloomberg (Martin and Spinetto 2016), perhaps a third of the cigarettes purchased in Brazil are illegal. The tax loss to Brazil is \$1.2 billion a year. "In the Brazilian border town of Foz do Iguaçu, the tax authority's shredder grinds 300,000 cigarettes per day on average."

Bloomberg found that the most likely brand of cigarettes to be seized and destroyed by the Brazilian authorities was Eight. "It is manufactured by Tabacalera del Este, the company co-founded and still at least partially owned by [Paraguay President] Horacio Cartes."

According to Bloomberg, Paraguayans probably consume one billion cigarettes, but export (legally or otherwise) perhaps 65 billion more.

Paraguayans tend to view the smuggling as Brazil's problem. Jose Ortiz, president of Tabesa, says his company sells its cigarettes legally and pays taxes to the Paraguayan government. "The problem in Brazil is not that Paraguay has moderate taxes, but that Brazil has exorbitant taxes," Ortiz says. While Cartes remains a Tabesa shareholder, Ortiz said, he hasn't had an active role in the company while he has served as a candidate and as president.

While Tabesa may be guilty of today's overproduction for smuggling to Brazil, they are copying the actions of the big tobacco firms in the 1980s and 1990s, which exported from Brazil into Paraguay, thus avoiding higher Brazilian tax, knowing that cigarettes would be smuggled back into Brazil. Eventually the Brazilian authorities wised up to this and imposed a steep export tax. Big tobacco curtailed its practices, and Tabesa filled the void, claims Bloomberg.

for illicit activity. PMI also agreed to pay \$1.2 billion over the life of the agreement to compensate for lost government revenue from smuggled products.

The EC published a recent report on efficacy of EU-PMI agreement (European Commission 2016). It concluded:

The PMI Agreement has effectively met its objective of reducing the prevalence of PMI contraband on the illicit EU tobacco market, as shown by a drop of around 85 percent in the volume According to researchers writing in Foreign Affairs:

Mexican drug cartels, such as Los Zetas and the Sinaloa cartel, have been involved in the distribution of Paraguayan illicit cigarettes. So too have Colombian organizations such as the Revolutionary Armed Forces of Colombia (FARC) and the Urabeños, which use illicit tobacco for money laundering purposes. There have also been suggestions that cigarette trafficking in Brazil may be also linked to criminal groups, such as the Red Command and the First Capital Command (PCC). (Gomis and Botero 2016)

While researching illicit trade through FTZs, my team can certainly echo the views above that Paraguayans view Brazil's smuggled tobacco as Brazil's problem. With a widespread attitude like that and the obvious benefit that Tabesa specifically and Ciudad del Este in general provide to Paraguay, it is no wonder that improving tobacco control is not a priority for Paraguay.



Eight and Ibiza Made by Tabesa

of genuine [smuggled] PMI cigarettes seized by Member States between 2006 and 2014. PMI has also put in place procedures to counter the risk of money-laundering.

Although PMI contraband fell, there was not an overall reduction of illicit products on the EU market.

The illicit tobacco market in the EU has seen important developments. The contraband

consisting of smuggled products from the large manufacturers has been increasingly replaced by other products including nonbranded cigarettes ("cheap [illicit] whites") typically produced in third countries by a variety of manufacturers.

It would seem that a continuation or upgrading of this approach makes some sense, especially since Codentify is now operating in 120 countries and is the industry-wide standard (now owned jointly by all the major cigarette producers).

Law enforcement officials in EU like the PMI agreement (Ariès and Panichi 2016). Furthermore, according to Interpol's June 2014 analysis of track and trace systems, only three "fully comply" with high standards. Codentify was one of them; the other two were run by French firm ATOS, which helped develop Codentify and ArjoWiggins.

The fact that illicit traders reacted to EU-big tobacco anti-smuggling efforts by changing practices to engage in illicit white production is typical of many industries. My experience with counterfeit pharmaceuticals tells me that illicit operators react very swiftly to policing and detection efforts and in ways not always envisaged by regulators and police. Furthermore, counterfeiters pay great attention to producing very high-quality packaging and can reproduce additional security devices with speed and ease. After all, the high level of tax paid by legitimate operators gives counterfeiters and smugglers a huge margin-they can afford to focus most of their costs on packaging and distribution. Only where Interpol, national governments, and the pharmaceutical industry worked together was there notable impact on counterfeit pharma rings. Where governments enacted standalone systems devoid of human intelligence, relying on single approaches, the outcomes were rarely positive and even then not for long (Bate 2012).

Tax Stamps. Tax stamps are marks attached to or printed on retail packaging to denote that products have been legally produced and conform to regulation, and that the manufacturer has paid all government duties owing. These stamps are fixed to tobacco packaging and assist in ensuring that only legal producers (who pay for the stamps) are accessing the supply chain, where stamps are demanded. Tax stamps are useful, especially when accompanied by a track and trace (T&T) approach, and have their place in contributing to making it harder for the counterfeiter and contraband trader to fool authorities and make money. These vary from country to country; efforts are made to keep them secure from counterfeiting, but in California (see Figure 3), Turkey, and Brazil they were copied within a month, and the vast majority of counterfeits of the leading brands had bogus stamps on them.

Figure 3. California Tax Stamps, Real and Fake



Source: Field research team.

An Indiana Department of Revenue study discusses tax stamps in California:

The most crucial fact to consider in adopting an encrypted stamp program is that encrypted stamps are not counterfeit proof . . . within a month of launching the encrypted stamp program in California, the U.S. Bureau of Alcohol, Tobacco, and Firearms reported discovering counterfeit encrypted stamps in retail establishments throughout the state. In fact, Federal authorities seized 3,800 counterfeit versions of the new encrypted tax stamp in April 2005, and 27,752 in June 2005. Furthermore, in October 2005, five individuals were arrested and approximately 18,000 cartons of cigarettes and 103,000 counterfeit California cigarette excise tax stamps were seized. The counterfeit stamps alone had a face value in excess of \$89,000. (Eckart 2009)

Overall, several countries have used stamps, and their impact on illicit trade was assessed by Oxford Economics, which undertook a simple cross-country regression model involving six countries: Brazil, Greece, Turkey, Malaysia, Morocco, and Ukraine. "Taking account of changes in retail sales prices, the state of the economy and the level of tobacco regulation, the analysis identified no effect on illicit consumption, legal sales volumes or government revenues from the introduction of tax stamps in these countries," said Oxford Economics.³

Tobacco, WHO, and Health

The previous section described how FTZs enable illicit tobacco and how some positive efforts to limit its spread have been undertaken, notably in the EU. The ultimate effort to combat illicit tobacco could arguably take place through a global treaty. I now turn to the World Health Organization and its efforts.

The history of tobacco and health is long and ugly. The tobacco industry hid facts about the harms of its products for decades, and employed strategy and tactics to undermine tobacco control efforts. The industry also allowed smuggling of its products to bypass high tax rates, and hence was implicated in the subject matter of this paper. So it is understandable that heath experts distrust those that make cigarettes and purvey the problem, and they demand industry has no role in anti-tobacco agreements. But ardent beliefs alone do not make good policy, a problem throughout WHO's checkered past.

WHO History. WHO was formed in 1945 to help combat sickness and promote health around the globe. Most of its early programs combated infectious disease, and it had considerable success in slowing diseases such as yaws and leprosy and in immunizing children against a host of pathogens. Its greatest victory came in 1978 with oversight of the eradication of smallpox. A few years ago I undertook an assessment of the WHO and found it to be a great health cheerleader, but often without requisite funds to achieve much (Bate and Porter 2009a). As such, I identified several problems with it: an ambiguous mandate and overambitious rhetoric, duplication of other agencies' efforts, susceptibility to political influence, failure to focus on results, tendency to exceed its capabilities, and a statist bias that allows politics to trump health.

For example, it pushed to eradicate malaria in the 1950s but never really had an action plan for Africa, so

this was never going to succeed. (Its control of malaria was a success, but most people talk of its early malaria efforts as a failure.) WHO did not consult Taiwan during the SARS outbreak (because like the rest of the UN, it does not accept Taiwan as a separate country from China), even though Taiwan was actively trying to provide information on any SARS cases in its area of influence, while Beijing just denied it had a problem. Even though WHO does not have the budget for, or expertise in, medicine regulation, it acts as a regulator for medicines for devastating diseases such as tuberculosis, AIDS, and malaria. When it pushed for countries to adopt ambitious HIV treatment goals, it ignored evidence that programs were being run poorly to the point of endangering patients' lives. Although it is happy to take funding from the pharmaceutical industry in exchange for its support of smoking cessation products, this is quite an exception. Generally, it distrusts the pharmaceutical and other industries. And it worryingly promotes some autocratic and corrupt political leaders, simply because they side with a single WHO health policy, even if their health systems and support for health generally are woeful (Bate and Porter 2009b).

Most of these types of problems are germane to the illicit trade in tobacco and the Illicit Trade Protocol, as we shall see.

WHO Finances. WHO's finances, are a critical problem not of WHO's making, but of its backers. Most of WHO's funding is tied to specific programs desired by national (usually Western) governments. WHO therefore runs programs of material interest to wealthy donors, such as on obesity or deep vein thrombosis, when these are not the primary concerns of most of the world's population. WHO actually receives more project-specific funding than it does core funding. In some cases, WHO has even launched unfunded programs with the hope that the subsequent media blitz would generate the necessary support. In that sense, it is hard for WHO to direct programs that make the most sense.

It was always likely to get funding for tobacco control work, and of course, tobacco use is a major health concern globally, but the financial drivers of its programs are important because, although it is a global health organization, it adopts the biases of its wealthy donors. Additionally, most successful UN framework conventions have had a lot of funding to assist emerging nations comply with

³ Oxford Economics, a well-respected economics consultancy funded for its research on tobacco by the tobacco industry, estimates no obvious reduction in illicit trade from the addition of stamps across several nations that recently added or improved them.

the convention, so funding levels will be critical if FCTC and its protocols are to function effectively.

The Case for International Coordinated Action Against Tobacco

Smoking is not a cross-border issue like industrial pollution, and it can be controlled at the federal, state, or even local level. However, unilateral or uneven adoption of control measures, especially "sin taxes" which make tobacco more expensive in one country relative to its neighbors, create a dynamic where smuggling is inevitable.

In this case, supranational coordination of nation-states can certainly help, and few would argue against international anti-tobacco policies based on health. However, many nations, in fact most emerging nations, have limited capacity to address smoking policies and understandably tend to prioritize other more immediate concerns.

WHO Framework Convention on Tobacco Control

(FCTC). WHO used its status as a UN body to establish a treaty (FCTC) to limit the damage caused by smoking, especially in poorer nations that may have weak tobacco control policies. WHO followed the approach taken by other UN bodies, notably the UN Environment Programme, in establishing a framework convention under which specific protocols could then be established to tackle key issues, notably against illicit trade.

The ITP. In November 2012, the fifth session of the Conference of Parties on Tobacco Control adopted the Protocol to Eliminate illicit Trade in Tobacco (ITP). As stated in FCTC documentation:

The objective of the Protocol is the elimination of all forms of illicit trade in tobacco products. "Illicit trade" in tobacco products in this context means any practice or conduct related to producing, shipping, receiving, having possession of, distributing, selling or buying tobacco products which is prohibited by law.

In order to prevent this illegal trade, the Protocol aims to secure the supply chain of tobacco products through a series of government measures. It requires the establishment of a system of control largely based on the successful EU-cigarette company agreements. Amongst other things this includes a global tracking and tracing regimes within five years of the Protocol's entry into force, comprising national and regional tracking and tracing systems and a global information sharing point located within the Secretariat of FCTC. Other provisions to ensure control of the supply chain include licensing and record-keeping requirements, as well as regulation of Internet-sales, duty-free sales and international transit. (WHO 2016a)

Clearly, supply chain security is vital to limit illicit trade. The requirement that participants in tobacco supply and distribution know what is where at all times is designed to limit the chances for diversion of legitimate products and insertion of counterfeits. If authorities have the correct legislation in place, they can then prosecute and perhaps prevent criminals undermining the supply chain more easily.

Demanding cooperation from signatories with global experts such as Interpol, the World Customs Organization, and others increases the competence of national agencies and increases the likelihood of best practices transferring.

The ITP will enter into force 90 days after the 40th party to the convention has ratified the protocol. As of August 2016, 20 parties have ratified (United Nations 2012).

The key articles for the ITP are addressed below:

Licensing. Licensing can be an important part of a secure supply chain. Ensuring that only approved organizations (e.g., tobacco growers, cigarette machine manufacturers, cigarette manufacturers, and tobacco retailers) are allowed to participate in the process limits the opportunities for bad actors, such as those who would sell cigarettes to minors. The threat of losing a license can be a useful deterrent to stop bad actors.

Licensing is only as good as the monitoring and enforcement. Furthermore, if too few licenses are allowed or they are too expensive, it can be counterproductive, delegitimizing the licensing authority and even encouraging parallel illicit trade.

Due Diligence. Like the know-your-customer rules we are familiar with in today's banking relationships, such efforts are important for tobacco. One of the key problems in illicit trade is the smuggling of legitimate products across borders to avoid high taxes. For example, if a large tobacco company knows that a local market is a certain size, then supplying twice the expected volume to a market suggests the likelihood of smuggling. Under due diligence requirements the tobacco company can be penalized in such an eventuality.

Tracking and Tracing. Under the ITP T&T will provide industry and law enforcement with information required to determine origins of products. With over 5 trillion cigarettes made every year and with numerous places for repackaging and retrade (and hence possible tracing required), this will be a difficult task.

Funding. The FCTC has voluntarily assessed contributions of roughly \$9 million a year from signatories, with the majority of the funds coming from richer nations. From this about \$1.4 million is specifically allocated to assisting poorer nations ratify the protocol (WHO 2016b). Compared with environmental framework conventions, this is a reasonable level of funding to ensure functioning of the FCTC Secretariat, but this is a very low level of support for poor nations to assist them to comply with the FCTC and ratify a protocol. As of August 2016, many nations are in arrears on their contributions (Framework Convention Alliance 2016). While there is an expectation that the tobacco industry would fund the FCTC through duties and taxes, those funds would be received after policy changes. So far, no funds have been allocated for distribution to assist with making policy changes to comply with ITP. Without sufficient up-front funding, many poorer nations will likely take a long time to ratify the ITP.

Free Trade Zones. Within three years of the entry into force of the ITP, FTZs will, in principle, be subject to the protocol's measures and controls. Better coordination between the governments of FTZs and other governments, domestic and foreign, as well as legitimate producers and competent international agencies (such as Interpol) is essential to combat illicit trade. It is important to appreciate that the main beneficiaries from the tobacco trade through FTZs are not law-abiding multinational companies, but governments, medium-sized illicit white producers, and an array of organized groups involved in repackaging and faking—some criminal, many not—and they are unlikely to care what health authorities say.

Anti-Tobacco Politics

The previous section explained WHO-led efforts to limit smoking and subsequently combat the rise of illicit tobacco and some of the interests stacked against these efforts. This section describes the likely implementation of ITP.

There are two key reasons why the ITP will be difficult to implement effectively. The first has been alluded to in previous sections: many groups of people (e.g., FTZ companies) and sometimes entire governments (e.g., Paraguay) benefit from the illicit tobacco trade. Their concentrated benefit will be hard to overcome by less-organized, weakly funded, and often distracted entities, especially since the most powerful nations in the world are either not party to the FCTC or have not yet ratified the ITP. Worse still, some nations, such as Germany, are not seriously combatting tobacco smuggling and the organized crime behind it (Tripmaker 2016).

The second reason is that the health community is often oblivious to nonhealth realities, has an anti-industry bias, and often overreaches. Some of this was hinted at in the sections on WHO history. But the following discusses some of the concerns directly related to tobacco policy.

This section describes some of the political shenanigans in establishing the FCTC efforts, the blinkered approach of the health community, and the likely outcome given such an approach in implementing the ITP.

Negotiations at the FCTC—Captured by (Health) Lobbyists. Gregory Jacob, a former US Department of Justice lawyer, was a US negotiator to the FCTC and was astonished at the latitude allowed to nongovernmental organization (NGO) health lobbyists during the negotiations. He made a formal complaint to the secretariat after he was followed by activists intent on listening to his phone calls and having to spend the bulk of his available time combatting false propaganda from health activists about the US government's position on FCTC: "Apparently some members of the NGOs believed so fervently in the rightness of their cause that in their minds the employment of some highly questionable tactics was fully justified," he said. "These tactics would not have been so disturbing if they had not had much of an effect, but the inexperience of many of the delegates rendered them ripe for capture by sophisticated NGOs.... The NGOs thus exerted tremendous influence over the course of the negotiations" (Jacob 2004).

But it is not just health activists who can be fanatical, so can WHO anti-tobacco staff. The WHO Syria representative said that the country should prioritize combatting tobacco use during the carnage of the Syrian civil war (Associated Press 2016). As the saying goes, if you're a hammer, all you see are nails.

FCTC/ITP Process and Agreements Used by Member

States. But other motivations were at work, which may explain other problems for implementing the ITP.

First, according to Jacob, many nation-states tried to use the FCTC as a protectionist measure, using popular anti-tobacco rhetoric to drive FCTC toward policies that would harm multinational tobacco companies, but protect their domestic industries. Such actions are illegal under established trade treaties.

Second, one US expert privately explained to me that many national health officials (e.g., France and Spain) wanted strong FCTC provisions to push their governments to act against tobacco, even if such actions were harmful to their domestic economies.

Third, national governments took advantage of the FCTC effort against tobacco to undertake domestic policies they already wanted, which were illiberal at best and illegal at worst. As established above, controlling licensing in tobacco products can limit access by criminals to supply chains. While FCTC is not responsible for what governments do, there have been worrying concerns that certain licensing arrangements may be designed to benefit political interests, while being presented as an attempt to comply with ITP, even though they may actually undermine the aims of the ITP.

Not long after the ITP was signed, the Hungarian government decided to limit the number of licensed outlets for selling tobacco in Hungary from 40,000 to about 7,000 (Feher and Gulyas 2013). Hungary made tobacco retailing a state monopoly and granted 20-year concessions to run tobacco shops for a flat fee to individuals. Critics of the Fidesz-led government's measure claim the move has reshaped the market in a way that helps the government by favoring Fidesz-friendly individuals and companies.

Investigators privately allege that it also may well have led to an increase in illicit activity. A former licensee pushed the European Court to rule that Hungary's government action was illegal, and won about \$25,000 in damages and costs from the Hungarian government (Keszthelyi 2015). **Sidelining of Industry.** I argue that a major risk to successful implementation of the ITP is the distrust of the tobacco industry. While it was arguably understandable for WHO to sideline industry in the main body of a health convention (FCTC), it bodes ill for a protocol on illicit trade where involvement of that industry is most important. After all, few can claim to know as much about legal and illegal products as the people making the real thing and the law enforcement experts with whom they work every day.

Article 5.3 of FCTC, "Interactions with Industry," states that "in setting and implementing their public health policies with respect to tobacco control, Parties shall act to protect these policies from commercial and other vested interest of the tobacco industry in accordance with national law." In essence this article is about ensuring transparency when interacting with industry, but the tougher interpretation being followed is that industry should be banished from all processes.

It should be noted that Article 5.3 refers to public health policies: curbing criminal activity is not public health policy, although it clearly has an effect on it. One can therefore strongly argue that the ITP should involve all parties, including industry and especially technical experts such as Interpol, which has been funded by industry.

Perhaps as importantly, WHO has been tempted into policy overreach many times in the past (Bate and Porter 2009b), and is doing so now with the ITP. Such mission creep is a major problem for WHO and its member states. For WHO to succeed in areas of weak competence, it surely must involve agencies with greater competence. Insiders tell me that WHO is interacting with the World Customs Organization (WCO) at public fora, but the interactions are only slowly developing.

Regardless of WHO overreach, the various sections of ITP can be an effective, if not comprehensive deterrent to illicit trade. As written, the ITP can improve regulation in FTZs and help secure the supply and distribution chain, increasing costs to counterfeiters and smugglers, increasing revenue for governments, and possibly lowering overall smoking. But if it is used to deny industry a voice, it could attempt to, *in extremis*, eliminate the legitimate industry. If it pushes for excessive licensing fees or too few licenses or if it bans internet and duty-free sales and removes industry from the track and trace systems, it may well lead to the demise of big tobacco, but not to the demise of smoking, exacerbating the problem of illicit trade as well as lowering governmental revenues. While such an eventuality might lower smoking rates, it might well backfire.

So the question is how will the ITP be implemented if it is ratified?

The remainder of this paper discusses the direction of implementation and obstacles to implementation.

WHO Hiding Its Work

A wide variety of meetings about the protocol have taken place over the past few years, held in locations that have no interest in transparency, making it hard for media to even cover what is being discussed. For example, several meetings have taken place in Turkmenistan (Kasperowicz 2016), which hardly has a reputation for media freedom and is one of the least free countries on earth.

As the *Washington Examiner* put it: "WHO in 2014 praised the country and its president, Gurbanguly Berdimuhamedow, and gave it a 'special recognition certificate' for its contribution to 'tobacco control."

As David Williams, president of the Taxpayers Protection Alliance, which followed the expenditure of US tax dollars on this said: "This is almost like giving North Korea credit for not having any electricity and being green." In the cases of the Turkmenistan meeting and another one in Russia in 2014, there is still no official public record of how participants voted or on what exactly.

Additionally, the following meetings have taken place without major law enforcement participation:

Nay Pyi Taw, Myanmar, December 9–11, 2014 Kuwait City, Kuwait, March 23–24, 2015 Panama City, Panama, April 22–24, 2015 Gaborone, Botswana, May 6–8, 2015 Harare, Zimbabwe, April 26, 2016

One insider told me off the record that even the WHO legal expert wasn't invited to some of them. The Panama meeting even had a Brazilian representative, Marcelo Fisch, who was implicated in that country's tax and corruption scandal, specifically around SICPA systems for tobacco and alcohol control (Government of Brazil 2015).

Such opaqueness about who is invited and what is discussed at these meetings is important because it shows a fundamental weakness in FCTC. To seek support from such autocratic states and prevent real experts on illicit trade from attending undermines the ITP. Furthermore, as customs experts have alluded, perhaps the "WHO Secretariat should be working with more 'enforcement' orientated agencies such as the WCO [World Customs Organization] or the United Nations Office on Drugs and Crime, where [enforcement] agreements are already in place." So while WHO may establish guidelines on the how to deliver on the aims of the ITP, "the WCO and UNODC may still need to play significant roles in implementation" (Sou and Preece 2013).

ITP Secretariat Is Pushing for No Industry Involvement in Track and Trace

As discussed above, the only comprehensive legal agreement (including track and trace requirements) against illicit tobacco involved the major cigarette companies and the EU. But the FCTC Secretariat rejects Codentify mainly because FCTC Secretariat Head Dr. Vera da Costa e Silva opposes industry involvement. Indeed, since Dr. Costa e Silva took over as head of FCTC, industry and industry-funded expert (including Interpol) involvement has collapsed.4

In a videoconference with Egyptian experts, Dr. Costa e Silva said:

We in the Secretariat see every day how much the Protocol is needed: reports on efforts by the tobacco industry to take over the work on illicit trade reach us on a regular basis. Industry is promoting its own tracking and tracing system, Codentify, and is proposing agreements to countries by which the tobacco companies would manage the fight against illegal traffic. This is letting the fox into the henhouse! We cannot let this happen. The tool we have

⁴ Rather than demanding transparency of industry and those funded by it or dealing with it, the secretariat has prevented such interests from even observing discussions. The rationale is that Big Tobacco is so corrupt, and is driving and benefitting from smuggling and even illicit white production, that its banishment from proceedings is vital. But there is almost no evidence for this. Historically, companies probably benefitted from smuggling, but since the EU agreements with Big Tobacco there is no evidence of bad actions. And the only unsupported conjecture that Big Tobacco gained from illicit white markets was related to Gottfried Phillips, which is an independent company in India. It is contracted by Philip Morris International (PMI) to make Marlboro for the Indian market. Gottfried Phillips also makes other brands for the local market, some of which (e.g., El Patrón and Jaisalmer) have been diverted to the Latin American market to emerge as illicit whites. But this is not a subsidiary of PMI and thus not its responsibility. Other than that there does not appear any smoking gun behind the theory.

to prevent it is the Protocol, which puts control over combatting illegal traffic firmly in the hands of governments around the world. We need the Protocol to become law as soon as possible! Your efforts will help to make this happen! (Costa e Silva 2016)

Margarete Hofmann, policy director of the EU anti-fraud office, known as OLAF, criticized such thinking: "That would assume we have a hen house—we don't," she said. She went on to warn that failure to renew the deal would hurt law-enforcement agencies' short-term anti-smuggling capability (Aries and Panichi 2016). In short, there is no proper legal structure in place other than the EU-big tobacco agreements.

Affordable T&T systems for tobacco do not exist. The only "system" being pushed by FCTC is the tax stamp approach of SICPA, but this is not a full T&T system.

But Dr. Costa e Silva and other anti-tobacco advocates have had their way. The EU has not renewed its agreement with PMI (Teffer 2016). So now there is no legal agreement in place to stop PMI from benefitting from smuggling, and there is no likelihood of another agreement via the ITP entering into force within the next five years. The EU Tobacco Product Directive, which will cover smuggling, does not come into force until May 2019—nearly three years away.

European Commissioner for Budget and Human Resources Kristalina Georgieva correctly identifies today's major problems: "To continue the effort to fight against illegal tobacco trade, it is, therefore, my intention to concentrate on cheap [illicit] whites, strict law enforcement and strengthened international cooperation" (Michalopoulos 2016). But one wonders, if the major brand owners neglect to control smuggling, whether it will simply start back up again. The lesson of successful anti-smuggling programs is that smugglers constantly change to find weaknesses in controls. If the major brand holders are not compelled to prevent smuggling, it may start again.

In any event the EU/WHO FCTC apparently has faith that PMI will continue to honor its policies. It is therefore supremely ironic that prevention of smuggling will depend on good behavior by PMI, since anti-tobacco forces have pushed against the one legal instrument in place.

The FCTC is promoting the tax stamps system provided by Swiss company SICPA, which has made much of its noninvolvement with the tobacco industry. SICPA may not have been associated with big tobacco, but it has other problems. The Kenyan newspaper *Standard Media* reported that an official of the Kenyan Revenue Authority (KRA) was under investigation: "KRA directly awarded the e-tax tender to Swiss company SICPA Security Solutions SA Ltd, despite the fact that the firm had been accused of corrupting tax agencies in Brazil, Albania, Morocco, and the Philippines." The public investment committee of the Kenyan parliament said awarding the \in 158,213, 898 (Sh17 billion) tender was to a company with a "dubious character" (Ngetich 2016). FCTC continues to champion the company.

It is therefore supremely ironic that prevention of smuggling will depend on good behavior by PMI, since anti-tobacco forces have pushed against the one legal instrument in place.

Additionally, SICPA stamps can be very expensive, up to \$2 per 1,000 cigarettes, as opposed to EU stamps that cost roughly 20 cents per 1,000 cigarettes and scanners that cost retailers about \$800 each (Ross 2015). High tax stamp cost may be why in Morocco, SICPA stamps, compulsory for tobacco since 2010, were widely faked.

Tax stamps at best mean those trading contraband have to copy the stamps, increasing their costs. SICPA can probably provide a fully comprehensive modular T&T system, but its high cost means those that have adopted its stamps have stopped short of buying a full system. Until FCTC identifies a workable solution for track and trace, it seems rash to abandon the one system, albeit run by the tobacco industry, that actually has lowered the specific contraband targeted. Yet the ITP says that a global T&T system will be in place "within five years of entry into force" of the ITP, which seems ambitious at best.

Free Trade Zones and FCTC

Nowhere is the disconnect between health desires and political reality more stark than in FTZs. As discussed above, FTZs are designed to bypass regulation, and the idea that FTZs that are making vast amounts of money for their companies and government coffers will bend to the will of the FCTC is simply laughable. Not all zones are run like Jebel Ali and Ciudad del Este, which export billions of illicit cigarettes every year, but it is extremely unlikely that the governments benefitting from even better-run zones will ratify the ITP given the oversight it will demand.

Funding, Ratification, and Compliance

The lack of significant funding to assist emerging markets in complying with FCTC, let alone ITP, is a problem for the secretariat. There is a legal cost to complying with any convention, and funding the costs greases the wheels of politics. The situation has even worsened, with many nations falling behind in even their contributions to the secretariat (Framework Convention Alliance 2016).

Without funding, nations will ratify only slowly, and then perhaps with ulterior motives (United Nations 2012). Right now only 20 have ratified.

WHO's FCTC implementation database is the only mechanism by which countries party to the treaty can be held to account for their compliance, yet researchers found many discrepancies between country reports and information on the database. They concluded that WHO had undermined the FCTC due to its lack of capacity and leadership (Hoffman and Rizvi 2012).

Conclusion

The ITP is in the balance. WHO FCTC documentation states: "The WHO FCTC Protocol to Eliminate Illicit Trade in Tobacco Products provides the mechanism to eradicate illicit tobacco products. The benefits gained from becoming a Party to the Protocol far outweigh the financial costs to the Party" (WHO 2016a). Becoming an active party to a robust protocol well enforced by most nations may provide great benefit, but simply ratifying the ITP will have no positive effect.

As it stands, the ITP is well drafted and, if implemented intelligently, could curtail much illegal activity, restore lost revenue to governments, and contribute to sensible tobacco control efforts designed to lower smoking around the world. But evidence is accumulating that the process is being taken over by those who seek not just to prevent widespread use of illicit tobacco but use of all forms of tobacco. An understandable distrust of the tobacco industry is in danger of leading to counterproductive policies and may even prevent ratification of the ITP.

Policy Recommendations

- FCTC Secretariat should reengage with major cigarette producers and certain key entities they fund (especially Interpol) to establish a functional, relatively cheap (hence widely deployable) system to reduce illicit tobacco trade, largely based on the successful EU-PMI agreement.
- 2. FCTC Secretariat should reach out to the governments behind key FTZs (notably Paraguay and UAE) to discuss how to reduce illicit trade from those locations. Rather than simply demanding compliance with a putative ITP, WHO should appreciate the financial losses these nations will suffer from curtailed illicit trade.
- FCTC Secretariat should reach out to rich nations and suggest that ITP will not be ratified or implemented effectively unless funding levels to support emerging nations' compliance are significantly increased.
- 4. Rich nations—notably the UK, Germany, Japan, and even US, although not party to FCTC— should push FCTC Secretariat to comply with the first three recommendations or risk having the ITP fail and illicit tobacco use soar.
- 5. Some rich nations, notably Germany, must demonstrate that illicit trade is a policy concern. Currently, the punishment for trading in illicit whites is pitifully low, barely discouraging criminal activity.

About the Author

Roger Bate is a visiting scholar at the American Enterprise Institute. He researches international health and development policy, with a special interest in medicine quality and tropical diseases. He has a Ph.D. in economics from Cambridge University. His writings have appeared in, among others, the *Wall Street Journal, Financial Times, New York Times, Washington Post, Lancet, PLoS Medicine, Journal of Health Economics, Journal of Economics and Management Strategy*, the *Malaria Journal,* and the *British Medical Journal*. He has been an adviser to the South African government.

Dr. Bate conducted extensive research in India, across Africa, and numerous other emerging countries on the public health consequences of the counterfeit and substandard medicine trade. His latest book is *Phake: The Deadly World of Falsified and Substandard Medicines* (AEI Press, May 2012). He is the author or editor of 14 books and over 1,000 journal and newspaper articles.

His broader interests include aid policy in the developing world, evaluating the performance and effectiveness of both US government agencies (especially FDA and USAID) and global agencies (especially World Bank and WHO).

He was the cofounder of the Frederic Bastiat Journalism Prize and cofounder with Richard Tren of Africa Fighting Malaria, where he remains on the board of directors. He is also a fellow at the Institute of Economic Affairs in London.

His research is available at https://www.aei.org/scholar/roger-bate/. For an easily accessible list of papers on medicine quality, see http://www.searchingforsafety.net/media.html. Links to peer-review publications are lower on the webpage.

Disclosures

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Past Funding and Involvement with Tobacco. I wrote about passive smoking and tobacco advertising from 1996 to 1998, which brought me to the attention of PMI, among others, and I consulted for PMI for roughly six months in 1998. The vast majority of my consulting related to explaining how WHO was constituted and how it would try to copy environmental framework conventions. I also requested funding from tobacco companies to support promotion of other non-tobacco-related research until 1999, and most of these requests were refused. Since 1999, I have twice discussed tobacco issues. The first was a decade ago when I was highly critical of tobacco company BAT for pressuring Uganda against the use of the insecticide DDT (for malaria control), which, because of the storage of tobacco in rural huts, was resulting in tiny amounts of DDT in tobacco leaf, which then might not have been importable into the EU. The other time I discussed tobacco was in my 2012 paper on free trade zones and illicit tobacco. In both instances I was only funded by my respective employers, Africa Fighting Malaria and the American Enterprise Institute.

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Appendix

Research Design

Protocol for Assessing Availability of Illicit Whites

A local of each city went into an establishment that was licensed to sell tobacco (e.g., news agent, tobacconist, pub, gas station, or other retailer) and asked for the price of Marlboro (the world's leading brand), and then asked for their very cheapest substitute (in some instances these might well be illicit whites). We recorded the prices of the products offered and whether the cheapest product was an illicit white.

Protocol for Assessing Consumer Knowledge and Demand for Illicit Tobacco

In two cities (London and Buenos Aires) smokers were asked about their opinions on excise taxes, availability of illicit whites, and whether they had ever bought such products. (The survey is reproduced below.) The aim was to ascertain if smokers are active participants in the market.

These data on availability and consumer attitudes toward the products will form the basis of a more robust model of illicit white availability as this working paper is improved and more data are gathered.

Model

Illicit white availability is a function of many variables such as cigarette taxes; income; literacy (knowledge of smoking harm, and knowledge and opinion about excise taxes); customs efficiency; anti-contraband efforts, such as stamps and T&T; corruption levels, especially in customs departments; and many other factors.

The aim of this empirical work is not to estimate illicit activity or volume of contraband, but just the availability of products.

We learned that in each market the location of most popular tobacco procurement varies. The most popular location in many Arab nations appears to be tobacconists, whereas in Singa-

pore it is hotels. In others such as Brazil it is grocery stores, and in India, it is most likely to be kiosks. We sampled from the most popular locations in each country.

Results

We found that in most locations in most cities illicit whites were readily available and far cheaper than the best-known brand (we compared it with Marlboro). Of all the cities targeted, London and Singapore were the most developed, and in both most of the outlets we sampled did not stock any illicit whites.

The most popular illicit whites we came across in each market are listed in the table in the main section of this paper. Using our sample of 175 observations, we ran a probit regression of the availability of illicit whites on taxes on tobacco products in the country, as well as on other country- and city-specific variables (see Table 2). Some of these variables appeared to have no impact on illicit white availability and hence dropped out of the preliminary model.

Table 2. Model Table Result

	iw_available
all_taxes	10.198 (6.094)*
gdp_country	2.44e-06 (.0002)
Врс	2.096 (1.155)*
Pct_inc_per100packs	94.497 (60.812)
Literacy	–131.14 (56.780)**
City dummy	Yes
Establishment dummy	Yes
Ν	174

*Significance at 10 percent level

**Significance at 5 percent level Source: Author's research.

Table 2 shows that the availability of illicit whites is positively

correlated with taxes (significant at 10 percent) in the country of availability and negatively correlated with levels of education in the country (significant at 5 percent). Countries with more efficient customs procedures also have fewer illicit whites (significant at 10 percent).

However, these results rely on a relatively small sample. We hope to test whether these results are robust in larger sample sizes as well as with additional controls on the right hand side.

Variable List for Model

all_taxes

- *Description:* Total taxes on the most-sold brand of cigarettes. Includes specific excise, ad valorem, VAT, import duty, and other taxes
- Units: Percent of retail price
- Source: WHO RGTE country profiles

bpc

- Description: Burden of customs procedure
- Units: scale from 1 (worst) to 7 (best)

cig_use_rate

- Description: Adult cigarette smoking prevalence, current
- Units: proportion
- Sources: WHO RGTE country profiles for all but UAE. 2013 UAE smoking rates from The Tobacco Atlas, http://www.tobaccoatlas.org/country-data/united-arab-emirates/; gender ratios from CIA World Factbook for 2013.
- Notes: UAE has a 18.1 percent smoking rate for men and 2.5 percent rate for women; male/female gender ratio 2.19

gdp_city

- Description: City GDP per capita, PPP-adjusted
- Units: International USD
- Source: Global Metro Monitor (http://www. brookings.edu/~/media/Research/Files/Reports/ 2015/01/22-global-metro-monitor/bmpp_GMM_final.pdf?la=en).
- Notes: Missing data for Amman

gdp_country

- Description: National GDP per capita, PPP-adjusted
- Units: International USD
- Source: IMF World Economic Outlook, 2015

literacy

- Description: Adult literacy rate, 2015
- Units: Proportion
- Source: CIA World Factbook

lpi

- Description: Logistics performance index: efficiency of customs clearance process
- Units: scale from 1 (worst) to 5 (best)
- Source: World Bank
- Source: World Bank

pct_inc_per_100packs

- Description: Percent of GDP per capita required to purchase 100 packs of most-sold brand of cigarettes
- Units: Proportion
- Source: WHO RGTE country profiles

price_iw

- Description: Price of illicit whites at the establishment
- Units: PPP-adjusted USD
- Source: Field survey

price_marlboro

- Description: Average price of Marlboro cigarette pack in the city
- Units: PPP-adjusted USD
- Source: Field survey

Smoker Survey

Hello, I noticed you're smoking, I'm doing a research project on illicit tobacco and I wonder if I could have two minutes of your time to ask a few questions?

The results will be published but your identity is not necessary.

Record male or female

1. How old are you?

Under 25, 26–40, 41–55, over 56

2. Where do you tend to buy your cigarettes?

Kiosk, pub/hotel, news agent, gas station, grocery or other general retailer, tobacconist, online, other

3. Do you always buy the same brand?

Yes/no

4. Do you think tax/excise rates on cigarettes are fair?

Fair, too high, not high enough

5. Illicit cigarettes are primarily good quality cigarettes on which duty/tax has not been paid. Have you ever knowingly bought illicit cigarettes?

Yes/no

6. If so did you buy the same brand as normal or a different brand? Normal brand/different brand

7. If so why?

Cheaper, avoid tax, convenience?

8. Where did you buy these products, same place as before or different?

Kiosk, pub/hotel, news agent, gas station, grocery or other general retailer, tobacconist, online, other

Results and Interpretation

A relatively high number of smokers, 14 of 68 (20 percent) across London and Buenos Aires had actually bought (at least once) what they thought were illicit white cigarettes, and the vast majority of those that had, did so because the products were far cheaper.

Far larger samples would be required for this finding to achieve the status of a robust result, but it is indicative that many smokers will actively participate in the illicit white market.

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