ALCOHOL SUPPLY: DOMESTIC AND INTERNATIONAL PERSPECTIVES

International issues in the supply of tobacco: recent changes and implications for alcohol

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Abstract
This paper reviews international issues in the supply of tobacco and tobacco products, including trade liberalization and globalization. The paper begins with a brief discussion of the theoretical foundations for trade and trade restrictions. This is followed by a description of the treatment of tobacco and tobacco products in recent multi-lateral, regional and bilateral trade agreements, as well as a short discussion of the recent globalization of the tobacco industry. Included in this description is a review of the empirical evidence on the impact of trade liberalization on tobacco use. The implications of two recently proposed international agreements—the Multilateral Agreement on Investments and the Framework Convention for Tobacco Control—are then discussed. The paper concludes by summarizing the theoretical and empirical evidence that shows clearly that trade liberalization has significantly increased tobacco use, particularly in low and middle-income countries, and follows this with a discussion of the lessons learned from tobacco for controlling alcohol supply.

Introduction
Over the past several decades, a series of bilateral, regional and international trade agreements have greatly reduced tariff and non-tariff barriers to trade in a wide variety of goods and services, including tobacco, tobacco products and alcoholic beverages. These reductions in trade barriers have significantly changed the nature of the markets for tobacco products and alcoholic beverages. Markets that were once monopolized, often by the government, have become increasingly competitive with the entry of multi-national firms. In addition, often at the urging of international agencies, the production and distribution of tobacco and alcohol products have been privatized. This increased competition has
almost certainly been accompanied by reduced prices for tobacco and alcohol products, as well as dramatically increased marketing of these products. One probable result of this is substantial increases in cigarette smoking, drinking and the variety of health, social and economic consequences associated with them.

Research examining the impact of trade liberalization and globalization on the markets for tobacco products is in its infancy, and comparable research for alcoholic beverages is yet to begin. This paper examines briefly the theoretical evidence concerning the impact of trade liberalization and globalization on trade in tobacco and tobacco products and on tobacco consumption. The limited empirical evidence on these issues is then reviewed, including discussions of the treatment of tobacco in recent trade agreements, descriptive evidence on trends in tobacco-related trade and consumption, and the few econometric studies in this area. The following section discusses briefly proposed international agreements with relevance to tobacco and tobacco control. Finally, based on the lessons from tobacco, the implications of trade liberalization and globalization for alcohol use and its consequences are discussed.

Theoretical foundations

There are several rationales for trade in general and for trade in tobacco and tobacco products specifically. Chaloupka & Corbett (1998) and Grise (1990) suggest the following:

· inability to produce tobacco and/or tobacco products domestically in quantities sufficient to satisfy the domestic demand for these products;
· inability to produce products of high enough quality domestically to satisfy consumer demand;
· differences in prices among countries for different types and qualities of tobacco and tobacco products; and
· a need to import unmanufactured tobacco used to produce tobacco products for export.

In addition, for some countries, tobacco and/or tobacco products are a significant source of foreign currency. Zimbabwe, for example, in recent years exported nearly all the tobacco grown domestically, with these exports generating nearly one-quarter of its total export earnings (Mavanyika, 1998). As Jacobs and her colleagues (2000) describe, this leads to five basic categorizations of countries for trade in either tobacco or tobacco products. Full exporters are countries that produce but do not consume much tobacco (tobacco products); for tobacco Zimbabwe is closest to this extreme. Net exporters are those that produce more tobacco (tobacco products) than are consumed domestically; many countries, including the United States, Brazil, Mexico and India, fall into this category. Self-contained countries produce and consume about the same amount of tobacco (tobacco products); this category includes countries such as China, South Africa, Egypt and others. Countries that import more tobacco (tobacco products) than is produced domestically are net importers; countries such as Russia, Spain and many others are included in this group. Finally, full importers are those countries that import all tobacco (tobacco products) that are domestically consumed; relatively few countries approach this extreme for tobacco products but a few, such as Japan, import most of the tobacco leaf used in producing cigarettes for domestic consumption. Table 1 highlights the leading importers and exporters of tobacco and tobacco products.

For decades, countries adopted restrictive trade and other policies that protected domestic tobacco growers and tobacco product manufacturers from foreign competition. These barriers included high tariffs on imported tobacco and/or tobacco products, quotas or complete bans on imports, domestic price support programs, marketing restrictions, licensing requirements, restricted product lists, exchange controls, domestic content requirements and growing or production subsidies (Grise, 1990). From a purely economic perspective, there are few rationales that justify these trade barriers, including the use of temporary restrictions to protect an “infant” industry and/or as a temporary strategy for promoting economic development.

As evidence on the health consequences of cigarette smoking has accumulated, some have argued that restricting tobacco-related trade would reduce the death and disease that result from tobacco use. Similar arguments have been used to defend trade restrictions in the case of other goods with negative externalities. These arguments are most well developed in the area of environmental policy (e.g. Anderson & Black-
Table 1. Leading unmanufactured tobacco and cigarette exporters and importers

<table>
<thead>
<tr>
<th>Leading exporters</th>
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<tr>
<td>Unmanufactured Tobacco, 1999, Metric tonnes dry weight</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Russian Federation</td>
</tr>
<tr>
<td>318 000</td>
<td>264 670</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Germany</td>
</tr>
<tr>
<td>205 500</td>
<td>260 510</td>
</tr>
<tr>
<td>United States</td>
<td>United States</td>
</tr>
<tr>
<td>189 379</td>
<td>241 065</td>
</tr>
<tr>
<td>Turkey</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>125 500</td>
<td>137 183</td>
</tr>
<tr>
<td>China</td>
<td>Japan</td>
</tr>
<tr>
<td>113 259</td>
<td>98 920</td>
</tr>
<tr>
<td>Malawi</td>
<td>Netherlands</td>
</tr>
<tr>
<td>107 600</td>
<td>84 813</td>
</tr>
<tr>
<td>World total</td>
<td>World Total</td>
</tr>
<tr>
<td>2 018 250</td>
<td>2 003 068</td>
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Cigarettes, 1997, million pieces

<table>
<thead>
<tr>
<th>Leading exporters</th>
<th>Leading importers</th>
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<tbody>
<tr>
<td>United States</td>
<td>Japan</td>
</tr>
<tr>
<td>243 190</td>
<td>79 000</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Russian Federation</td>
</tr>
<tr>
<td>113 000</td>
<td>70 000</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Singapore</td>
</tr>
<tr>
<td>108 031</td>
<td>57 611</td>
</tr>
<tr>
<td>Brazil</td>
<td>France</td>
</tr>
<tr>
<td>86 000</td>
<td>53 189</td>
</tr>
<tr>
<td>Germany</td>
<td>Italy</td>
</tr>
<tr>
<td>82 000</td>
<td>41 512</td>
</tr>
<tr>
<td>Singapore</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>70 124</td>
<td>31 309</td>
</tr>
<tr>
<td>World total</td>
<td>World Total</td>
</tr>
<tr>
<td>1 073 115</td>
<td>673 962</td>
</tr>
</tbody>
</table>

Sources: United States Department of Agriculture, 2000 (unmanufactured tobacco) and Market Tracking International Ltd., 1999 (cigarettes). 1997 cigarette import and export data are preliminary estimates; total imports and exports are not identical due to smuggling and other causes (see Merriman et al., 2000, for a more complete discussion).

hurst, 1992). In practice, however, tobacco-related trade restrictions have often helped to protect state-run monopolies on tobacco production and distribution (Grise 1990). Moreover, arguments that trade restrictions are an appropriate response to the health consequences resulting from tobacco use have usually not been accompanied by strong efforts to reduce the consumption of domestically produced cigarettes and other tobacco products.

In general, economic theory predicts that barriers to trade in any good or service will reduce the total supply of that product while raising the quantity supplied by domestic producers. Consequently, the prices for the protected products will almost certainly be higher than they would be in the absence of these trade barriers. In the case of tobacco, trade restrictions resulting in higher prices for tobacco leaf will raise the prices of tobacco products. Additional trade barriers for manufactured tobacco products will raise prices further. Given the well-documented evidence on the impact of price on tobacco use (see Chaloupka & Warner, 2000, for a detailed review), the higher prices will lead to significant reductions in cigarette smoking and other tobacco use. Given the firmly established evidence on the impact of tobacco use on health (e.g. Gajalakshmi et al., 2000), the reduced tobacco use resulting from trade restrictions will reduce the health and other consequences of tobacco use. In addition, given the higher prices and increased quantity supplied, domestic suppliers will generally benefit, while foreign suppliers will usually be worse off as a result of their reduced access to protected markets.

In contrast, reductions in trade barriers resulting from international trade agreements will have the opposite impact. Liberalized trade will probably lead to greater competition in tobacco and tobacco product markets, reductions in the prices for tobacco products and greater marketing of these products. The increases in advertising and promotion will result not only from the efforts of new entrants into the markets attempting to establish themselves, but from increased activity by existing firms attempting to protect their market share in the face of increased competition. Given the inverse relationship between price and consumption, as well as the positive relationship between advertising/promotion and demand (e.g. Saffer, 2000), cigarette smoking and other tobacco use, as well as the health, economic and social consequences of tobacco use, will almost certainly increase as tobacco-related trade is liberalized.

However, economic theory and empirical evidence indicates that the liberalization of trade in
a variety of goods and services is expected to have substantial economic benefits, including increased incomes, greater employment, more stable prices, greater innovation and more rapid economic growth (WTO, 1998a; Yellen, 1998). The greatest impact of freer trade is likely to be felt in developing countries (Edwards, 1992). Given the strong evidence showing that health improves with increased incomes, particularly at lower income levels, trade liberalization can lead to improved health outcomes (Preston, 1976; Chaloupka & Corbett, 1998). Thus, the consequences of freer trade in tobacco and tobacco products needs to be weighed against the benefits associated with generally freer trade when evaluating the impact of trade liberalization. This is particularly true given that current tobacco consumption trends imply that, by 2030, there will be 10 million annual premature deaths globally attributable to tobacco (Gajalakshmi et al., 2000) and that liberalization of trade has led to increases in tobacco use (as discussed below in more detail).

Trade liberalization and tobacco use
This section reviews the treatment of tobacco in existing trade agreements, briefly discusses trends in privatization and globalization in the world tobacco markets, provides some descriptive evidence on the impact of trade liberalization on tobacco use and concludes with a discussion of the limited econometric and other empirical evidence linking freer trade to increased cigarette smoking.

International agreements liberalizing tobacco-related trade
Multi-lateral/international trade agreements. The most far-reaching multi-lateral trade agreement is the General Agreement on Tariffs and Trade (GATT). The most recently completed round, the Uruguay round completed in 1994, formed the World Trade Organization (WTO). WTO is the primary international institution governing international trade, with approximately 90% of world trade conducted under its rules (Dunoff, 1994). In the most recent round, 117 member countries, as well as a number of non-member countries, agreed to abide by the provisions of the GATT. The basic principles of the GATT, as characterized by the WTO, include:

- a commitment to achieving free trade and fair competition;
- limits on and the eventual elimination of tariff and non-tariff barriers to trade;
- the non-discriminatory treatment of all trading partners;
- the non-discriminatory treatment of domestically and foreign-produced products;
- predictability, by ensuring that trade barriers are not erected arbitrarily;
- the negotiated elimination of trade barriers and the settlement of trade disputes; and
- opposition to retaliatory trade sanctions (WTO, 1998a).

Since the completion of the first round in 1948, the GATT has sharply reduced tariffs and other barriers to trade in manufactured goods. As a result, global trade in these goods has increased significantly, as have world incomes (WTO, 1998a). Until the most recent round, the GATT did not cover trade in services and agricultural commodities, including trade in tobacco leaf. The Uruguay round, however, significantly expanded the coverage of the GATT to include trade in agricultural commodities, services and other products not covered in previous agreements.

With respect to tobacco and tobacco products, the 1994 agreement significantly liberalized trade. For example, the European Union was called on to reduce its tariffs on cigars by 50%, on cigarettes and other manufactured tobacco products by 36% and on unmanufactured tobacco by 20% (USDA, 1997a). Similarly, the United States was to eliminate its tariffs on cigar wrappers and reduce tariffs on cigar filler, binder tobacco, cigars and most cigarettes by 55%, on tobacco stems and refuse by 20% and on other manufactured and smoking tobacco by 15% (USDA, 1997a). Furthermore, the agreement led to the elimination of domestic content legislation in the United States that had required that all domestically produced cigarettes contain at least 75% domestically grown tobacco. A variety of tariff and other tobacco-related trade barriers in many other countries were similarly reduced or eliminated by the 1994 agreement.

The GATT includes on important exception to its general principles that is of particular relevance to public health. Article XX of the GATT states:
Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary and unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures ... necessary to protect human ... health (or) necessary to secure compliance with the laws or regulations which are not inconsistent with the provisions of this agreement (emphasis added).

The most relevant application of this principle was in settling a dispute between the United States and Thailand over Thai restrictions on foreign cigarette companies brought before the GATT Council in 1990. Historically, the Thai cigarette markets were controlled by a government-run monopoly that was protected by a virtual ban on the import of cigarettes. In April 1988, the Thai monopoly voluntarily stopped its cigarette advertising and promotion. Foreign companies, however, continued their marketing efforts, prompting the Thai government to enact a complete ban on cigarette advertising in 1989. Given the complete ban on advertising, other tariff and non-tariff trade barriers, and recent success in opening cigarette markets in other Asian countries (described below) the US Trade Representative, under Section 301 of the US Trade Act, took action against Thailand. Among other things, the United States contended that the ban on advertising created an unfair advantage for the domestic monopoly that would make it impossible for US companies to compete effectively, even if markets were opened and, as such, was a violation of the non-discriminatory principles of the GATT.

In October 1990, the GATT Council ruled that the virtual ban on cigarette imports was a violation of the international trade agreement and that the Thai cigarette markets should be opened to foreign producers, rejecting the Thai government’s contention that the prohibition on imports was “necessary” to protect public health (GATT, 1990). However, given Article XX, the GATT Council upheld the Thai government’s right to impose the same cigarette tax on US-produced cigarettes as applied to domestically produced cigarettes and, more importantly, upheld the government’s right to ban all cigarette advertising by domestic and foreign producers, even if the ban made it more difficult for foreign entrants to compete with the established domestic monopoly. This was the first GATT decision applying these principles to tobacco products and has created an important precedent for other countries. The clear message of the decision is that strong tobacco control policies aimed at reducing the death and disease caused by tobacco use can be adopted and implemented, as long as they are applied in a nondiscriminatory fashion, without violating international trade agreements. However, some have criticized the GATT/WTO for being unduly restrictive in its interpretation of “necessary” for protecting health, instead favoring policies with the least impact on trade (Taylor et al., 2000).

In addition, there are a number of other international agreements with implications for tobacco and tobacco products. The WTO’s 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), for example, deals with issues that may have some impact on countries’ ability to regulate tobacco product labeling and packaging. The tobacco industry has argued that the labeling restrictions employed in some countries are a violation of the TRIPS; there have, however, been no formal challenges to these restrictions under TRIPS. Similarly, several agreements related to non-tariff barriers that are aimed at reducing the technical and bureaucratic measures that hinder trade, such as the Agreement on Technical Barriers to Trade, the Agreement on Import Licensing Procedures and the Rules of Origin Agreement, are also potentially relevant to trade in tobacco and tobacco products (Taylor et al., 2000).

Regional trade agreements. In addition to the international agreements, there are a number of multi-lateral agreements aimed at liberalizing trade among countries in various regions. The WTO, for example, reports that nearly all of its members have entered into regional trade agreements, with over 80 of these agreements currently in force (WTO, 1998b). Many of these agreements have significantly reduced barriers to trade among member countries in a variety of goods and services, including tobacco and tobacco products. Some of the major multi-lateral/regional trade associations and agreements include: the North American Free Trade Area
(NAFTA), the European Union (EU), the Association of South East Nations (ASEAN), the Common Market of Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), the Organization of American States (OAS) and others. As a result of NAFTA, for example, almost half of US farm exports, including tobacco, enter Mexico duty-free and other non-tariff barriers, such as Mexico’s restrictive licensing system for agricultural products, were eliminated; eventually, nearly all agricultural trade in the region will be duty-free.

In addition to removing trade barriers, some regional agreements have pursued regional approaches to regulating tobacco products in order to protect public health. For example, as a result of Article 29 of the Treaty of Rome, the European Commission is allowed to take any useful initiative to promote the coordination of member states’ policies so as to ensure a high level of human health protection. The most notable examples of this to date are the recently adopted directive that requires all EU members to ban nearly all tobacco advertising by 2006 (EU, 1998) and the earlier directive on labeling that specified the content, size, placement, print and languages of health warning labels as well as the disclosure of tar, nicotine and other toxic tobacco additives on tobacco product packages.

**Bilateral trade agreements.** There are numerous bilateral agreements addressing tariff and non-tariff barriers to trade, including several specifically addressing trade in tobacco products. Among the most notable are the bilateral agreements between the United States and several Asian countries—Japan, Taiwan, South Korea and Thailand—that resulted from actions taken by the US Trade Representative under Section 301 of the US Trade Act of 1974. Section 301 initially gave the US President the authority to investigate unjustifiable, unreasonable or discriminatory trade practices used by other countries to limit access by US companies to their markets. When such practices were identified, the 1974 Act call for the negotiated elimination of these practices and allowed the President to impose retaliatory trade sanctions if negotiations were unsuccessful. Amendments to the Act in 1984 and 1988 strengthened Section 301 by formally requiring the US Trade Representative to identify annually countries and their trading practices that limited the access of US firms to their markets. Once identified, if these practices are not eliminated through negotiations, the amended Act calls for the mandatory imposition of retaliatory measures.

As described in more detail by Chaloupka and colleagues (Chaloupka & Laixuthai, 1996; Chaloupka & Corbett, 1998), the Reagan and Bush Administrations, on behalf of the US Cigarette Export Association (a cartel created by Philip Morris, R.J. Reynolds and Brown and Williamson to increase their cigarette exports to foreign markets) used Section 301 successfully to pressure Japan, Taiwan and South Korea into establishing bilateral trade agreements that opened their cigarette markets to US cigarette companies. A similar Section 301 action against Thailand led to the GATT decision described above and a subsequent bilateral agreement between the United States and Thailand. These agreements led to significant reductions in tariffs on US cigarettes, changes in distribution practices that served as barriers to US firms, the elimination of prohibitions on US cigarettes and other changes that led to a substantial expansion of US cigarette companies’ roles in the affected countries. Most of the agreements, however, did include some limits on cigarette advertising and promotion, required health warning labels in local languages on cigarette packaging and other health-related provisions.

More recently, the Clinton Administration has not used Section 301 to ease US cigarette companies’ entry into additional countries. Instead, the Administration has begun to address the public health concerns associated with tobacco-related trade policy (Wildavsky, 1995). The Clinton Administration, for example, has agreed not to oppose non-discriminatory tobacco control laws in other countries (Bloom, 1998). This position was more formally adopted as part of the Doggett Amendment to the fiscal year 1998 Appropriations Act for the Departments of Commerce, State and Justice, the Judiciary and Related Agencies. The Doggett Amendment specifically prohibits the use of funds provided by the Act for the promotion of tobacco and tobacco product exports and sales, as well as the removal of any foreign country restrictions on the marketing of tobacco or tobacco products, as long as these are applied evenly to foreign and domestic products. More recently, the UK Secretary of State for Foreign and Commonwealth
Affairs issued a directive to its posts that was similar in spirit to the recent US actions.

Privatization and globalization. Accompanying the increased liberalization of trade in tobacco and tobacco products has been the expansion of the large multi-national tobacco companies into a growing number of countries. The largest multi-national tobacco companies—British American Tobacco, Philip Morris, R.J. Reynolds International, Rothmans International and Reemstma—have been particularly active, but a number of smaller companies, including some state-owned monopolies, have also become increasingly focused on global markets. Table 2 provides estimates of the global market shares of major tobacco companies and their changes in volume in recent years.

This expansion has taken several forms, including new investment in production and distribution facilities, joint ventures between major multi-nationals and domestic companies and the acquisition of existing production facilities by multi-nationals, either through the privatization of former state-run tobacco companies or through the acquisition of other companies. Between 1991 and 1998 alone, there were over 70 major changes of ownership and joint-venture agreements in the global cigarette markets (MTI, 1999). The large multi-nationals have been particularly active in central and eastern European and Asian countries whose markets had historically been closed to foreign companies. Other regions, including Latin America and Africa, have also experienced an increasing presence of major multi-nationals. The expansion of the multi-nationals into new markets has enabled them to increase overall production, even as consumption of their products declined domestically given the differing trends in tobacco use between developed and developing countries (MTI, 1999).

Tobacco control advocates contend that the accelerated growth of multi-national tobacco companies and the globalization of tobacco markets is a major threat to public health (Yach & Betchler, 2000). The International Monetary Fund (IMF), for example, has been criticized for its call for privatization of state-run tobacco companies in a number of countries as a condition for its economic aid to those countries. Opponents of privatization argue that these state-run monopolies are likely to restrict supply, keep prices high and engage in other activities that can benefit the public health. In contrast, supporters of privatization argue that governments that once depended on tobacco production and distribution for a significant share of revenues may now be more willing to impose higher taxes on tobacco products and adopt stronger tobacco control policies, given that they are no longer in the business of selling tobacco (Peter Heller, IMF, personal communication).

To date, existing evidence on the impact of privatization of state run monopolies on tobacco control is mixed.


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<tr>
<td>Philip Morris</td>
<td>18.24%</td>
<td>19.13%</td>
</tr>
<tr>
<td>British American Tobacco</td>
<td>13.71%</td>
<td>6.27%</td>
</tr>
<tr>
<td>R.J. Reynolds</td>
<td>6.08%</td>
<td>5.01%</td>
</tr>
<tr>
<td>Japan Tobacco</td>
<td>5.55%</td>
<td>0.14%</td>
</tr>
<tr>
<td>Rothmans International</td>
<td>3.60%</td>
<td>6.86%</td>
</tr>
<tr>
<td>Reemstma</td>
<td>2.30%</td>
<td>56.49%</td>
</tr>
<tr>
<td>KT&amp;G</td>
<td>1.82%</td>
<td>2.17%</td>
</tr>
<tr>
<td>Tekel</td>
<td>1.44%</td>
<td>−6.99%</td>
</tr>
<tr>
<td>Seita</td>
<td>1.06%</td>
<td>−1.79%</td>
</tr>
<tr>
<td>Tabacalera</td>
<td>0.89%</td>
<td>−0.65%</td>
</tr>
<tr>
<td>Others</td>
<td>45.33%</td>
<td>−10.15%</td>
</tr>
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Source: Market Tracking International Ltd, 1999. The state tobacco monopoly in China is not included in these figures since it is not an individual company.
The impact of trade liberalization and globalization on tobacco consumption

As discussed above, there are strong theoretical reasons for expecting that the liberalization of trade in tobacco products would lead to significant increases in the consumption of tobacco products. The descriptive data on global trade in tobacco and tobacco products are consistent with this hypothesis. For example, the agreements reached in the Uruguay round of the GATT appear to have had a dramatic impact on global trade in tobacco and tobacco products. From 1994 to 1997 there was a 12.5% increase in unmanufactured tobacco exports globally, after a decade of virtually no growth (USDA, 1994, 1997b). Similarly, cigarette exports, which had been relatively stable over the period from 1975 to 1985, began rising at an increasing rate in the mid-1980s. Since the 1994 GATT, cigarette exports have accelerated rapidly, rising by 42% from 1993 to 1996. At the same time as global trade in tobacco and tobacco products has been increasing, global cigarette consumption has risen by approximately 5%. The increased trade in tobacco and tobacco products has almost certainly contributed to this increased consumption (Chaloupka & Corbett, 1998).

Relatively few analyses have examined the impact of trade liberalization on tobacco consumption. Chaloupka & Laixuthai (1996) first addressed this issue in their examination of the impact of the Section 301 Agreements between the United States and Japan, Taiwan, South Korea and Thailand on cigarette smoking in those countries. They used annual data on the market share of US cigarette companies and overall cigarette consumption for the period from 1970 to 1991 for the four affected countries as well as six other countries in the region (China, India, Indonesia, Malaysia, Pakistan and the Philippines). The key independent variables in their analyses included per capita GDP and an indicator for the years, or fraction thereof, during which the Section 301 agreements applied. Given the lack of data across countries and over time on other important determinants of cigarette demand, they estimated fixed effects models to control for other unmeasured country and time-specific influences on cigarette smoking.

Chaloupka & Laixuthai found that the market share of US cigarette companies increased significantly after the implementation of the Section 301 agreements, rising by approximately 600%, on average, in 1991. More importantly, they concluded that cigarette smoking in Japan, Taiwan, South Korea and Thailand increased as a result of the opening of these countries’ cigarette markets to US cigarette companies. Their estimates suggest that per capita cigarette consumption in these countries was 10% higher in 1991 than it would have been in the absence of the bilateral trade agreements. Anecdotal evidence from these countries is consistent with their findings and suggests that the biggest increases in smoking have been among youth and women (Connolly & Chen, 1993; Roemer, 1993; USDA, 1994).

Chaloupka & Laixuthai contended that a probable explanation for the significant increase in cigarette smoking in these countries is the lower prices and more aggressive advertising and promotion likely to result from the increased competition in their cigarette markets (prior to the Section 301 agreements, the state-run monopolies in these countries controlled well over 90% of the markets). Sesser (1993), for example, noted that total cigarette advertising by US companies in Japan nearly doubled from 1987 (the first year after the Section 301 agreement) to 1990, with the Japan Tobacco Company responding by increasing its advertising as well; as a result, cigarettes went from being the 40th most advertised product on television to being the second most heavily advertised. Similarly, Hagihara & Takeshita (1995) concluded that US cigarette advertising significantly increased the market share of US cigarettes in Osaka and suggest that this advertising may help to explain the increased smoking prevalence observed among young Japanese women in the late 1980s. Hsieh & Hu (1997) provide some empirical evidence from Taiwan that similarly supports Chaloupka & Laixuthai’s contention about the impact of the market opening on cigarette prices. Prior to the opening of the Taiwanese cigarette markets in 1987, the average price of imported cigarettes in Taiwan was NT$46 per pack, more than double the price of domestic brands, and imported cigarettes accounted for less than 2% of overall cigarette consumption. After the opening of the markets, inflation adjusted prices for both domestic and imported cigarette brands fell sharply.

Hsieh & Hu (1997) went on to examine the impact of these reductions in cigarette prices on
cigarette smoking in Taiwan, decomposing the overall effect into two parts—a switching effect and a market expansion effect. The first reflects the switch from domestic brands to imported brands in response to the increased availability and reduced relative prices of the imported cigarettes (they note that the ratio of imported cigarette prices to domestic prices fell from 2.08 prior to the opening of the markets to 1.64 after the markets were opened). Hsieh & Hu estimated that this brand switching accounted for approximately a 10-pack per capita reduction in the consumption of domestically produced cigarettes. With respect to the market expansion effect—the effect resulting from the reduced prices for all cigarettes—Hsieh & Hu estimated that overall cigarette demand rose by about 10 packs per capita. Hsieh & Lin (1998) suggest that the early market expansion effect induced the Taiwanese government to adopt stronger tobacco control policies than it would have had it remained a monopolist in the cigarette markets. These stronger policies offset the impact of the reduced prices and have led to recent reductions in overall cigarette smoking in Taiwan.

More recently, Taylor and colleagues (2000) conducted an econometric examination of the impact of trade liberalization on cigarette consumption in 42 countries over the period from 1970 to 1995. They followed the basic approach employed by Chaloupka & Laixuthai (1996), using a new measure of “openness” based on the importance of trade to a country’s economy as their indicator of barriers to trade in tobacco products. In addition, they conducted separate analyses for low, middle and high-income countries in order to examine the differential impact of trade liberalization on smoking across countries at different stages of development. Their estimates provide consistent support for the hypothesis that increased trade liberalization leads to increased cigarette smoking, with a highly significant relationship estimated for low and middle-income countries.

Finally, there have been no empirical examinations of the impact of privatization on tobacco consumption. However, the experiences of Poland over the past decade help to provide at least one illustration of the potential impact of privatization. As part of its transition to a market economy, tobacco production and distribution in Poland was privatized in the early 1990s. Currently, the five leading tobacco companies in Poland are all involved in joint ventures with multi-national tobacco companies. During the first part of this period (1992 to 1995), cigarette sales increased by over 5%. However, in the mid-1990s, the Polish government (no longer a monopolist in the cigarette markets) began to adopt a series of tobacco control measures, partly in response to pressure from the Polish public health community. These measures include some of the world’s strongest, most visible health warning labels on cigarette packaging and advertising, steep increases in cigarette taxes (including a 27% increase in tax rates in 1999, with proposed increases of 28, 34 and 33% in 2000, 2001 and 2002, respectively) and, most recently, a complete ban on cigarette advertising and other promotions (to be phased-in by the end of 2001). The impact of these new tobacco control measures, in part likely to be a response to the increased smoking that followed privatization, is beginning to be seen in reductions in smoking prevalence and overall cigarette consumption (Czart et al., 1999). The Polish experience should not be assumed to be the probable outcome resulting from the privatization of other state tobacco monopolies, but does provide one illustration of what can happen when governments leave the tobacco markets.

Proposed international agreements with implications for tobacco use

In addition to the expansion of bilateral, multilateral and regional trade agreements that can further liberalize trade in tobacco and tobacco products, two major initiatives have been proposed with important implications for tobacco markets. The first is the Multilateral Agreement on Investment (MAI) that was being negotiated under the auspices of the OECD (but open to signature by all nations) before being put on hold in late 1998. The second is the World Health Organization’s proposed Framework Convention on Tobacco Control (FCTC). Each of these will be discussed in more detail in this section.

The multi-lateral agreement on investment. Negotiations for the MAI had been under way for several years, but came to a standstill in late 1998. While temporarily on hold, there is much interest in this Agreement and it seems likely that negotiations will eventually resume. The pro-
posed MAI aimed to ease the flow of assets across international borders by restricting the authority of nations to limit foreign investment and was, in many ways, a complement to the GATT (Sforza-Roderick et al., 1998). Some have interpreted the provisions of the most recent draft of the treaty as limiting the ability of a country to regulate the domestic and foreign corporations doing business within its borders (Preamble Center for Public Policy, 1998). Many of the principles of the proposed MAI are consistent with the principles of the GATT, including non-discriminatory treatment and a commitment to reducing barriers to international investment. In addition, the draft MAI contained a number of other provisions aimed at removing obstacles to economic integration, including a ban on restrictions on the repatriation of profits or the movement of capital and a prohibition of the uncompensated expropriation of assets, including governmental actions that are “tantamount” to expropriation. In addition, the draft treaty expressly empowered private investors and corporations to sue governments, enabling them to seek compensation for any laws, practices or policies that violate investor rights under the treaty. Other notable aspects of the draft treaty include rollback and standstill provisions that would require governments to eliminate laws that violate MAI rules and refrain from passing any such future laws.

Supporters of the MAI contend that it would significantly expand international investment and fuel economic growth, and would not significantly affect the ability of governments to adopt and implement measures aimed at protecting public health (Dymond, 1997). Critics, including many from the tobacco control and public health community, counter that the draft treaty has negative implications for public health, calling for the treaty to include exceptions for regulations imposed on public health grounds (Clarke, 1998). They state, for example, that if adopted as drafted, multi-national tobacco companies could argue that tobacco control policies that reduce the demand for their products constitute an expropriation of their assets. Given this, they could sue governments for compensation and/or force governments to repeal the tobacco control measures in question. Moreover, the critics argue, even the threat of such a suit would slow the adoption of effective tobacco control measures, particularly in low and middle-income countries that are just beginning to take action.

Framework convention on tobacco control. The FCTC aims to be an international treaty that would commit countries to adopting strong, effective tobacco control policies. The treaty is being developed by the World Health Organization (WHO) in response to the unanimous adoption of a resolution calling for work on it at the 1999 World Health Assembly meetings. It is currently being negotiated by the 191 member states of the WHO and will probably consist of the framework convention and a series of negotiated protocols. The framework convention itself will provide the basic principles and structure for the treaty, while the protocols will consist of separate agreements governing specific areas. The first three protocols being negotiated deal with smuggling, advertising and treatment. Countries agreeing to the negotiated protocols would adopt appropriate legislation, if necessary, to implement them. Negotiations on the treaty began in autumn 1999, with the adoption of the framework convention and related protocols targeted for no later than May 2003.

Supporters of the treaty contend that it is an effective way to address the concerns associated with globalization of the tobacco industry and the anticipated increases in tobacco use and its health consequences. It is particularly appropriate, they argue, for dealing with issues that cross national boundaries, including restricting tobacco-related advertising and promotion on television, radio and the Internet, controlling the smuggling of tobacco products, improving the sharing of information internationally, and more. Indeed, supporters point to the GATT/WTO as providing evidence that international treaties can produce tangible results (Tobacco Free Initiative, 1999). Prospects for the treaty appear promising. During the debate over the resolution at the recent World Health Assembly a record number of countries took the floor to provide support, including a number of major tobacco-growing and exporting countries.

Summary and implications for alcohol supply

International trade in virtually all goods and services has increased dramatically over the past several decades, largely in response to a variety
of multi-lateral and bilateral trade agreements that have significantly reduced tariff and non-tariff barriers to trade. Continued broadening and deepening of existing agreements and proposed new agreements will almost certainly lead to further increases in trade. This expansion of trade carries with it a wide range of economic and other benefits. Economic theory and growing empirical evidence indicates that freer international trade leads to faster economic growth, greater employment, higher incomes, more stable prices and other benefits, with perhaps the greatest impact in developing countries. Accompanying these economic gains are social benefits, including significant improvements in health, with the largest gains occurring at the lowest income levels. In the aggregate, the evidence clearly indicates that these economic gains lead to improved health outcomes.

These general improvements in health, however, mask some of the negative health consequences of freer trade. A small but growing body of literature shows that the expansions in the trade of tobacco and tobacco products over the past few decades has led to significant increases in cigarette smoking and other tobacco use, largely in response to the reduced prices for and increased marketing of tobacco products that result from more open markets. Moreover, the increases in tobacco use are largest in developing countries where the controls on tobacco use are generally weakest and where there is a positive relationship between income and tobacco use (unlike in developed countries in recent years, where tobacco use has become increasingly concentrated among lower-income populations). Given the strong links between tobacco use and health, the liberalization of trade in tobacco products and subsequent increases in tobacco use will almost certainly lead to significant global increases in tobacco-related death and disease.

Many of the same factors contributing to the global increase in tobacco use are almost certainly having the same impact on alcohol use and abuse. Similarly, barriers to international trade in alcoholic beverages have been falling over the past several decades and the alcohol markets are becoming similarly globalized. This has probably led to a general increase in the overall supply of alcoholic beverages and, as a result, reductions in the prices for beer, wine and distilled spirits and increased advertising and promotion of these products. Given the strong evidence on the relationships between price, advertising, income and drinking, the liberalized trade in alcohol has probably led to greater consumption than would have been the case had markets remained closed. Given the strong links between alcohol use and a variety of health, economic, and social consequences, it is similarly likely that the problems associated with alcohol use and abuse are greater as a result of liberalized trade.

This does not imply, however, that restricting the supply of alcoholic beverages by maintaining and/or strengthening barriers to trade in alcohol is an appropriate policy response. Doing so would probably violate international trade treaties and almost certainly result in retaliatory measures that could have significant economic harms. The experiences of tobacco, however, provide some examples of more appropriate strategies that are not in conflict with international treaties. One important example comes from the GATT Council decision resolving the dispute between the United States and Thailand. This decision stated clearly that strong tobacco control policies aimed at improving public health are consistent with international trade agreements, as long as these policies are applied evenly to domestic and foreign cigarettes and other tobacco products. The precedent established by this decision would probably also apply to alcohol control policies. That is, strong measures to reduce alcohol use and abuse, including higher taxes, bans on alcohol advertising and promotion, limits on alcohol availability and a variety of other measures, as long as they are applied in a non-discriminatory manner to domestically produced and imported alcoholic beverages, would not be a violation of international trade agreements.

Similarly, the globalization of the alcohol markets that accompanies the liberalization of trade in alcoholic beverages, in part a result of the privatization of state run monopolies, does not necessarily result in greater alcohol consumption and an increase in the consequences of alcohol use and abuse. As seen with tobacco in Poland, a government that is no longer in the business of supplying a harmful product and benefiting from the revenues this generates may be freed to adopt strong, effective measures to reduce the use of that product. However, in countries that have used state-run monopolies to control the distribution and availability of alcoholic beverages, the elimination of this monopoly can have significant public health consequences.
Similarly, the recent negotiations for a Framework Convention on Tobacco Control provides an excellent example of the type of international effort that can directly address many of the issues that result from trade liberalization and globalization that are difficult for countries to address on their own. A similar effort addressing transnational issues associated with pricing, marketing, labeling, smuggling and other aspects of alcoholic beverage supply and demand could be highly effective in reducing the global toll resulting from alcohol use and abuse.

However, in order to understand fully the impact of liberalized trade and globalization and to develop appropriate control policies, much more information is needed. Too little is currently known about global trade in alcoholic beverages and the coverage of these products in bilateral and multi-lateral trade agreements. Similarly, trends in alcohol trade and its liberalization over time are poorly documented. Data on alcohol use and its consequences are limited, particularly for developing countries. The development of adequate surveillance systems containing detailed information on alcohol use, its consequences, key socio-economic and demographic determinants of use and abuse, indicators of price and control policies, treatment of alcoholic beverage imports and exports, and more, is critical to providing the data necessary to examine thoroughly the effects of trade liberalization and globalization on alcohol-related problems. Findings from these analyses would be valuable in guiding the development of appropriate alcohol control policies.

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