

Does tobacco taxation have an influence on industry consolidation?

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Outline

- Background
- What is consolidation?
- Looking at the tobacco industry globally
- Case studies
- Link between consolidation/production concentration and tobacco taxation?
- Next steps
- Conclusions

Background

- This ongoing study is a response to a direct concern raised by a number of countries:
 - While the threat of illicit trade remains to be a convincing argument against tobacco tax increases
 - The industry has been recently arguing that if excise taxes in a cigarette-producing country were to be increased it would relocate to another country with lower excise rates
- Purpose: explore the veracity of such argument

What is consolidation?

- Consolidation refers to the joining of companies through
 - Mergers: when two firms agree to go forward as a single new company rather than remain separately owned and operated,
 - Acquisitions: when one company buys another and establishes itself as the new owner,
 - Privatization: deliberate sale by government of state-owned enterprises or assets to private economic agents,
 - Additional aspect: concentration of production facilities in one (fewer) location(s) => economies of scale => facilitated by increased globalization.

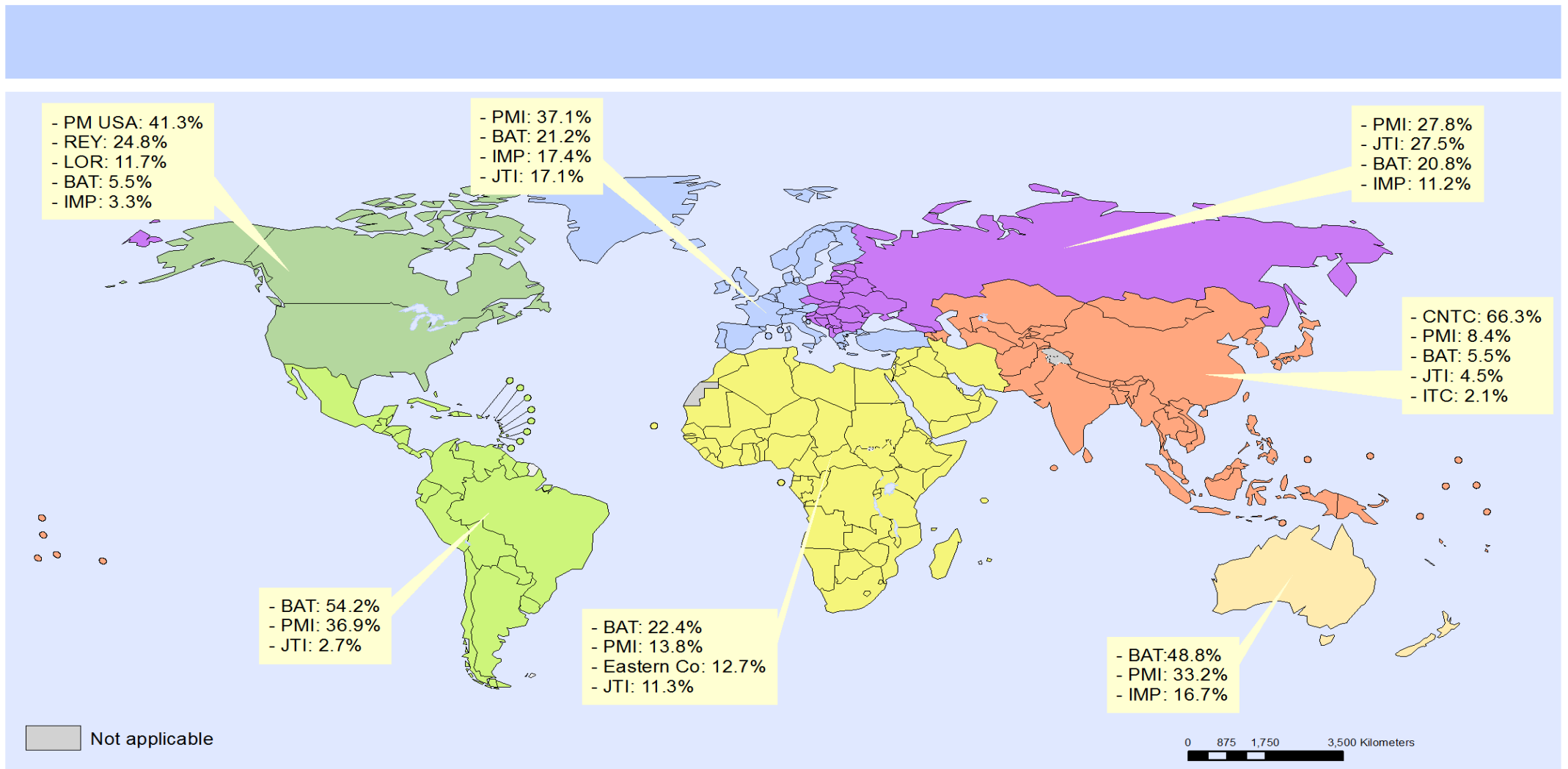
This has been seen in a number of sectors like alcohol or mining and is not limited to tobacco.

Tobacco industry consolidation

- Big four (Philip Morris International, British American Tobacco, Japan Tobacco International and Imperial Tobacco) + China National Tobacco Company:
 - Owned 69% of global market share in 2000
 - Owned 81% of global market share in 2011

Source: Tobacco Atlas, 2012 and Euromonitor 2013

Top tobacco companies market shares by geographical distribution



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Euromonitor International. Passport 2012.
Map Production: Public Health Information
and Geographic Information Systems (GIS)
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Tobacco industry consolidation

Consolidation activities	Examples
Privatization	Kyrgystan => Imperial (Reemtsma) 1998 Morocco => Imperial (Altadis) in 2003 Turkey => BAT in 2008
Acquisitions	International companies: Rothmans => BAT 1999 RJ Reynolds => JTI 1999 Reemtsma => Imperial 2002 Gallaher => JTI 2007 Imperial ? Local (private) companies: Mexico: Cigarrera La Moderna => BAT 1997 Indonesia: Sampoerna => PMI 2005 and Bentoel => BAT 2009
Joint ventures (helps gain market shares)	VINATABA with PMI, BAT, JTI and Imperial brands produced under license. CNTC with PMI (distribution of Marlboro)

Sources: ERC 2009, WHO/NCI Monograph on tobacco and tobacco control economics (chapter on privatization, forthcoming), Euromonitor 2013 company reports.



BAT and production concentration

- Since 2000, the number of factories reduced from 87 to 44. Present in 39 countries.
- In their own words:
 - *"Our companies have closed or downsized some factories and consolidated production elsewhere in recent years. These changes enable us to rationalise our machinery and technology to establish a more cost-effective operational base for the future."*

BAT Annual Report 2011

Production concentration

case study: BAT in Central America

- Honduras: BAT's sub-regional hub for Central America
- Guatemala: PMI's sub-regional hub for Central America

Country	Closure of BAT factories	Main import partner	Imports, kg Before closure	Imports, kg After closure	Sales, million cigarettes, 2000
Guatemala	1994	El Salvador then Honduras	5,236 (1993)	535,609 (1995)	2,693
El Salvador	1997	Honduras	629,168 (1996)	1,116,932 (1998)	1,649
Panama	1998	Honduras but also China, Germany and US	40,006 (1997)	958,917 (1999)	923
Nicaragua	1999	Honduras	99,494 (1998)	1,050,834 (2000)	2,390
Costa Rica	2000	Honduras	8,650 (1999)	1,296,887 (2001)	1,970
Honduras					3,014

Sources: ERC 2009, Comtrade, Euromonitor 2013 sales data

Production concentration case study: BAT in Africa

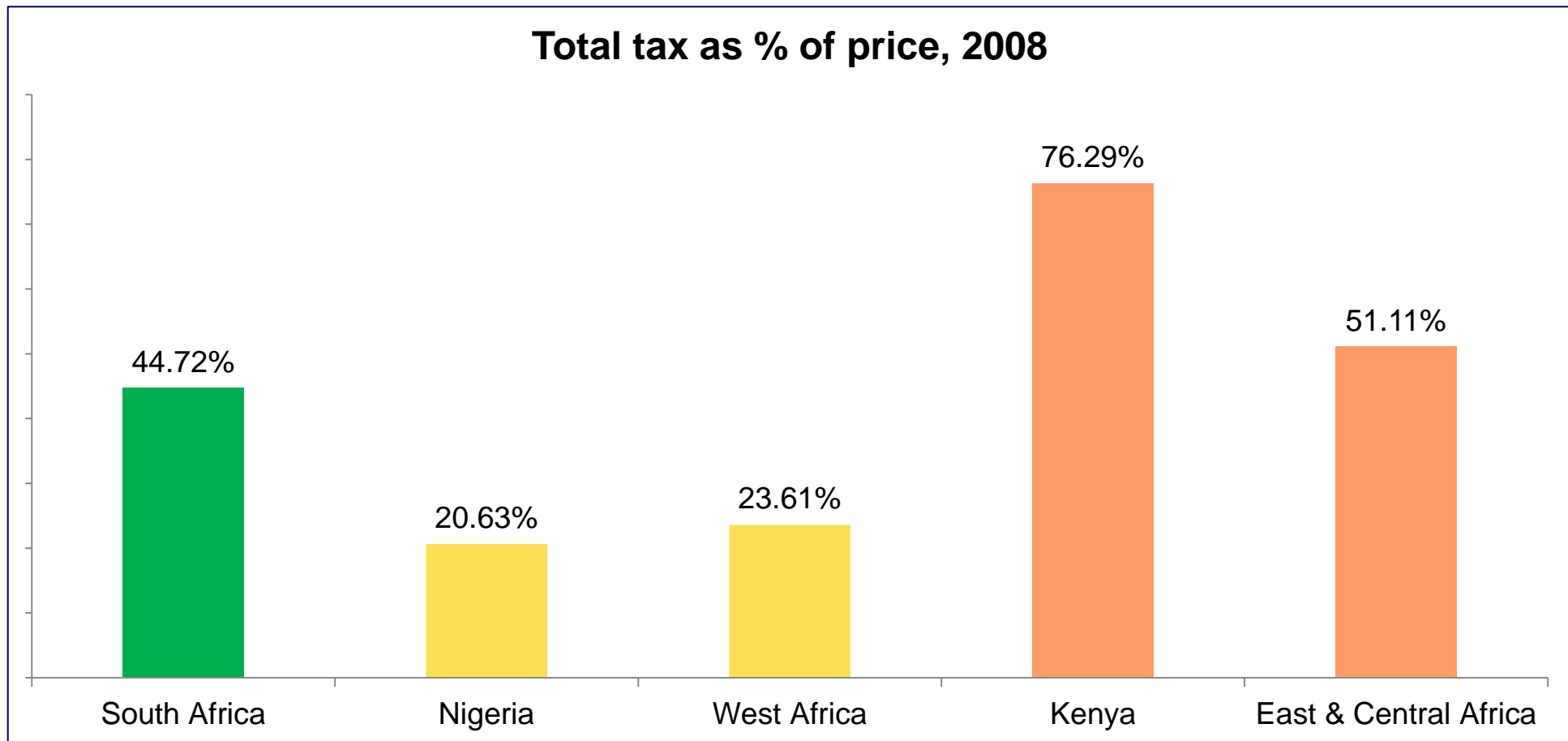
- Main operational facilities are based in South Africa, Nigeria and Kenya.
 - Large producing countries where BAT has a very large majority in the market.
 - Concentration of production in those countries increased => regional hubs
 - Kenya: geared to export to Central and East African countries (about 30% of total exports in 2010)
 - Nigeria: West African countries (66% of total exports in 2011)
 - South Africa exports to both sub-regions (48% of total exports to Central and East Africa and 25% of exports to West Africa).

Production concentration case study: BAT in Africa

Country	Closure of BAT factories	Main import partner	Imports, kg 2006	Imports, kg 2008	Sales in downsized country, million cigarettes, 2008	Sales in partner country, million cigarettes, 2008
Uganda	2006	Kenya	41,525 (2005)	1,388,800 (2007)	859	7,467
Ghana	2006	Nigeria	118,188	1,530,971	1,726	16,033
Mauritius	2007	Kenya	409,787	2,426,358	772	7,467
Zambia	2007	Kenya	800,537	1,188,511 (2007)	1,377	7,467
Cameroon	2007	South Africa	686,619	2,576,039	2,625	24,459

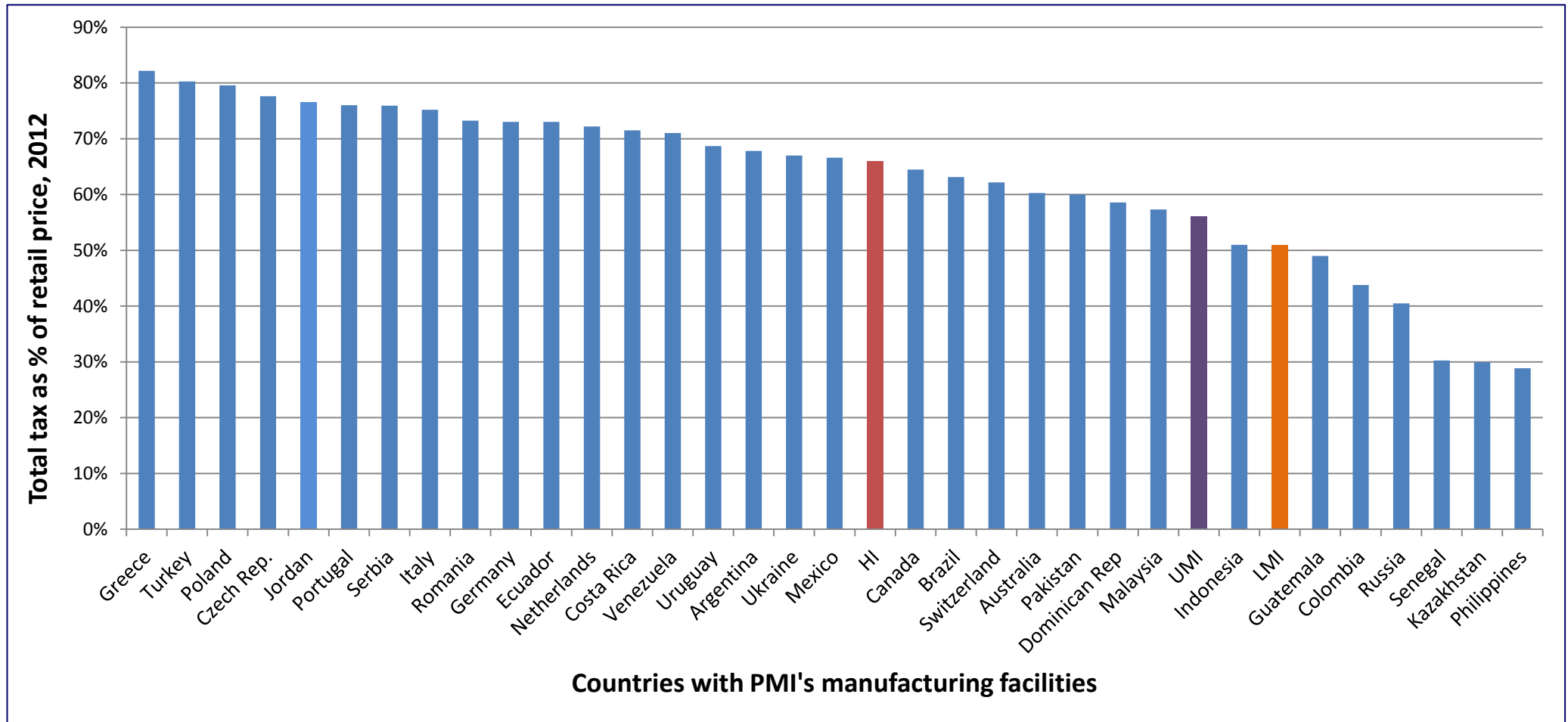
Sources: ERC 2009, Comtrade, Euromonitor 2013 sales data

Production concentration case study: BAT in Africa TAXES?



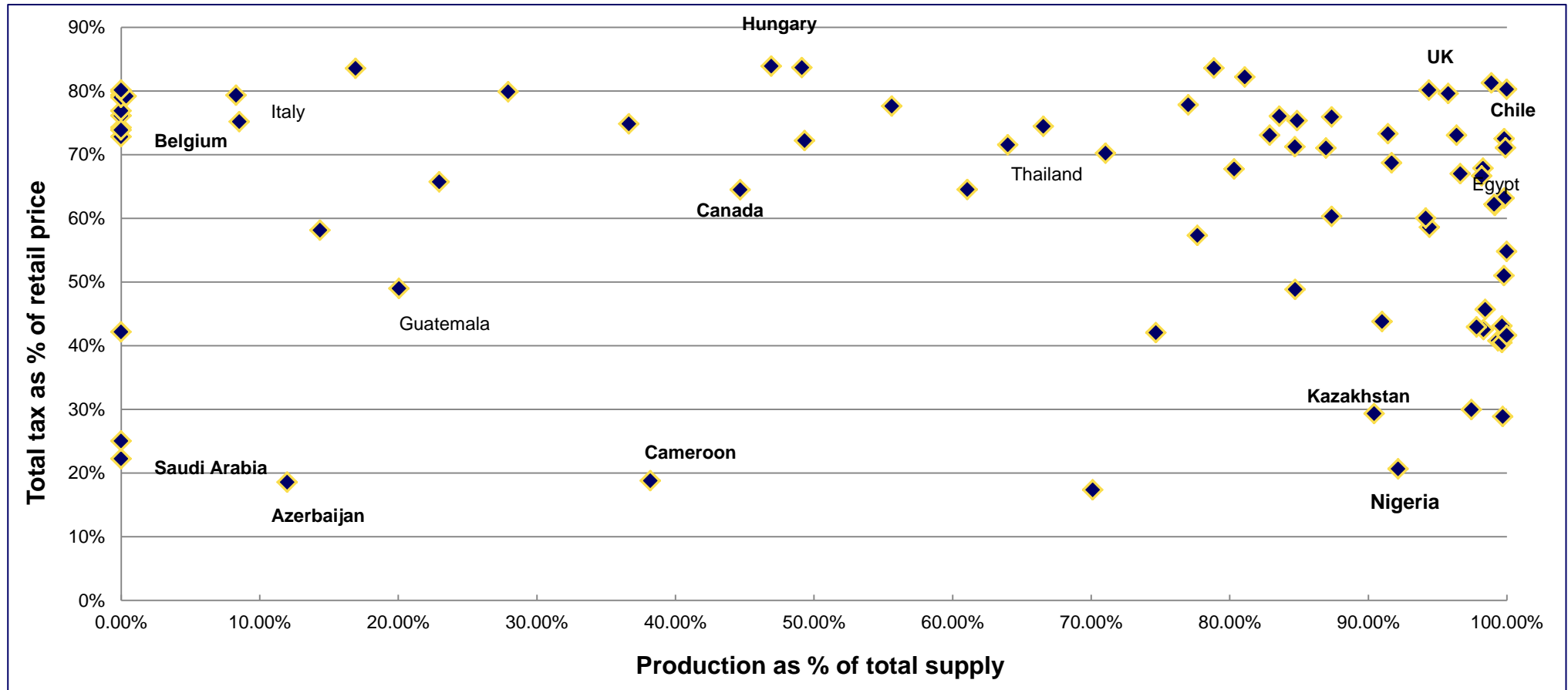
Source: Tax rates from the WHO Report on the Global Tobacco Epidemic 2013 and UN sub-regional classification

PMI Manufacturing facilities



Source: Calculations using tax rates from the WHO Report on the Global Tobacco Epidemic 2012, World Bank income group classification, 2012, and PMI manufacturing facilities from PMI's Website

No apparent association between local production importance and tax levels



Sources: Tax information from the WHO report on the Global tobacco Epidemic, 2013;
Production and supply data from Euromonitor International, 2013.

Note: Total supply represents local production + imports, exports were kept in in order to account for countries that export large parts of their local production.

Next steps

- Work in progress
- Panel data econometric analysis
 - Dependent variable: local production size (production as % of supply or production as % of sales)
 - Independent variables:
 - Tax rate (or tax yield PPP)
 - Sales / market size
 - Estimate of trade openness
 - Quality regulatory (from WB corruption index: perceptions of governments ability to promote private sector development)

Conclusions

- Industry consolidation common in many sectors and has been ongoing for some time now.
- Tobacco industry consolidation led to global market dominance by four multinationals + China tobacco monopoly.
- Closure of facilities in some countries and concentration in others is one aspect of consolidation
 - Does not seem to be linked to taxation
 - But more to cost reduction in general, economies of scale => regional hubs
 - Choice of country: Market size seems to be a key factor