



*American Enterprise Institute for Public Policy Research*

# Tariffs, Corruption and Other Impediments to Medicinal Access in Developing Countries: Field Evidence

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AEI WORKING PAPER #130, AUGUST, 2006

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[www.aei.org/workingpapers](http://www.aei.org/workingpapers)  
[www.aei.org/publication24749](http://www.aei.org/publication24749)  
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### **Abstract**

There are many factors which hamper health care delivery in the developing world. These factors include tariffs, taxes, corruption, such as bribes and other local price inflators on medicines and medical products. Non-tariff barriers, such as lengthy registration periods for medicines and onerous requirements to clear customs, also restrict the availability of medication in the developing world. According to the World Health Organization, approximately one-third of the world's population lacks access to essential medicine and proper medical treatment. Drawing upon extensive evidence from surveys and accounts from the field, this paper examines the impact of tariffs, taxes and other markups on imported medicines and medical products provided to lesser developed countries by pharmaceutical companies, not-for-profit groups, for-profit corporations, multilateral and bilateral aid and health agencies. The paper discusses how these regulatory barriers affect access to medication. The authors conclude that although efforts to reform the current system of government revenue generation through tariffs collection may meet resistance in many developing countries, especially those featuring systemic corruption and those with domestic production, governments which take steps to eliminate tariffs could in fact expedite health care delivery and consequently improve the well-being of their people.

### **Acknowledgements**

The authors would like to thank the numerous people, many of whom wish to remain anonymous, who took risks in answering our questions to help with our data collection and research for this project. We thank Africa Fighting Malaria (AFM), the American Enterprise Institute (AEI) and PhRMA for funding field data collection for this project, which involved considerable travel and time in US, Europe and Africa. None of the authors were funded to specifically write the paper itself, which was a product of general employment at their respective organizations (AFM and AEI).

## Introduction

Attempts to identify the factors that restrict access to essential medicines and medical devices in developing countries are increasing. Low-income levels, weak healthcare systems, and rising costs of medical supplies have been identified as some of the chief culprits of impeded access. An estimated 30 percent of the world's population lacks reliable access to required medicines primarily because they cannot afford them.<sup>1</sup> In the poorest parts of Africa and Asia, the figure rises to over 50 percent. Even when therapies are priced at many multiples below prices in industrialized countries, medicines remain out of reach: the HIV patient who lives on less than US \$1 a day<sup>2</sup> simply cannot afford to buy an antiretroviral drug (ARV) priced at his entire income.<sup>3</sup> What is not so obvious is how prices can be reduced to affordable levels for patients in poor nations and how access to medicines in these areas can be improved.

The existence of large gaps between drug availability and access to treatment in many poor nations led to the adoption of a World Health Assembly resolution in May 2001, where states were rallied to explore systems for monitoring medicine prices with the view to improving access to essential drugs. Specifically, member states were urged to "increase access to medicines, in accordance with the health needs of people, especially those who can least afford the costs."<sup>4</sup> Adding to the WHO resolution, others have called for the examination of trade agreements and their role in supporting access to medicines. The most well-known of these trade agreements is the Agreement on Trade-Related Aspects of Intellectual Property (TRIPS).<sup>5</sup> Tariffs on pharmaceutical products not only constitute an international trade issue but also a public health issue, a fact which compelled member states of the World Trade Organization

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<sup>1</sup> World Medicines Situation 2004, p. 61

<sup>2</sup> According to the World Resources Institute at the World Bank, about one-fifth of the earth's population, or 1.1 billion people, currently live on less than \$1 a day. Nine of the ten countries with the largest percentage of people in this category are in Africa; Madagascar, Sierra Leone, Burundi, Gambia, Niger, Zambia, Central African Republic, Nigeria, and Mali have 49% to a staggering 73%, of their populations living in extreme poverty conditions. Between 1981 and 2001 the number in Sub-Saharan Africa living on less than \$1 a day increased 93%, from 164 million to 316 million. For more see, World Bank, World Resources Institute. 2005. <http://earthtrends.wri.org/updates/node/6>, (accessed May 10, 2006).

<sup>3</sup> The example stated here is at the lower end of drugs prices for ARV in Africa. In developing countries wages are often too low and prices too high for medicines to be affordable.

<sup>4</sup> World Health Organization, Fifty-fourth World Health Assembly Resolutions, May 2001

<sup>5</sup> TRIPS provides international guidelines for intellectual property protection. TRIPS also accords governments the right to issue compulsory licenses that effectively override the exclusive control that patents can give to the inventor of new drugs. For more see, Bate, R. and Richard Tren, "The WTO and Access to Essential Medicines: Recent Agreements, New Assignments" Health Policy Outlook, no. 4 (2006).

(WTO) during the Uruguay Round, and more recently during the Doha Round, to address the issues of high tariff rates and the public health implications of the TRIPS agreement. Although, there is now a growing consensus that medicines and other health commodities warrant preferential status from other products and services,<sup>6</sup> this realization has not translated into action<sup>7</sup>. The percentage of the population in the developing world with regular access to essential medicines is still low, particularly for countries in Africa where over 80 percent of the population are in the “very low” and “low to medium” access groups (Table 1).

**Table 1: Financing, Delivery, and Other Constraints Still Limit Access to Essential Medicines**

WHO Region	Percentage of Population with Regular Access to Essential Medicines				Total Countries
	Very Low Access (<50%)	Low to Medium Access (50%-80%)	Medium to High Access (81%-95%)	Very High Access (>95%)	
	Number of Countries	Number of Countries	Number of Countries	Number of Countries	
Africa	14	23	5	3	45
Americas	7	14	7	7	35
Eastern Mediterranean	2	7	5	8	22
European	3	12	6	25	46
South-East Asian	2	4	3	0	9
Western Pacific	1	8	8	9	26
Total Countries	29	68	34	52	183

Source: World Medicines Situation (2004), p.62

Other global responses to this growing problem have varied. Academics, such as Attaran and Sachs (2001)<sup>8</sup> have called upon the international donor community to increase aid to poor countries, while pressure groups such as Médecins Sans Frontières (MSF) have demanded pharmaceutical companies to reduce their prices. The amount of aid has subsequently increased and drug prices have fallen.<sup>9</sup> Historically the pharmaceutical procurement price of ARV drugs

<sup>6</sup> “A Tax on the Sick,” New York Times Editorial, July 4, 2006. Also, “Free-market medicine” Los Angeles Times Editorial, July 17, 2006

<sup>7</sup> See reasons for the recent suspension of the Doha trade round negating any potential multilateral deal on tariff removal - <http://news.bbc.co.uk/2/hi/business/5216080.stm> and <http://www.tcsdaily.com/article.aspx?id=072506E>

<sup>8</sup> Sachs, Jeffrey, and Amir Attaran. “Defining and Refining International Donor Support for Combating the AIDS Pandemic.” *Lancet* 357 (January 6, 2001): 57-61.

<sup>9</sup> Beginning in 2001 and onwards there has seen a marked trend of increased foreign aid to developing countries despite declining poverty levels. See Global Issues,

was as high as US \$15,000 per person per year, although this is now much lower.<sup>10</sup> But answers to improving medicinal access to essential drugs in poor countries do not lie solely in increased funding or with pharmaceutical companies; the solution lies largely within the developing countries themselves.

### **1. The Root of the Problem**

Currently, a common practice in many African, Asian, and Latin American countries is to increase the price of medicine through import tariffs, duties and sales taxes. Such markups often increase the end-user price of medicine significantly, sometimes by more than 80 percent.<sup>11</sup> Examples of these regressive practices abound. For example, a 57-country study conducted on behalf of the European Commission in 2003 examined taxes and tariffs on pharmaceutical products used in the treatment of communicable diseases. The study found that many of the countries that apply the highest tariff rates—such as Nigeria, Pakistan, India and China—have poor access to medicines. In Nigeria for instance, less than 20 percent of the population has access to essential medicines. What explains this phenomenon? Could it be that legal costs, port/currency charges, and demands for bribes which occur at the borders add a significant markup to the price of the drugs? Or perhaps that tariffs act as a disincentive to the trade or the donation of such products by global health groups? Possibly, it is a combination of both of these factors.

In Iran, where regulatory constraints are imposed on a variety of essential medical products from bandages and bed nets to insecticides and raw materials for drug production, tariff rates can sometimes reach 50 percent or more. A recent study put the global average markup when duties and taxes are added at almost 20 percent.<sup>12</sup> While pharmaceutical manufacturers still have the prime role, the consumer prices of life-saving medicines are increasingly being influenced by governmental policy; some countries even tax drugs and healthcare products that are donated for

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<http://www.globalissues.org/TradeRelated/Debt/USAid.asp#Aidbeginningtoincreasebutstillwaybelowobligations>, accessed May 9, 2006

<sup>10</sup> For years, companies were often not marketing at economically sensible (tiered lower) pricing in many poor countries. Concerns about re-direction (leakage) of products from poor country markets to wealthier countries prevented them from doing so.

<sup>11</sup> Bate R. "Taxed to Death," *Foreign Policy Magazine* July/August, 2006

<sup>12</sup> "Taxes and Tariffs Deny Patients Access to Medicines, says New Study." *International Policy Network (IPN)*, available at [http://www.policynetwork.net/main/press\\_release.php?pr\\_id=49](http://www.policynetwork.net/main/press_release.php?pr_id=49), accessed February 10, 2006.

free<sup>13</sup> and others have high taxes on all medical products, for example, South Africa and Armenia maintain 14% and 20% VAT rates respectively.

Various econometric and survey-based studies have lent further credibility to the position that a marked reduction of financial impediments such as tariffs would increase access to medicines, an improvement that would save thousands of lives. In a study comparing the prices and availability of 15 different essential medicines in Ethiopia, Kenya, Uganda and Tanzania, Myhr (2000) found that both Ethiopia and Tanzania had low-to-zero availability of these medicines generally, with the lowest availability recorded in the public sector. A recent study by some of this paper's authors, (Bate et al 2006), examined the effects of tariffs, domestic taxes and other regulatory requirements on access to essential drugs, vaccines and devices. Using data from COTECNA<sup>14</sup> Bate et al found that any decreases in tariffs for a particular class of products are associated with increased access to that class of products. They suggested that governments could most likely increase access to medicine by lowering these tariffs.<sup>15</sup>

WHO economists Laing and Olcay (2005) prepared a study for the *Commission on Intellectual Property Rights, Innovation and Public Health*, which contains an analysis of the data collected on tariff rates and revenue generated by over 150 countries around the world on different categories of pharmaceutical products.<sup>16</sup> Some of the products under study include active pharmaceutical ingredients, finished products, and vaccines for human medicines. Among their many key findings, Laing and Olcay (2005) reveal that currently 59 percent of countries (for which data are available) levy tariffs on active pharmaceutical ingredients, 61 percent levy tariffs on finished pharmaceutical products and 35 percent levy import duties on vaccines. They also

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<sup>13</sup> Bate. R. "Taxed to Death" Transcript of speech presented to PACHA (President's Advisory Council on HIV/AIDS), May 9, 2005, available at [http://www.aei.org/publications/pubID.22483,filter.all/pub\\_detail.asp](http://www.aei.org/publications/pubID.22483,filter.all/pub_detail.asp), accessed June 9, 2006.

<sup>14</sup> COTECNA is a leading trade inspection, trade security and trade certification company. Their comprehensive range of inspection services to governments and private commerce includes, among many others, the valuation and tariff code classification of tradable goods. COTECNA maintains a database which provides information from close to 100 countries on the tariff codes of these goods, and while the available COTECNA data may not be comprehensive, it is by far the most current data to comparable sources.

<sup>15</sup> Roger Bate, Richard Tren and Jasson Urbach, "Still Taxed to Death: An Analysis of Taxes and Tariffs on Medicines, Vaccines and Medical Devices," AEI-Brookings Joint Center, Washington, D.C., 2006, available at <http://www.aei-brookings.org/admin/authorpdfs/page.php?id=1136>.

<sup>16</sup> Pharmaceutical goods are classified in either Chapter 29 (active pharmaceutical ingredients) or Chapter 30 (finished products) of the Harmonized Tariff Schedule (HTS). Goods classified in Chapter 29 are the basic organic compounds used in the manufacture of pharmaceutical products. Goods classified in Chapter 30 are the manufactured pharmaceutical products. For more, see Bate, Tren, Urbach (2006), Still Taxed to Death, p. 3

conclude that tariffs are a “regressive form of taxation which target the sick,” and advocate for the elimination of pharmaceutical tariffs. Table 2 below shows the wide variations in the levels of import tariffs imposed by selected countries on Chapter 29 and Chapter 30 products, and how slightly different measurement techniques lead to quite different results.

**Table 2: Import Tariffs - Simple Average and Weighted Average**

Country	Bate et al. Simple Average of Ch 29 & 30 tariffs	Laing and Olcay Weighted Average of Ch 30 tariffs
Benin (WAEMU)	1.62	0
Tanzania (EACU)	5.45	10
Zimbabwe	7.49	17.6
Congo, Dem Rep.	8.10	15.45
Nigeria	8.41	20
Algeria	9.48	5.24
Brazil	9.6	10.31
Ghana	9.77	4.73
Kenya (EACU)	10	5.29
India	16	30
Morocco	18.30	12.4

EACU- East African Community Customs Union  
 WAEMU- West African Economic and Monetary Union  
 Source: Bate, Tren, and Urbach (2006)

In their study on tariffs levied on pharmaceutical medicines, Laing and Olcay (2005) argue that although tariffs may not fully explain why medicines are not accessible in developing countries, there is still no valid reason why countries should retain these tariffs: “tariffs on medicines target the sick which cannot be good public policy.”<sup>17</sup> Mikkel Vestergaard Frandsen, CEO of Vestergaard Frandsen S.A. a company that makes and exports malaria bed nets explained recently to the UK All Party Parliamentary Committee on Malaria, Annual General Meeting on July 13, 2006, House of Commons, London, that “tariffs do create problems, for example Nigeria, where they change quickly, and create delays.”<sup>18</sup>

In addition to tariffs which elevate the price of a drug at the onset of the pharmaceutical supply chain, it is worth noting that additional charges such as sales taxes, wholesaler and retailer markups imposed further down the chain also drive up drug prices. For example, some governments mandate markups for wholesalers, retailers (pharmacies), and other end-of-chain providers. The margin of markup can be high, 40-60 percent in some instances. An all-encompassing explanation of the effects of these barriers, or what experts have dubbed “the hidden costs,” of pharmaceutical procurement is beyond the scope of this paper, and will be treated in more detail in a future study, however the point that needs to be emphasized is that these markups build on existing pricing. A single tariff may initially elevate a price by only 10 percent; however, this elevation has a compounding effect that carries on through the entire supply chain as other markups are added on.

#### *Significance of our Questionnaire-Based Study*

Although most economists would agree that tariff elimination on medical products increases medicinal access because prices would otherwise be lower, the specific impact of tariffs is not well-established, and the level of exposure of imported essential medicines to tariffs and other onerous bureaucratic hurdles from the exporter's or importer's experiences in the field has yet to be documented. To examine this issue, we conducted a survey of over one hundred global health organizations, as well as a few export and import firms with trade relations with countries such as Uganda, Nigeria, Kenya and Ethiopia. Responses from the questionnaire provide evidence of the barriers facing medical aid donors and importers in the field. Such barriers, usually occurring

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<sup>17</sup> Laing and Olcay (2005), p.36

<sup>18</sup> Transcript on file with author Richard Tren



at the port of entry, include tariff and tax rates, custom surcharges, and in some cases unsavory exchanges with corrupt custom officials.

A consequence of imposing tariffs is its influence on corruption. The burden caused by high tariff rates creates a potential opportunity for public officials to extract bribes; since local officials often have asymmetric knowledge about what is a correct fee and the authority to charge it locally, this allows them all sorts of leverage, such as allowing them opportunities to waive official fees if paid a bribe. Equally, random or capricious intervention by custom officials makes criminals of importers, by often leaving them little choice but to pay bribes to avoid delays, especially where goods with short shelf lives (for example, antibiotics that need refrigeration) are concerned. Such corruption contributes to the instability of access to medicines in a country. Recent studies have shown a robust association exists between non-uniform tariff rates and high levels of corruption perception in a country.<sup>19</sup> In a World Bank study Roberta Gatti (1999) looked at the determinants of corruption and argued for the removal of non-uniform tariffs across goods in favor of uniform ones.<sup>20</sup> According to Gatti, setting uniform tariff rates “limits the ability of public officials to extract bribes from importers and can therefore deliver higher government revenues and welfare...when corruption is pervasive.”<sup>21</sup> Lewis (2006) suggests that, in principle, it is possible for tariffs (whether uniform or not) to reduce corruption by providing the customs and excise authority with a funding stream, which may lower the incentive to raise funds in an ad hoc and illegal fashion.<sup>22</sup> Given the low pay for civil servants in many nations officially sanctioned local funding mechanisms may improve matters. Of course, this argument assumes that officials receive the benefit of locally raised tariffs, if they do not then incentives to extract bribes will remain (and even if they benefit but further ‘rents’ can be extracted incentives are lower but remain).

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<sup>19</sup> See Roberta Gatti (1999 ) p. 1

<sup>20</sup> Unlike uniform tariffs, where a single tariff rate is set for all goods across all sectors (with few exceptions), a non-uniform or differentiated tariff structure is more discriminating, varying along the production chain. For example, most industries are characterized by a tariff structure where tariffs are lowest for raw materials and increase as one moves on up the production chain to intermediary and final goods—there is not one single rate applied to all goods. Chile and Bolivia are examples of countries which have more or less adhered to a single, uniform tariff rate from previously non-uniform tariff systems. See, Tarr (2002), for arguments for and against uniform tariffs and non uniform tariffs.

<sup>21</sup> Gatti, p.1

<sup>22</sup> See Lewis, M (2006), also personal communication with Roger Bate

## 2. Access to Essential Medicines and the Disease Burden in the Developing World

For a quarter of a century, the WHO has publicized that millions do not have access to essential medicines. It has used its Model List of Essential Medicines to promote better access. As defined by WHO, “essential medicines are those that satisfy the priority health care needs of the majority of the population; they should therefore be available at all times in adequate amounts and in the appropriate dosage forms, and at a price that individuals and the community can afford.”<sup>23</sup> While WHO accepts that the concept of essential medicines is intended to be flexible, many health experts are finding that the WHO’s classification of some drugs as essential and not others is problematic. As Dr. John Kilama, Director of the Global Bioscience Development Institute notes “...the concept of EML is ill-fitted to the myriad health needs of people in lower-income countries.”<sup>24</sup> To make matters worse, most African health ministries have adopted the WHO’s list of essential medicines as a basic formulary, and their governments only allow the importation of drugs on the list, which do not include drugs for chronic conditions (check this), an increasing burden, even in poorer nations according to Jerry Norris a health expert from the Hudson Institute.

The logic for restricting procurement to medicines on the EML list is clear: national procurement offices are more likely to see lower manufacturer’s prices from economies of scale. Given scarce resources, price will always be a cause for exclusion, but there are several options available for low-income countries to secure drugs at lower prices even if the products are protected by a patent in the countries concerned. Further, drug manufacturers themselves are often willing to negotiate their products to affordable levels.

Amidst the challenges of adopting a rational essential medicines list suitable for a country’s needs with the aim to improve access to medicines, developing countries simultaneously have to tackle some of the world’s lowest life expectancy and mortality rates. For example, in Ethiopia where GDP per capita is a paltry US \$900 and life expectancy at birth for the total population is 49 years, HIV/AIDS prevalence rate for adults (aged 15-49) per 1000 of the population is 44. Nigeria with a GDP per capita of \$1,400 and a life expectancy of 47 years for the total

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<sup>23</sup> WHO, Technical Report Series, No.895, 2000.

<sup>24</sup> Civil Society Report on Intellectual Property, Innovation and Health , p.32

population does no better with a prevalence rate of 54 (among 15-49 age groups). The total number of cases reported in both adult and children in these countries in 2005 alone were 1,400,000 and 3,300,000 respectively. The disease burden of malaria is equally disheartening. In Uganda, where income per capita is US \$1, 800 and life expectancy is 52 years, the malaria incidence rate is close to 500 per 1000 of the population.<sup>25</sup> Table 3 below compares the development performance of sub-Saharan Africa as a whole with other parts of the world using selected development indicators.

**Table 3: Development Performance, by Major Developing Region of the World**

Region	Gross National Income per capita, 2001 (USD)	Average annual growth in GDP per capita, 1980-2000	Life expectancy at birth, 2001 (years)	Under-five Mortality rate, 2001 (deaths per 1,000 live births)
Tropical sub-Saharan Africa <sup>26</sup>	\$271	-1.1%	46	2.3
South Asia	\$449	3.3%	63	1.7
Middle East and North Africa	\$2,207	0.9%	68	2.0
Latin America	\$3,669	0.5%	71	1.4
East Asia and the Pacific	\$3,710	6.4%	70	0.8

Source: World Bank- World Development Indicators 2003

Aside from the highly publicized problems of HIV/AIDS and malaria, developing countries also have to deal with the added burden of chronic diseases more readily associated with higher income countries. Prevalence rates of diabetes, cancer, hypertension, cardiovascular disorders among others are on the rise. Given the precarious state of health in poor countries imposing tariffs and non-tariff barriers on therapeutic drugs and prophylactic interventions is a short-sighted and even churlish government policy.

<sup>25</sup> Figures on income per capita, HIV/AIDS and Malaria prevalence rates from Congressional Research Service table on Tariffs, Income Statistics, and Disease Rates of Developing Countries. Life expectancy figures, from CIA World Factbook, available at <http://www.cia.gov/cia/publications/factbook/>, accessed May 25, 2006.

<sup>26</sup> On the African continent, tropical sub-Saharan Africa refers to the 42 countries and island nations south of the Sahara which are not considered part of North Africa. This term if strictly applied excludes South Africa, most of which lies outside the Tropics.

### 3. Explaining the Tariffs Rationale: Perspectives from the State and the Domestic Supplier

A tariff is a customs duty imposed by importing countries on the value of goods crossing its border. They are usually levied in two ways: on an ad valorem basis (percentage of value) or on a specific amount depending on the value of the shipment. Except where countries risk infringing WTO rules and regulations, every government has a right to impose income-generating tariffs as they see fit and politicians are often reluctant to decrease or remove tariffs because of revenue lost. However, across countries and regions, available data show that revenues from tariffs on finished pharmaceutical products are generally relatively insignificant as a percentage of that country's overall government revenue. In fact, with only a few exceptions, the revenue from this category is much less than 1 percent of government income, and this is raised disproportionately from those already disadvantaged, undertaking treatment for illness.<sup>27</sup>

Despite its alarming poverty, Ethiopia is the fifth-largest U.S. export market in sub-Saharan Africa, after South Africa, Nigeria, Angola, and Ghana. U.S. exports of pharmaceuticals and medical devices alone amounted to almost US \$22.5 million in 2005.<sup>28</sup> With an average tariff rate of 19.5 percent levied on all pharmaceutical medicines and medical devices, the revenue made for the Ethiopian Government from US drug imports in 2005 was US \$4.5 million, which represents a substantial annual contribution to its foreign exchange deposits.

Of course in addition to simply raising revenue, local governments may also care to garner foreign exchange from a foreign entity and hence enjoy the maintenance of tariffs. So does the exporter pay the tariff even if it is donating the products?

According to trade lawyer Matt Mcgrath<sup>29</sup> there are two aspects to the question: (1) who is legally required to pay the tariffs, and (2) who actually pays the tariffs? The GATT 1947, Art. I and II, adopted by the WTO Agreement in 1994, makes no mention of "who" must pay, but only sets rules on duties that a country can assess on "products upon their importation into the

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<sup>27</sup> See Bate et. al (2006), "Still Taxed to Death."

<sup>28</sup> Data from "Tariffs, Poverty and Disease Rates of Developing Countries" Memo, compiled by Congressional Research Service (CRS), Washington, March 10, 2006. Copy on file with authors.

<sup>29</sup> Personal communication with authors, July 24, 2006

territory of a member country." The international agreements governing movement of goods and tariffs leave it up to the importing country to decide who they will require to pay the duty.

Generally In all cases I can think of, the importer of record is legally liable for the tariff payment, but that does not mean the importer is the actual payer of the duty. The exporter will often agree, either contractually or informally, to pay the foreign tariff, if, for instance, they agree to deliver the goods to the foreign buyer "CIF", or "CIF Duty Paid" (Cost, Insurance, and Freight). The terms set the contractual liability between the parties; the local law sets the civil legal liability for payment. Legal systems seldom seek to impose liability solely on an extra-territorial foreign shipper, unless that shipper is also doing business in the importing country and thus within the reach of their domestic legal jurisdiction. In the US, whoever signs the entry document and meets the legal criteria for being within the country's jurisdiction is liable for the payment, regardless of where they are located and regardless of who actually transfers the funds to the US Treasury.

From our survey responses and in personal communications with trade experts what generally happens is this: when a large US non-governmental entity makes a donated shipment to a developing African country, it usually also agrees to pay the shipping, brokerage, tariff and any other entry charges, regardless of who is legally required by that country to be liable for the tariff. Often the US entity will try to have the tariffs and other governmental charges waived, sometimes they succeed, and sometimes they don't. Unfortunately, tariffs (especially on bed nets, which are considered textile products and often subject to very high tariffs) vary over time – even every month. It is difficult for exporters to cheaply negotiate their way out of paying the charges. The more successful appear to be those that engage with a well-connected importer who can get an exemption from the tariff and VAT, as long as that importer is listed as the responsible party.

Table 4 shows revenues from tariffs as a percentage of GDP for 10 selected countries.

**Table 4: Pharmaceutical Import Tariff Revenue as a Percentage of Overall Government Revenue (Selected Countries - 2003)**

Country	% Tariff Revenue of Overall Government Revenue
Senegal	0.000%
South Africa	0.000%
Uganda	0.000%
India	0.012%
China	0.004%
Vietnam	0.037%
Colombia	0.049%
Algeria	0.049%
Kenya	0.058%
Mexico	0.069%
Peru	0.080%
Congo, Dem Rep	1.460%
Nigeria	N/A
Ethiopia	N/A

Source: Adapted from Bate, Tren, Urbach, 2006.

Another argument given for why countries levy tariffs on goods is to protect local industries. For example, India's pharmaceutical exports jumped from US \$6 million in 2000 to US \$223 million in 2002.<sup>30</sup> As long as local industries produce both active pharmaceutical ingredients (API) and completed pharmaceuticals, imposing tariffs on similar imported goods would partly protect them from international competition, which can lead to higher drug prices.<sup>31</sup> Concerning India, Bate et. al (2006) write, "India, which until recently maintained the world's highest import tariffs for medicines has over 5 million people living with HIV/AIDS. Access to antiretroviral therapy is extremely low, with only 20,000 to 36,000 receiving treatment. Even the most basic treatment for preventable and curable diseases is out of reach of most Indians. According to the United Nations, only 35% of the Indian population has access to essential medicines, yet this might be increased had the country removed import tariffs on Chapter 29 and 30 goods many years ago."<sup>32</sup>

Since the removal of a 10 percent tariff rate by the Kenyan government in April 2005, local medicine manufacturers have lobbied to reinstate the tariffs. They argue that removal of the

<sup>30</sup> Figures from the Embassy of India. "India-US Bilateral Trade Zooms in 2002" Press Release, March 4, 2003. Available at [http://www.indianembassy.org/press\\_release/2003/mar/04.htm](http://www.indianembassy.org/press_release/2003/mar/04.htm), accessed June 2, 2006.

<sup>31</sup> However, the unwanted externality here is that it may prevent local companies from being robust enough to compete internationally, where they do not have the benefit of such domestic protection.

tariffs poses a threat to the welfare and profitability of generic pharmaceutical industries in the East African region. Of course, most countries in the developing world do not have comparable manufacturing capacity and are dependent on drug imports and like Kenya and India philanthropic donations, which fundamentally overrides the logic (albeit weak economic logic) found in the trade protection argument for keeping tariffs in place. Nevertheless, Levison (2003) offers one explanation of why they remain: “Economically...tariffs impede the action of a competitive market where the best drug will achieve the best price and [they] protect inefficient [local] producers who charge high drug prices.”<sup>33</sup> Furthermore, the evidence shows that, while tariffs may temporarily help domestic industry (as in the case of India), they reduce access to essential medicines. Although protecting industry is arguably a reasonable goal for emerging economies, it is perverse if the overall effect is an unhealthy and dying population.

### **3b. Corruption: An Institutional Constraint that Limits Access to Essential Medicines**

From high-level bribery in Costa Rica to informal payments in sub-Saharan African countries, corruption is a worldwide phenomenon. Corruption, defined as “the abuse of public power for private benefit,”<sup>34</sup> involves more than actions carried out by two agents, the briber and the recipient of the bribe; to a large extent, it is driven by state policies and actions, which create the environment and incentives that influence private action.<sup>35</sup> In developing countries informal payoffs are required to obtain even ordinary services such as a passport, basic medical attention or a driver’s license. Significant revenue leakage, limited investment and growth opportunities are some of the effects of this pernicious problem. These in turn undermine property rights, resulting in economic inefficiencies and inequities, reduce public trust and confidence in government institutions, and result in the maintenance of unnecessary barriers to international trade and economic growth. Usually, the poorest sectors of the community suffer these effects disproportionately.

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<sup>32</sup> Bate et. al (200), Still Taxed to Death, p. 13

<sup>33</sup> Levison, L., “Policy and Programming Options for Reducing the Procurement Costs of Essential Medicines in Developing Countries,” Concentration Paper, 2003, available at, [http://dcc2.bumc.bu.edu/richardl/IH820/Resource\\_materials/Web\\_Resources/Levison-hiddecosts.pdf](http://dcc2.bumc.bu.edu/richardl/IH820/Resource_materials/Web_Resources/Levison-hiddecosts.pdf), accessed June 6, 2006.

<sup>34</sup> Corruption has been defined in many different ways, each lacking in some aspect. In this paper, the authors use the most popular and simplest definition of corruption, which is also the definition used by the World Bank. For other definitions, see Bardhan, P. “Corruption and Development: A Review of Issues” *Journal of Economic Literature* 35, no. 3 (1997): 1310-1346.

<sup>35</sup> Tanzi, (1998) p.587

### *Corruption: Empirical Evidence and Measurement*

The inevitable secrecy of corruption makes it difficult to study and quantify. Some economists even argue that is not possible to measure corruption properly because it involves many more subtle variables than direct bribery.<sup>36</sup> Over the years economists have formulated several indirect ways of quantifying corruption's prevalence in a country or institution, which include assessing the level of economic freedom in a given country through estimations of the quality of property rights and governance, and the freedom of labor, capital and product markets and their openness to international competition.<sup>37</sup> Other approaches include questionnaire-based surveys related to a particular activity, specific agency or country. These types of projects, used by the World Bank among others in Tanzania and Uganda for example, measure perceptions of corruption rather than corruption per se, yet still provide valuable insights.

Transparency International (TI) also provides certain tools by which perceptions of corruption can be measured internationally. *The Global Corruption Barometer* reveals which spheres of people's lives are most affected by corruption and whether it has increased or decreased in relation to the past. Results from these surveys are then published in the annual *Global Corruption Reports*. The report now covers 150-plus countries, providing valuable insights and benchmarks. The Corruption Perception Index, (CPI) also compiled by *Transparency International*, assigns a range from 10 to 0, with a score of 10 signifying low perceived corruption and 0 signifying high perceived corruption. For example, in 2005, Nigeria scored 1.9 on the scale, Kenya recorded 2.1 and Uganda scored 2.5, all scores which point to high levels of perceived corruption in these countries. These countries also enforce high tariff rates which we believe is not unconnected.

### *Corruption in the Health Sector*

Health is an essential goal for development but in many cases governmental failure to provide healthcare services is connected to corruption.<sup>38</sup> Some of the most devastating forms of corruption found in the health sector involve procurement, services and supply of goods. In her

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<sup>36</sup> Tanzi (1998), p.576

<sup>37</sup> Kasper, Wolfgang. "Make Poverty History: Tackle Corruption" Issue Analysis, Center for Independent Studies, no.67 (2006).



recent study on *Governance and Corruption in Public Health Care Systems*, Maureen Lewis (2006) chronicles numerous instances where health care systems in developing countries have faced dire staffing problems which compromise health quality. She notes “among the most serious issues in developing countries is the high rate of absenteeism, which undermines service delivery and leads to closed public clinics that compromise the equity and health objectives of publicly financed health care”<sup>39</sup> Absenteeism rates in health service delivery are alarmingly high: 60 percent among physicians in one surveyed Dominican Republic hospital, an occurrence which is mirrored in other places such as Bangladesh and Uganda. In Uganda, for example, health workers are often found at home or involved in second jobs when they should be doing their primary job. Corruption takes on even graver portions in humanitarian emergency situations when medical care is needed urgently and oversight mechanisms are often bypassed.<sup>40</sup>

The health sector is an attractive target for corruption because it is replete with vast sums of *public* money. Based on estimates from a recent study, the collective worldwide sum governments spend on their health services is more than US \$3.1 trillion; the United States alone spends US \$1.6 trillion. Although in developing countries the share of private spending often exceeds public health spending, the latter is still significant. Public health spending in developing countries can range from 5 percent of GDP in Ethiopia to 15 percent in places like Costa Rica.<sup>41</sup>

Unlike other service areas, the health sector also embodies certain unusual characteristics which make it particularly susceptible to corrupt practices by public officials. Hussmann and Savedoff (2006) have identified three features—uncertainty, asymmetric information and large numbers of dispersed actors— which increase the risk of corruption. According to their study, uncertainty regarding who will fall ill, when illness will occur, what kind of illnesses people get and how efficacious treatments are makes the market for health care unique. Asymmetric information—the fact that information is not sufficiently shared equally between actors— and large numbers of dispersed actors ranging from government regulators such as health ministries, to providers and suppliers, are other distinguishing features of the health sector. Vian (2006) attributes the health sector’s vulnerability to the: “diversity of services and outlays, the scale and expense of

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<sup>38</sup> Global Corruption Report, p.49-61

<sup>39</sup> Lewis, p. 16

<sup>40</sup> Global Corruption Report, p.49-61

<sup>41</sup> Hussmann, Karen and William D. Savedoff. “Why Are Health Systems Prone to Corruption” Global Corruption Report, 2006, p.4.

procurement, the nature of health care demand...the many kinds of processes and expenditures occurring in the health sector, from expensive construction and high tech procurement, with attendant risks of bribery, collusion and ex-post corruption, to frontline services being offered within a provider-patient relationship marked by imbalances in information and inelastic demand for services."<sup>42</sup> For developing countries, the inelasticity of demand and the paltry number of health care providers makes bribery almost inevitable. The full brunt of the corruption is always felt by the end user -- the sick person, and frequently an impoverished, sick person, who is forced to pay over the odds or who is given unsafe, counterfeit medicines.<sup>43</sup>

*Creating a Drug Treatment Gap: The Corrupting Influence of Tariffs in Developing Countries*

Custom officials are particularly likely to engage in corruption, since they control access to the outside world and participate in the many steps required to release imported goods. Chart 1 maps the steps involved in clearing customs, from the arrival of the goods to its port removal, each step requiring customs participation. Tanzi's study captures best the corruption that frequently pervades the customs clearing process: "The existence of these regulations and authorizations gives a kind of monopoly power to the officials who must authorize or inspect the activities. These officials may refuse the authorizations or may simply sit on a decision for months or even years. Thus, they can use their public power to extract bribes from those who need the authorizations or permits. In India, for example, the expression 'licence raj' referred to the individual who sold the permits needed to engage in many forms of economic activities."<sup>44</sup> Add to this scenario, the highly-variegated tariff structure that exists in most developing countries. This creates opportunities for unscrupulous custom officials to extract rent from importers. If officials have sufficient discretionary power, they might threaten to misclassify goods into more heavily taxed categories unless importers pay them a bribe.

It is worth mentioning that just as high custom charges foster bribery, so too, do they encourage the counterfeiting of medicines. According to the WHO, 25 percent of all medicines in less developed countries are counterfeit. In Nigeria for example, counterfeit drugs constitute between 40 to 50 percent of their total supply, most of which originate from India. While the link between counterfeit medicines and tariffs may not be immediately obvious, it should be noted that

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<sup>42</sup> Vian T, p.44

<sup>43</sup> Global Corruption Report, 2006

developing countries often “stimulate demand for cheaper fakes by artificially driving up the price of legitimate drugs through taxes and tariffs, which can inflate the retail price of drugs.”<sup>45</sup> Many of the high tariff countries also have a significant indigenous counterfeit medicine industry, India being a case in point; it is our belief that this link is not entirely coincidental.

Further, in addition to counterfeit medicines, studies have shown that countries with high tariffs also have to deal with the problem of drug smuggling. In a 2002 World Bank study, David Tarr (2002) points out that a diverse tariffs structure (which as previously discussed allows for price arbitration) provides an incentive to smuggle those products which are subject to a high tariff.<sup>46</sup> Following these observations, the corrupting influence of tariffs is as varied as it is detrimental to the health of a nation’s population. In sum, tariffs not only provide the motive (by being such an easy target for manipulation) for corruption, but also the means (the wide variance of tariff rates, coupled with the unsupervised, discretionary power of customs agents) to do so.

**Chart 1: The Steps to Release Goods from Time of Arrival**

Steps	Customs Participation
1. Arrival of the goods	
2. Unloading of the goods	
3. Delivery to a customs area, where goods are generally temporarily stored	yes
4. Lodgment of the declaration	yes
5. Payment of duties and duty discrepancies (can take place after step 9)	yes
6. Acceptance of the declaration	yes
7. Documentary control	yes
8. Physical inspection	yes
9. Control of other agencies such as standards or phytosanitary	
10. Goods released by customs	yes
11. Actual removal from the port, airport, or land border post premises	

Source: Luc De Wulf 2005. *Strategy for Customs Modernization*.

High levels of tariffs and taxes all too easily give way to high levels of corruption in developing countries. Most of the countries cited as having the highest average tariff and tax rates are also amongst the list of countries with high levels of perceived corruption as reported by Transparency International. For example, Nigeria, which has a very high tariff rate, up to 50% on certain medical related goods, ranks 152, near the very bottom of Transparency International’s Corruption Perception Index (CPI). Ethiopia, which ranks 137 on the CPI also has a high tariff

<sup>44</sup> Tanzi, Vito, p. 566

<sup>45</sup> Morris, Julian and Philip Stevens (2006), “Counterfeit Medicines in Less Developed Countries: Problems and Solutions” International Policy Network (IPN), London, UK, available at [http://www.fightingdiseases.org/pdf/IPN\\_Counterfeits.pdf](http://www.fightingdiseases.org/pdf/IPN_Counterfeits.pdf), accessed July 13, 2006.

rate, as previously mentioned. The increased cost of doing business in countries in which the flow of trade is slowed by extreme bureaucracy makes engaging in corruption considerably more appealing. Eradicating corruption from the health sector through the removal of tariffs, and other import duties is as important to its improvement as it is unpopular with bureaucrats and often donors, who simply do not want the problem discussed, presumably for fear of loss of political support for their actions in recipient countries (and also the loss of taxpayer support in their own countries if voters were to find out more about aid being subject to corruption). Consequently, reform may require changes in institutional structures, and especially reform of the public sector.

In most developed countries where perceived levels of corruption are low and tariffs and taxes on essential medicines are largely eliminated, current data show that customs activities attract substantial funds for government revenue. In Norway for example, about 33 percent of central government revenue originates from value added tax, excise duties and customs duties. In 2003-2004 customs and excise revenue for the United Kingdom was £115.7 billion (approximately \$200bn). Of this figure, revenue from value added taxes accounted for £69 billion (almost 60% of customs and excise revenue) fuel duties accounted for £22.8 billion (19%) and £20.1 billion came from duties on tobacco, spirits, wine, beer and cider, betting and gaming, air passengers, and insurance premiums. An additional amount of £4.8 billion was collected on vehicle excise duties. In the United States, customs duties brought in over US \$23 billion in 2005. This includes duties on imports, arms and ammunition. None of this revenue was raised on medical interventions but on less essential products.<sup>47</sup> These examples show that, absent corruption, custom revenue generation on non-essential goods could bring in substantial revenue for low-income countries to fund state needs as it occurs in higher income nations.

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<sup>46</sup> Tarr (2002), p.531

<sup>47</sup> Sources: Norway— Ministry of Finance, “The National Budget 2005”, available at <http://www.statsbudsjettet.dep.no/2005/english.asp?id=1>, accessed July 12, 2006; United States: Financial Management Services, United States Department of Treasury [http://www.google.com/search?hl=en&lr=lang\\_en&rls=GGLD%2CGGLD%3A2004-40%2CGGLD%3Aen&q=receipts+offset+against+outlays+US](http://www.google.com/search?hl=en&lr=lang_en&rls=GGLD%2CGGLD%3A2004-40%2CGGLD%3Aen&q=receipts+offset+against+outlays+US), accessed July 12, 2006; United Kingdom: Budget 2005, available at [http://www.hm-treasury.gov.uk/media/AA7/AD/bud05\\_chapc\\_252.pdf](http://www.hm-treasury.gov.uk/media/AA7/AD/bud05_chapc_252.pdf), accessed July 12, 2006.

#### **4. Results: Methodology and Discussion**

##### *Description of Questionnaire*

A questionnaire was developed to obtain an account of the experiences of those either selling or donating essential medicines to developing countries. The purpose of the survey was to examine the level of exposure to tariffs and taxes on pharmaceuticals and medical devices, provided at little or no cost to lesser developed countries by pharmaceutical companies, not-for-profit groups, for-profit corporations (including expert firms involved in delivering/trading products), and multilateral/bilateral agencies in some cases looking at a few selected countries: Ethiopia, Kenya, Nigeria, South Africa and Uganda. [A full copy of the questionnaire can be found in the Appendix I of the paper.]

Our access to essential medicines questionnaire comprised six questions, which were designed to collect information on elements of price composition, such as tariffs, markups and fees demanded at the various country ports, and more importantly, their effects on determining accessibility to the drugs. The investigation was also meant to determine priority areas for intervention by policymakers to improve drug availability and affordability systems in their countries. Feedback was based on written and oral responses to both qualitative and quantitative questions. We were compelled to use qualitative questions in some places due to the sensitive nature of the issue we were attempting to address.

##### *Sampling Frame*

The questionnaire was distributed to over 100 global health groups including pharmaceutical companies, not-for-profit groups, for-profit corporations, and multilateral/ bilateral agencies, as well as export and import firms involved in the provision of essential medicines and medical devices in low-income countries. We selected as many organizations as possible for the study; since the intention was to be as comprehensive as possible. To facilitate the process, contacts were first established in the relevant offices of the respective organizations and then copies of the survey were sent via email or mailed to respondents. The authors received advice from numerous groups, from NGOs, to pharmaceutical companies, to government officials.

##### *Strengths and Weakness of Survey*

The self-completion questionnaire allowed us to approach respondents from all over the world,

but the response rate was low, partly because some organizations have a non-disclosure policy on such matters. It also provides only discrete, one-point responses, some from immediate memory, others stretching back years. Despite these deficiencies, the survey method still presented a powerful assessment tool that enabled conclusions to be drawn on the level of exposure of tariffs to medicines and the implications of such a policy on drug access in several developing countries.

*a. Discussion of Questionnaire Results*

Despite repeated follow-up queries, the non-response rate for the overall survey was very high. Out of the 100 surveys delivered, 77 did not respond to our repeated queries; 12 responded citing that they had limited exposure to these issues and could not provide us with any estimates (despite evidence that shows the organization is involved in drug supply in some form). This response by itself could suggest several things: first, tariffs on medicines affecting drug access may not be a universal problem, second it could equally be that there are no monitoring mechanisms in place to document such experiences, or third, that groups simply do not want attention drawn to the topic. Out of the total surveys sent out, 11 affirmative responses were received. In these surveys, respondents answered at least one of our questions, and provided some quantitative information on price increases as a result of the local levies<sup>48</sup>

The first set of questions in the survey was designed to determine the level of exposure of medicines and medical devices to tariffs, taxes and other duties. To this question, 7 out of the total responses indicated that they knew of instances when their products had been affected by local price inflators in recipient countries; we received 4 responses indicating no knowledge of such instances.<sup>49</sup> Out of the affirmative respondents, the majority considered tariffs to be a “moderate” to “serious threat” to the access of medicines by citizens of lesser-developed countries. For instance, USAID’s Supply Chain Management with the Office of HIV/AIDS under PEPFAR (President’s Emergency Plan for AIDS Relief) noted that they considered VATs and LPIs (local price inflators) as a “serious threat” to the accessibility of medications. In fiscal year 2005, this branch of the organization donated as much as US \$63 million in ARV to

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<sup>48</sup> Five survey responses were orally gathered as well, but these were from importers and exporters and addressed only the detail of cross border problems.

<sup>49</sup> Note that one respondent provided multiple responses to the survey, primarily because it is an organization which supplies a wide range of medicines and medical products through various partnerships. In this case, their responses are viewed separately.

PEPFAR focus countries. This is quite a significant response given that US Government donations are not usually subject to tariffs.

Our second set of questions was designed to determine the actual percentage increase of the price of the drug products as a result of the levy imposed. To this question, a little over 50 percent of the responses cited tariffs as the most prevalent local price inflator they faced. VATs and other sales taxes came in a close second, with 5 responses. Local taxes and transportation were also cited as barriers, but these generated fewer responses.

Question 3c of the questionnaire elicited the lowest response rate of the entire survey, as it asked respondents to indicate specifically by how much the final price of their product had been increased as a result of the levy. Of the total respondents who completed the surveys, only 6 of them responded to this question, but most cited significant inflation in the final retail price of their drugs. For example, Gilead Sciences, a biopharmaceutical company, which provided drug therapy to over 200,000 patients in 2005 at not-for-profit prices, noted that local price inflators increased its product prices by as much as 25 percent. What we do not know, and hope to investigate further in a forthcoming study, is whether this estimated price increase included other markups, such as wholesaler and retailer charges, which occur further along the pharmaceutical supply chain.

The last set of questions attempted to test for perceived levels of corruption due to the imposition of tariffs. Out of the 11 who responded to this question, only 2 said there had been instances where bribes had been demanded of them. 6 respondents answered that they had faced no such situations, while 3 said they were not sure. Also, asked if the respondent had experienced any type of price inflation aside from tariffs and taxes, here too, the majority responded as not sure. These non-committal responses could suggest that within organizations some measure of internal censoring of corruption occurs—generally, companies who have resorted to paying bribes are unwilling to give specific information due to the fear of legal ramifications at home. Using the specific example of the United States, by far the most well-known reflection of anti-corruption concerns is the Foreign Corrupt Practices Act of 1977 (the FCPA or the Act), which imposes criminal penalties on American enterprises that bribe officials of foreign governments and third parties. Any American enterprise charged with a violation of the FCPA may also be charged with violations of other anti-corruption statutes/provisions that pre-date the FCPA such as the Internal

Revenue Code (which prohibits the deduction of illegal payments to foreign officials).

But even for organizations that choose to abstain from corrupt behavior, other problems exist. For example, the Catholic Medical Mission Board (CMMB), a leading US-based global healthcare provider, donates large volumes of pharmaceuticals, totaling about US \$175 million worth of medical products to over 50 different countries. These medical products are sent in approximately 500 different shipments to recipient countries. All pharmaceutical shipments from CMMB are given freely as humanitarian donations and are consequently not for resale. Reciprocally, CMMB asks recipients of their drugs to obtain certificates of exemption for duty-free customs clearance from their respective finance ministries. In most donor African countries, however, CMMB notes that the statistical value associated with each shipment is used many times as a basis to compute “administrative handling fees” for documentation filings. To make matters worse, these charges are often inflated according to the statistical value of the donation. In Vietnam, CMMB reports that Vietnamese customs routinely demand some form of payment upon entry of their goods.

Janssen-Cilag Ltd., a UK-based research pharmaceutical company that provides medicines in a number of therapeutic areas to countries around the globe, reports a similar experience in Vietnam, where they have encountered “arbitrary enforcement and/or increased import duty to certain items for which locally-imitated items are available.” In the case of Myanmar, Janssen-Cilag Ltd. notes that it frequently has to pay a “premium in addition to the import duties and VATs subsequently imposed by the country in order to have access to foreign exchange,” which results in an increase in the price of the drug by an additional 15-20 percent. Peculiarly, in a similar context, both CMMB and Janssen-Cilag’s experiences differ significantly from that of USAID (the leading US foreign aid agency). Like CMMB, USAID’s Global Tuberculosis Drug Facility (GDF) has a standard condition that recipient programs must pay or waive any duties or taxes for GDF-supplied products. Consequently, the organization notes that it has not had bribes or any payments demanded of them in their five-plus years of dealing with over 75 countries, providing approximately \$40 million in first line anti-TB medicines annually.

A variety of factors could account for why USAID’s GDF has been more successful than CMMB in sending donated medical products in countries where tariffs and duties exist. Whatever the explanation may be, where freely donated drugs are concerned, national



governments have foremost a moral obligation (given the number of human lives at stake) to level the playing field for easy and effective access to all life-saving medical products which come into their country. USAID also reports that its other branches, such as USAID-Contraceptives and USAID partnerships with global health groups (such as the Centers for Disease Control and the WHO) which donate medical supply kits to places such as Indonesia, India and Nigeria report similar favorable experiences. In these areas, the organization responds that it knows of no incidents when bribes were demanded or prices of their goods affected by tariffs or VATs.

Los Medicos Voladores, or “Flying Doctors,” a diverse group of medical professionals and volunteers who provide free health care to the people of Mexico and Central American nations also reports facing no charges at the borders of the countries in which it operates. This is because they hand-carry all medical products and supplies and monitor the distribution of the materials on the field personally. Interestingly, they note that some instances have occurred when they haven been asked to pay fees, but they have managed to “quibble” out of them. In effect they consider such instances more of an “annoyance” than a “threat.”

The common trend running through most of the written responses were stories of unnecessary delays due to lengthy registration and licencing procedures at the ports. Although tariffs on drugs, medical equipment and accompanying accessories and parts is comparatively low in Ethiopia, there are other non-tariff barriers that make the process of exporting drugs to the country more troublesome than necessary. Aside from a one-time US \$700 registration fee charged by the country’s Drug Control and Administration Authority (DACA) for each drug, re-registration is required every 3 years at an additional cost of US \$200 per drug per importer.

Drug exporters to Ethiopia complain repeatedly that with drugs that have a limited market, these fees tend to be high and have thus forced companies to consider the volume of potential sales before they incur such fees. To make matters worse, there are further “small” fees that need to be paid by the importer for customs clearing, documentation and other customs “support” services. Not only that, drug importers in Ethiopia indicated two more problem areas. First, there is a strict documentation requirement, which means that even very small errors, such as mistakes in recording dates, can result in long delays. Second, evaluation of drugs can take a long time because DACA’s Central Quality Control Laboratory (CQCL) has limited equipment and, quite

frequently, lacks the requisite chemicals, reagents and, more importantly, laboratory technicians to conduct the necessary tests. Imported drugs can often languish in customs' warehouses for months waiting for the laboratory tests procedures. Other respondents indicated that Uganda, and Nigeria exhibit similar problems with delays due to incompetent staff or inadequate staffing levels.

In fiscal year 2005, USAID Netmark (AED) program spent approximately US \$984,000 on ITNs (insecticide treated nets) to Nigeria.<sup>50</sup> In the questionnaire, the organization cites a specific case in 2005 when a delivery of bed nets for protection against malaria were diverted from Nigeria (the intended recipient) to another African country due to extreme increases in costs in the former nation. The delivery was eventually sent to Ghana where they were sold without a tariff or tax. In some cases, drug importers note that US Embassy personnel have intervened "to expedite the payment of tariffs so goods could be moved along quickly." Another drug company noted that for two consecutive years, 2004 and 2005, the organization encountered customs delays in Kenya and Uganda. The organization justifiably points out, "the necessity to invest both time and effort to address such delays is a significant deterrent to the organization's ongoing commitment to certain areas."

Gilead Sciences also reports of alarming instances in 2004 and 2005 when clearance of shipped drugs to Kenya, Uganda and in South Africa were held up at the ports. For example, drugs destined for use by *MSF* treatment programs in South Africa were repeatedly delayed. Gilead notes that at the time "the delays were seen to be attributable to Gilead and not the local system." To make matters worse, treatment programs are generally ill-equipped to manage or tackle the bureaucratic requirements such as obtaining necessary import permits and securing pre-payments before release of goods that often accompanies these delays; which regrettably leads to further delays. These issues took as long as three years to resolve, and only after they secured the services of appointed local distributors to remedy the situation, who in turn operate at a five percent markup.

Nigeria currently applies a 30 percent tax to drug imports but Gilead notes that their drug shipments are not charged this tax because of diplomatic pressure from the US Embassy.

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<sup>50</sup> The commodities delivered by Netmark's commercial sector totaled over \$50,000,000 in FY 2005.

However, upon product registration these taxes are applied to drugs shipped via the locally appointed distributor. Voicing similar concerns raised by USAID Netmark's representative at such delays, Gilead officials also note "the time and effort ... is a significant deterrent to ongoing commitment to this therapeutic area."

#### *b. Discussion of Results from Interviews*

Summary Table 5 below documents surveyed results and findings of estimated unnecessary delays, legal costs, and non-official payments including bribes. Data collected from oral interviews based on the questionnaire included 105 occasions/incidents of imports of finished pharmaceuticals, bed nets and insecticides (for use in disease control) into the listed developing countries listed below. Many of these products were donated but there is no breakdown of those products, whether sold or donated.

First, it is important to realize that these countries' data have been self-selected based simply on the availability of data, and are not necessarily representative of the developing world. This data may demonstrate at least two factors about the countries from which they are drawn; a considerable amount of trade into the countries and sufficient transparency in those countries to allow estimates of differentiation of charges levied. Indeed, anecdotal evidence from the authors' observations and discussions with questionnaire respondents, customs officials and traders, it seemed that corruption and delays are worse in many African countries not recorded here.

The data is also biased in favor of the mode of transport from western countries, overwhelmingly air traffic and secondly sea/river ports (although this fairly reflects most donated products). Respondents indicate that more non-official payments are often extracted at land border crossings than at better-policed ports - airports in particular. Simply put, we've more data for airports but corruption may be greater in out-of-the-way places.

#### *Data Analysis*

Approximately 85% of tariffs that should have been levied were in fact paid, in 15% of the cases officials either let importers off payment or they allowed goods to simply go undeclared or declared/inspected properly. Also roughly 85% of imports experience unnecessary and

unanticipated delays (these delays ranging from several days to months in a few cases), are a mixture of incompetence and intention, the latter allegedly say our respondents, in order to increase the likelihood to extract some non-official payment. Some of these delays (20%) involve legal costs (agents requiring the involvement of a lawyer to overcome some bureaucratic hurdle), and in 90% of cases a non-official payment (either an administrative charge or other) was paid and in a third an out-and-out bribe demanded (most respondents refused to comment on whether bribes were paid). Bribes were demanded most routinely in Vietnam and least in China and Uganda.

**Table 5: Summary of Results**

Country	Number of cases/ tariffs paid	Type of border crossing			Unnecessary delay		Non-official payment		
		Airport	Sea/River Port	Land/ Border	Time*	Legal Cost**	Admin Charge	Other Charge	Bribe^
Uganda	14/12	11	2	1	14	4	6	11	3
Ethiopia	11/9	3	6	2	11	2	4	11	3
Nigeria	21/18	11	9	1	17	4	13	18	7
Kenya	18/16	11	6	1	16	3	9	14	6
Vietnam	12/8	12	-	-	4	5	3	12	10
China	14/12	14	-	-	12	0	1	12	3
India	15/14	15	-	-	15	3	4	15	4
	105/89	68	24	13	89	21	40	93	36

\*Time - Excess of at least 24 hours over what is subjectively considered to be good practice in these locations by exporters/importers

\*\*Legal cost - exporter/importer incurred some excess legal cost

^Bribe - Means a bribe was demanded no data on whether they were complied with

Non-official payments and delays occur in nearly every instance with non-governmental/charitable supplies. Some of the most interesting aspects of the data is what is omitted. It appears that the large donors (such as government bodies, PEPFAR or USAID, or multilateral groups, Global Fund), demand that tariffs not be applied to their donations and their tolerance to most other non-official payment demands is also close to zero. However, other non-governmental donors are not so lucky, having little power to prevent tariffs being applied, with 85% having tariffs charged and 90% other payments extracted. One of the outcomes of this is that it is likely that some donors/humanitarian groups may prefer to break local laws (a few respondents – not named in this report - indicated that they, or their colleagues, or partner association colleagues, smuggled drugs in suitcases covered with holidaymaker clothes in case of limited inspection, without declaring them) than pay what are often outrageous costs.

In several instances donated ARV drugs had an imputed US price tag used as the basis of tariffs and non-official payment calculations costing the donor several thousand dollars. Perhaps the most powerful finding from all exporters (non-governmental/charitable/for-profit) with no particular reason to act in one location over another is that they have pulled resources from one location to another when confronted with repeatedly high levels of tariffs and/or corruption. The result is that countries that are (perceived to be) better run often attract more support, with a virtuous circle of ever-increasing support, versus the poorly behaved countries exhibiting a vicious circle of diminishing support.

## **5. Conclusions**

This anecdotal survey does not do justice to the complexity of the issue of tariffs, taxes and other impediments to essential medicines in developing countries. What this study has provided, however, is evidence of the chronic weakness (brought on largely by ineffective government policies) that pervades the supply of drugs in developing countries and often cripples any well-meaning drug accessibility efforts. Based on results from the questionnaire, the paper has described the prevailing problem of tariffs and taxes on medicines that make drugs unaffordable to most people in the developing world, as well as the wide range of irregularities in duties and “fees” collected at the ports that characterize the drug- importing process. While evidence from the survey may seem fragmented and only anecdotal in nature, some key conclusions for policymakers cannot be overlooked.

Our results show that in developing countries, the need to remove tariffs and taxes from medicines so as to lower the purchase price of the drug for the patient and hence increase access is long overdue. While organizations such as CMMB, USAID and many others, may seek to provide life-saving treatments at no charge to needy countries, having their well-meaning efforts frustrated by the tariff and non-tariff barriers, is essentially a classic example of 'killing the goose that lays the golden egg'. To this end, we have found that there is now evidence showing that organizations prefer to donate to countries where there are no tariffs on imported medical goods. If revenue from western largesse is what governments seek, they should be cognizant of the fact that tariffs on pharmaceuticals and medical devices sets into motion a vicious cycle of underperformance: essentially, tariffs on medicines harm the sick, which in turn inhibits the

country's productivity cycle due to a 'weakening' labor force. Further, as this form of taxation is regressive, governments should seek revenue elsewhere, perhaps on non-essential goods.

Customs officers, as well as other actors along the medical intervention supply chain, are given too much discretionary power which allows them to arbitrarily negotiate tariff rates and prices. This evidence points to serious problems of governmental neglect, which have created a dysfunctional environment where the chances of getting drug shipments to a country without encountering any delays, are extremely low. But access to medicines will require infrastructure and management systems that allow medicines to be procured, transported, prescribed, dispensed and subsequently monitored, in as cost effective and speedy manner as possible. Many are advocating that adequate incentives in the form of higher salaries and benefits be given to custom officials to deter them from demanding bribes. While such policies are necessary they are insufficient in tackling the problem. To successfully tackle corruption in this area, tariffs on medical interventions should be eliminated.

It is worth noting that in developing countries, most leading causes of death and disability can be prevented, treated or at least alleviated with the availability of cost-effective drugs. If carefully selected, low-cost pharmaceuticals are available in these areas, disease rates could be substantially reduced. This framework must be further supported by national tariff policies implemented to lower prices of essential drugs in both the private and public sectors. In cases of extreme poverty and where the national budget allows for such a provision, governments are encouraged to provide free essential medicines to the public sector.<sup>51</sup> Good drug supply management and an affordable pricing strategy are hence essential components of an effective health care system. Currently, the European Union and other developed countries' markets apply zero tariffs on imports of pharmaceuticals from other developed World Trade Organization (WTO) members. In addition, the United States Trade Representative recently joined with its Swiss and Singaporean counterparts in announcing the adoption of an initiative that advocates the elimination of tariffs and non-tariff barriers on essential medicines within WTO countries. Hopefully this initiative will be carried forward when the Doha Development Round of the WTO resumes. Indeed, with support from the EU, Japan and others, the initiative to remove medicine tariffs could be something that could help kick start the WTO talks again. Elsewhere, support has

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<sup>51</sup> Laing et. al 2006, p.55

come from the G8 and the UN. At their 2006 meeting in Russia, the G8 leaders encouraged governments around the world to remove import tariffs and non-tariff barriers on medicines and medical devices<sup>52</sup>. UN Secretary General Kofi Annan noted that that the UN will “work with individual countries to remove tariffs and import duties which hamper efforts to make HIV medications and diagnostics affordable and accessible.”<sup>53</sup> Such ongoing advancements to bring full medicinal access to patients are progressive and encouraging, and developing countries must be encouraged to do the same.

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<sup>52</sup> See G8 statement on the Fight Against Infectious Diseases. Available from <http://en.g8russia.ru/docs/10.html>

<sup>53</sup> United Nations, The Secretary General – Statement Issued Following Meeting With Top Pharmaceutical Executives on HIV/AIDS, New York, 24 July, 2006. Available from <http://www.un.org/apps/sg/sgstats.asp?nid=2147>

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## Appendix I

# MEDICINAL ACCESS QUESTIONNAIRE

To be completed by drug manufacturers, NGOs and global health groups that provide essential medicines and/or medical devices to lesser-developed countries.

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\* \* \*

**Introduction:** Many drug manufacturers, NGOs, and global health groups provide essential medicines and medical devices to lesser-developed countries in parts of Africa, Latin America and Asia at little-to-no charge to help in the global fight against infectious diseases. These products, on entry and once inside the recipient country, are often subject to a number of governmental price markups, tariffs, taxes or duties which increase the price of products that were intended to be distributed at a low – if any – cost to citizens (one study puts the average worldwide price markup at 18%<sup>54</sup>).

The governments of these countries state that the price markups are in place to protect local industries and to generate revenue for the recipient country's government. While every government has a right to impose income generating tariffs as they see fit, recent econometric analyses have shown that decreases in tariffs for a particular class of products are associated with increased access to that class of products. Governments could probably increase access by lowering these tariffs.<sup>55</sup>

The aggregate story from the data is what we wish to examine in more detail. **The purpose of this questionnaire is to examine the level of exposure of medicines, medical products/devices, blood products etc. provided at little or no cost to lesser developed countries by pharmaceutical companies, NGOs, and global health groups, to tariffs, taxes, duties or other forms of local price inflators.** And, as importantly, the impacts these tariffs play in changing access times. The results of this study will be published on an open-access web site. Thank you for your time!

\* \* \*

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**ALL INFORMATION PROVIDED IN THIS QUESTIONNAIRE WILL BE USED FOR AGGREGATE ASSESSMENTS OF TARIFFS IMPACTS (DELAYS, LEGAL TIME INCURRED, BRIBES PAID ETC.).**

**ALL SOURCES WILL BE KEPT CONFIDENTIAL.**

**However,** if you would permit the surveyors to quote or reference your provided written answers in whole or in part in future publications, please place a check mark on this line: \_\_\_\_\_.

**Providing the authors with this approval would be useful to demonstrate the potential harmful effects of tariffs, which could help change policy.**

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<sup>54</sup> Source: "Taxes and tariffs deny patients access to medicines, says new study." Policynetwork.net.

<sup>55</sup> Source: Roger Bate, Richard Tren and Jasson Urbach, "Still Taxed to Death: An Analysis of Taxes and Tariffs on Medicines, Vaccines and Medical Devices," *AEI-Brookings Joint Center*, Washington, D.C., 2006), available at <http://www.aei-brookings.org/admin/authorpdfs/page.php?id=1136>.

# MEDICINAL ACCESS QUESTIONNAIRE

**Instructions: PLEASE ANSWER ACCURATELY AND COMPLETELY**

If more space is required for written answers, use the fields on page 4.

**For choice questions, please select only one answer, EXCEPT for Question 3b.**

## QUESTION #1

**1a.** Please identify your organization and your affiliation with the entity.

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**1b.** What is the volume/value of the products your organization exports and to which countries? (Aggregate assessments are fine, and for drug companies just highlight donated supplies or medicines sold at cost).

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## QUESTION #2

In your opinion, how serious of a threat are tariffs, value-added taxes (VATs) or other local price inflators (LPIs) to the access of medicines or medicinal products by citizens of lesser-developed nations?

- SERIOUS THREAT  
 MODERATE THREAT  
 NEITHER PARTICULARLY THREATENING  
OR PARTICULARLY UNTHREATENING  
 NO THREAT  
 UNSURE

## QUESTION #3

**3a.** Are you aware of a situation in which your products' prices on developing countries have been affected by taxes, tariffs, duties or other local price inflators (LPIs)?

YES NO

**3b.** If so, what type(s)? (*Please choose all the apply; if other, please list.*)

- TARIFFS  
 VALUE ADDED TAXES (VAT)/SALES TAXES  
 LOCAL/REGIONAL TAXES  
 TRANSPORTATION TAXES/CHARGES  
 OTHER \_\_\_\_\_

**3c.** If you answered yes to question 3a and 3b above, by how much was the price of your product increased as a result of the levy?

- \_\_\_\_ (0-5%)                      \_\_\_\_ (15-20%)  
\_\_\_\_ (5-10%)                    \_\_\_\_ (20-25%)  
\_\_\_\_ (10-15%)                  \_\_\_\_ (above 25%)

**3d. Please provide** the date and country of the inflation/tax/duty levy/markup (If more than one occurrence, use additional space on page 4.)

DATE: \_\_\_\_\_

COUNTRY: \_\_\_\_\_

*Please continue on next page.*

**3e. If products were delayed or processes expedited through the payment of tariffs please provide** the approximate duration of this occurrence at the port of entry to your product. Try to be as accurate as possible.

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**3f. Please identify** any recourse (legal action, etc.) undertaken to address the situation. Include amount of time and money invested in the effort.

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**3g. If applicable, please provide** the fraction of your organization's total output that was shipped to the country/countries you provided in **3d**.

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**3h.** How long (# of weeks, months, years etc.) has your organization been working with the country/ countries listed in question **3d**?

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**QUESTION #4**

**4a.** Have you, your organization, or your colleagues ever experienced any type of price inflation in lesser developed countries besides tariffs or value-added taxes (VATs)?

YES                      NO                      NOT SURE

**4b.** If so, **please explain** and state how frequently (# of times) this situation has occurred.

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**QUESTION #5**

**5a.** Have you, your organization, or your colleagues ever experienced a situation or been aware of a time when a bribe was demanded to enter medicines into lesser developed countries?

YES                      NO                      NOT SURE

**5b.** If so, please explain and provide details where possible. **N.B.** If the surveyors would like to use this information specifically rather than in aggregate, they will contact you to discuss any and all uses.

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**QUESTION #6**

In general, how knowledgeable do you feel you are with the problems of taxes, tariffs, duties, and/or local price inflation of medicines in lesser-developed countries?

- QUITE FAMILIAR
- MODERATELY FAMILIAR
- NEITHER PARTICULARLY FAMILIAR OR PARTICULARLY UNFAMILIAR
- MODERATELY UNFAMILIAR
- QUITE UNFAMILIAR
- COMPLETELY UNFAMILIAR

**ADDITIONAL COMMENTS / REMARKS**

Please provide any additional information you feel may be useful.

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**ADDITIONAL WRITING SPACE**

**3d.**

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**3e.**

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**3f.**

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**3g.**

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**3h.**

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**4b.**

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**5b.**

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Please mail or fax completed questionnaires to: **Office of Roger Bate, ATTN: Tariff Project**  
**American Enterprise Institute**  
**1150 17<sup>th</sup> Street, N.W**  
**Washington, DC 20036**

**Fax: 202.862.5867**