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The Taiwan Tobacco and Liquor Corporation: To ‘join the ranks of global companies’

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ABSTRACT

Until the late 1990s, the Taiwan Tobacco and Liquor Corporation (TTL) focused almost exclusively on serving the domestic market as a highly protected monopoly. This paper describes how the company has adopted a more outward looking strategy since 2000, with ambitions to become a regional, and eventually global, business by 2021. Drawing on company documents and industry sources, the paper argues that this shift in strategy was a direct reaction to the decline in domestic market share following liberalisation of the Taiwanese tobacco market and adoption of tougher domestic tobacco control measures. Market opening occurred as a result of pressure from the U.S. Trade Representative in the 1980s, as well as World Trade Organization membership in 2002. It is argued that TTL’s efforts to globalise operations have been limited by bureaucratic company management and structures, and ongoing political tension between Taiwan and China. However, the relative success of TTL’s alcohol branch, and potential détente as the Taiwanese government reaches out to improve relations with China, may provide TTL with new opportunities to achieve its goal of becoming a regional player with global ambitions. This article is part of the special issue ‘The Emergence of Asian Tobacco Companies: Implications for Global Health Governance.’

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Introduction

The Taiwan Tobacco and Liquor Corporation (TTL) is a state-owned manufacturer and distributor of cigarettes and alcohol products.¹ The TTL was established as a government agency during Japanese colonial rule (1895–1945), exercising a monopoly until Taiwan’s entry into the World Trade Organization (WTO) in 2002. Although TTL lost market share, following the forced opening of the domestic market by the U.S. in the late 1980s, foreign competition accelerated after WTO accession. Transnational tobacco companies (TTCs) cite Taiwan as one of the world’s key growth markets (BAT, 2009; Imperial, Tobacco, 2014; JTI, 2013), as Taiwan has one the world’s highest average consumption of cigarettes per smoker per day, and the highest in Asia (Ng et al., 2014). Existing research

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on the Taiwanese tobacco market and industry has mainly focused on the impact of tobacco control measures on smoking cessation (Hsieh, Yen, Liu, & Lin, 1996) and shows that, despite an increase in quit attempt – and annual cessation rates in the country (Chang, Sung, Zhu, & Chiou, 2014), youth smoking (especially among women) is increasing (Wen, Chen, et al., 2005; Wen, Cheng, Eriksen, Tsai, & Hsu, 2005). Others have looked at the domestic effects of market opening (MacGuill, 2014; Wen, Cheng, et al., 2005), including stronger tobacco control measures (Chang et al., 2014), as well as the strategies of TTCs in Taiwan (Wen, Chen, et al., 2005). In this paper, however, we focus on adaptation by TTL to the radically changing business environment.

In this context, this paper analyses how TTL shifted, from a company focused on domestic customers, to a more outward looking company. TTL's ambitions to globalise were initially prompted by a significant decline in domestic market share due to foreign competition from the 1990s onwards and further fuelled by WTO membership and the adoption of stricter domestic tobacco control regulations. Efforts to expand exports and other foreign operations have been limited by the company's bureaucratic nature, and ongoing political tensions between Taiwan and China. However, by building on the success of TTL's alcohol export business and by taking advantage of potential warming relations with China, TTL has the opportunity to become a regional company with global ambitions.

Background

TTL's roots lie in a government monopoly of opium, established during the late nineteenth century, which became the Monopoly Bureau of the Taiwan Governor's Office in 1901 after absorbing the Taiwan Pharmaceutical Factory, Taiwan Salt Bureau and Taiwan Camphor Bureau (TTL, 2016b). When the Taiwan Provincial Monopoly Bureau was formed in 1945, the monopoly extended to eight products: opium, salt, camphor, tobacco, alcohol, matches, weights and measures, and petroleum. Following reorganisation, the name was changed to the Taiwan Tobacco and Wine Monopoly Bureau in 1947, maintaining a monopoly over alcohol, tobacco and camphor until 1968. The monopoly remained in control of the tobacco market until 1987, when the first steps towards market liberalisation took place with the import of foreign cigarettes (STMA, 2012).

Since 2000, TTL has undergone important changes. In 2002, the alcohol and tobacco monopolies were officially abolished, and the Monopoly Bureau was renamed the Taiwan Tobacco and Liquor Corporation (TTL, 2010). No longer a monopoly TTL became a state-owned enterprise governed by a chairman and board of directors. While TTL has since expanded its product lines to household products, supplements, cosmetics and food products, tobacco and alcohol remain its main revenue sources.

Alongside these changes, 'the goal of becoming an international company' (TTL, 2010, p. 1) has become a declared business strategy. Statements about TTL's global ambitions can be found in annual reports since 2009 (see TTL, 2010, 2011, 2012, 2013, 2014). The 2010 *Annual Report*, for example, summarises TTL's operational strategy as 'rooted in Taiwan, connected with Asia-Pacific, marketed world-wide' (TTL, 2011, p. 5). Global ambitions have also been voiced by TTL executives. For instance, when publicly unveiling the company's future plans, then Chairman Martin Tsai stressed the pivotal importance of

foreign expansion (Lin, 2007, p. 11). Similarly, TTL Chairman Hsu An-hsuan reaffirmed the belief that ‘growing the company requires a global perspective’ (Liu, 2011).

Methods

We first searched the scholarly literature on the Taiwanese tobacco industry using Google Scholar, PubMed and JSTOR, focusing on the fields of public health, business studies, economics, Asian studies, international relations and political science. As this literature was limited, we reviewed TTL annual reports (available for 2009 until 2015) and other publicly accessible company materials. These documents provided some understanding of the domestic and international activities and plans of the company. For a fuller, and more independent perspective on TTL activities, we then systematically searched the tobacco specific sources *Tobacco Journal International*, *Tobacco Reporter* and *Tobacco Asia*, as well as more general business news such as the *Financial Times* and *Bloomberg News*. In addition, we searched economic data and market analyses from Euromonitor International (<http://www.euromonitor.com/>), MarketLine, Datamonitor, UN trade database (<http://comtrade.un.org/>). The latter was particularly important because we were unable to find company figures on exports, foreign direct investment (FDI) and other economic indicators and therefore had to rely on country data.

Next we searched industry documents in the Truth (formerly Legacy) Tobacco Industry Documents Library to understand market access strategies of foreign TTCs in Taiwan. We used the keywords ‘Taiwan’, ‘monopoly’ and ‘Taiwan Tobacco and Wine Monopoly Bureau’. We used snowballing to generate further search terms including names of companies, individuals and activities.

Based on the above sources, we constructed a chronological narrative of the drivers behind TTL’s globalisation strategy, the exact form of this strategy, and the extent to which global ambitions have been achieved. For this purpose, we used the analytical framework by Lee and Eckhardt (2016), structuring the analysis with the following three questions: what are the key factors behind TTL global business strategy? Which global business strategies has TTL pursued? How globalised is TTL to date?

Findings

What are the key factors behind the TTL’s global business strategy?

Liberalisation and foreign competition

The most important factor behind TTL’s ‘push’ for globalisation was the opening of Taiwan’s tobacco market and the resulting increase in competition from foreign tobacco companies (TTL, 2010, 2011, 2012, 2014). Liberalisation happened gradually, set in motion after nearly 40 years of authoritarian rule by the Nationalist Party or Kuomintang (KMT), when democratic political forces gained ground during the 1980s. This shift resulted in rapid economic growth, social change and, as Cheng (1989, p. 474) describes,

the political entrepreneurship of the new opposition, as reflected in its ability to set the agenda, to use extralegal methods in finessing the repressive legal framework, to shift the bargaining arenas and eventually to force the ruling elite to institute a new set of rules.

This democratic transition went hand in hand with steady economic change, consisting of export promotion of labour-intensive manufacturing, and liberalisation of trade and investment (Park, 1990). It was this process that brought about the first steps towards the liberalisation of the state-owned tobacco industry.

Alongside domestic transformation, external pressure played an equally important role. Taiwan was among the Asian economies that were pressured to open their markets during the 1980s under Section 301 of the U.S. Trade Act of 1974, including the tobacco sector. In 1986, the U.S. Trade Representative declared that ‘acts, policies and practices of Taiwan regarding the distribution and sale of US beer, wine and tobacco products in Taiwan are actionable under Section 301’ (USTR, n.d.). These ‘acts’ included quotas and tariffs on imported cigarettes, a ban on the retail sale of imported cigarettes, as well as a ban on print advertising of imported cigarettes. The U.S. government announced that it would take proportional countermeasures if Taiwan continued these practices (General Accounting Office, 1992; USDHHS, 2000). Taiwan eventually agreed to remove several measures on tobacco products (USTR, n.d.). In 1987, the Taiwanese government then took initial steps towards trade liberalisation, allowing a certain amount of U.S., and then European Union and Japanese, tobacco imports (Wen, Cheng, et al., 2005). Liberalisation had an immediate effect on imports, which multiplied 10-fold, and increasing from less than a 2% to 17% share of the market from 1986 to 1987 (RJ Reynolds, 1989), so TTL’s domestic market share dropped from nearly 100% to 83%. By 1997, TTL’s market share had dropped to 67.9% (Table 1). It is notable that the increase in market share by imports during this period was two to five times higher than in Japan, South Korea and Thailand, which all liberalised their markets during the same time. An important reason, according to Wen et al. (2006), was that Taiwan was immediately flooded with smuggled cigarettes after market opening in 1987. According to internal industry documents, smuggled cigarettes in the 1990s constituted 17% of the total market (78% of legal imports on average) comparable to the level of legal imports. Foreign tobacco companies were allegedly complicit in the illicit trade, as a means of evading import quotas, increasing profits and expanding market presence. According to Wen et al. (2006, p. 162), smuggling increased TTC’s market share, ‘as it affected preference and increased consumption of the foreign brands’, especially among young smokers. Youth preference for foreign brands increased sharply during this period, from 2% in 1986 to 75% in 2000 (Wen, 2004). For adult smokers the preference for foreign brands increased from 2% in 1986 to about 50% (Wen, 2004).

From the late 1980s, TTL’s monopolistic position started to break down. Following the adoption of ‘Taiwan Tobacco and Wine Monopoly Bureau’s Provisions of Tobacco, Wine and Beer Import’ in 1987, the monopoly was restricted to domestically manufactured

Table 1. Percentage share of Taiwan tobacco market, 1997–2013 (companies ranked by 2013 figures).

	1997	2008	2013
Japan Tobacco Inc.	15.8	35.7	37.7
Taiwan Tobacco & Liquor Corp	67.9	32.2	29.9
BAT	4.5	10.8	11.3
Philip Morris International	3.8	6.1	6.6
Others	8	7.1	6.3
Total	100	100	100

Source: Compiled from Gourlay (1998) and data for 2008–2013 from Euromonitor (2014).

products, ending jurisdiction over foreign imports other than a monopoly surcharge for every pack imported (STMA, 2012). Local agents were permitted to import and distribute foreign products, giving rise to two major importers: Hongtong Company (distributing British American Tobacco's [BAT] products) and Jietai Company (distributing Japan Tobacco International's [JTI] products).

However, even though barriers on tobacco imports were substantially lowered under U.S. pressure, the Taiwanese market remained relatively protected by a range of tariffs and quotas, which buffered TTL from full competition for another decade. During the 1990s this situation changed amid Taiwan's democratisation process, which led to more far-reaching liberal and market-driven economic policies. By extension, Taiwan sought to become a member of the WTO (USITC, 2000). Lowering trade barriers on tobacco products, as well as abolishing the state monopoly over tobacco, were key issues during the ensuing 12 years of accession negotiations. For example, in Taiwan's 83-page long WTO accession agreement, tobacco is mentioned 119 times, far more than any other product or issue area (2001). Official negotiations were concluded in 1999 but '[i]n keeping with [China's] wishes, Taiwan was not admitted to the organisation until after the PRC's accession on December 12, 2001' (Dumbaugh, 2007, p. 14). To meet the requirements of WTO membership by 2002, Taiwan radically reformed its legislation on tobacco and alcohol production and trade. To this end, the Taiwanese government adopted a new Tobacco and Alcohol Administrative Law in 1999, which 'provided the blueprint for the conversion of the board into a private enterprise' (Cohen, 2006). The board was divided into two segments: (a) an administrative bureau, which became part of the Ministry of Finance and (b) a newly formed state-owned corporation responsible for production and distribution. At the same time, import duties and quotas were removed. In this way, 'full-fledged competition in both the tobacco and alcoholic beverage markets' was introduced (Cohen, 2006).

While through most of the 1990s TTL was able to keep its market share above 60% (Table 1), the market became almost equally split between foreign and domestic cigarettes in 2003, almost immediately after WTO accession, and further declined to below 50% in 2004 (Wen, Cheng, et al., 2005). Since then, TTLs market share has dropped to 29.9% of the Taiwanese market (Table 1). From all foreign tobacco companies, JTI has benefited the most from the opening of the Taiwanese tobacco market to foreign competition. JTI sees Taiwan as one of its key markets, and its most important market in Asia (for a further discussion see MacKenzie, Eckhardt, & Prastyani, 2017) and with a share of almost 40%, JTI has now overtaken TTL as the tobacco company with the largest market share in the country. Other TTCs, such as BAT and Philip Morris International (PMI), gained market shares of about 6–11%. Although the last few years have been relatively stable in terms of market share, the trend remains that the share of TTL is decreasing, while foreign tobacco companies see their share increase (Table 1).

Two developments are likely to further erode TTL's domestic market share. First, foreign tobacco companies have begun building production facilities in Taiwan. For example, Imperial Tobacco built its first factory in the region in Taiwan in 2008 to supply the local and other Asian markets more cost effectively (Euromonitor, 2014; Imperial Tobacco, 2014). In 2013, JTI announced plans to build a plant at the Tainan Technology Industrial Park to shift exports to local production, thus reducing costs and becoming more competitive. The Ministry of Economic Affairs welcomed the US\$281.6

million investment, approving the project in 2014, but the decision provoked a formal complaint by public health advocates on the grounds it violated the Statute for Investment by Foreign Nationals and the Framework Convention on Tobacco Control (Anonymous, 2015b). Market share is also being challenged by domestic start-up companies, such as the Miaoli Tobacco Company established in 2011 (Mint Global, n.d.; TTL, 2012).

Second, the government has struggled to effectively control the illicit trade. According to the industry-funded Tobacco Institute of the Republic of China, 100 million packs are smuggled annually (5.2% of the market), representing a loss in tax revenues of NT\$3.18 billion (US\$156 million) (Anonymous, 2010). Industry advocates argue that smuggling has boomed since a 42% increase in the tobacco tax in 2013. In response, the Executive Yuan (2014) announced an increase in seizures (21 million packs in 2013) but reports suggest customs and law enforcement efforts have had limited impact.

The introduction of tobacco control measures

Alongside competition for market share, another external factor influencing TTL during this period were ‘tighter anti-smoking policies and the general increased influence of the domestic tobacco control movement’ (2010, p. 1). An active tobacco control movement by the Taiwan Medical Alliance for the Control of Tobacco, John Tung Foundation and other civil society organisations, emerged during the 2000s, inspired in large part by the negotiation of the World Health Organisation (WHO) Framework Convention on Tobacco Control. While Taiwan is not a WHO member state – due to continued obstruction from China (for a discussion see Chang, 2010) – it signed and ratified the agreement in 2005. This led the government to adopt stronger measures including an amended Tobacco Hazard Prevention Act, which came into effect in 2009. The Act extended smoke-free areas by banning smoking from ‘work-places, restaurants, bars, hotels, shopping malls, campuses, train stations and government agencies’ (Chang et al., 2014). The Act also introduced graphic health warnings and a complete ban on tobacco advertising, promotion and sponsorship. In addition, ‘the surcharge on a pack of cigarettes [was raised] from NT\$10 (US\$0.33) to NT\$20 (US\$0.66) ... with a proportion of the tax proceeds dedicated to funding the new tobacco control programme’ (Chang et al., 2014, pp. 140–141). The adult smoking prevalence rate has steadily decreased between 1990 and 2011, from 32.5% to 19.1% (although rising among adult females and youth) (John Tung Foundation, n.d.). Given calls for further restrictions in future, with the ultimate ‘goal of reducing smoking prevalence by half over a nine-year period’ (MacGuill, 2014), TTL will face a continued shrinking domestic market.

Which global business strategies have TTL pursued?

Export promotion

As a result of the factors discussed in the previous section, TTL thus expressed the ambition to become a ‘globalized enterprise’. Yet, TTL first sought to ‘become a major regional player’ by 2016 (n.d., p. 3). To achieve this, increasing tobacco exports to neighbouring countries was seen as a first step, focusing on establishing a regional distribution system via a network of agents including in China, Japan, Korea, Cambodia, Vietnam, the Philippines and U.S. (Canadean, 2015). This system of regional tobacco distribution

was created by 'selecting quality distributors' in target countries, building on the companies' existing networks for alcohol exports (TTL, 2011, 2012, 2014).

Within Asia, TTL initially focused heavily on the Chinese market and, according to TTL Chairman Hsu An-hsuan (Liu, 2011), annual reports and other public statements, China has indeed been TTL's most important export market since 2003 (Huaxia, 2003; TTL, 2010, 2011, 2012, 2013, 2014). As one think tank report put it, 'TTL must first establish itself on the Chinese market before it can globalize' (Liu, 2009). To this end, the company announced in 2007 that it was establishing 'a complete retail network' in China (Lin, 2007, p. 11). An important step in this regard has been the launch of the flagship cigarette brands *Longlife* and *Gentle* in 2007 initially for duty-free markets along the Chinese coast (Lin, 2007, p. 11), and then duty paid markets following a product launch in Beijing in 2009 (Li, 2009). The premium brand *Alishan* then followed suit in 2011. These launches were facilitated by the opening of TTL offices in Beijing, Guangzhou and Shanghai in 2009 (TTL, 2010), and Hong Kong, Xiamen and Zhengzhou since 2010 (TTL, 2011).

Despite these efforts, TTL exports to China have been lower than hoped. An important factor, despite rhetoric to the contrary, has been a lack of clear vision or strategy for boosting exports. For example, TTL closed its Hong Kong office in 2013, soon after it was officially opened because it was 'not achieving its goals', while the future of the remaining offices in China are uncertain (TTL, 2013). The aforementioned report by a Taiwanese think tank, on TTL's globalisation strategy, also concludes that the approval, opening and closing of offices in China in quick succession is a clear indication of indecisiveness regarding TTL's foreign aspirations. In addition, the report criticises TTL for failing to work together with 'first class distribution agents in China' (Li & Zhou, 2014). The report concludes that the biggest obstacle preventing TTL expansion is its control by people with a 'conservative public servant' attitude rather than true 'global perspective' (Li & Zhou, 2014).

Another hindering factor in China has been the persistence of monopoly protection (including distribution) of the tobacco market, which continues to severely restrict all imports (discussed in Fang, Lee, & Sejpal, 2016). Fluctuating political tensions, between China and Taiwan, have also played an important role. When TTL began to seek entry to the Chinese market in 1999, with Taiwan Beer seeking to become a registered company in China, there were rising diplomatic tensions between the two countries. Cross-strait relations were notoriously volatile but the election of Chen Shui-bian in 2000 as Taiwanese President, favouring full independence for Taiwan, raised tensions considerably (Romberg, 2008). Consequently, the Chinese authorities became even more reluctant 'to allow Taiwanese companies [such as TTL] whose names carry meaning that involves Taiwanese sovereignty to conduct business in China under their own names' (BBC Monitoring Asia Pacific, 2009). In terms of trademark registration, China was particularly reticent about products or companies containing words such as 'Chunghwa', 'China', 'Central' and 'Taiwan' (Tsai, Lee and Chen Co, n.d.). This explains why TTL's 'Taiwan beer' took ten years to be approved, and there were significant challenges registering Chunghwa post, Chunghwa telecom and China Petrol. As a result of political tensions, since 2010 TTL has acknowledged the need to decrease dependence on China and diversify export markets to Japan, South Korea (Liu, 2011) and Southeast Asia, as well as further afield to North America and Europe (TTL, 2010). Tobacco exports to these countries so far have remained limited, although alcohol exports to Asia and elsewhere have been more successful.

Licensed production and FDIs

Beyond exports, TTL also aims to improve its 'competitive edge' through licensed production in targeted foreign markets (TTL, 2010, 2011, 2012, 2013). Licensing is described by the company as a way to 'save on shipping costs' in the short run (Lin, 2007, p. 11), but also as an initial step towards foreign direct investment (FDI) for eventual 'global market expansion' and to 'become an international corporation with overseas production' (TTL, 2012, pp. 6–7). In the medium term, TTL seeks to 'facilitate international cooperation' with 'major international manufacturers' (TTL, 2013, p. 7) in the form of joint production facilities, and mergers and acquisitions, to increase foreign production and distribution. This may include eventually building production facilities overseas (TTL, 2011). The huge Chinese market has again figured centrally in these plans. TTL's strategy is to supply Chinese customers in coastal provinces by exports, and reach inland populations through local production once demand is created (Huaxia, 2004). To achieve this, TTL has indicated the importance of granting 'authorization to local [Chinese] manufacturers' to produce TTL's products 'or look for original equipment manufacturing partners to produce [TTL's] products' (Lin, 2007, p. 11). In its annual reports, TTL also mentions plans for similar licensing schemes in other Asian countries, and beyond the region (TTL, 2011, 2012, 2013).

However, TTL has not been very successful so far in its attempt to sign licensing agreements with foreign partners. All efforts have so far focused on China and these activities have been severely restricted by Chinese legislation banning foreign investment in the tobacco industry (Ding, 2006). Despite this, TTL has taken some concrete steps to facilitate production in China. For example, TTL has trained 'over 100 (Taiwanese) personnel who have manufacturing licenses to work in China ... to oversee [local] manufacturing' (Lin, 2007, p. 11). TTL also signed a joint venture agreement with the China-based Dabaihui group with the aim of launching *Alishan* series cigarettes and Taiwan Kaoliang wine on the Chinese market (Anonymous, 2013). The Dabaihui Group specialises in marketing and brand development, previously working with Guangdong Tobacco Industrial to launch a successful luxury brand in 1999 (Dabaihui Group, n.d.). While it is unclear when Taiwan Alishan Tobacco and Liquor group went into operation, *Alishan* was already launched on the Chinese market in 2010, and is currently marketed to nearly 20 countries and regions including Macao, Hong Kong, South Korea, Singapore, Japan, U.S. and Malaysia. Moreover, in 2012, TTL opened Taiwan Liquor in Xiamen as its first overseas subsidiary (2013). It is unclear if this has implications for plans reported earlier on the establishment of a Taiwan Beer production facility in the Yangtze delta, with investments up to 500 million RMB (US\$75.9 million) (Zhang, 2010). Finally, TTL has had licensed manufacturing agreements with PMI and JTI since at least 2009, under which TTL produces and distributes popular brands like *Marlboro* and *Next* (PMI), and *LD*, *More* and *Winston* (JTI) in Taiwan (Euromonitor, 2014; see also TTL, 2011).

Product diversity and development

A further strategy pursued by TTL has been product development. First, TTL has sought to develop 'international brands' aimed at attracting new consumers in foreign markets (2010, p. 4). It has so far developed two variations of the *Long Life* brand explicitly to meet consumer trends and preferences in China (Li, 2009). Second, TTL is developing more mid- to higher-price products, most immediately, to compete against foreign

tobacco companies which target this segment of the domestic market. While economy brands dominate the Taiwanese market by volume and total sales, luxury brands earn greater profit margins (TTL, 2010), and increasingly dominate the export markets worldwide (Gilmore, 2012). Third, the company has sought to diversify into other types of product lines, including cosmetics, snacks and supplements containing byproducts of alcohol beverages (TTL, 2012).

Marketing and advertising

A further globalisation strategy has been to introduce intensive marketing and advertising. Under monopoly control, tobacco marketing was not much needed. After market opening, and the dramatic rise in the popularity of foreign brands (Wen, 2004), TTL started 'to transform part of the production workforce into marketing staff' (Lin, 2007, p. 11). Although most of the allocated budget is spent on domestic marketing, 'global marketing' has become a key new task (TTL, 2012). In 2011, TTL marketing executives decided to add English to its logo (previously only in Chinese) 'to gear to international standards' (TTL, 2012). Marketing has extended to participation in international events, like the Asian Games in Guangzhou in 2010, to generate awareness of TTL's leading brands. In a bid to attract a younger consumer base, TTL has begun to use celebrities on its promotional material similar to TTCs. China has been the initial focus of increased marketing campaigns (TTL, 2013; see also Lin, 2007, p. 11), but other 'familiar international markets', such as South Korea, Japan and Southeast Asia, are mentioned in annual reports (TTL, 2011, 2012). There is evidence that TTL has encountered challenges in China where the company has lobbied hard to promote the four varieties of *Long Life* amid increasingly restrictive tobacco control measures. In 2011, TTL advertised *Long Life* on 63 billboards across the country as outdoor advertising was regulated by local authorities (Jenings, 2011). The adoption of national legislation in 2015 banning tobacco advertising outdoors and in public spaces has now closed this avenue and new forms of indirect marketing may be used in the future (Rajagopalan, 2015).

In summary, while TTL has frequently expressed aspirations to 'join the ranks of global companies', its strategies so far have not been globally oriented. Rather, they are almost exclusively focused on one foreign market: China. Even in China, TTL has not been very successful in achieving its goals, mainly as a result of poor management decisions and political tensions across the straits. Recently, the company has recognised the need to reduce its dependence on China by expanding into other foreign markets. We assess below whether TTL has been able to do so when considering how globalised TTL has become to date.

How globalised is TTL to date?

In order to assess how globalised TTL is, we have to rely primarily on official government export data for Taiwan (International Trade Centre, 2015a, 2015b). [Figure 1](#) shows that total Taiwanese tobacco exports have grown substantially since 2001. The value of exports grew, from less than US\$2.4 million in 2001 to almost US\$60 million in 2014. Export volumes between 2010 and 2014 more than doubled. Although [Figure 1](#) seems to capture to a significant extent rising TTL exports, part of this growth may also be attributed to Imperial Tobacco, which built a manufacturing facility in Taiwan in 2008 to supply

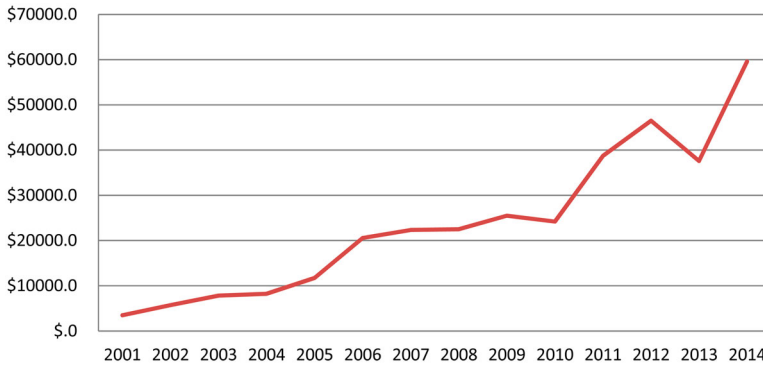


Figure 1. Taiwan’s export of tobacco products in US\$000s (2001–2014). Source: compiled from trade map data, International Trade Centre (2015a, 2015b).

its Asian operations, particularly exports to Japan (Schmid, 2015). So, figures from 2009 onwards (when Imperial Tobacco started to use the facility) include exports from both TTL and Imperial. Therefore, we have also searched TTL annual reports (2008–2015) for export data (summarised in Figure 2). Figure 2 shows that the value of TTL’s exports increased significantly between 2008 and 2012, but then dropped again. Although it is unclear what caused this decrease in exports, such fluctuations suggest that TTL’s global expansion is a slow and volatile process at best.

On main export destinations (Table 2), in 2001 these were led by China (including Hong Kong and Macau). By 2014, exports to the combined markets of China, Hong Kong and Macao had grown substantially, remaining among the top five export destinations for TTL. However, Table 2 suggests Vietnam had become the largest export market, followed by Japan, Korea and Thailand. While it is difficult to distinguish exports by TTL versus Imperial Tobacco to Japan and Korea, exports to China, Vietnam and Thailand are likely to be largely TTL’s. The importance of Vietnam as an export market, as indicated by data from the International Trade Centre (2015a) and shown in Table 2, appears to contradict company reports (see e.g. TTL, 2012), which

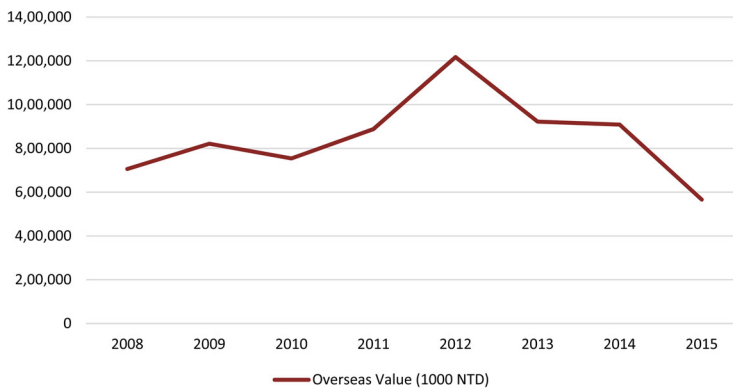


Figure 2. TTL tobacco export in 000’s new Taiwan dollar (2008–2015). Source: TTL annual reports 2009–2015.

Table 2. Top five destinations for Taiwan tobacco exports, 2001 and 2014 (US\$000s).

Rank	2001		2014	
	Country	Value (US\$000s)	Country	Value (US\$000s)
1	China	3491	Vietnam	33,471
2	Philippines	51	China	14,896
3	U.S.	1	Japan	10,674
4	N/A		Korea	241
5	N/A		Thailand	163
World		3486		59,575

Source: Compiled from Trade Map data, International Trade Centre (2015b).

Note: Data for China includes Hong Kong and Macao special administrative zones.

state that up to 90% of export revenue is from China. The lack of reliable and detailed data on the legal, and significant illegal, trade of tobacco products may explain this anomaly. While annual reports contain important information on company finances, data on key indicators of globalisation set out by Lee and Eckhardt (2016a), such as FDI and exports by foreign market, are not provided by TTL. Standardised data on such indicators across tobacco companies remains needed.

Discussion

The findings of this paper suggest that the Taiwanese tobacco market has already undergone important changes since 2000. As part of WTO accession in 2002, Taiwan was forced to open its domestic market to foreign competition and has since become a key ‘battle-ground’ for the world’s major tobacco companies. This paper shows how TTL has been forced to turn, at least in outlook, from a company solely focused on the domestic market, to one with stated ambitions to join ‘the ranks of global [tobacco] companies’ (2010, p. 1). We find that this shift was a direct response to declining domestic tobacco sales resulting from increased competition from TTCs – since the end of the 1990s TTL share of the domestic tobacco market dropped from more than 60% to less than 30% – and tougher tobacco control measures. Given the importance of tobacco sales for TTL which has been consistently accounting for more than half of total revenue since 2012, TTL had no other choice than to seek alternative markets for their tobacco products (TTL, 2013, 2014, 2015, 2016a).

However, despite TTL’s aspirations to ‘go global’, the paper demonstrates that its globalisation strategy has focused mainly on China so far. Although we lack reliable data, TTL’s annual reports suggest that exports, foreign licensing, product development, as well as advertisement and marketing have almost exclusively been aimed at the Chinese market. This has created a high degree of dependency on the success of these initiatives, which have, so far, been hindered by poor management decisions and ongoing political tensions between Taiwan and China. Consequently, although TTL’s foreign tobacco sales and FDI have increased since the early 2000s, the company remains far from becoming a global, or even regional, player. TTL continues to depend heavily on the domestic market for its core revenues, with foreign earnings a small fraction of its total sales (Canadian, 2015). In short, at present TTL remains a minor regional tobacco company at best.

How likely is it that TTL will become a major regional or even a global tobacco company in the foreseeable future? The company’s success with exporting alcohol

products suggests that TTL has growing experience and capacity to expand into foreign markets. The flagship brand Taiwan Beer, especially popular among the expatriate community in the U.S., is spearheading the company's growth abroad. TTL beer and other alcohol product exports are expanding to countries such as Australia, Cambodia, Japan, the Philippines and New Zealand (Canadean, 2015; Cohen, 2006). The success of TTL's alcohol exports does of course not guarantee foreign expansion of its tobacco business, but it may pave the way for TTL to become a more successful tobacco company abroad as senior management learn from this experience. The easing of political tensions between China and Taiwan in 2015, including an historic meeting between Chinese President Xi Jinping and then Taiwan President Ma Ying-jeou (of the KMT party) in Singapore, was motivated in part by a desire to promote business relations amid continued volatility in the world economy. TTL cites 'improving inter-straight relations' as one of the key external factors affecting its ambitions to expand into the Chinese market (TTL, 2010, 2011). However, tensions may return after the 2016 elections, which were won by the Democratic Progressive Party – a party generally associated with a more critical stance towards China than the KMT party ('How will Mainland China', 2016).

Internal factors will also be important. A recently published report suggests that, as long as TTL fails to adopt clear directive strategies, it will not be able to fulfil its ambition to become a major regional, let alone global, player (Li & Zhou, 2014). Of particular importance in this regard is the question of privatisation, an issue debated for more than two decades. Although senior executives have indicated time and again that, the sooner TTL is privatised the better, the government has remained hesitant to proceed with issuing a public offering because of the company's current lack of competitiveness (Cohen, 2006; Lin, 2007, p. 11). Job losses, and the fear of a takeover by one of the major TTCs, appear to be the main concerns. Takeover fears do not seem unfounded, based on internal documents suggesting foreign companies have been keen to buy TTL since the 1990s (BAT, n.d.; Gourlay, 1998).

The changes so far to TTL operations, and likely trajectory in pursuit of regional and global markets, raise important implications for public health (for a more in-depth discussion on implications for public health see Lee & Eckhardt, 2017b). In Taiwan, adult smoking prevalence rates are likely to continue to decline, although rising among females and youth. If smoking patterns in Taiwan continue to follow those of other high-income markets, competition among tobacco companies, including TTL, for this shrinking market will intensify. The main public health impact of a more competitive TTL seeking new markets, however, will be regional and global. Under state ownership, the government will continue to protect TTL domestically, while encouraging its transformation into an outward looking company. With three out of five of the world's largest cigarette consuming countries in Asia (China, Japan and Indonesia), and continued growth expected in the short to medium term, TTL would join an already competitive regional market. Evidence suggests that this greater competition will exert downward pressure on price, and result in increased marketing and promotion, as new entrants gain and existing firms maintain market share (Anonymous, 2015a). This will lead to rising consumption, especially in countries such as Indonesia (which has not yet signed the Framework Convention on Tobacco Control), Myanmar and Cambodia, where tobacco control measures remain relatively weak.

Note

1. The current name of the company, TTL, was adopted in 2002. To avoid confusion, we refer to the company throughout the paper as TTL including the period prior to 2002 when the company was differently named (i.e. Monopoly Bureau of the Taiwan Governor's Office, Taiwan Tobacco and Wine Monopoly Bureau).

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References

- Anonymous. (2010, October 27). Higher surcharge fans cigarette smuggling in Taiwan: Study. *China Post*. Retrieved from <http://www.chinapost.com.tw/taiwan/national/national-news/2010/10/27/277625/Higher-surcharge.htm>
- Anonymous. (2013, March 4). 台湾烟酒股份有限公司阿里山香烟大陆销售 [Taiwan tobacco and liquor Corp's Alishan cigarettes distribution in Mainland China]. *Huangye*. Retrieved from <http://shenzhen.huangye88.com/xinxi/13412365.html>
- Anonymous. (2015a, August 15). Altria in the U.S. tobacco industry – a Porter's five forces analysis. *Forbes*. Retrieved from <http://www.forbes.com/sites/greatspeculations/2015/08/17/altria-in-the-u-s-tobacco-industry-a-porters-five-forces-analysis/>
- Anonymous. (2015b, August 20). Control Yuan probe of two ministries, JTI deal sought. *Taipei Times*. Retrieved from <http://www.taipeitimes.com/News/taiwan/archives/2015/08/20/2003625800>
- BAT. (2009). *A consistent strategy for building shareholder value – annual report 2009*. London. Retrieved from [http://www.bat.com/group/sites/uk__9d9kcy.nsf/vwPagesWebLive/DO9DCL3B/\\$FILE/medMD9G2L3B.pdf?openelement](http://www.bat.com/group/sites/uk__9d9kcy.nsf/vwPagesWebLive/DO9DCL3B/$FILE/medMD9G2L3B.pdf?openelement)
- BAT. (n.d.). *Taiwan: a briefing note*. Retrieved from <https://industrydocuments.library.ucsf.edu/tobacco/docs/nnmw0200>
- Taiwan's Chunghwa telecom succeeds in registering name in China. (2009, July 31). *BBC Monitoring Asia Pacific*.
- Canadean. (2015). *SWOT analysis Taiwan Tobacco & Liquor Corporation*. London: Canadean.
- Chang, F. C., Sung, H. Y., Zhu, S. H., & Chiou, S. T. (2014). Impact of the 2009 Taiwan tobacco hazards prevention act on smoking cessation. *Addiction*, 109(1), 140–146.
- Chang, J. L. J. (2010). Taiwan's participation in the World Health Organization: The US 'facilitator' role. *American Foreign Policy Interests*, 32(3), 131–146.

- Cheng, T. J. (1989). Democratizing the quasi-Leninist regime in Taiwan. *World Politics*, 41(4), 471–499.
- Cohen, M. (2006). *Taiwan Tobacco & Liquor Corporation. International directory of company histories*. Retrieved from <http://www.encyclopedia.com/doc/1G2-3445200101.html>
- Dabaihui Group. (n.d.). 主营产业- 品牌运营 [Key operation – brand management]. Retrieved from http://www.dbh.com.cn/web/common/main.asp?typeCode=152&id_module=293&lan
- Ding, X. (2006, February 8). 中国正积极实施《烟草控制框架公约》 [China actively implementing the FCTC]. National People's Congress of the People's Republic of China. Retrieved from http://www.npc.gov.cn/npc/xinwen/fztd/fzsh/2006-02/08/content_344513.htm
- Dumbaugh, K. (2007). *Taiwan: Recent developments and US policy choices*. Washington, DC: US Library of Congress, Congressional Research Service.
- Euromonitor International. (2014). *Tobacco in Taiwan*. London: Author.
- Executive Yuan. (2014, February 26). *Tobacco smuggling, theft targeted at public security meeting*. Press Release. Retrieved from http://www.ey.gov.tw/en/News_Content2.aspx?n=1C6028CA080A27B3&s=2C8AB9494A34D379
- Fang, J., Lee, K., & Sejal, N. (2016). The China national tobacco corporation: From domestic to global dragon? *Global Public Health*. doi:10.1080/17441692.2016.1241293
- General Accounting Office. (1992). *International trade: Advertising and promoting U.S. cigarettes in selected Asian countries*. Washington, DC: Author. GAO/GGD-93-38.
- Gilmore, A. B. (2012). Understanding the vector in order to plan effective tobacco control policies: An analysis of contemporary tobacco industry materials. *Tobacco Control*, 21(2), 119–126.
- Gourlay, N. (1998). *Taiwan – TTWMB privatisation*. British American Tobacco. Retrieved from <http://industrydocuments.library.ucsf.edu/tobacco/docs/ktlx0208>
- How will Mainland China respond to Taiwan's elections? (2016). *The Diplomat*. Retrieved from <http://thediplomat.com/2016/01/how-will-mainland-china-respond-to-taiwans-elections/>
- Hsieh, C. R., Yen, L. L., Liu, J. T., & Lin, C. J. (1996). Smoking, health knowledge, and anti-smoking campaigns: An empirical study in Taiwan. *Journal of Health Economics*, 15(1), 87–104.
- Huaxia. (2003, August 12). 台湾烟酒公司积极与大陆合作 年底可望正式登陆 [TTL actively collaborating with Mainland China, hoping for a 'landing' before the end of the year]. Retrieved from <http://www.huaxia.com/xw/twxw/2003/08/266256.html>
- Huaxia. (2004, January 18). 台湾啤酒与长寿烟下半年可望正式'登陆' [Taiwan beer and longlife cigarettes preparing for 'landing' in second half of the year]. Huaxia. Retrieved from <http://www.huaxia.com/xw/twxw/2004/01/280468.html>
- Imperial Tobacco. (2014). *A stronger business – annual report and accounts 2014*. Bristol: Imperial Tobacco Group.
- International Trade Centre. (2015a). *List of importing markets for a product exported by Taipei, Chinese* [data set]. Retrieved from http://www.trademap.org/Country_SelProductCountry_TS.aspx
- International Trade Centre. (2015b). *List of supplying markets for a product imported by Taipei, Chinese* [data set]. Retrieved from http://www.trademap.org/Country_SelProductCountry_TS.aspx
- Jenings, R. (2011, February 10). Taiwan eyes mainland smokers. *South China Morning Post*. Retrieved from <http://www.scmp.com/article/737780/taiwan-eyes-mainland-smokers>
- John Tung Foundation. (n.d.). *Tobacco control in Taiwan: A Taiwanese NGO perspective* [presentation]. Retrieved from <http://www.ehfg.org/intranet/app/webroot/uploads/presentations/files/uploads/16e166010ac3a3ca7939107faf9be1.pdf>
- JTI. (2013). *Market share increases in most key markets pricing drives revenue growth in spite of industry contraction*. Press Release. Retrieved from http://www.jti.com/files/2313/7510/8932/JTI_Business_results_for_April-June_and_January-June_2013_20130730.pdf
- Lee, K., & Eckhardt, J. (2016). The globalisation strategies of five Asian tobacco companies: An analytical framework. *Global Public Health*. doi:10.1080/17441692.2016.1251604
- Lee, K., & Eckhardt, J. (2017). The globalisation strategies of five Asian tobacco companies: A comparative analysis and implications for global health governance. *Global Public Health*. doi:10.1080/17441692.2016.1273370

- Li, L. Z., & Zhou, X. Y. (2014, February 24). 台酒公司應更積極走向國際市場 [TTL should be more active in entering the international market]. Retrieved from national Policy Foundation <http://www.npf.org.tw/3/13273>
- Li, X. J. (2009, July 29). 台湾卷烟第一品牌 ‘长寿’ 在北京上市 [Longlife, Taiwan's no.1 brand launched in Beijing]. Huaxia. Retrieved from <http://www.huaxia.com/tslj/rdqy/qt/2009/07/1514964.html>
- Lin, J. (2007, January 11). Plans brewing at Taiwan Tobacco and Liquor Corp. *Taipei Times*. Retrieved from <http://www.taipetimes.com/News/bizfocus/archives/2007/01/01/2003342962/3>
- Liu, D. M. (2009, August 28). 兩岸菸酒產業交流與合作 [Inter-strait tobacco and liquor industry exchange and cooperation]. National Policy Foundation. Retrieved from <http://www.npf.org.tw/2/6378>
- Liu, K. (2011, January 7). Taiwan Tobacco and Liquor Corp. breathes new life into sins. *Taiwan Today*. Retrieved from <http://www.taiwantoday.tw/ct.asp?xitem=142519&ctnode=445&mp=9>
- MacGuill, S. (2014). *Focus on Taiwan: A restrictive market where competition and on-pack branding drives innovation*. London: Euromonitor International Analysis.
- MacKenzie, R., Eckhardt, J., & Prastyani, W. (2017). Japan Tobacco International: To 'be the most successful and respected tobacco company in the world'. *Global Public Health*. doi:10.1080/17441692.2016.1273368
- Mint Global. (n.d.). *Taiwan Miaoli Industry Corp*. Retrieved from https://mintglobal.bvdinfo.com/version-20151210/Search.Quick.serv?_CID=2&context=3EP9C0EJNNDG8LM&FromId=Home
- Ng, M., Freeman, M. K., Fleming, T. D., Robinson, M., Dwyer-Lindgren, L., Thomson, B., ... Gakidou, E. (2014). Smoking prevalence and cigarette consumption in 187 countries, 1980–2012. *JAMA*, 311(2), 183–192.
- Park, Y. C. (1990). Development lessons from Asia: The role of government in South Korea and Taiwan. *American Economic Review*, 80(2), 118–121.
- Rajagopalan, M. (2015, September 1). China adopts tougher rules on tobacco advertisements. *Reuters*. Retrieved from <http://www.reuters.com/article/2015/09/01/us-china-smoking-idUSKCN0R13M920150901>
- RJ Reynolds. (1989). *Taiwan*. Retrieved from <http://industrydocuments.library.ucsf.edu/tobacco/docs/jlxb0087>
- Romberg, A. D. (2008). Cross-strait relations: In search of peace. *China Leadership Monitor*, 23(9), 1–18.
- Schmid, T. (2015, September 1). Managing a global empire: Imperial Tobacco Group. *Tobacco Asia*. Retrieved from <http://www.tobaccoasia.com/features/managing-a-global-empire-imperial-tobacco-group/>
- STMA. (2012). *中国烟草年鉴 2011–2012* [China tobacco almanac 2011–2012]. Beijing: Science and Technology of China Press.
- Tsai, Lee & Chen CO Ltd. (n.d.). 中華電信獲中國大陸商標登記 [Chunghwa telecom obtains trademark registration in Mainland China]. Retrieved from http://www.tsailee.com/news_show.aspx?cid=38&id=218
- TTL. (2010, April 26). 98 年度年報 [2009 annual report]. Retrieved from <http://www.ttl.com.tw/files/59c1d27f-bc2d-4e68-9af4-ccdf066097d1.pdf>
- TTL. (2011, May 16). 99 年度年報 [2010 annual report]. Retrieved from <http://www.ttl.com.tw/files/c4e6293f-3417-47b5-b5dc-8f3cec5863b9.pdf>
- TTL. (2012, May 21). 100 年度年報 [2011 annual report]. Retrieved from <http://www.ttl.com.tw/files/0a825a90-34f8-41c7-9625-b8b1d9c08403.pdf>
- TTL. (2013, May 13). 101 年度年報 [2012 annual report]. Retrieved from <http://www.ttl.com.tw/files/26d18491-5fbf-4fce-b518-d543b8dc840c.pdf>
- TTL. (2014, May 13). 102 年度年報 [2013 annual report]. Retrieved from <http://www.ttl.com.tw/files/fc64f48c-15da-4187-b72a-01af27a02d4c.pdf>
- TTL. (2015, May 13). 103 年度年報 [2014 annual report]. Retrieved from <http://www.ttl.com.tw/files/dcf93f0c-fa5f-43e7-aa0a-5d8728b1868f.pdf>
- TTL. (2016a, May 5). 104 年度年報 [2015 annual report]. Retrieved from <http://www.ttl.com.tw/files/aaa2e11d-f461-44da-91f5-c736abc869eb.pdf>

- TTL. (2016b, September 27). *History*. Retrieved from http://en.ttl.com.tw/about/about_06.aspx
- TTL. (n.d.). 102 年預算案 [2013 budget]. Retrieved from <http://www.ttl.com.tw/files/54f42eaf-3da9-43eb-ab7f-b9ef820ecfba.pdf>
- USDHHS. (2000). *Reducing tobacco use: A report of the surgeon general*. Atlanta, GA: U.S. Department of Health and Human Services, Washington, DC: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- USITC. (2000). *The year in trade: Operations of the trade agreements program during 1999*. Washington, DC: United States Trade Committee.
- USTR. (n.d.). *Section 301 table of cases – United States trade representative*. Retrieved from https://ustr.gov/archive/assets/Trade_Agreements/Monitoring_Enforcement/asset_upload_file985_6885.pdf
- Wen, C. P. (2004). *The Taiwan tobacco Atlas*. Taipei: United Medical Foundation and National Health Research Institute.
- Wen, C. P., Chen, T., Tsai, Y. Y., Tsai, S. P., Chung, W. S. I., Cheng, T. Y., ... Liu, W. Y. (2005). Are marketing campaigns in Taiwan by foreign tobacco companies targeting young smokers? *Tobacco Control*, 14(Suppl. 1), i38–i44.
- Wen, C. P., Cheng, T. Y., Eriksen, M. P., Tsai, S. P., & Hsu, C. C. (2005). The impact of the cigarette market opening in Taiwan. *Tobacco Control*, 14 (Suppl. 1), i4–i9.
- Wen, C. P., Peterson, R. A., Cheng, T. Y. D., Tsai, S. P., Eriksen, M. P., & Chen, T. (2006). Paradoxical increase in cigarette smuggling after the market opening in Taiwan. *Tobacco Control*, 15(3), 160–165.
- WTO. (2001). *Report of the working party on the accession of the separate customs territory of Taiwan, Penghu, Kinmen and Matsu*. Geneva: Author.
- Zhang, Y. J. (2010, August 2). 拓展大陆市场份额 台啤将在长三角设生产基地 [Taiwan beer will establish a production facility in the Yangtze delta to increase Mainland China market share]. Huaxia. Retrieved from <http://www.huaxia.com/tslj/lasq/2010/08/2017220.html>