

# Complexities at the intersection of tobacco control and trade liberalisation: evidence from Southeast Asia

Jeffrey Drope,<sup>1</sup> Jenina Joy Chavez<sup>2</sup>

<sup>1</sup>Economic and Health Policy Research, American Cancer Society, Atlanta, Georgia, USA  
<sup>2</sup>Action for Economic Reforms, Quezon City, Metro Manila, Philippines

## Correspondence to

Dr Jeffrey Drope, American Cancer Society, 250 Williams Street NW, Atlanta, Georgia 30303, USA; [jeffrey.drope@cancer.org](mailto:jeffrey.drope@cancer.org)

Received 28 August 2013  
Accepted 6 January 2014  
Published Online First  
5 February 2014

## ABSTRACT

For more than two decades, public health scholars and proponents have demonstrated concern about the negative effects of trade liberalisation on tobacco control policies. However, there is little theoretically-guided, empirical research across time and space that evaluates this relationship. Accordingly, we use one major region that has experienced rapid and significant recent liberalisation, Southeast Asia, and examine key tobacco control-relevant outcomes between 1999 and 2012. While we find a modest increase in regional trade in tobacco products in some countries, the effects on tobacco affordability and consumption are very mixed with no clear link to liberalisation. We argue that widespread penetration of the region by transnational tobacco firms is likely mitigating the effects of trade liberalisation. Notably, tobacco control policies have also generally improved across the region, part of which is likely the result of successful regional and global efforts by civil society, governments and intergovernmental organisations. The results suggest that scholars and public health proponents should move the focus away from narrow economic aspects of liberalisation toward specific issues that are more likely to affect tobacco control, such as intellectual property rights protections and investor–state dispute settlement.

## INTRODUCTION

For more than two decades, many public health proponents including WHO Director-General, Margaret Chan, have expressed alarm about the perils of trade liberalisation for tobacco control.<sup>1–5</sup> Particularly after the US-forced liberalisation of many East Asian tobacco markets in the 1980s contributed to increased tobacco consumption, the conventional wisdom has rested on the central notions that trade liberalisation naturally leads to lower prices for tobacco products, increased consumption and decreased levels of regulation. Yet, the theoretical discussion and empirical evaluation of these propositions are remarkably sparse. In this research, we seek to help fill these important gaps.

To evaluate the implications of trade commitments and practices for tobacco control, we draw upon the recent experiences of a major region, Southeast Asia. This region is an ideal ‘most likely case’ because (a) it has experienced recent rapid trade liberalisation regionally and multilaterally (eg, World Trade Organization (WTO)) and (b) tobacco control proponents from the region continue to voice loud concern about the issue, suggesting that it is perceived as a genuine threat. The Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA) first came into force in 1992 and began to lower barriers to trade in the original six

member countries (Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand). Shortly after, four more countries joined (Cambodia, Laos, Myanmar and Vietnam). Liberalisation specific to the tobacco sector occurred mostly in the early 2000s. Some prominent public health observers predicted that tobacco would ‘in fact be one of the chief beneficiaries...’ of the AFTA.<sup>6</sup> The concern continues. For example, in mid-2012, health ministers from the ASEAN member countries declared publicly that tobacco should be excluded from the common effective preferential tariff list as ASEAN seeks to integrate even further from a free trade area into an economic community, scheduled for 2015. In essence, an exclusion of tobacco products would mean that the tobacco sector would not be part of the agreement in terms of the contractual reduction of barriers and other obligations in the AFTA. Notably, trade ministers and negotiators did not formally acknowledge the declaration, suggesting that the gap between trade and health practitioners is wide.

## THEORY AND APPROACH

There are two principal sets of theories and propositions relevant to this discussion. The first set seeks to explain the more direct economic relationship between trade liberalisation and increased consumption. The second set seeks to examine the links between trade liberalisation and levels of domestic regulation.<sup>7</sup>

In order to explain the economic relationship between trade liberalisation and tobacco consumption, it is necessary to consider briefly a progression of connected theories and propositions. To begin, there is a near consensus among economists that trade liberalisation generally leads to an increase in trade.<sup>8</sup> A similar logic applies to regional trade liberalisation: scholars have demonstrated that it often contributes to more trade within the liberalising region, though experts continue to debate how some agreements appear to create genuinely new trade while others appear to divert it away from existing robust non-regional trading relationships.<sup>9 10</sup>

Theory suggests that increases in trade from economic liberalisation can contribute to lower prices for goods in liberalised sectors. Most obviously, liberalisation is largely about the reduction of barriers to trade including most commonly tariffs, which can help firms to improve efficiencies. For example, cigarette manufacturers might choose to source imported tobacco leaf from a trading partner with which trade barriers are lower compared to previous trading partners, thereby reducing production costs. Sometimes, the efficiencies stemming from lower trade barriers contribute to lower prices



CrossMark

**To cite:** Drope J, Chavez JJ. *Tob Control* 2015;**24**: e128–e136.

because producers choose to pass on some of these gains to consumers. Importers of finished manufactured products can also choose to pass on any savings from lower barriers to consumers in the form of lower prices. Reduction in barriers to trade also frequently leads to the introduction of new imported products, thereby increasing competition.<sup>11</sup> Sometimes, to introduce new products, firms market and sell them more cheaply.<sup>12</sup> In a related dynamic, firms can also make existing products more attractive in a competitive marketplace by lowering prices.<sup>13</sup> Finally, the greater variety of goods, new and old, often begets increased marketing as firms seek increased exposure of their products to consumers in order to maintain or grow market share.<sup>14</sup> Lower prices of tobacco products,<sup>15</sup> and in some cases increased marketing,<sup>16</sup> typically lead to greater consumption.

While research on trade liberalisation and tobacco control in East Asia demonstrates that sudden significant tariff reductions in the tobacco sector in the 1980s contributed to lower prices and increases in cigarette consumption,<sup>17 18</sup> it is crucial to note that these studies were limited to a narrow set of market conditions: all of the cases involved state-owned tobacco monopolies that were forced—primarily by the US—to open up their tobacco markets quickly and vigorously to international competition. Moreover, for a variety of reasons, these monopolies had not been marketing their products aggressively, nor were they keeping prices low.<sup>17</sup> Tobacco control policies were mostly non-existent in these contexts too, so there was no obvious policy-based counter-force to the sudden changes in the tobacco marketplace.<sup>19</sup>

In the last decade, scholars have begun to examine how the components of economic liberalisation—particularly membership in complex international economic agreements—might be affecting governments' abilities to regulate within their own borders. Preliminary evidence suggests that specific provisions within some types of economic agreements can constrain governments' abilities to regulate, including in multiple policy areas such as the environment,<sup>20</sup> agriculture<sup>21</sup> and health.<sup>22</sup> Some tobacco control proponents and scholars have argued that economic liberalisation negatively affects tobacco control regulation<sup>2 23</sup> and there are clear cases in which actors have sought to use international economic agreements to undermine governments' attempts to regulate tobacco, including the recent Uruguay labelling case in a bilateral investment treaty (BIT) between Uruguay and Switzerland,<sup>24</sup> and the plain packaging case involving Australia at the WTO and in another BIT between Australia and Hong Kong.<sup>25</sup> Specific provisions can include the heightened protection of intellectual property, the subjection of public services to commercial rules and large burdens in demonstrating the necessity of a regulation, among other issues.<sup>26</sup>

There is also the possibility that the threat of using such agreements to challenge regulations can 'chill' countries' regulatory efforts.<sup>27</sup> In other words, the mere threat of a country facing opposition to regulate tobacco will dissuade it from pursuing such measures. It is sometimes difficult to identify such incidents definitively because there can be multiple explanations for governments' policy choices. In 2013, the UK announced that despite intentions to implement plain packaging of tobacco products, the government was not yet convinced of the scientific basis of the measure and might also wish to consider the Australia dispute at the WTO.<sup>28 29</sup> In the same year, however, Ireland and New Zealand<sup>29–31</sup> moved forward with plans to develop plain packaging in spite of the uncertainty around the Australia case. It is possible that reluctance to move forward stems from regulatory chill, but it is also possible that there are

other explanations; for example, countries could use such ostensible concerns as political cover to pursue alternative policy paths. In the UK, Prime Minister Cameron rhetorically blames legal uncertainty and a lack of scientific evidence, but in a possibly related development, he has publicly defended the work of his party's chief electoral strategist as a lobbyist for Philip Morris.<sup>32</sup> However, in late November 2013, the government announced the appointment of a prominent doctor to examine plain packaging formally, suggesting that the politics of the possible measure are indeed complex.<sup>33</sup>

While scholars have developed the logic of these propositions about the relationship between trade liberalisation and regulation, they have not yet been tested empirically, particularly in tobacco. However, we do know that countries belong to literally thousands of international economic liberalisation agreements, yet the number of formal cases of regulatory interference or 'chill' is relatively small. This dynamic does not suggest that similar dynamics do not occur away from public scrutiny (eg, informal discussions within government or between government and stakeholders) and/or that the cases that we do observe are unimportant; indeed, research particularly in the legal realm suggests that particular cases including in both trade agreements<sup>34 35</sup> and BITs<sup>24 36–38</sup> have had tangible impacts on public health. However, researchers have not yet identified clearly when to anticipate relevant cases or how to determine effectively if and how interference or chill is happening in non-transparent circumstances.

A significant gap in the literature is the dearth of cross-national research on the relationship between trade liberalisation and tobacco control using a reasonably large sample of countries over time, and particularly a sample that demonstrates more varied market conditions than the frequently-cited snapshot of the small sample of Asian countries in the 1980s. The ASEAN countries provide a suitable sample because of variation across many key variables, particularly tobacco product market structures, which include state-owned monopoly, dominant firm (ie, >40% market share of one firm) and the most common, oligopoly. To examine changes over time, and particularly variation before and after liberalisation, we begin our analysis in 1999, 3 or 4 years before most AFTA members liberalised their tobacco sectors, until 2011, the last year with reliable data across most countries.

We examine trade-tobacco relationships in the context of the theoretical constructs introduced above, including changes in trade flows, affordability, consumption and relevant policies. We also add a layer of complexity by introducing the dynamic of tobacco firm ownership and investment, which are likely having an intervening effect on the trade-tobacco control nexus. Because of the vast complexity of these relationships, we elucidate connections among these outcomes and policies, rather than seek to establish precise empirical causality.

## TRADE POLICIES AND FLOWS

Regional trade liberalisation has been significant in recent years in Southeast Asia, including in the tobacco product sector. Multilateral (eg, WTO) and regional commitments have contributed to marked tariff decreases in most countries. (We use the word 'contributed' because countries change tariffs for other reasons, too. In the case of at least Singapore, there has been significant unilateral liberalisation.) Using data from the WTO trade barriers database, table 1 displays WTO Most Favoured Nation (MFN) bound and applied tariff rates, and AFTA applied tariff rates on cigarettes. (In international trade, a country that grants MFN status to another country must grant equal treatment—

## Special communication

**Table 1** World Trade Organization (WTO) reported tariffs on cigarettes, 2011

Country	2011 applied MFN tariff (2011 bound rate)	AFTA applied tariff	First year with AFTA preference*
Brunei	0 (Brunei \$132/kg)	0	2010
Cambodia	7% (40%)	6%	2005
Indonesia	40% (40%)	0	2002
Laos	40% (40%)	5%	2008
Malaysia	RM 0.20/stick (RM 270/kg)	RM 0.08/stick	2003
Myanmar	30% (330%)	5%	2005
Philippines	10% (45%)	0	2002
Singapore	0 (Singapore \$115/kg)	0	2002
Thailand	60% (60%)	0	2002
Vietnam	140% (135%)	General exception	NA

Data from WTO Tariff Database.

\*Most countries phased out tariffs in steps (eg, in 5% per annum increments).

AFTA, The Association of Southeast Asian Nations (ASEAN) Free Trade Area; MFN, most favoured nation; NA, not applicable.

such as lower tariffs—to any other country that it designates MFN. Bound rates are the MFN rates agreed upon by the members of a trade agreement, while applied rates are the ones actually levied on the imports. AFTA bound rates on tobacco products are set at 5%.) While there remains variation across WTO MFN rates, there is much less variation in ASEAN rates. Considering that pre-2002 tariffs within ASEAN had typically been at WTO MFN rates, and that these rates were previously higher than 2011 rates, the decreases are significant. Singapore and Brunei have completely eliminated extra-AFTA and intra-AFTA tariffs on cigarettes. The Philippines maintains a small 10% MFN tariff and has eliminated AFTA tariffs on cigarettes. Thailand and Vietnam are the only countries with a WHO MFN rate of 60% or greater, though Thailand has eliminated its AFTA cigarette tariffs. For most ASEAN countries, tobacco sector liberalisation began to occur after joining the WTO in the mid-1990s (or before, in some cases), but as column<sup>3</sup> illustrates, AFTA liberalisation in most countries began in the early 2000s.

Trade liberalisation has generated changes in patterns of trade flows of manufactured tobacco products in some ASEAN countries. For example, using the most recent data from ERC Group Ltd., table 2 demonstrates that several of the major economies

**Table 2** Import penetration,\* ASEAN cigarette market, 1999–2011

Country	1999	2001	2003	2005	2007	2009	2011
Indonesia	0.1	0.2	0.1	0.4	0.2	0.3	0.2
Malaysia	4.8	6.1	9.6	10.0	24.1	32.6	37.2
Philippines	3.3	6.8	6.3	1.2	0.4	0.3	0.1
Singapore†	900.3	828.0	472.5	613.1	667.9	824.8	873.4
Thailand	15.1	21.8	19.6	27.6	28.4	28.7	30.9
Vietnam	n/a	n/a	n/a	0.2	0.2	0.1	n/a

Data from Euromonitor (except Vietnam imports, from ERC).

\*Import penetration=imports/(production+imports – exports), expressed as a percentage.

†Singapore demonstrates very high penetration values only because it continues to employ an import/re-export economic model; most imported cigarettes are re-exported.

ASEAN, Association of Southeast Asian Nations; ERC, .

in the region have experienced significantly greater cigarette import penetration. (We do not address the issue of tobacco leaf production and trade in this research. In general, because of growing global demand, cultivation and export of leaf has been growing steadily in most tobacco-producing countries in SE Asia and elsewhere.) In particular, Malaysia has experienced the greatest change: where imports until recently comprised less than 10% of the domestic cigarette market, imports now comprise nearly 40%. Thailand's deeper import penetration (approximately 40%) is well documented and occurred in the face of a once-powerful state-owned enterprise that had previously dominated the market.<sup>6 39</sup> In the Philippines, import penetration has actually declined slightly since becoming a manufacturing hub that produces cheaply and efficiently for domestic consumption and to a limited extent, for foreign markets (mainly Thailand).<sup>40</sup> It now imports very few tobacco products. Indonesia's lack of import penetration is in part a result of the fact that the vast majority of cigarettes consumed are kretek (clove based), and no other country in the world has large clove cigarette production.<sup>41</sup> Vietnam's lack of import penetration reflects its ongoing—previously negotiated—closed trade policies in this sector.<sup>42</sup>

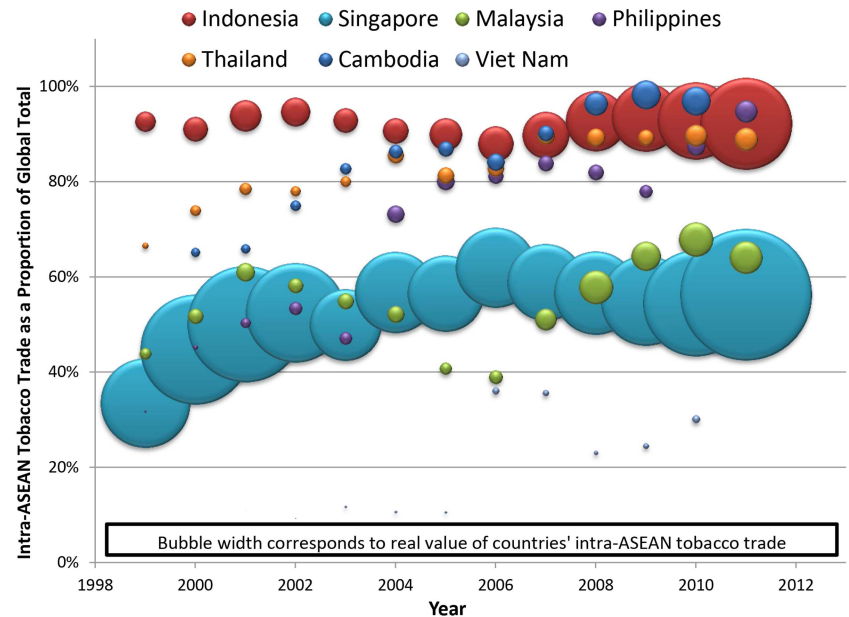
Using data from the Comtrade database,<sup>41</sup> Figure 1 illustrates mainly gradual overall increases in the proportion of intra-ASEAN trade post-regional liberalisation. Before AFTA tobacco sector liberalisation, countries' cigarette imports were typically from non-ASEAN trade partners. For example, in 1999, Singaporean imports came principally from the US (50%) and the UK (25%). A decade later, nearly half of Singapore's cigarette imports were from its larger AFTA partners, Indonesia, Malaysia, the Philippines and Vietnam, with almost no imports from the US. In terms of an export example, pre-AFTA Philippine cigarette exports were destined mainly for the US and The Netherlands. After AFTA, exports shifted; by 2011, nearly three-quarters of Philippine exports flowed to Thailand.<sup>43</sup>

The width of the bubbles, however, demonstrates another crucial related dynamic: actual intra-ASEAN trade as measured in actual dollars increased only in some countries. The sole large export increase was in Indonesia, which became a major exporter of tobacco products within the region. Most other countries' exports increased somewhat, but not a lot in real terms. Singapore's exports experienced a substantial decrease before returning to pre-AFTA levels, possibly as a result of adjusting to new regional trade flows. These patterns might simply reflect revealed regional comparative advantage in the sector<sup>44 45</sup> (that is, Indonesia is an efficient tobacco producer). The import story is potentially more complex. There were sizeable increases for four countries (Singapore, Cambodia, Thailand and Malaysia), but little change for the others; a dynamic less easy to explain using trade liberalisation as the main explanation. We examine an important alternative dynamic—investment in the tobacco sector—below, which might help to explain these mixed patterns.

## AFFORDABILITY

While it is clear that trade liberalisation in ASEAN has contributed to lower trade barriers in the tobacco sector across all members with the exception of Vietnam, an increase in import penetration in some countries and more intraregional trade in tobacco products among some countries in the region, changes in price-related variables are mixed. Because price is a fundamentally problematic measure, we instead consider changes in cigarette affordability. Affordability is a superior measure to

**Figure 1** Changes in intra-Association of Southeast Asian Nations (ASEAN) tobacco trade, 1999–2011.



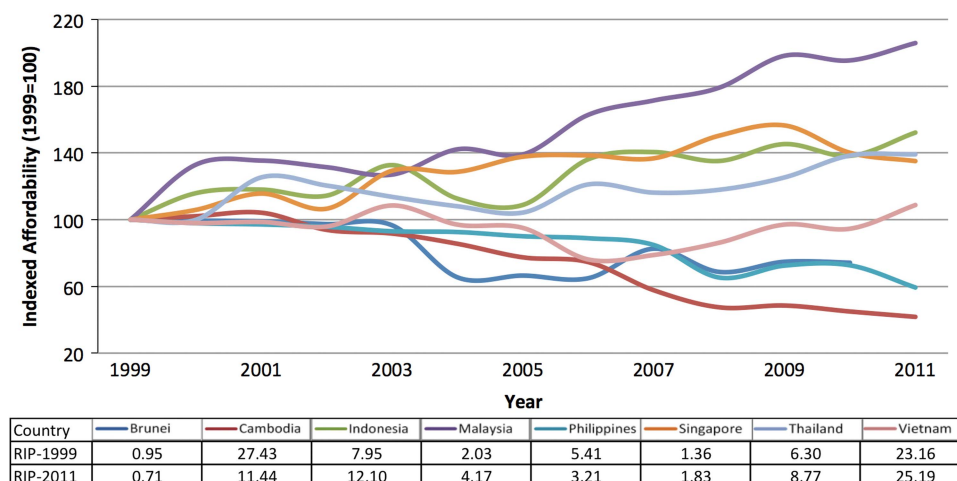
nominal prices because it incorporates changes in income and price. For example, even if cigarette prices increase, if average incomes grow more quickly—which has happened recently in much of Southeast Asia and many developing regions—cigarettes become more affordable.<sup>46 47</sup> As cigarettes become more affordable, there is typically greater consumption.

Figure 2 presents decidedly mixed results across AFTA countries in terms of changes in cigarette affordability in this era of rapid and significant trade liberalisation. Borrowing the relative income price (RIP) measure developed by Blecher and van Walbeek,<sup>46</sup> the figure illustrates the indexed change in affordability (with 1999 as the base year) by tracking changes in the proportion of annual income that the average person (measured by gross domestic product (GDP) per capita<sup>48</sup>) would require to purchase 100 standard packages of cigarettes of the least expensive available brand, using annual price data from Euromonitor and Economist Intelligence Unit (EIU). At the bottom of the figure, we also present the actual RIP values at the beginning and the end of the time period under examination. We use least expensive brand because we are interested in affordability as a

barrier to consumer entry into the market. For example, the measure naturally incorporates any market changes as the result of the introduction of less expensive imported brands after liberalisation as there is evidence of brand switching when a new, less expensive brand enters the market.<sup>15</sup>

Contrary to the conventional wisdom that would predict that deeper import penetration would make cigarettes more affordable, in the two AFTA countries where import penetration increased most dramatically (Malaysia and Thailand), cigarettes have become less affordable. In the case of Malaysia, proportionally and in real terms, cigarettes are dramatically less affordable: purchasing 100 packages of the least expensive cigarettes in 2011 would require close to 5% of the GDP per capita measure compared to approximately 2% in 1999. Thus, for Malaysians, it was possible to smoke significantly more cheaply in 1999 before any AFTA liberalisation and before the large influx of regional cigarette imports.

In several countries in Southeast Asia, a major reason for the changes in affordability is tobacco excise tax increases. For example, in the early 2000s, the Malaysian government began



**Figure 2** Changes in cigarette affordability in ASEAN countries – 1999–2011.

## Special communication

to increase specific excise taxes from RM28 per kilogram to RM220 per 1000 sticks by 2010, a substantial increase. Similarly, Singapore's excise tax on tobacco products was S\$130 per kilogram in 1999, but by 2010, the government had increased it to S\$352. Tax rate changes, however, were less dramatic in Indonesia and Thailand, suggesting that other variables also affect affordability, a discussion that is beyond the purview of this study. Notably, in the Philippines and Cambodia, two countries where cigarettes became more affordable in this time period, there were only limited tobacco excise tax increases at this time.

In Vietnam, the least liberalised country in the region, where all tariffs intra-AFTA and extra-AFTA remain high, relative affordability actually declined in the mid-2000s before returning to 1999 levels in 2011. This evidence suggests that having a state-owned tobacco monopoly is far from a guarantee that prices will remain sufficiently high to discourage consumption.<sup>49</sup>

Indonesia is an unusual case because, as a result of a 90% market share for kretek, we expect that imports will have limited effects on its markets. Despite its unusual cigarette market, Indonesia is exporting and importing more regionally, but cigarettes are significantly less affordable in 2011 than in 1999. In contrast, in the Philippines and Cambodia, both countries that experienced major changes in their tobacco markets as a result of regional trade liberalisation, cigarettes have become significantly more affordable. However, in early 2013, a new, dramatically-higher tobacco tax came into effect in the Philippines and the price of cigarettes increased markedly almost immediately. Scholars demonstrate that tobacco taxes have the largest effect on affordability<sup>50 51</sup> and the evidence here points to trade liberalisation's very limited role.

### CONSUMPTION

Though some previous research suggests that economic liberalisation leads to increased consumption under certain conditions, considering the decidedly complex relationship between trade liberalisation and affordability in the ASEAN countries, it is not clear what to expect in terms of changes in per capita consumption over this time period. As figure 3 illustrates, changes in consumption per capita, too, demonstrate mixed results, though not precisely in the same pattern that we observe with affordability. The most pronounced declines have occurred in Malaysia, Myanmar and Cambodia, while the only clear upward

trend is in Indonesia. Again, the most economically-liberalised countries are not showing any clear increases in consumption per capita. Similarly, the more closed cigarette markets are not demonstrating a downward trend either. In fact, the only ASEAN country to demonstrate a strong upward trend in consumption per capita is Vietnam, the only country that continues to have a closed tobacco sector. The evidence suggests strongly that tobacco sector liberalisation is not a significant determinant of changes in cigarette consumption per capita in Southeast Asia.

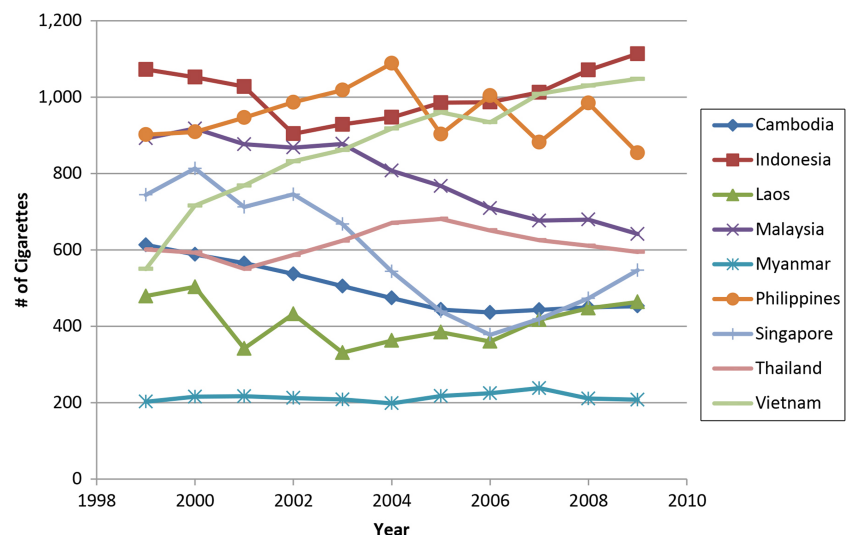
### TOBACCO CONTROL POLICIES

Because many variables typically determine levels of regulation, it is challenging to test the proposition that economic liberalisation systemically contributes to weaker tobacco control policies. However, to begin to illuminate these relationships, it is reasonable to evaluate countries' progress in tobacco control during this era of rapid and significant economic liberalisation. While evaluating tobacco control measures, it is important to consider that the WHO Framework Convention on Tobacco Control (FCTC) came into force in ASEAN countries in all but Indonesia in the mid-2000s. The treaty, with vocal proponents such as WHO Secretary-General Margaret Chan,<sup>52</sup> has helped to shape tobacco control policy in the region, though its effects undoubtedly vary across countries.

As table 3 illustrates, progress on tobacco control across three of the early compulsory FCTC measures varies considerably. Contrary to theoretical expectation, many of the countries with the most stringent tobacco control regulation—including Singapore, Brunei and Malaysia—are the countries with more open trading regimes, including in the tobacco sector. Though not a perfect association, the more closed economies—including Laos and Vietnam—are much lower tobacco control performers.

There have thus far been few overt challenges to new measures using provisions from trade or investment policy regimes. Most recently, in September 2013, Indonesia notified the WTO Secretariat to begin consultations with Australia about its use of plain packaging of tobacco products. As of late 2013, the two countries are in the WTO-mandated bilateral consultation stage. In 2002, according to a report by the Southeast Asia Tobacco Control Alliance, Philip Morris threatened to sue the Thai Public Health Ministry over proposed graphic warnings on cigarette packs, partly over alleged violations of commitments to

**Figure 3** Cigarette consumption per capita, 1999–2011.



**Table 3** Tobacco control policies in ASEAN countries

Country (year of FCTC ratification)	Article 8: smoke-free	Article 11: labelling and packaging	Article 13: TAPS (no. of specific FCTC provisions)
Brunei (2004)	2012: strong ban	2008: graphic (50/50)	Weak: until 2004/medium (8): 2005 onwards
Cambodia (2005)	Very weak (some government buildings)	2008: Text warning: 30% of both sides	Weak: until 2010/medium (7): 2011 onwards
Indonesia (no FCTC)	Weak: beginning only in 2004	Very weak	Weak
Laos (2006)	2009: partial ban	Very weak	Medium: 2010
Malaysia (2005)	2004: wide ban	2009: graphic	Medium (12.5): 2004
Myanmar (2004)	2002: weak ban	No	None
Philippines (2005)	2003: partial ban (major cities starting to expand bans)	2006: FCTC compliant	(4): 2003
Singapore (2004)	Strong smoke-free laws for decades	2004: graphic	Strong (19): pre-2000
Thailand (2004)	2002: partial ban/2008: comprehensive ban	1990: rotating, text/2005: graphic	(15): pre-2000
Vietnam (2004)	2007: Partial ban	2008: not quite FCTC-compliant text	(4): 2007/(13): 2009

Data sources: Articles 8 and 13: FCTC Country Reports<sup>53</sup>; Article 11: Canadian Cancer Society.<sup>54 55</sup> ASEAN, Association of Southeast Asian Nations; FCTC, Framework Convention on Tobacco Control; TAPS, tobacco advertising, promotion and sponsorship.

the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).<sup>56</sup> Recognising that an actual state would need to pursue alleged violations of the TRIPS commitments within the WTO mechanism, Thailand ignored the threat and successfully implemented the new warnings. Notably, a WTO case initiated in 2008 concerning Thailand's taxation of Philippine cigarette exports was not a health-based challenge or defence and is not appropriate for inclusion in a list of health-focused cases. (A different discussion among WTO members involving labelling of alcohol products in Thailand is a more relevant case, but we include only formal disputes and/or tobacco-related cases.) The crux of the case was Thailand's accusation that the Philippines exporter was undervaluing its products in order to pay less tax. Thailand, however, would not reveal its own calculation methods, which led the WTO to rule in favour of the Philippines. Some members of civil society groups promoting tobacco control in the Philippines have expressed concern that the case is a violation of FCTC Article 5.3 because tobacco firms in the Philippines, particularly Philip Morris-Fortune Tobacco, might have exerted inappropriate pressure on the Philippine government to pursue the case (interview, 9 April 2013). To date, however, critics have not produced unequivocal evidence of an Article 5.3 violation on the part of the government in this particular case.

Ironically, the oft-cited 1990 trade dispute between Thailand and the US over Thailand's cigarette import ban, might actually suggest the possibility of reverse causality in certain circumstances. In a formal dispute in the General Agreement on Tariffs and Trade's Dispute Settlement System, the US successfully demanded that Thailand remove the ban even though Thailand argued that it existed in part to protect public health. Rather than stifle tobacco control, however, the supposed 'lost' dispute galvanised public opinion, civil society and a largely indignant government to push through path-breaking tobacco control policy reforms.<sup>57</sup>

### ROLE OF FOREIGN INVESTMENT

The overwhelming evidence presented above suggests that the relationship between trade liberalisation and tobacco control is a complex one. In order to identify better how other economic policies and/or dynamics might be affecting tobacco control, we examine a closely-related economic dynamic that is likely acting as a key intervening variable: investment in the tobacco sector

by large transnational tobacco companies (TTCs).<sup>58 59</sup> For more than 20 years, in most Southeast Asian countries and across the world, investment activities in domestic tobacco markets by TTCs have been substantial and increasing. The marketplace is complex and has involved many different types of transactions, including: investment in domestic firms; discrete, new investments in manufacturing; building new relationships with tobacco leaf producers, buyers and/or processors; mergers; joint ventures; and even disinvestment in certain tobacco-related endeavours for a variety of reasons.

Table 4 provides the most recent available data on market shares and locations of tobacco manufacturing in ASEAN (Euromonitor and ERC). Undoubtedly, TTCs have been and are well established in these tobacco markets. In all but Vietnam and Thailand, one or more of the TTCs manufactures cigarettes directly. Even in Vietnam, the largest TTCs all have licensing agreements with the state-owned monopoly to manufacture and market major brands. So while it is true that trade liberalisation has shifted the patterns of imports and exports in most ASEAN countries, the major tobacco firms are continuing to manufacture domestically in most countries and this dynamic likely greatly blunts the effects we might reasonably see from liberalisation in the absence of this kind of presence of TTCs. Importantly, this dynamic mirrors widespread penetration by TTCs in other regions, where scholars have demonstrated that investment can have tangible effects on marketing, price and consumption.<sup>58 60</sup>

These data suggest that TTCs make strategic investments in order to operate effectively in most countries even without open trade, a veritable hedge position. The data in table 4 strongly suggest that TTCs are making concerted, thorough and ongoing efforts to penetrate almost all of these markets through investment. Euromonitor tobacco reports for countries in the region consistently demonstrate that beginning in the 1990s before ASEAN countries liberalised trade in tobacco products, TTCs sought aggressively to establish domestic manufacturing either through acquisition and/or investment in new facilities, including in Cambodia (BAT), Indonesia (PMI), Malaysia (BAT and PMI) and Laos (the Chinese Tobacco Corporation and later Imperial). Notably, however, investment in the tobacco sector continued at a similar or even quicker pace in the 2000s during and after rapid trade liberalisation. For example, PMI-Philippines opened a new US\$300 million cigarette

## Special communication

**Table 4** Principal cigarette market share and domestic manufacturing in AFTA, 2011

Country	Firm tobacco market share and manufacturing
Cambodia	BAT* (originally a joint venture with the state-owned tobacco company, 37%); Viniton* (29%); Paradise Tobacco (Imperial, 23%)
Indonesia	PMI/Sampoerna* (approximately 26% market share); Gudang Garam* (domestic, 28%); Djarum* (13%); BAT/Bentoel* (10%)
Laos	Joint venture between Imperial Tobacco* and the Lao Government (89%); Thai Tobacco Monopoly (7.8%)
Malaysia	BAT* (approximately 60%); JTI* (20%); PMI* (13%)
Myanmar	Rothmans of Pall Mall Myanmar* (RPMM, 37%; under political pressure, BAT sold its 60% share in RPMM in 2003 to a Singapore holding company); Myanmar Sampoerna* (acquired by PMI in 2005, 31%); State-owned company* (27%)
Philippines	PMI* is in a joint venture with Fortune Tobacco Company (PMFTC) (86%); JTI (6%)
Singapore	PMI (49%); BAT* (31%); JTI (20%). Due to open economy, it is also a major import/re-export hub for many global and regional tobacco companies.
Thailand	Thai Tobacco Monopoly* (approximately 75%); PMI (22%)
Vietnam	Government-owned monopoly, Vinataba* (98+%); all the major TTCs have or have had licensing arrangements with Vinataba to produce and sell their brands

Data from Euromonitor and ERC.

\*Connotes significant manufacturing in the country.

AFTA, The Association of Southeast Asian Nations (ASEAN) Free Trade Area; ERC, ; TTC, transnational tobacco companies.

manufacturing plant in 2003. In 2010, PMI-Philippines and the largest domestic manufacturer, Fortune Tobacco Company, created a joint venture as well as opening a new US\$20 million leaf storage facility. In Malaysia, PMI opened a new US\$40 million plant in 2005, while purchasing remaining shares in Sampoerna Indonesia, which they had partly purchased in 1995. In 2009, BAT acquired the fourth largest cigarette producer, Bentoel, in Indonesia.

The TTCs do not make their trade/investment strategies particularly transparent, but the evidence suggests a broader strategy that is a changing combination of invest and trade depending on shifting needs and conditions. In the Philippines and Malaysia, for example, TTCs produce largely for domestic markets, but also export, mostly within the region. This business model undoubtedly provides these firms increased flexibility, and might also enhance profits, though this is difficult to discern definitively since annual reports do not disaggregate by country-level profit sufficiently to evaluate reliably.

## DISCUSSION AND CONCLUSIONS

The very mixed results above across key aspects of the trade and tobacco nexus suggest that there is no clear-cut link between trade liberalisation and a decline in tobacco control and/or an increase in tobacco consumption in Southeast Asia. One popular proposed solution to mitigating trade liberalisation's effects on tobacco control is a total exclusion of tobacco from future economic agreements. While there are some obvious benefits to this proposal, it is not clear that it is politically viable or that it will have particularly large positive effects for public health.

In terms of tobacco exclusion's political viability, the broader task of affecting trade negotiations successfully is challenging, not to mention the additional burdens of returning to hundreds of previously negotiated economic agreements.<sup>61</sup> In each case, proponents would have to convince the appropriate political actors that a policy of tobacco exclusion is necessary and appropriate. These actors almost surely include governments' trade officials and negotiators, but probably also legislators and/or other major political actors. Many of these actors will have strong preferences and/or vested interests that preclude supporting such initiatives. Moreover, in a consensus-based context such as ASEAN, such efforts would have to occur successfully across all members.<sup>62</sup> A high-ranking trade official in the Philippines noted that no key trade or finance officials in ASEAN countries are openly supportive of this proposal (interview, 8 April 2013). With literally thousands of products and

hundreds of discrete issues up for negotiation in most agreements, prospects for change of this nature are dim.

Tobacco exclusion may even be problematic in some circumstances by perpetuating market structures that serve strong pro-tobacco interests (eg, by preserving the market share of a particularly politically strong TTC). It is no mistake that in two major recent economic agreements, the Pacific Island Countries Trade Agreement (PICTA) and the South Africa–European Union Trade, Development and Cooperation Agreement, it was a major TTC operating in favourable domestic conditions pushing governments for an exclusion policy (personal communication with South African treasury official, 23 April 2013).

If one of the ultimate goals is to affect price positively (and thereby reduce consumption), tobacco excise taxes are typically a superior strategy to trade barriers such as tariffs because they are non-discriminatory, can be made specific to quantity or unit, and can even be designed to account for inflation and income growth.<sup>51</sup> Tariffs as a tobacco control tool may have the perverse consequence of permitting domestic tobacco manufacturers to thrive, while having limited or no effect on price, affordability and/or consumption. While it is true that decreased competition generally leads to higher prices, it remains the prerogative of the domestic industry to set prices to optimise their goals. For example, a protected domestic firm or industry might set certain products at lower prices to encourage initiation of use and then raise prices only after solidifying its consumer base through the products' profoundly addictive nature.<sup>63</sup>

Similarly, if one of tobacco control proponents' ultimate goals is to counteract aggressive marketing by the tobacco industry, it might be more prudent to pursue FCTC-compliant bans on tobacco advertising, promotion and sponsorship. These bans do not discriminate between domestic and foreign products, but rather, address all tobacco products and thereby prevent domestic firms from taking advantage of a potentially privileged status in a domestic market.<sup>64 65</sup> However, such bans might preserve market shares forcing firms to compete more aggressively on price.<sup>66</sup>

Without doubt, there remain enormous challenges at the economic policy–tobacco control nexus: the extant case study evidence cited above suggests strongly that there are very serious challenges to public health. But the public health community must identify better the precise causal mechanisms, and develop some viable and sophisticated solutions. Simply arguing the trade liberalisation is bad for tobacco control and that excluding the tobacco sector from economic agreements is the solution is a suboptimal strategy in terms of how it addresses the challenges and its likelihood for effective implementation. As all ASEAN

countries negotiate the evolving Regional Comprehensive Economic Partnership with regional neighbours (Australia, China, India, Japan, Korea and New Zealand) and some ASEAN members consider their membership in the even more comprehensive Trans-Pacific Partnership (TPP), the impetus to find the most feasible and effective balance among health and economic commitments could not be larger. Public health proponents' concern about the TPP appears founded as even a US Trade Representative proposal to include a safe harbour for tobacco control regulations is reportedly no longer under consideration (as of late 2013).<sup>67</sup>

Instead, the public health community must target efforts toward the largest, most pressing and potentially problematic substantive problems. For example, the Uruguay labelling and Australia plain packaging challenges demonstrate clearly that investor–state dispute settlement provisions in BITs pose genuine risks to tobacco control, not least of which because wealthy TTCs have the opportunity to bully small or even larger countries in the unpredictable setting of international arbitration. Similarly, the public health community must push negotiators firmly and unequivocally not to privilege the protection of intellectual property rights over governments' moral and legal obligations to regulate for the broader public health. Economic agreements are not likely going away any time in the near or medium term, so the public health community needs to be better prepared to make appropriate and effective requests and demands.

### Key messages

- ▶ The precise relationships between trade liberalisation and tobacco control are unclear: liberalisation has mixed effects on tobacco product affordability, consumption, and regulation.
- ▶ Tobacco industry investments likely play a much large role than trade and trade policy in shaping key tobacco control outcomes, including affordability, consumption and regulation.
- ▶ Considering the political challenges, instead of attacking trade liberalisation broadly, tobacco control proponents should consider focusing more attention on discrete trade policy issues that appear to have potentially the largest effects on public health, including investor-state dispute settlement and increased intellectual property protections.

**Acknowledgements** We thank Raphael Lencucha and Benn McGrady for our fruitful collaboration in this area and for valuable comments on this manuscript. We also thank Alex Liber for his outstanding help with the data graphs and figures. We are grateful to participants in the Innovations in Tobacco Control lecture series at the Institute for Global Tobacco Control at the Johns Hopkins Bloomberg School of Public Health, and particularly to Dr Joanna Cohen for encouragement and support. All errors remain our own.

**Contributors** JD and JJC executed the research together, including data collection and key informant interviews. JD wrote the first draft. JJC edited the draft. Both authors agreed to the final content.

**Funding** Johns Hopkins Bloomberg School of Public Health (through the Bloomberg Initiative to Reduce Tobacco Use) contributed generous financial support to collect data and execute key informant interviews. The article's contents are solely the responsibility of the authors and do not necessarily represent the official views of the Bloomberg Family Foundation or the Johns Hopkins Bloomberg School of Public Health.

**Competing interests** None.

**Ethics approval** The Institutional Review Board (IRB) at Morehouse School of Medicine (American Cancer Society's IRB of record) in Atlanta, GA, USA reviewed and approved fully this research.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data sharing statement** Economic data are drawn mainly from proprietary databases, particularly Euromonitor and ERC. We can only share these data with their permission. All data from COMTRADE and World Bank Development Indicators can be shared publicly.

### REFERENCES

- 1 Shaffer ER, Brenner JE, Houston TP. International trade agreements: a threat to tobacco control policy. *Tob Control* 2005;14:ii19–25.
- 2 Callard C, Chitanondh H, Weissman R. Why trade and investment liberalisation may threaten effective tobacco control efforts. *Tob Control* 2001;10:68–70.
- 3 Gleeson D, Friel S. Emerging threats to public health from regional trade agreements. *Lancet* 2013;381:1507–9.
- 4 Reynolds T. Anti-Smoking Forces Retaliate Against Overseas Tobacco Marketing. *JNCI J Natl Cancer Inst* 1991;83:677–9.
- 5 Chan M. *WHO Director-General considers the tobacco endgame [Internet]*. New Delhi, 2013 [cited 2013 Dec 5]. [http://www.who.int/dg/speeches/2013/tobacco\\_endgame\\_20130911/en/index.html](http://www.who.int/dg/speeches/2013/tobacco_endgame_20130911/en/index.html)
- 6 Vateesatokit P, Hughes B, Ritthphakdee B. Thailand: winning battles, but the war's far from over. *Tob Control* 2000;9:122–7.
- 7 Howse R. Democracy, science, and free trade: risk regulation on trial at the World Trade Organization. *Michigan Law Rev* 2000;98:2329.
- 8 Baldwin JR, Gu W. Trade liberalization: export-market participation, productivity growth, and innovation. *Oxf Rev Econ Policy* 2004;20:372–92.
- 9 Frankel J, Stein E, Wei S. Trading blocs and the Americas: the natural, the unnatural, and the super-natural. *J Dev Econ* 1995;47:61–95.
- 10 Yeats AJ. Does Mercosur's trade performance raise concerns about the effects of regional trade arrangements? *World Bank Econ Rev* 1998;12:1–28.
- 11 Melitz MJ, Ottaviano GIP. Market size, trade, and productivity. *Rev Econ Stud* 2008;75:295–316.
- 12 Wathieu L. Consumer habituation. *Manag Sci* 2004;50:587–96.
- 13 Raju JS, Srinivasan V, Lal R. The effects of brand loyalty on competitive price promotional strategies. *Manag Sci* 1990;36:276–304.
- 14 Labonté R, Mohindra KS, Lencucha R. Framing international trade and chronic disease. *Globaliz Health* 2011;7:21.
- 15 Chaloupka FJ, Cummings KM, Morley CP, et al. Tax, price and cigarette smoking: evidence from the tobacco documents and implications for tobacco company marketing strategies. *Tob Control* 2002;11(Suppl 1):i62–72.
- 16 Tye JB, Warner KE, Glantz SA. Tobacco advertising and consumption: evidence of a causal relationship. *J Public Health Pol* 1987;8:492.
- 17 Chaloupka FJ, Laixuthai A. *U.S. Trade Policy and Cigarette Smoking in Asia [Internet]*. National Bureau of Economic Research, 1996 Apr. Report No.: 5543. <http://www.nber.org/papers/w5543>
- 18 Honjo K, Kawachi I. Effects of Market Liberalisation on Smoking in Japan. *Tob Control* 2000;9:193–200.
- 19 Hilamo H, Crosbie E, Glantz SA. The evolution of health warning labels on cigarette packs: the role of precedents, and tobacco industry strategies to block diffusion. *Tob Control* 2014;23:e2.
- 20 Green A. Climate change, regulatory policy and the WTO how constraining are trade rules? *J Int Economic Law* 2005;8:143–89.
- 21 Pollack MA, Shaffer GC. *When Cooperation Fails: The International Law and Politics of Genetically Modified Foods*. Oxford University Press, 2009.
- 22 Pollock AM, Price D. The public health implications of world trade negotiations on the general agreement on trade in services and public services. *Lancet* 2003;362:1072–5.
- 23 Gilmore AB, Fooks G, McKee M. A review of the impacts of tobacco industry privatisation: implications for policy. *Global Public Health* 2011;6:621–42.
- 24 Lencucha R. Philip Morris versus Uruguay: health governance challenged. *Lancet* 2010;376:852–3.
- 25 Jarman H. Attack on Australia: Tobacco industry challenges to plain packaging. *J Public Health Pol* 2013;34:375–87.
- 26 McGrady B. *Trade and Public Health: The WTO, Tobacco, Alcohol, and Diet*. Cambridge University Press, 2011.
- 27 McGrady B. Trade liberalisation and tobacco control: moving from a policy of exclusion towards a more comprehensive policy. *Tob Control* 2007;16:280–3.
- 28 Keating D. UK Shelves Plan for Plain Packaging. *European Voice* [Internet]. 2013 Jul 12 [cited 2013 Jul 12]. <http://www.europeanvoice.com/article/2013/july/uk-shelves-plans-for-plain-cigarette-packaging/77870.aspx>
- 29 Sparrow A. UK plans for plain cigarette packaging to be shelved [Internet]. *The Guardian*. 2013 [cited 2013 Dec 5]. <http://www.theguardian.com/society/2013/jul/12/plans-plain-cigarette-packaging-shelved>.



## Special communication

- 30 Turia T. Biennial Oceania Tobacco Control 2013 [Internet]. Auckland, New Zealand, 2013 [cited 2013 Dec 5]. <http://www.beehive.govt.nz/speech/biennial-oceania-tobacco-control-2013>
- 31 World Health Organization. Ireland joins tobacco plain packaging leaders [Internet]. 2013 [cited 2013 Jul 12]. <http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/tobacco/news/news/2013/05/ireland-joins-tobacco-plain-packaging-leaders>
- 32 Watt N. Tory strategist Lynton Crosby set to escape new register of lobbyists. *The Guardian* [Internet]. 2013 Jul 17 [cited 2013 Jul 31]. <http://www.theguardian.com/politics/2013/jul/17/tony-strategist-lynton-crosby-register-lobbyists>
- 33 James W, Geller M. Britain seeks to force plain cigarette packaging on tobacco firms. Reuters [Internet]. London, UK; 2013 Nov 28 [cited 2013 Dec 5]. <http://uk.reuters.com/article/2013/11/28/us-britain-cigarettes-packaging-review-idUKBRE9AR0BM20131128>
- 34 McGrady B, Jones A. Tobacco control and beyond: the broader implications of United States—clove cigarettes for non-communicable diseases. *Am J Law Med* 2013;34:265–89.
- 35 Voon T. The WTO appellate body outlaws discrimination in U.S. flavored cigarette ban. *Insights* 2012;16:1–7.
- 36 Franck SD. The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law Through Inconsistent Decisions. *Fordham Law Review* [Internet]. 2005 [cited 2013 Jul 12];73. <http://papers.ssrn.com/abstract=812964>
- 37 McGrady B. Implications of Ongoing Trade and Investment Disputes Concerning Tobacco: Philip Morris v. Uruguay [Internet]. Rochester, NY: Social Science Research Network, 2011 Aug. Report No.: ID 2046261. <http://papers.ssrn.com/abstract=2046261>
- 38 Mitchell AD, Studdert DM. Plain packaging of tobacco products in Australia: A novel regulation faces legal challenge. *JAMA* 2012;307:261–2.
- 39 Chantornvong S, McCargo D. Political economy of tobacco control in Thailand. *Tob Control* 2001;10:48–54.
- 40 Parker J. Trade boost. *Tob Rep* 2011; March:50–4.
- 41 United Nations. United Nations Statistics Division—Commodity Trade Statistics Database (COMTRADE) [Internet]. UN COMTRADE. 2010 [cited 2011 Jul 1]. <http://comtrade.un.org/db/ce/ceSnapshot.aspx?px=H3&cc=240399>
- 42 AFTA. Association of Southeast Asian Nations (ASEAN) Free Trade Agreement (AFTA). [Internet]. ASEAN Secretariat, 2013 [cited 2013 Jul 31]. <http://www.asean.org/news/item/annex-2-tariff-schedules>
- 43 Tobacco International. *PMI Invests in Philippine Hub*. Tobacco International, 2007.
- 44 Whalley J. Why do countries seek regional trade agreements? In: Frankel J, ed. *The Regionalization of the World Economy*. Chicago, IL: University of Chicago Press, 1998:63–90.
- 45 Korinek J, Melatos M. *Trade impacts of selected regional trade agreements*. Paris, France: Organization of Economic Cooperation and Development, 2009. Report No.: 87.
- 46 Blecher E, van Walbeek CP. An international analysis of cigarette affordability. *Tob Control* 2004;13:339–46.
- 47 Blecher EH, Van Walbeek CP. Cigarette affordability trends: an update and some methodological comments. *Tob Control* 2009;18:167–75.
- 48 World Bank. World Development Indicators [Internet]. World Bank, 2012 [cited 2012 Apr 17]. <http://data.worldbank.org/indicator>
- 49 Tobacco Reporter. *In Vietnam, the cigarette industry invests for the long term*. Tobacco Reporter, 2005.
- 50 Chaloupka FJ, Straif K, Leon ME. Effectiveness of tax and price policies in tobacco control. *Tob Control* 2011;20:235–8.
- 51 WHO. *WHO technical manual on tobacco tax administration*. Geneva, Switzerland: World Health Organization, 2010. [http://whqlibdoc.who.int/publications/2010/9789241563994\\_eng.pdf](http://whqlibdoc.who.int/publications/2010/9789241563994_eng.pdf).
- 52 Chan M. The changed face of the tobacco industry [Internet]. Singapore, 2012. [http://www.who.int/dg/speeches/2012/tobacco\\_20120320/en/index.html](http://www.who.int/dg/speeches/2012/tobacco_20120320/en/index.html)
- 53 WHO. FCTC Parties Report. Geneva, Switzerland: WHO National Center for Health Promotion, 2011 September. [http://www.who.int/fctc/reporting/party\\_reports/Philippines\\_5y\\_report.pdf](http://www.who.int/fctc/reporting/party_reports/Philippines_5y_report.pdf).
- 54 Canadian Cancer Society. Cigarette Package Health Warnings: International Status Report [Internet]. Canadian Cancer Society, 2008. <http://www.fctc.org/dmdocuments/warnings-intl%20status%20report%20oct%202008.pdf>
- 55 Canadian Cancer Society. *Cigarette Package Health Warnings: International Status Report* [Internet]. Canadian Cancer Society, 2010 [cited 2012 Aug 28]. <http://www.cancer.ca/Canada-wide/About%20us/Media%20centre/CW-Media%20releases/CW-2010/~media/CCS/Canada%20wide/Files%20List/English%20files%20heading%20not%20in%20publications%20section/CCS%20international%20warnings%20report%202010-English.ashx>
- 56 Southeast Asian Tobacco Control Alliance. *Tobacco Industry Interference in Health Policy in ASEAN Countries*. Bangkok, Thailand: SEATCA, 2009.
- 57 Vateasatokit P, Ritthiphakdee B. Tobacco Control in Thailand. *Mahidol J* 1997;4:1–8.
- 58 Gilmore AB, McKee M. Exploring the impact of foreign direct investment on tobacco consumption in the former Soviet Union. *Tob Control* 2005;14:13–21.
- 59 Gilmore AB, McKee M. Tobacco and transition: an overview of industry investments, impact and influence in the former Soviet Union. *Tob Control* 2004;13:136–42.
- 60 Holden C, Lee K, Fooks GJ, et al. The Impact of Regional Trade Integration on Firm Organization and Strategy: British American Tobacco in the Andean Pact. *Bus Polit* 2010;12: Article 3.
- 61 Jawara F, Kwa A. *Behind the Scenes at the WTO: The Real World of International Trade Negotiations*, Updated Edition. Zed Books, 2004.
- 62 Aggarwal VK, Chow JT. The perils of consensus: how ASEAN's meta-regime undermines economic and environmental cooperation. *Rev Int Polit Econ* 2010;17:262–90.
- 63 Slater SJ, Chaloupka FJ, Wakefield M, et al. The impact of retail cigarette marketing practices on youth smoking uptake. *Arch Pediatr Adolesc Med* 2007;161:440–5.
- 64 Saffer H, Chaloupka F. The effect of tobacco advertising bans on tobacco consumption. *J Health Econ* 2000;19:1117–37.
- 65 Blecher E. The impact of tobacco advertising bans on consumption in developing countries. *J Health Econ* 2008;27:930–42.
- 66 Depken CA. The effects of advertising restrictions on cigarette prices: evidence from OECD countries. *Appl Econ Lett* 1999;6:307–9.
- 67 Inside U.S. Trade. *U.S. Will Not Table Texts On Tobacco, SPS Enforceability At TPP Round*. Inside US Trade. 2013; March 4.



# Complexities at the intersection of tobacco control and trade liberalisation: evidence from Southeast Asia

Jeffrey Drope and Jenina Joy Chavez

*Tob Control* 2015 24: e128-e136 originally published online February 5, 2014

doi: 10.1136/tobaccocontrol-2013-051312

---

Updated information and services can be found at:  
<http://tobaccocontrol.bmj.com/content/24/e2/e128>

---

*These include:*

## References

This article cites 38 articles, 18 of which you can access for free at:  
<http://tobaccocontrol.bmj.com/content/24/e2/e128#BIBL>

## Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

---

## Notes

---

To request permissions go to:  
<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:  
<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:  
<http://group.bmj.com/subscribe/>