COMMISSION ON MACROECONOMICS AND HEALTH
A WHO commission examining the interrelations among investments in health, economic growth and poverty reduction

11

CMH Working Paper Series

Title

Confronting the Tobacco Epidemic in an Era of Trade Liberalization

Authors

Douglas Bettcher
Coordinator, Framework Conventions for Tobacco Control, World Health Organization, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland
bettcherd@who.ch

Liana Soll
Intern, Tobacco Free Initiative Hastings College of the Law
solll@uchastings.edu

Chitra Subramanian
Coordinator, Policy Analysis and Communications, Framework, World Health Organization 20, Avenue Appia, CH-1211 Geneva 27, Switzerland
subramaniamc@who.ch

Genevieve Grabman,
Intern, Tobacco Free Initiative Georgetown University Law Center
grabmang@bulldog.georgetown.edu

Emmanuel Guindon
Economist, Framework Convention for Tobacco Control, World Health Organization, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland
guindone@who.ch

Luk Joossens
Consultant, Tobacco Free Initiative, World Health Organization, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland
joossens@globalink.org

Anne-Marie Perucic
Economist, Framework Convention for Tobacco Control, World Health Organization, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland
perucica@who.int

Allyn Taylor
Legal Adviser, Framework Convention for Tobacco Control, World Health Organization, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland
tayloral@aol.com

Date: July 2001

I. Introduction

It is widely recognized that tobacco is a major public health disaster of the 20th century and that spiraling rates of tobacco consumption worldwide harm global health on an unprecedented scale. Scientific evidence unequivocally establishes that that tobacco use has devastating health consequences for the users and to those exposed to tobacco smoke. The extraordinary public health implications of tobacco, long apparent in industrialized societies, are now apparent worldwide. In contrast to the concrete agreement on the health consequences of tobacco, debate continues regarding many of the economic aspects[1] and policy implications of tobacco, including the links between international trade liberalization on global tobacco consumption and appropriate remedies.

In recent studies, global trade liberalization and market penetration have been linked to a risk of increased tobacco consumption, particularly in low and middle income countries. A recent World Bank/World Health Organization (WHO) study empirically examined the relationship between cigarette consumption and global trade in tobacco products.[2] Estimates from that study indicated that reduced trade barriers had a large and significant impact on cigarette consumption in low income countries and a small but significant impact in middle income countries.

This article builds upon the foundation of the World Bank/WHO study by examining further the links between international trade liberalization and tobacco consumption; by exploring new horizons for econometric and other economic research focusing on trade, investment, and tobacco; and by considering the legal and political issues involved in proposed efforts to address tobacco trade liberalization in the WHO Framework Convention on Tobacco Control (FCTC).

Part II of this paper reviews the epidemiological evidence of the tobacco epidemic's globalization and its links to international trade liberalization. This part also reviews the political economy of global tobacco production, manufacturing and export/import of tobacco, and the implications of the globalized tobacco economy for controlling the tobacco epidemic. The public health perspective of the tobacco epidemic's globalization is presented with analysis of the tobacco industry's views on trade liberalization and new market access. Industry perspectives are ascertained from over 35 million pages of industry documents disclosed in recent U.S. tobacco litigation. Finally, an analysis of new trading challenges to tobacco control, namely internet commerce and online advertising, will be offered.

Following this analysis Part III further explores the links between trade liberalization and tobacco consumption by proposing new avenues of economic research and defining the links between trade liberalization and tobacco trade, such as foreign direct investment. In summary, this section will:

- summarize the negative externalities associated with tobacco;
- provide descriptive analysis of world tobacco trade flows and foreign direct investment (FDI) inflows/outflows;
- offer a descriptive analysis of world tobacco trade flows and transnational tobacco companies' expansion in emerging markets;

- summarize existing empirical evidence linking trade liberalization with tobacco consumption;
- provide a detailed analysis of new econometric research commissioned for this paper;
- propose a research agenda for future empirical investigation in the area of trade and tobacco.

Within the context of tobacco as a global public health "bad," Part IV provides an overview of a the negotiations of the WHO Framework Convention on Tobacco Control (FCTC), a regulatory strategy aimed at addressing transnational determinants contributing to a worsening of the tobacco epidemic. This evidence-based treaty approach is being taken by the 191 Member States of WHO, and represents the first time the Organization has launched treaty negotiations under Article 19 of its Constitution. Several trade-related components, described herein, are proposed for inclusion in the FCTC and/or its related protocols. First, we give particular attention to how a variety of multilateral trade agreements concluded during the Uruguay Round of the General Agreements on Tariffs and Trade (GATT) in 1994 link to possible elements of the proposed Framework Convention. Contributing authors from the World Trade Organization (WTO) provide a detailed examination of the relevant WTO agreements for the Framework Convention negotiations. Secondly, possible regulatory approaches to other trade-related challenges, illicit trade and internet tobacco trade, are analyzed.

The conclusion addresses the global policy implications of the link between tobacco trade and trade liberalization. While tensions exist between the aims of tobacco control and trade liberalization, preventive strategies such as the Framework Convention have potential to impact the negative public health effects associated with the liberalization of tobacco trade. The aims of global tobacco control and trade liberalization need not be mutually exclusive: given sufficient political will, both can be addressed in tandem.

II. The Tobacco Epidemic, Trade Liberalization and Industry Strategies

A. Current Epidemiological Situation

In the early 1990s, an estimated 1.1 billion individuals used tobacco worldwide. This figure increased to almost 1.25 billion by 1998. Assuming no change in global prevalence, the number of tobacco users is expected to reach 1.69 billion in the year 2020. Table 1 summarizes the gender-specific smoking prevalence by WHO region as in 1998.[3]

Table 1. **Gender-specific smoking prevalence by WHO Region, 1998**

Region	Weighted prevalence estimate (%)			Estimated numbers of smokers (millions)			Number of studies	% of total population represented by studies
	Male	Female	Total	Male	Female	Total		
Africa	36.2	9.4	22.9	59.6391	15.1086	74.7477	15	55.4
The Americas	34.7	23.0	28.7	98.0754	67.8454	165.9209	30	96.3
Eastern Mediterranean	34.2	8.7	21.8	49.7699	11.9266	61.6965	17	88.7
Europe	43.5	23.4	33.0	144.3112	84.6990	229.0102	40	88.8
South-East Asia	48.2	8.2	28.6	242.6307	39.4710	282.1017	6	96.9
Western Pacific	62.3	5.8	34.4	387.2792	34.9310	422.2101	23	99.3
Total	**47.9**	**12.4**	**30.2**	**981.7055**	**253.9816**	**1235.687**	**131**	**92.3**

Sources: American Cancer Society and World Health Organization, TCCP database.

Note: Several small countries for which population figures were not available did not contribute their population weight to the analysis.

In 1990, tobacco use caused an estimated 3 million deaths.[4] In 1998, the annual death toll from tobacco use reached 4 million. The toll is expected to reach 8.4 million deaths by 2020, of which 70% will occur in developing countries.[5] If current growth rates continue, tobacco use will be responsible for about 10% of the global burden of disease by 2020. Of the 100 million projected tobacco-related deaths over the next 20 years, about half will occur during the productive ages of 35-69 years.[6] In China alone, 800,000 individuals will die in 2000 because of tobacco use. Further, at current smoking uptake rates, tobacco use will kill about 100 million of the 300 million Chinese males under 29 years of age.[7] Like epidemics due to communicable diseases, the tobacco epidemic is characterized by known exposure, a time lag, and pathology. However, the epidemiologic curve of the tobacco epidemic is more attenuated that that of communicable diseases.

Tobacco related diseases are the single most important cause of preventable deaths in the world. Smoking causes over 20 major categories of fatal and disabling disease, including lung and other cancers, ischaemic heart disease, and chronic respiratory diseases[8]. Epidemiological studies indicate that maternal smoking accounts for the majority of sudden death syndrome (SIDS) cases. Among post-menopausal women, current smokers have lower bone density than non-smokers and increased risk of hip fracture.

Newer studies report massive impacts of tobacco on adult mortality in China and India. In these studies, the range of outcomes attributable to tobacco included cancers and heart and lung disease, categories previously described only in developed countries. In addition, recent studies underscore the importance of tobacco as an important cause of tuberculosis death. Recent epidemiological studies in China show a significant increase in the risk of contracting tuberculosis. Yet in different regions of the world, the tobacco epidemic has taken on different profiles. In India, the widespread use of bidis (cheap cigarettes made using unprocessed tobacco) is associated with a very high rate of oral cancer.

Further evidence extends the range of health problems in adults attributable to passive smoking. Specifically, these problems include pneumococcal pneumonia and stroke. Women and children are most at risk from the effects of passive smoking in their homes. Moreover, the ill effects of passive smoking appear in the workplace, where the majority of the world's smokers are not protected from involuntary exposure to tobacco smoke by workplace health and safety regulations on tobacco control.

The trends in tobacco use among woman and youth are also of concern, since tobacco companies increasingly target this potentially lucrative market. In general, 8 percent of women in developing countries and about 15 percent in developed countries currently smoke cigarettes; women in India and several other countries chew tobacco. Unless innovative, robust, and sustained initiatives are adopted, these figures are expected to rise to 20 percent by 2025, with today's 187 million women smokers rising to 532 million.[9] Even today, more young women aged 14 to 19 than young men smoke in several industrialized countries, including Denmark, Germany, and the United States.[10]

Similarly, trends in tobacco use by children and teenagers raise alarm. Studies in developed countries show that most people start using tobacco before the age of 18 years. Recent trends show an earlier age of initiation and rising smoking prevalence rates among children and adolescents. A study of students aged 13 to 15 years across 12 countries indicated that in the Ukraine, Russian Federation, and Poland, around 30 percent were current smokers. Although rates were lower (around 20 percent) in Costa Rica, Jordan, and South Africa, the rising trends are disturbing.[11]

Though the purpose of this paper is not to review the evidence base for tobacco control interventions, the above points demonstrate the public health risks associated with increased tobacco consumption. In this regard, the suggested links between trade liberalization and increased tobacco consumption are of grave concern, and a signal for concerted global action.

B. Implementing Effective Demand Reduction Strategies in an Era of Trade Liberalization

A significant contributor to the increased risk of tobacco-related deaths, as will be documented empirically in Section III, is the globalization of the tobacco epidemic. This globalization results from the successful efforts of tobacco companies to expand their global trade and to achieve market penetration in developing countries and transnational market economies. Major transnational tobacco companies targeted growing markets in Latin America in the 1960s, the newly industrializing economies of Asia (Japan, the Republic of Korea, China (Province of Taiwan), and Thailand) in the 1980s and 1990s, and have moved recently into Africa, China, and eastern Europe. In its expansionist campaigns, the tobacco industry increasingly targets young persons and children.

The GATT Uruguay Round facilitated penetration of the world's tobacco markets by the transnational tobacco companies and, for the first time, included agreements to liberalize trade in unmanufactured tobacco. The entire package of WTO agreements will facilitate the expansion of global trade in tobacco products through significant reductions in tariff and non-tariff barriers to trade. Other regional trade agreements and/or regional trade associations, such as the North American Free Trade Agreement (NAFTA), the European Union (EU), the Association of South-East Asian Nations (ASEAN), the Common Market of East and Southern Africa (COMESA), the Economic and Community of West African States (ECOWAS), the Common Market of the South (MERCOSUR), and the Organization of American States (OAS), acted in synergy with global agreements by mandating further regional-level trade liberalization in goods and services, including tobacco. Other bilateral agreements also facilitated the penetration of potential growth markets. Examples include those negotiated by the United States Trade Representative under Section 301 of the revised 1974 U.S. Trade Act with Japan, China (Province of Taiwan), Republic of Korea, and Thailand in the 1980s.[12,13,14]

As will be documented in Section III, existing empirical evidence links increased opening of markets with enhanced consumption of tobacco products, especially in lesser developed countries. In view of the risks posed by trade liberalization, a debate has emerged as to whether tobacco control is compatible with trade liberalization. We will return to this debate in the concluding segments of this paper. However, we here note the World Bank study that proposes:

> While the arguments in favour of free trade in general, then, are robust, tobacco is clearly more harmful to health than most other traded consumer goods. The key issue for policymakers is to decide how to control tobacco without jeopardising the otherwise beneficial consequences of free trade.

To this end, the World Bank report provides definitive empirical evidence supporting the effectiveness of the following tobacco control actions:

- Tax increases, which represent a win-win situation: in all studies examined, tax increases on tobacco products resulted in net increases in national tax revenues and a reduction in consumption. The World Bank estimates that tax increases raising the price of cigarettes by 10 percent would cause 40 million smokers in 1995 to quit and would prevent a minimum of 10 million tobacco-related deaths.
- Non-price measures, including advertising bans, mass counter-advertising campaigns, warning labels, publicised findings of research on the health effects of smoking, and restrictions of smoking in public places and workplaces represent effective demand reduction strategies. The report estimates that a package of such nonprice measures implemented worldwide could reduce the number of smokers alive in 1995 by 23 million and avert 5 million tobacco deaths.
- Nicotine replacement and other cessation therapies, which, if used by 25% of the world's smokers, 29 million smokers alive in 1995 would be enabled to quit and 7 million deaths could be averted.
- Global action to counteract smuggling is recommended as a supply side intervention.

This paper addresses whether trade liberalization and tobacco control efforts can be successfully combined. As the following two parts emphasize, the threat posed by global tobacco markets is more daunting when one considers tobacco companies' marketing strategies and new, difficult to regulate challenges such as internet commerce.

C. Targeting Developing Country Markets: inside view from the tobacco industry documents

The industry is well aware of the power of free trade to open developing markets to tobacco products. In short, "Removal of [trade] barriers will provide us with expanded market opportunities."[15] Trade in developing markets will compensate for decreased tobacco consumption in the U.S. and Western Europe. An industry executive stated:

> We should not be depressed simply because the total free world markets appears to be declining. Within the total market, there are areas of strong growth, particularly in Asia and Africa; there are new markets opening up for our exports, such as Indo-China and the Comecom countries; and there are great opportunities to increase our market share in areas like Europe…It is consistently profitable. And there are opportunities to increase that profitability still further.[16]

In fact, the cigarette industry has long been developing its strategy to reach new markets in Asia, Africa, Latin America, and the Former Soviet Union. "Until recently, perhaps forty per cent of the world's smokers were locked behind ideological walls. We've been itching to get at them… That's where our growth will come from."[17] Support of free trade and multilateral trade agreements is core to this strategy. Philip Morris admits to having a large stake in market access negotiations. As foreign barriers to imports are lowered, the company stands to boost exports significantly.[18]

Philip Morris believes that NAFTA will remove virtually all barriers to trade in consume products between Canada, Mexico, and the U.S., allowing the company to move to a North American sourcing strategy.[19] Consequently, the company expects that its costs will decline and its efficiency will increase. [20] In Latin America, the enlargement of NAFTA will eliminate non-tariff import barriers "that hinder our ability to enter markets" like Chile.[21]

China is a particularly attractive new market for the tobacco industry. Robert Fletcher, Rothmans Regional Public Affairs Manager, says, "Thinking about Chinese smoking statistics is like trying to think about the limits of space."[22] Phillip Morris (PM) also notes, "China …is the largest market in the world. As it continues to move toward a market-oriented economy and incomes rise, it offers great potential for… cigarettes."[23] Yet, "[e]xtremely high import duties and local taxes… severely limit our ability to export cigarettes to China." [24] The reduction of trade barriers "will be beneficial to PM."[25] Martin Broughton, BAT's Chief Executive Officer, is the Chairman of the Chatham House Task Force, a foreign policy group which aims to facilitate free trade in China. He says, "For BAT, China is an important challenge for the future. It is the world's largest market for tobacco products…"[26]

The industry has also set its sight on Africa. Rothmans Public Affairs Manager said:

> It would be stupid to ignore a growing market. . . We are in the business of pleasing our shareholders. We have a very strong feeling that if no one had

> heard of cigarettes in Timbuktu, than a Rothmans billboard would not mean anything. All we are doing is responding to a demand.[27]

Formerly, the United States Trade Representative negotiated for tobacco when opening markets, though former U.S. President Clinton changed this policy and entirely barred U.S. embassies from publicly associating with tobacco interests. The industry reacted to this change, stating:

> In view of the growing demand for premium cigarettes as a result of the rapid economic growth, we must prepare ourselves to capitalize on any relaxation of rules and regulations… We cannot rely on USTR [United States Trade Representative] to liberalize the cigarette market; local production is essential for expanding our volume.[28]

Nevertheless, the tobacco industry enjoys strong political support for its trade liberalization tactics in new markets. One powerful, and still current, U.S. Senator has made his position clear in his letter to the Prime Minister of Japan:

> Your friends in Congress will have a better chance to stem the tide of anti-Japanese trade sentiment if and when they can cite tangible examples of your door being opened to American products. I urge that you make a commitment to establish a timetable for allowing US cigarettes a specific share of your market.[29]

D. New Challenges of Open Trade: Internet trade/E-commerce

The internet is automatic, non-centralized, and uncontrolled by geographical boundaries.[30] Tobacco retailers increasingly make use of this versatile media to market and sell their products. The United States cigarette industry reported spending $650,000 on internet advertising in 1999.[31] This is a dramatic increase from industry spending on internet advertising two years before. In 1997, online cigarette advertising cost $215,000, representing less than 0.01 percent of all advertising and promotional expenditures for the year.[32] Similar to changes seen in the cigarette industry, cigar industry expenditures on internet advertising increased by 180% from 1996 to 1997.[13] Only the U.S. smokeless tobacco industry reported no spending on internet advertising or promotion between 1996 and 1999.[33] (Yet, reported internet spending by tobacco products manufacturers may well be understated. U.S. reports only reflect expenditures by leading manufacturers, and not advertising run independently by tobacco retailers.)[13, 16]

Tobacco manufacturers and retailers use a variety of formats to market their products on the internet. Company or product home pages introduce the viewer to a company's products and services. While tobacco manufacturers' homepages do not sell tobacco products, these webpages are interactive and entertaining to the user. For example, Brown and Williamson Tobacco's site is set up like a small town, providing the user with different "spaces" in which to access information.[34] Webpages collectively provide a forum for the tobacco industry to advertise persuasively to a select group of consumers.[13] Many tobacco websites attempt to build a pro-smoking community by focusing on the lifestyle and culture of smoking and by including chat rooms or message boards for users to interact with one another.[35] Further, internet webpages and advertisements permit the advertiser to gain information about the user through "cookies" and to better target direct marketing campaigns through individual emails from the company.

Advertising banners are the most common form of advertising on the internet.[13] Banners are unsolicited advertising messages, text, images that appear on the user's screen while the user is viewing a website. Often banners hyperlink to webpages, providing direct access to another website where the user may obtain information related to the banner. Tobacco sites link extensively to other tobacco sites, helping to build a sense of community and encouraging visitors to spend more time on smoking-related sites.[18]

Online advertisers use other innovative ways to access potential customers. Some companies sponsor the creation of content on websites in exchange for being named as a sponsor on the site for the promotion of their product. Other companies make use of intermercials, short, animated segments that appear on the user's screen. Interactive characters are also used as a mechanism for advertising. These characters "live" on a user's computer but receive animating instructions over the internet from an outside source. "Advertainment," computer advertisements that combine games and movie clips with product promotion, is yet another means of getting viewers to spend time on a site.

Tobacco products are often available for sale from tobacco promotional or advertising websites, either directly from the site or from links located on the sites. While most webpages require consumers to make purchases with a credit card, tobacco products may also be purchased via a printable mail-in order form which can be used with a check or money order.[18] Other sites list a toll-free telephone number so that customers can order tobacco products offline. Tobacco internet sales may supplement or even replace sales through traditional methods: in 2000, R.J. Reynolds Tobacco Company began marketing Eclipse cigarettes only through on the internet.[36]

Internet advertising and sales promotions are targeted to meet the interests of internet users. The internet has proved to be a valuable channel for shopping among young people. The most active online users are 18 to 34 years old.[37] Fifty-four percent of this group reports using the internet to gather information about products and services.[38] In China, a country with a large upsurge of young people starting to use the internet, the typical internet user is 30 years old, male, wealthy, and university-educated.[39] In 2000, 12.3 million Chinese were online.[40]

The United States has the most internet users, and online population in the United States will soon closely resemble the aging demographics of the overall US population.[20] Adults aged 55 and over represent the fastest-growing group of US internet users, now accounting for twenty percent of all new users.[20]

Targeted tobacco advertising is a profitable venture for tobacco retailers. By 2005, consumers will spend five billion dollars on tobacco products purchased online.[41] Web-based tobacco sales continue to thrive, even after the April 2000 market shakeout that resulted in closure of many online retailers.[42]

Internet trade of tobacco thus represents a transnational threat to tobacco control; potential regulatory strategies at address this emerging threat will be considered in Section IV of this paper.

III. Trade, Investment and Tobacco: Existing Evidence and New Research

A. Background

In recent years, the movement of goods, services, and capital across national boundaries has been a much discussed topic. World trade as a share of gross domestic product (GDP) has been steadily increasing since World War II, while Foreign Direct Investment (FDI) reached record levels and stood at 865 billion US dollars in 1999.[43] FDI traditionally received less attention in globalization circles despite the fact that the value of world production by affiliates exceeds the value of world trade.[44]

The theory of comparative advantage provides the foundation for the economic benefits from the trade liberalization. As long as differences exist in the ability to produce goods and services (i.e. different relative production costs), opportunities for trade will exist, even if one country can produce everything more cheaply than other countries. Differences in the cost of production can arise due to factors including disparities in natural resources, labour force characteristics, and technology. Freer trade is expected to reduce costs of living, provide more choice and quality of products, raise incomes, and stimulate economic growth.[45]

Economic benefits from investment liberalization arise from easier transfers of capital, technology, and know-how achieved through increased FDI. FDI adds to gross capital formation[46] and balance of payments without the risk associated with additional loans. FDI also increases competition and can produce spillovers such as improved management and better technology.[47] The expected benefits of freer investment environments are higher wages and better productivity through technology transfers and improved managerial skills.[48]

However, critics argue that, because of lower wages in poor countries, freer trade leads to lower employment in rich countries and FDI leads to a transfer of control from poor to rich countries. This contributes to the exploitation of workers and natural resources in poor countries. Moreover, critics submit that FDI inflows can crowd out domestic investments and foreign exchange transactions can lead to financial instability.[49]

From an economist's perspective, it is instrumental to note that the benefits from trade and investment liberalization reside in importing rather than exporting.[50] In 1821, 19th century trade theorist James Mills wrote, "The benefit which is derived from exchanging one commodity for another, arises, in all cases from the commodity received, not the commodity given."[51] This statement raises important issues when the commodity received is associated with negative externalities.[52] Tobacco clearly fits in this category and has been aptly described as "the only legal consumer product that kills half of its regular users."[53]

B. Liberalization and tobacco use

1. Theory

Trade in manufactured tobacco products such as cigarettes has been increasing rapidly since the mid-1980s. Several reasons have been proposed to explain this surge in international tobacco trade. First, the inability of a specific country to produce tobacco products in enough quantity or of sufficient "quality" to satisfy domestic demand may lead to increased imports.[54] Secondly, tobacco products price differentials between countries may create an incentive to exports and imports.[55] Thirdly, in a few developing countries, tobacco products can be an important source of foreign currency and thus create a strong incentive to trade.[56] Finally, reductions in trade barriers, such as import bans, tariffs, quotas, and domestic content requirements, almost certainly have encouraged trade in tobacco products.[57]

This recent upsurge in tobacco trade does not come without potential health consequences. Increases in tobacco trade may lead to increases in the use of tobacco products and thus lead to death and disability. The reasons are manifold. First, reductions in barriers to tobacco trade usually lead to increased supply and lower prices. Given the well-established relationship between prices and tobacco use,[58] this will likely lead to increases in the use of tobacco.[59] Secondly, removals of trade barriers will usually be associated with enhanced competition and, hence, will depress prices and increase advertising expenditures. This effect is particularly important in markets dominated by government-owned monopolies that may neither advertise vigorously nor produce efficiently. In addition, increased advertising expenditures by new entrants can lead to increases in advertising expenditures by existing firms.[60] Increased advertising can reach certain market segments, such as women and minorities, whom are often untapped in emerging economies. Further, brand proliferation (i.e. an increase in the number of brands available to consumers) can increase the size of a market.[61]

For similar reasons, one can expect tobacco-related FDI to have at least a comparable effect on tobacco use. Unlike trade in tobacco products, tobacco-related FDI may provide tobacco transnational companies with a strong local presence that allows more pertinent lobbying of government officials.

2. Existing Evidence

A few econometric studies have tried to measure the effects of trade liberalization on tobacco consumption. However, to our knowledge, no attempts were made to empirically examine the impact of investment liberalization on tobacco use. The different works reviewed below and outlined in Appendix 1 examine this topic and conclude that trade openness does lead to an increase in tobacco consumption.

Chaloupka and Laixuthai (1996)[62] studied the impact of Section 301 agreements on cigarette consumption in 10 Asian countries. Section 301 of the 1974 Trade Act called for the imposition of retaliatory trade sanctions on countries that failed in negotiations to eliminate unfair trade. During the 1980s and early 1990s, the U.S. used this section to force three Asian countries and one Asian province (Japan, Republic of Korea, Thailand, and Taiwan, Province of China) in opening their cigarette markets.

Chaloupka and Laixuthai examined annual data ranging from 1970 to 1991 in the four markets mentioned above and in six other Asian countries: China, Indonesia, India, Malaysia, Pakistan and the Philippines. The researchers built models where the dependent variable was either the cigarette per capita consumption or the market share of U.S. cigarettes. The explanatory variables considered were: a dummy variable for section 301 agreements - taking value one for the years starting from when the markets were open to U.S. cigarettes and zero otherwise; the GNP; and a dummy variable called GNP missing - defined as one when GNP data was missing and zero otherwise. This research defined three models. The first model estimated the impact of section 301 agreements on the natural log of consumption in the ten countries. The second model considered only the 4 markets affected by the agreements. The third model studied the impact of section 301 agreements on the natural log of the market share of U.S. cigarettes in those same four markets. This regression model used a fixed effect model controlling for country and time-specific determinants of cigarette consumption. Results showed that section 301 agreements had a significantly positive effect on the market share of U.S. cigarettes in model 3. Models 1 and 2 showed also that the agreements increased cigarette demand. The opening of a once-closed Asian market had a positive and significant effect on cigarette consumption. The estimates implied that cigarette consumption was almost ten percent higher than it would have been if the Asian markets remained closed to U.S. cigarettes.

Chaloupka and Laixuthai offered two explanations for this effect. The first explained that the opening to U.S. markets resulted in an increase in competition and a price reduction that, in turn, led to an increase in cigarette demand and consumption. The second explanation was that the substantial increase in advertising and promotion of U.S. cigarettes, and of domestic cigarettes in some countries, led to increases in the market share of U.S. cigarettes and in overall consumption.

Hsieh, Hu and Lin (1999)[63] concentrated their work on Taiwan. Their model included as the determinants of cigarette consumption the price of cigarettes, income, lagged cigarette consumption, measures related to health information, low tar, warning label, import (the market share of imported cigarettes, in percentage), and participation rate of females in the labor force. Hsieh, Hu and Lin also built a more disaggregated model by separating domestic cigarette consumption and imported cigarette consumption in two equations each depending on both domestic and imported cigarette prices. The researchers used different methods for the estimation of the first model, an AR(1) residual correction, a two stage least squares, and a two stage least squares with the addition of the lagged consumption variable. For the disaggregated model, the SUR estimation was used. Conclusions remained globally the same for the different estimation approaches. For the aggregate model, the researchers found that prices had a positive and significant effect on consumption. Price elasticity showed that a 10% increase in cigarette prices caused a 5-6% decrease in consumption. The import share variable had a positive and significant coefficient. Estimates showed that an 811% growth of the market share of imported cigarettes led to a 20% increase in per capita cigarette consumption in 1987. And finally, the lagged consumption variable did not have a significant effect.

In the disaggregated model, cross prices effects in both equations (domestic and imported consumption) were positive. This indicates that domestic and imported cigarettes are substitutes. The market share of imported cigarettes had a significantly negative impact on domestic consumption. A 10% increase in market share resulted in a 0.8% decrease in domestic consumption. The results of the two models lead to a conclusion with two outcomes: the increase in market share of imported cigarettes has induced smokers to switch from domestic to imported cigarettes and has increased overall cigarette consumption.

Unlike other studies, Depken (1999)[64] used the real price of cigarettes as the dependent variable in an attempt to study the effect of advertising restrictions on the prices of cigarettes in OECD countries. The model studied the real price of cigarettes as a function of consumption, employment, percentage of female workforce, GDP, openness (trade as a fraction of GDP), population, time, time squared, and a variable that measured tobacco advertising restrictions. A log-log model was defined with a fixed effect panel data estimator. Two measures were used independently: a dummy variable for whether advertising was completely banned from the country and a scale variable developed by Laugesen and Meads (1991)[65] that attempts to measure the degree of restrictions advertising. The results indicate that trade openness is associated with a decrease in the prices of cigarettes. By association, one could conclude that as openness to trade increases, cigarette prices decrease, leading to higher levels of consumption.

Taylor et al. (2000)[66] examined the impact of trade openness (as measured by import penetration (i.e. total imports as a share of GDP) on cigarette consumption. The dependent variable in the model, per capita cigarette consumption, was a function of real per capita GDP, trade openness, and lagged cigarette consumption (included in the model to account for the addictive nature of cigarette consumption). The study examined 42 countries that were organized into three groups depending on their levels of per capita income. The low income countries were defined as those with real average per capita GDP of US$ 1000 over the 70-95 period, the middle income countries were defined with GDP ranging between US$ 1000 and US$ 3000 and the high income countries were defined with GDP over US$ 3000.

Results show that the openness measure was significant and positive for countries with low and middle income but was not significant for high income countries. The positive relation between consumption and openness implies that trade liberalization leads to an increase in cigarette consumption in low and middle income countries. Taylor et al. propose that trade openness has a diminishing marginal effect on cigarette consumption as openness rises. That is, since trade openness is greater in high income countries, one would expect openness to have a greater marginal effect in countries with lower income.

C. New Econometric Research: Model Specifications

Three models will be used to test the hypothesis that trade and investment liberalization positively affect tobacco consumption:

Model 1 – First, a model similar to Taylor et al. using time series panel data will be estimated. A larger panel dataset covering more than 80 countries and the years

1970-1997 will be used. As well, additional measures of trade openness will be utilized and some measures of investment openness will be introduced. Econometric methodology developed by Baltagi et al. (2000)[67] which proposes several pooled-estimators will be followed.

Model 2 – In order to introduce more explanatory variables (notably prices), Model 1 will be modified to three-period (1985, 1990 and 1995). The same trade and investment openness measure and econometric methodology will be used.

Model 3 – The Asian model proposed by Chaloupka and Laixuthai (1996)[68] will be re-estimated using longer time series data using various pooled-estimators proposed by Baltagi et al. (2000).[69] As well, new explanatory variables such as price will be included in the 4-market model.

Until analysis of models 1-3 is complete, prescriptions for future research directions are premature.

IV. Framework Convention for Tobacco Control: A Global Regulatory Strategy

A. The FCTC: A paradigm shift in regulating "global bads"?

Kaul, Grunberg, and Stern[70] note that with ensuing instabilities in the global marketplace, increasing attention is paid to global public bads. These public bads have direct negative connotations for stability in the global marketplace. Banking crises (internet-based crime and fraud) provide an example. Other negative effects of increasing globalization include environmental degradation, such as ozone depletion and climate change, which have negative repercussions for public health. Major transnational determinants of ill-health that qualify as global bads include the spread of infectious diseases via the food trade and movement of persons across borders; increased trade, marketing, and promotion of harmful products such as tobacco; and increased illicit trade in other harmful drugs.

As noted above, trade liberalization facilitates penetration of developing country markets and consequently contributes to the spread of the tobacco epidemic to the developing world. Here, we introduce the notion of regulating global public bads in the context of trade liberalization and argue it is rooted in a specific political economy paradigm.

The Uruguay Round tackled issues of strategic importance for the design and management of the global economy, including linkages among money, trade, and finance. The outcome of the Uruguay Round may affect the domestic development and future options of developing countries.[71] Negotiations began when the economies of major developed countries were still reeling from the recessionary years of the 1980s. In addition, political and institutional constraints – compulsions of the arms race, unwillingness to reduce consumption, rigid wage structures, powers of domestic lobbies – prevented developed economies from looking for fresh solutions and from bringing about structural changes necessary to stir economic growth. The Uruguay Round was thus conceived as an external impetus.[72]

Developed countries, particularly the United States, muted calls for a new round of trade negotiations in the early 1980s. Developing countries were reluctant to enter another round of negotiations so soon after the 1979 Tokyo Round where gains had been limited and of dubious character.[73] Further, developing countries were apprehensive of developed countries' efforts at the 1982 General Agreement on Tariffs and Trade (GATT) Ministerial Meeting to negotiate new areas such as Services, Trade-Related Investment Measures (TRIMS), and Trade-Related Intellectual Property Rights (TRIPS). Developing countries succeeded in underplaying these new areas in the 1982 Programme of Action. However, in following months, developed countries used the Programme of Action to launch a new round of trade negotiations. The thrust of developed countries' position was to use the negotiations to maintain an international regime to protect foreign capital and technology and secure compliance.[74]

When the Uruguay Round was launched, developing countries attempted to safeguard their interests by ensuring:

a) in Services, any proposed regime respected the policy objectives of national laws and regulations applying to services;
b) in TRIPS, the negotiations were confined to GATT provisions and, as appropriate, new rules and disciplines were elaborated;
c) in TRIMS, the negotiations examined the operation of GATT rules related to trade restrictions and distortions of investment measures and, as necessary, elaborated provisions to avoid such adverse effects;
d) in Goods and Services, negotiations proceeded on separate tracks to avoid "cross retaliation" (i.e., retaliation by way of withdrawing or withholding concessions on trade in goods for lack of compliance with liberalization commitments).[75]

Launched at the United States' initiative, the Uruguay Round negotiations addressed global production and production of capacities. The European Community's (now European Union) chief negotiator, Ambassador Tran Van Thinh, said that the new round was not about technical GATT issues like tariff and non-tariff measures. Rather, the round would focus on wider economic issues and trade policy. Thus, the main negotiations would be a trilateral affair involving the US, EU, and Japan.[76]

In the early phase and throughout negotiations, developing countries sought to limit damages in the new areas and to achieve positive results in traditional areas, like market access. In Services, developing countries tried to safeguard their nascent service industries and seek access in areas where they had competitive advantage. In TRIPS, developing countries tried to keep norms and standards of intellectual property protections outside the negotiations.[77]

Turmoil, tension, and a search for balance between economics, growth, and social justice marked the 1980s. Two seemingly unrelated developments bear this out. A year after the Uruguay Round launch, as GATT defined the Round's parameters, the United Nations General Assembly in New York called for action on sustainable and environmentally sound development. This was a response to the World Commission on Environment and Development (WCED) Brundtland Commission Report, *Our Common Future*, chaired by Dr. Gro Harlem Brundtland, the present Director-General of the World Health Organization. The Commission published its report and forwarded it to the General Assembly, United Nations bodies, and specialized agencies.[78] While the Brundtland Commission did not challenge the fundamentals of the market economy, it also did not endorse the status quo.

The UN's view of its Member States' development priorities and directions is significant in the context of trade liberalization and tobacco control. The General Assembly called on UN bodies to "pursue sustainable development," though the GA qualified this directive, specifying that action should be "in accordance with . . . development plans, priorities and objectives."[79]

The two development paradigms are not easily reconcilable. One, the Uruguay Round, calls for tearing down trade barriers largely irrespective of countries' development priorities. The Uruguay Round's basic premise is that private enterprise and transnational corporations function efficiently and for the benefit of all when left to themselves. Thus, governments' power to intervene and regulate must be curbed. Further, markets and development have no room for those who are not useful for consumption or for production.[80]

The Brundtland Commission and *Our Common Future* accepts that the State, governments, and the international community may have to intervene to ensure sustainable development.[81] Such interventions might include eradicating poverty, ensuring justice for the poor on the market's periphery, regulating market forces, making protection of the environment profitable, and penalizing and/or making environmental degradation unprofitable.[82] Moreover, the real threats posed by increased tobacco consumption associated with trade liberalization provide an impetus for intervention by governments and the international community.

The Framework Convention on Tobacco Control unfolds against a background of awareness of health and other human rights. It is debatable whether existing international and national systems have achieved these rights. The FCTC has shown that tobacco industry exemplifies globalization as profit-making at all costs, including the loss of lives. FCTC has shown that globalization can be about responsible industrialization and growth that incorporates sustainability, suitability, saving lives, and protecting children.

Currently, tobacco sits in a sort of regulatory no-mans-land. In many national jurisdictions and on the global level, tobacco is neither regulated as a licit nor illicit product.[83] For instance, tobacco is the only legal product that kills one-half of its customers when used as recommended, contains 4000 additives and up to 60 carcinogens, harms non-users, and does not contain mandatory product content disclosure information. At the beginning of the Uruguay Round, the idea of a legally binding international agreement on tobacco would have been preposterous. However, the Framework Convention is becoming a global reality.

B. Rationale and Summary of FCTC Negotiation Process

To strengthen and coordinate global responses to the tobacco epidemic, the World Health Assembly adopted on May 24, 1999 a resolution to pave the way for accelerated multilateral negotiations on a WHO Framework Convention on Tobacco Control (FCTC) and possible related protocols.

The international legal strategy being used to promote global tobacco control is the framework convention-protocol approach. The term 'framework convention' does not does not have a technical legal meaning in international law. It is used to describe a variety of legal agreements that establish a general system of governance for an issue area. (Bodansky 1999) Framework conventions, unlike more comprehensive types of treaties, do not attempt to resolve all substantive issues in a single document. (Taylor 1996) Rather, they divide the negotiation of separate issues into separate agreements. States first adopt a framework convention, which creates an institutional forum in which states can cooperate and negotiate the conclusion of separate implementing protocols containing detailed substantive obligations or added institutional commitments. First proposed in a background document to the World Health Assembly by Taylor and Roemer (1996),[84] the framework convention-protocol approach is, in essence, a dynamic and incremental approach to global lawmaking.

The idea behind the FCTC process, the FCTC and related protocols, is that it will act as a global complement to – not replacement for – national and local tobacco control actions.[85] When entered into force and implemented by state parties, the FCTC will constitute an important component of a stable and integrated global regulatory environment for tobacco control. It is important to recognize that the FCTC is not just *a* platform to develop binding global standards on tobacco control, but in fact the *only* platform available to develop such international commitments and harmonize national policies. Mechanisms can be incorporated in the treaty to encourage states to comply with their international legal obligations, including mechanisms to enhance the technical capacity of poor countries to develop and implement strengthened tobacco control programs. The FCTC and its protocols will be binding international law for those states that adopt and ratify these agreements once they enter into force.

1. Process and Progress in the FCTC Negotiations

i. The Pre-negotiation Stage of the FCTC: the FCTC Working Group

The 1999 WHA adopted by consensus Resolution 52.18 that established a two-step political process for negotiating the FCTC. First, it created a working group, open to all WHO Member States, to consider the potential technical foundation for the FCTC and related protocols. Second, it established an intergovernmental negotiating body (INB) to draft and negotiate the FCTC.

The first stage of the process is complete. During the pre-negotiation period, a technical working group met twice between May 1999 and October 2000 to elaborate the scientific and policy foundation for the FCTC. At its first meeting in October 1999, the group agreed that substantive tobacco control obligations in the FCTC and related protocols should focus principally on empirically established demand-reduction strategies. (WHO 1999a) Hence, from the inception of the FCTC process, WHO Member States emphasized that the FCTC should promote global agreement and action on the primary interventions upon which there is overwhelming scientific support: tobacco taxes and prices, advertising and promotion, education, warning labels, clean indoor-air policies, and treatment of tobacco dependence. Consistent with the World Bank's recommendations on tobacco control, the working group supported coordinated action against smuggling as the one key supply-side area for global agreement and harmonization of policies.

The working group met again in March 2000, to prepare a final report for the 52nd World Health Assembly. Working from secretariat documents analyzing potential elements of the FCTC, examples of existing framework conventions, and other treaties, (WHO 1999b) the final working group output was a catalog of possible draft elements for the FCTC and a menu of possible options. The group forwarded its work to the INB for consideration. (WHO 2000a)

ii. Negotiation of the FCTC: The Intergovernmental Negotiating Body

Formal political negotiations on the FCTC commenced with the convening of the first session of the INB in Geneva on 16-21 October 2000. Nine intergovernmental organizations, 148 Member States and observers from the European Community, and 25 NGOs attended the session. (WHO 2000b) Ambassador Celso Amorim, a senior Brazilian diplomat and former foreign minister with extensive negotiating experience, was elected as the Chair of the INB; the INB also nominated vice-chairs from Australia, India, Iran, South Africa, Turkey and the USA.

The INB began work by reviewing and commenting on the working group's 'proposed draft elements' document. There was widespread agreement that it was a useful reference document for initiating negotiations. The INB also agreed that, following oral comments and written submissions made during the first session, the Chair should prepare a first draft text of the FCTC, indicating possible compromises, a reduced number of options (compared with the working group report), and reorganization of the draft elements.

In January 2001, the FCTC negotiations took a major step forward with the release of the Chair's Text, the first draft of the FCTC. (WHO 2001) The formulation of the first draft of an international instrument is a critical step in any treaty negotiation process. (Taylor and Bodansky 1998). As the eminent scholar Paul Szasz has observed, the initial draft of a treaty acquires a degree of authoritativeness: "it tends to focus the necessary negotiations and further studies." (1997)

In twenty sections, the text sets forth proposed substantive and procedural obligations under the FCTC. With respect to substantive obligations, the draft reflects a comprehensive approach to global tobacco control, addressing a broad range of concerns, including:

- General obligations to develop comprehensive, multisectoral tobacco control programs;
- Specific control provisions, such as price and tax demand reduction measures; non-price demand reduction strategies, such as environmental tobacco smoke,

advertising, and labeling; and supply measures such as youth protection and smuggling;

- Other potential national obligations under the FCTC, such as education, training, public awareness, and multilateral cooperation in surveillance, scientific research, and information exchange.

Notably, the Chair's Text calls for the negotiation of early protocols in a number of high priority areas for global tobacco control, such as advertising, promotion, sponsorship, and illicit traffic in tobacco products.

The Chair's Text does not represent a full draft of the FCTC. Rather, it is confined to areas addressed during the first session of the Negotiating Body and does not address matters not considered, such as amending and updating the text and final clauses. In many treaty negotiations, no full initial draft is prepared at all. Rather, the drafters build "one, provision by provision, on the basis of debates and of individual proposals considered in the course thereof." (Szasz 1997)

The Negotiating Body formally considered the Chair's Text at the Second Session on the FCTC in Geneva, April 30 to May 5, 2001. Dividing the substantive consideration of different aspects of the FCTC into three plenary working groups, the participating Member States provided oral comments and written submissions to amend the Chair's Text. In order to further negotiations, the Chair, in collaboration with the Co-Chairs of three working groups and the WHO Secretariat, has prepared a new integrated rolling text, which reflects all textual proposals to amend the Chair's Text. This new text will be considered by participating states at the third session of the Negotiating Body.

C. Relevant World Trade Organization Agreements: Potential Overlap between FCTC and WTO Obligations

The goal of this section is to review how some of the potential national and international measures currently proposed in the Chair's Text of the Framework Convention as necessary to combat effectively the global tobacco pandemic involve issues regulated under several of the WTO agreements. Such agreements include the *General Agreement on Tariffs and Trade (GATT 1994),* the *Agreement on Technical Barriers to Trade (TBT Agreement),* and the *Agreement on Trade-Related Aspects of Intellectual Property Rights* (*TRIPS Agreement)* (Plotkin 2000). As the FCTC is still in the process of negotiation and no final text has been codified, it is impossible to analyze with specificity the potential areas of overlap between the proposed WHO Convention and obligations of Member States under WTO treaties. Identifying possible areas of overlap is further confounded by the lack of draft texts of possible FCTC protocols and by the uncertainly of the legal implications of new WTO agreements for global tobacco control.

GATT 1994 – GATT 1994 is the most significant of the WTO Multilateral Agreements with respect to international tobacco trade and potential provisions of the FCTC and related protocols and related protocols. GATT 1994 provides detailed rules and standards for determining what trade-related measures are permitted. Article I of the Agreement establishes the principle of most favored nation that, with several exceptions, requires that products from one member country be given no less favorable treatment than "like" products from any other member country. Article III establishes the principle of national treatment that, subject to some exceptions, mandates that laws and regulations cannot treat differently products imported into a country and "like" domestic products. Collectively, these principles are designed to prevent members of GATT 1994 from using internal law to favor domestic products over imported goods. These rules thus enshrine the core principle that members are generally entitled to nondiscriminatory treatment of their products in other Organization State Members.

Article XX of the text of the Agreement provides a critical and highly limited exception for national measures designed to protect public health that would otherwise violate GATT 1994 obligations. Article XX, in relevant part, 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).

Article XX is a conditional exception from obligations under other provisions of the Agreement. Article XX exceptions are only relevant if a trade violation is found. In addition, dispute resolution practice establishes that: (1) GATT panels examine Article XX only if has been expressly invoked by the party to a dispute; (2) Article XX is narrowly interpreted, and; (3) the party invoking the Article XX exception has the burden of proof. (WTO 1998)

GATT has elaborated on the implications of Article XX in the context of national tobacco control regulations in a 1990 case involving Thailand's ban on cigarette imports and advertising. (GATT, 1990; Chaloupka and Laixuthai, 1996; Chaloupka and Corbett,1998; Roemer, 1993; Taylor, et. al 2000) In this case, American tobacco companies challenged Thailand's ban on advertising and imports, prompting an investigation by the U.S. Trade Representative who referred the matter to GATT. Article XI:1 of GATT (1947) provides that "no prohibitions or restrictions ... made effective through... import licenses... shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party...." Although inconsistent with Article XX:1, Thailand contended that the prohibition on imports was justified by the objective of public health policy and was therefore covered under Article XX .

The GATT panel found that Thailand could "give priority to human health over trade liberalization" as long as the proposed measures were "necessary." The Panel concluded that Thailand's restrictions on imports could be considered "necessary" in terms of Article XX only if there were no alternative measure consistent with the General Agreement - or less inconsistent with it - that Thailand could reasonably be expected to employ to achieve its health policy objectives. Based on its analysis of the "necessity" of the Thai measures, the panel concluded that Thailand's practice of permitting the sales of domestic cigarettes while banning the importation of foreign cigarettes was not "necessary" and, therefore, not justifiable under Article XX(b) since alternatives to banning the importation of cigarettes were available to protect public health.

The panel further found, however, that requiring foreign tobacco companies to abide by tobacco control regulations that applied equally to domestic and foreign tobacco products was appropriate and consistent with GATT obligations. GATT upheld the advertising ban and stated that various tobacco control measures could be adopted and applied to both domestic and imported tobacco, in lieu of an import ban, and could still be consistent with GATT obligations. Given this decision, Thailand could have banned the sale of all cigarettes, domestic and imported, and remained consistent with GATT. The Panel also noted that a ban on advertising applying to both domestic and imported cigarettes would be justified under the Agreement, even if it created unequal competitive opportunities between domestic and foreign firms, because advertising risks stimulating demand for cigarettes.

This was the first GATT case decision on manufactured tobacco products. As such, it has set a critical precedent for other countries. The case sends a message that member nations can adopt and implement strong tobacco control standards in the FCTC consistent with WTO obligations so long as the measures are aimed at protecting health and do not discriminate between domestic and imported tobacco. The decision by the GATT Council thus indicates that stringent FCTC tobacco control policies aimed at reducing the death and disease associated with tobacco could be adopted and implemented without violating international trade commitments.

As commentators have observed, however, it cannot be assumed that GATT 1994 will be applied in a manner that supports the protection of public health in future decisions. (Bettcher, Yach & Guindon 1999; Taylor, et. al. 2000) The WTO regime is primarily aimed at the limitation of health-based restrictions to those that are necessary and minimally burdensome to trade. In addition, the GATT panel's interpretation of the necessary requirement under Article XX unduly restricts the capacity of countries to adopt standards to protect public health. (Schoenbaum, 1997) The standard employed by the GATT panel when considering Thailand's import ban requires countries to adopt the least trade-restrictive policy possible. This standard, which was followed by the WTO panel in the Gasoline case, inordinately favors the expansion of free trade over national authority to protect public health.

Notably, the Thailand cigarette case was handled under the dispute resolution process applicable to GATT (1947). Resolutions of disputes concerning the substantive rights and obligations of WTO member states under the new Multilateral Agreements is now governed by the Understanding on Rules and Procedures Governing the Settlement of Disputes. These new dispute resolution procedures are producing a new body of GATT jurisprudence that differs significantly from the rules governing the Thai case, although not, thus far, in ways that would appear to change the Thai result. (Palmeter and Mavroidis, 1998). In addition, the text of Article XX has been modified in GATT (1994) from the way it originally appeared in GATT (1947), although not in a way that appears relevant to the Thai decision.

Trade-Related Aspects of Intellectual Property Rights (TRIPS) – The World Trade Organization's 1994 Agreement on Trade-Related Aspects of Intellectual Property

Rights provides for broad protection of intellectual property rights. Under TRIPS each Member has a basic obligation to provide the intellectual property protection required under the treaty to the nationals of other Members. The treaty provides for international minimum standards of protection related to the availability, scope, and use of intellectual property rights associated with trademarks, copyrights and related rights, industrial designs, patents, and undisclosed information including trade secrets. Further, TRIPS requires that Members adopt a broad range of remedies and enforcement procedures to address violations of the rights provided for under the treaty.

TRIPS trademark provisions are potentially relevant to a number of proposed provisions in the FCTC or related protocols, including those that seek to limit tobacco marks (advertising as well as generic and plain packaging). Article 15, the basic rule of the trademarks section in TRIPS, requires that any sign, or combination of signs, capable of distinguishing the goods and services of one undertaking from those of others, must be eligible for registration as a trademark, provided that it is visually perceptible. Article 20 of TRIPS provides:

> The use of a trademark in the course of trade shall not be unjustifiably encumbered by special requirements, such as use with another trademark, use in a special form or use in a manner detrimental to its capability to distinguish the goods or services of one undertaking from those of other undertakings.

The tobacco industry has argued that labeling restrictions violate Article 20 of TRIPS because they are an unjustified encumbrance on their rights to use their trademarks. There are, however, strong counter arguments to the claim of the tobacco industry. TRIPS, like GATT, contains an exception for measures necessary to protect the public health. Notably, no TRIPS challenge has been initiated by a member state to date against either Australia or South Africa, both of which require health warnings taking up 25% of the tobacco packet. (Allen, 1998) Whether plain packaging, which would involve displacement of all tobacco company labeling and the removal of trademarks entirely, would violate TRIPS remains an open question.

Agreement on Technical Barriers to Trade ("TBT Agreement") – With the conclusion of the Uruguay Round, trade ministers adopted a number of agreements that deal with various non-tariff barriers designed by countries to protect domestic industries from foreign competition. Although no case has addressed the issue thus far, such agreements may have some implication for future tobacco control regulatory efforts. Collectively, the non-tariff barrier agreements are designed to promote free competition by controlling technical and bureaucratic measures that involve hindrances to trade. (WTO, 1998b)

The TBT Agreement governs a broad range of product-related regulations, including labeling, ingredients, testing, and production standards, that states impose upon imported products to protect domestic health, safety, and environmental interests. The TBT Agreement tries to ensure that national regulations, standards, testing, and certification procedures for imports do not create unnecessary obstacles to trade. Specifically, the TBT Agreement applies to technical regulations and standards that "lay down product characteristics or their related processes and production methods, including the applicable administrative provisions" and "may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method."

As the scope of the TBT Agreement includes many health-related requirements pertaining to product contents, packaging and labeling, as well as procedures for testing and certifying compliance with such requirements, the TBT Agreement is likely to address many of the potential provisions of the FCTC and its related protocols. Such provisions may include: restrictions on tobacco product contents; labeling of cigarette packages; tobacco manufacturer/importer reporting and testing obligations; package stamps or markings designed to curtail smuggling; package size, design, and other markings, including plain-packaging; and distribution and licensing requirements.

Agreement on Agriculture – The Agreement on Agriculture addresses trade issues involving agricultural primary and processed products, and specifically includes tobacco and tobacco products. In general terms, the treaty addresses: (1) the reduction of tariff and non-tariff barriers to agricultural trade and (2) the reduction or prohibition of export and domestic subsidies on agriculture products.

There are potentially strong synergies between the FCTC and the Agreement on Agriculture. The WTO Agreement aim to reduce, regulate, or prohibit various types of subsidies is consistent with the approach recommended by public health experts for the FCTC and related protocols. Notably, however, the Agreement on Agriculture does permit some kinds of agricultural supports and subsidies and phased-in reduction commitments. For example, under Article 15(2) of the WTO Agreement, developing countries have up to ten years to implement tariff and subsidy reduction commitments. Further, least developed countries are not required to undertake reduction commitments.

Rules of Origin Agreement – The Rules of Origin Agreement requires WTO members to ensure that their rules of origin are transparent; that these rules do not have a restricting, distorting or disruptive effect on international trade, and; that the rules are administered in a consistent, uniform, impartial, and reasonable manner. Rules of origin, the criteria used to define where a good is made, are a critical part of trade rules because a number of countries have used rules of origin to protect domestic industries. With the rise of preferential trading arrangements, rules of origin have become increasingly important because the benefit of being determined to be from a certain country or trading group has increased. The Rules of Origin Agreement has already had important implications for countries seeking to protect domestic tobacco production. For example it led to the elimination of domestic content legislation that required that all cigarettes produced in the United States contain at least 75% domestically grown tobacco. (USDA, 1997).

(This section will be revised following input from Doaa Motaal and WTO colleagues)

D. Future Regulatory Challenges

Some of the regulatory challenges that must be addressed at both national and global levels, perhaps within the FCTC negotiations, are the issues of illicit trade and internet trade. As discussed in the previous section, the WTO is looking at issues related to internet commerce. The following analysis focuses in more depth on the regulatory conundrums associated with both the illicit trade in tobacco and internet trade. Both of these public health threats fall in between countries' regulatory cracks and demand concerted global efforts.

1. Regulation of Illicit Trade

According to the World Bank report "Curbing the Epidemic" (1999), taxation is considered one of the most effective measures for reducing tobacco consumption. It has been argued that higher taxes will contribute to increased cigarette smuggling and associated criminal activity. However, econometric and other analyses of the experience of a large number of high income countries show that, even in the face of high rates of smuggling, tax increases bring increased revenues and reduce cigarette consumption. According to the World Bank, the appropriate response to smuggling is not to reduce taxes or forego tax increases. Instead, it is more appropriate to crack down on crime.

Tobacco smuggling is a global problem. Its international implications are evident: it involves international brands, produced by multinational companies and distributed by criminal organizations which operate in all parts of the world and buy large amounts of tax free cigarettes which previously "disappeared" during international transport. Some 30 percent of internationally exported cigarettes are lost to smuggling, a far higher percentage than most internationally traded consumer goods.

The magnitude cigarettes disappear during transport can be estimated by looking at the difference between global exports and imports. World cigarette production is known fairly accurately and, since cigarettes do not keep for very long, world production is very close to world consumption – that is there are no large quantities of cigarettes in storage. Global imports should thus be close to exports, after allowing for legitimate trade usually excluded from national statistics. But for many years, imports have been lower than exports to a degree that cannot be adequately explained by legitimate duty free sales. In 1996, 1107,000 million cigarettes were exported, but only 707,000 million imported, a difference of 400,000 million. After deducting 45,000 million for legitimate duty free sales, there are still almost 355,000 million cigarettes missing.

Research shows that the real problem with cigarette smuggling is fraud. The real solution therefore must be to control, through international treaty, the transport of this valuable and dangerous product.[86] Cigarette manufacturers have argued that what dealers do with their (legally sold and bought) cigarettes is not their business. Similar arguments have proved socially and politically unacceptable when the product is arms, and so tobacco export and transit should be controlled by mechanisms similar to arms control mechanisms. Provisions in the FCTC could require measures to improve the traceability of the goods such as markings on all packages of tobacco products identifying the origin and the final destination. A specific protocol could hold the manufacturer or exporter – usually the tobacco company – responsible for ensuring that cigarettes arrive legally in their end-user markets and be liable if the product ends up on the black market. A system of import and export licensing may be instituted. This sort of regime would require an important change for trading tobacco products during transit, but is clearly not unprecedented. Liability regimes form the basis of conventions on small arms and light weapons, narcotics and psychotropic substances, and environmental treaties such ozone-depleting chemicals, pesticides, persistent organic pollutants, hazardous waste, and endangered species. [87]

Trade in weapons has been excluded from GATT and WTO jurisdiction since 1947. Narcotics and psychotropic substances have been dealt with exclusively under narcotics and psychotropic substances conventions of 1961, 1971 and 1988. Each of the environmental agreements provides for restrictions in trade, including a form of "discrimination" against countries that do not adopt relevant environmental agreements.[88] As the main cause of cigarette smuggling is an abuse of transit trade rules, similar rules affecting trade in tobacco products would seem to be a logical extension of the precedent set in environmental treaties.

2. Regulation of the Internet

The transnational character of the internet permits retailers to bypass national legislation to control access to information about harmful products. The internet also permits tobacco retailers to avoid individual countries' tax and import requirements. These and other harmful effects of tobacco trade on the internet have been well discussed.[89] Herein, we consider whether cyberspace control of tobacco sales and advertising is technically and legally feasible. Then, we examine the effectiveness of attempts to regulate tobacco sales and marketing.

i. Technical restrictions

The current state of technology supports a spectrum of internet regulatory schemes from heavy government regulation to industry self-regulation to individual filtering of offensive or undesired websites. Regulatory schemes, particularly those for content regulation, often involve several technologies and require that all involved parties cooperate in good faith.[90] Some governments use direct censorship to block content that is received or transmitted within each country.[91]

Content limitations – Several governments, such as China and the United Arab Emirates (UAE), censor the internet content their citizens may access. China issued a set of rules prohibiting online advertising of tobacco products that require government officials to examine and approve the web content of all internet service providers (ISPs).[92] The United Arab Emirates (UAE) censors websites for breaching local values and traditions.[93]

Access limitations – Internet access can be restricted by eliminating all ISPs, as is done in North Korea, or by limiting the number of available ISPs, as in the UAE.[94] Further, Cuba restricts internet access to those holding a government license.[15]

Personal filters - Filtering software and ratings systems provide means to assess and approve or restrict viewing of certain sites. Commercial rating programs provide automated filters searches for subjects listed on a ratings. The EU supports the voluntary, personal use of a specific filtering and rating standard.[95]

Government filters – Saudi Arabia built a system to filter addresses and content,[18] though this type of content solution may be feasible only in sparsely populated areas. Some countries have proposed creating an international rating and filtering system for internet content in lieu of national legislation regulating online speech.[96]

Voluntary Service Provider Codes - The European Commission Communication on Illegal and Harmful Content on the internet proposes voluntary measures for service providers including self-control and adoption of technical solutions including filtering software and ratings.[19] Further, the EU provides guidelines for national self-regulation schemes that call for interested parties' involvement in designing codes of conduct to be implemented by the industry.[97]

In response to harmful or undesirable content on the internet, individual countries may act as cyberpolice. Failure to censor information may be punished under criminal and civil laws. Some countries shift the burden of censorship to Internet Service Providers (ISPs) who must unilaterally censor undesirable information. In devising a national or global regulatory model, the allocation of burdens, costs and benefits of compliance on individuals, industries and governments is a crucial analysis.

ii. Legal Regulation

The United Nations Commission on International Trade Law (UNICTRAL) has proposed a model law on electronic commerce that would address the myriad legal issues presented by international control of internet trade.[98] This model law follows agreements within the European Union and other countries to regulate specific types of online content and sales (i.e. child pornography). UNICTRAL further proposes to harmonize legal standards dealing with other forms of trade and to translate these standards to internet environment.[20]

Regulation of internet tobacco advertising and sales implicates legal protections of expression and privacy; questions of jurisdiction, choice of law, and liability; and determinations of customs and taxation regimes. The areas most germane to trade liberalization include:

Fair Trade – Although the World Trade Organization (WTO) agreements mandate free, unrestricted trade, and the need for consumer protection enables countries to limit trade from other countries.[99] Further, tobacco control measures that address online trade and advertising may be permissible under the general exception in GATT's Article XX.

Customs – The WTO member countries agreed to refrain from imposing customs duties on electronic transmissions.[100] The United States further advocates in the WTO that the internet should be declared a tariff-free environment when used to deliver products of services.[101] However, the EU holds that tobacco products sold through the internet from one member state to a private individual in another member state are liable for duty in the member state of destination.[102]

Taxation – OECD's Taxation Framework Conditions conclude that international taxation norms are capable of being applied to electronic commerce.[27] Taxation should occur in the jurisdiction where consumption takes place.[103]

iii. Effect of Actual Restrictions: Focus on Tobacco

Several regulatory mechanisms are used to control tobacco sales and advertising:

Filters – Attempts to use blocking software to regulate consumer exposure to online tobacco promotion requires individual consumers to buy, install, and use the software. This may be difficult for uninterested or technically inept consumers. Further, any filtering scheme's success wholly depends on accurate labeling of websites.[40]

Age limits - "Websites currently have no way to verify the age of the person placing the order or of limited sales to minors."[40] In 1998, only 5% of tobacco sites made any reference to legal age restrictions associated with tobacco products.[18] Credit cards are often required as a method of blocking underage access to websites. Some U.S. state have passed legislation placing the burden on the internet retailer to establish that its tobacco customers are of legal age. In Rhode Island, an internet retailer must deliver a tobacco product only by a postal service which requires an adult signature to receive the product.[104] Sting operations conducted in the U.S. confirm that children can easily evade or ignore online age limits.[105]

Health Warnings – As a part of a lawsuit settlement agreement, the U.S. government ordered all R.J. Reynolds Tobacco advertisements, including internet advertisements, to include warnings which indicate that additive-free cigarettes "does not mean safer" cigarettes.[42] Similarly, the seven largest U.S. cigar companies agreed in another settlement arrangement to include warnings about significant health risks of cigar use in their internet advertising. These warnings must be clear and conspicuous and must follow a standardized, agreed upon format.[106] Other than the seven U.S. cigar manufacturers, online retailers are not required to display these warnings.[42]

Customs and Taxation – Despite countries' attempts to tax tobacco products, many internet tobacco websites offer "duty free" cigarettes. These websites are set up in countries with low tax rates on tobacco. Retailers claim to sell tobacco products at greatly reduced prices, since the taxes of an importing country are not charged. Tax free cigarette sales via the internet often violate domestic law.[107] Moreover, despite legal requirements, internet sellers of tobacco products are also reticent to report sales to the tobacco tax administrator for that state into which the sales are made.[108]

Ban – If a government body has jurisdiction to ban tobacco advertising in other electronic media, jurisdiction may be had to ban tobacco advertising on the internet.[42]

Human rights and free expression proponents generally promote deliberate consideration of self-regulatory approaches to content control.[21] Fear of government regulation, however, tends to be the primary motivator for industry efforts at self-regulation.[40] Critics suggest that the internet economy should be market-driven, led by the private sector, and regulated only as a last resort, when the panoply of self-regulatory measures is exhausted.[29]

V. Concluding Remarks: Curbing the Tobacco Epidemic in an Era of Trade Liberalization

The Framework Convention on Tobacco Control is unfolding in a post-Uruguay Round era where there is clash of philosophies and paradigms. At issue are not the merits of globalization and competition. Competition is what got men out of caves; competition is what keeps prices down; competition is what fires the creative genius; and competition is what makes nations advance. Globalization as seen today is about managed competition.[109] On one hand, this kind of globalization has brought about more conflict and less resolution. On the other, increased political literacy in developing countries has brought into sharp focus the roles and responsibilities of national governments in ensuring the well-being of their citizens.

In the post-Uruguay Round world, the negative implications of trade liberalization, such as tobacco use, must be focused on. Some of the new realities of this post-Uruguay political and economic terrain are as follows:

- Developing countries' bargaining power remains limited. Perceived limitations arise out of lack of political will. In the health arena, the potential for conflict is intense.
- Primary health considerations and priorities of countries cannot be weighed on the same scales as telecommunications and consumer durables. With the FCTC, the WHO takes a lead role and mandate in ensuring that health implications are fully considered.
- Developed countries must acknowledge that globalization includes a globalization of responsibilities as well as a globalization of rights.

This paper has demonstrated empirically why the regulatory terrain for tobacco control must shift at the global level. We do not question the compatibility of trade liberalization and tobacco control. In fact, the preventive potential of global tobacco control through provisions in the Framework Convention on Tobacco Control may be realized without discrimination to international trade. Rather, we suggest that a mix of strong global and national regulatory strategies is required to address tobacco consumption, a global bad. As demonstrated in our analysis, challenges such as internet and illicit trade pose unique transnational threats to public health but remain unregulated by existing frameworks. Tobacco sits in a regulatory no-mans-land; at the global level, the FCTC is an attempt to fill this void.

[1] See, e.g., TOBACCO CONTROL IN DEVELOPING COUNTRIES (Jha, P. and Chaloupka, F.J. eds. 2000).
[2] Taylor, AL. et. al., Trade Policy and Tobacco Control, in TOBACCO CONTROL IN DEVELOPING COUNTRIES (Jha, P. and Chaloupka, F.J. eds. 2000).
[3] Corrao MA., Guindon GE, Cokkinides V., Sharma N., Building the evidence base for global tobacco control, *Bulletin of the World Health Organization*, 2000, 78: 884-890.
[4] Murray CL, Lopez AD, eds., *The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020*. Cambridge, MA, Harvard School of Public Health on behalf of the World Health Organization and The World Bank, 1996.
[5] Murray CL, Lopez AD. Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study, *Lancet*, 1997, 349: 1498-1504.
[6] Peto R et al. *Mortality from smoking in developed countries 1950-2000*. New York: Oxford University Press, 1994.
[7] Liu B-Q et al. Emerging tobacco hazards in China: 1. Retrospective proportional mortality study of one million deaths. *British Medical Journal*, 1998, 317: 1411-1422.
[8] Doll R., Uncovering the effects of smoking: historical perspective, Statistical Methods in Medical Research; 7: 87-117.
[9] Mackay J., Preface, *Women and the Tobacco Epidemic*, Jonathan M. Samet and Soon-Young Yoon (Eds.), WHO document WHO/NMH/TFI/01.1, Geneva: World Health Organization, 2001, p. vi.
[10] Samet JM, Yoon SY, Introduction, *Women and the Tobacco Epidemic*, Jonathan M. Samet and Soon-Young Yoon (Eds.), WHO document WHO/NMH/TFI/01.1, Geneva: World Health Organization, 2001, p.x.
[11] Waren C, Riley L, Asma S, Eriksen M, Green L, Blanton D., Loo C, Batchelor S, Yach D. Tobacco use by youth: a surveillance report from the Global Youth Tobacco Survey project, *Bulletin of the World Health Organization*, 2000, 78: 868-876.
[12] Chaloupka F, Corbett M, Trade Policy and tobacco: towards an optimal policy mix. In: Abedian I et al (Eds). *The economics of tobacco control: towards an optimal policy mix*. Cape Town, University of Cape Town, 1998: 129-145.
[13] Supra note at 2: Taylor et al.
[14] Bettcher DW, Yach D, Guindon GE, Global trade and health: key linkages and future challenges, *Bulletin of the World Health Organization*, 78: 521-534.
[15] PM 2047623773/3778. Trade. April 1996.
[16] Talk to TMDP, Chelwood, 1990, August [L&D RJR/BAT 16]
[17] M. Macalister, Making a Packet – The New Tobacco Gold-Rush, the Observer Magazine, 1992, 8 November.
[18] PM 2041424406/4415. Memo on November/December Monthly Reports from CL Fuller to MA Miles. January 15, 1993.
[19] PM 2047623773/3778. Trade. April 1996.
[20] PM 2047623773/3778. Trade. April 1996.
[21] PM 2047623773/3778. Trade. April 1996.
[22] D. Ibison, Rothman's Joint Deal Opens Heavenly Gates, Window Magazine, 1992, No. 4 16 October.
[23] PM 2047623773/3778. Trade. April 1996.
[24] PM 2047623773/3778. Trade. April 1996.

[25] PM 2047623773/3778. Trade. April 1996.
[26] BAT Bulletin, March 1996.
[27] J Sweeney, Selling Cigarettes to the Africans, The Independent Magazine, 1988, 29 October.
[28] PM 2504033326. China – Vision 2000+. 1993.
[29] Letter from Senator Jesse Helms to His Excellency Yasuhiro Nakasone, Prime Minister of Japan, 24 July 1986.
[30] Davidson PA, Banthin CN. Untangling the Web: Legal and Policy Tools to Restrict Online Cigar Advertisement. *University of San Francisco Law Review*, 2000, 35: 1-56.
[31] *Federal Trade Commission Cigarette Report for 1999*. Washington, United States Federal Trade Commission (USFTC), 2001.
[32] *Federal Trade Commission Report to Congress for 1997 Pursuant to the Federal Cigarette Labeling and Advertising Act*. Washington, USFTC, 1999.
[33] *Smokeless Tobacco Report: 1988-1999*. Washington, USFTC, 2001 (Table 2E).
[34] Coleman T. "Cyber Kool." Tobacco International, June 1999: 18-23.
[35] *Tobacco Targeted at Youth on the Internet: An Update*. Washington, Center for Media Education, 1998.
[36] *Tobacco Advertising on the Internet*. Washington, National Center for Tobacco Free Kids, 2000.
[37] Pastore M. Demographics of the Net Getting Older. *CyberAtlas*, 29 Aug. 2000.
[38] Pastore M. Young Internet Users Prefer E-Browsing to E-Commerce. *CyberAtlas*, 7 March 2001.
[39] Survey Shows Digital Divide Narrowing in China. *iamaisa*, 22 June 2000.
[40] Iamasia Releases Survey Findings. *iamasia*, 7 June 2000.
[41] Rubin R. Online Tobacco Sales Grow, States Lose. *The Forrester Brief*, 27 April 2001.
[42] Enos L. Shakeout Can't Put Out Web Tobacco Sales. *E-Commerce Times*, 23 February 2001. <http://www.ecommercetimes.com/perl/story/7625.html>.
[43] UNCTAD 2000.
[44] McCorriston 2000.
[45] WTO 2001.
[46] Gross capital formation is the amount of capital increased during a year minus depreciation.
[47] Gastanaga et al. 1998 and OECD 1998
[48] OECD 1998.
[49] South Centre 1998.
[50] See Levinson, Marc, Thinking about globalisation: popular myths and economic facts, published by The Economist, 1997 (written by Brian Barry, Francis Cairncross, Clive Crook, Patrick Lane, Marc Levinson, Zanny Minton-Beddoes and Pam Woodwall.
[51] Cited in Levinson (1997) p. 10.
[52] See Bettcher et al. (2000) for a discussion of various components of trade which have direct or indirect effects on health.
[53] Brundtland 2000.
[54] Grise 1990, Chaloupka and Laixuthai 1996
[55] Grise 1990, Chaloupka and Laixuthai 1996.
[56] Taylor et al. 2000.
[57] Grise 1990.

[58] See World Bank (1999)
[59] Chaloupka and Corbett 1998.
[60] Chaloupka and Corbett 1998.
[61] Saffer 2000.
[62] Chaloupka and Laixuthai (1996).
[63] Hsieh, Hu and Lin (1999).
[64] Depken (1999).
[65] Laugesen and Meads (1991).
[66] Taylor et al. (2000).
[67] Baltagi et al. (2000).
[68] Chaloupka and Laixuthai (1996).
[69] Baltagi et al. (2000).
[70] Kaul I, Grunberg I, and Stern MA, Defining Global Public Goods, In: Global Public Goods: International Cooperation in the 21st Century. Oxford: Oxford University Press, 1999.
[71]South Commission, Statement at third meeting, Mexico, 5-8 August, 1988.
[72] Subramaniam, India Is For Sale, UBSPD pp. 101.
[73] Muchkund Dubey, Political Economy of the Uruguay Round of Trade Negotiations, Part 1, Mainstream, May 30, 1992.
[74] Chitra Subramaniam, India Is For Sale, UBSPD pp. 98
[75] Political Economy of the Uruguay Round of Trade Negotiations – 1, Muchkund Dubey, Mainstream, May 30, 1992.
[76] Trade: “Uruguay Round Negotiation mainly triangular – EEC.” SUNS 1659, pp. 3-4.
[77] Muchkund Dubey, Mainstream, 1992
[78] Taghi Farwar, SUNS No. 1800, 1802.
[79] Development: Oslo Statement of UN Heads Questioned, SUNS 1982.
[80] Faith and Credit: The World Bank’s Secular Empire. Susan George and Fabrizio Sabelli, Penguin, 1994.
[81] Chakravarti Raghavan, Third World Network, 1992.
[82] Chakravarti Raghavan, Third World Network, 1992.
[83] Bettcher DW. Et al , International Law and Health: Two Approaches: The World Health Organization's Tobacco Initiative and International Drug Controls. Washington DC: American Society of International Law, 2000.
[84] Taylor and Roemer (1996).
[85] Taylor and Bettcher 2000.
[86] Joossens L, Raw M, How cab cigarette smuggling be reduced?, BMJ, 14 October 200, 321:947-950
[87] Bloom J, Public health, international trade and the Framework Convention on Tobacco Control, Washington DC, February 2001
[88] Bloom J, Public health, international trade and the Framework Convention on Tobacco Control, Washington DC, February 2001
[89] Cohen JE et al. *Tobacco Commerce on the Internet: A Theat to Comprehensive Tobacco Control*. Toronto, 2001 (unpublished document on file with authors).
[90] Bad faith metatagging, for example, would make voluntary self-regulatory schemes futile.
[91] Reed KM. From The Great Firewall Of China To The Berlin Firewall: The Cost Of Content Regulation On Internet Commerce. *Transnational Lawyer*, 2000, Fall: 451-476.

[92] Too hot to handle: Beijing bans online tobacco, sex ads—and a lot more. *China Online*, 16 April 2001.
[93] *Material Reflecting National Or Cultural Attributes Mandated in a Broadcast Medium or Banned As Contrary To The Culture's Interest*. London, Internet Law and Policy Forum Working Group on Content Blocking, 1997. <http://www.ilpf.org/work/content/mandate.htm>.
[94] The Enemies of the Internet. *Reporters Sans Frontières – Transfer.net*, 28 Feb. 2001.
<http://www.rsf.fr/uk/html/internet/ennemis.html>.
[95] *Self-Regulatory Initiatives*. London, Internet Law and Policy Forum Working Group on Content Blocking, 1997. <http://www.ilpf.org/work/content/selfreg.htm>.
[96] Global Internet Liberty Campaign Member Statement. Internet Content Summit, Munich, 9-11 Sept. 1999. <http://www.gilc.org/speech/ratings/gilc-munich.html>.
[97] Guide to Electronic Commerce Regulation. *Diffuse*, Dec. 2000. <http://www.diffuse.org/commerce.html>.
[98] *Building Confidence: Electronic Commerce and Development*. Geneva, UNCTAD, 2000 (UNCTAD/SDTE/MISC.11, 128).
[99] See e.g., Huron Portland Cement Co. v. Detroit, 362 U.S. 440 (1960) (holding that the U.S. Constitution's Commerce Clause did not prohibit states from regulating areas relating to the health, life, and safety of citizens).
[100] WTO Pledges Duty-Free Internet for One Year, *Reuters*, 20 May 1998.
[101] The Enemies of the Internet. Reporters Sans Frontières – Transfer.net, 28 Feb. 2001. <http://www.rsf.fr/uk/html/internet/ennemis.html>.
[102] EU council Directive 92/12/EEC, 25 Feb. 1992.
[103] Taxation Framework Conditions, OECD, Ottawa, October 1998.
[104] Davidson PA, Banthin CN. Untangling the Web: Legal and Policy Tools to Restrict Online Cigar Advertisement. *University of San Francisco Law Review*, 2000, 35: 1-56.
[105] Krebs B. A Smoke Free Internet. *ComputerUser.Com*, 27 Dec. 1999.
[106] *FTC Announces Settlements Requiring Disclosure of Cigar Health Risks*. Washington, USFTC, 26 June 2000.
[107] *Buying Cigarettes on the Internet: A Survey by Action on Smoking and Health*,
[108] Delio M. E-Tailers Fuming Over N.Y. Law. *WiredNews.com*, 17 Oct. 2000.
[109] Subramaniam, Globalisation: Is It Truly Global, UBSPD 1997.