Trade and the Sustainable Development Goals: Can Tariffs and NTMs be Bad for Your Health?

Policy Brief

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1   INTRODUCTION

Trade economists have long argued the case that increased openness to international markets can, under the right circumstances, boost productivity, which is the backbone of sustained growth in per capita incomes. The distribution of the gains from trade in a way that conforms to each society's view of equity is an issue best addressed by complementary policies, such as welfare and social safety net measures. But the experience of many developing countries suggests that trade can be an important part of promoting economic growth, which can help reduce poverty. Trade is therefore intimately linked to Sustainable Development Goals 1 and 8, which relate respectively to ending poverty, and promoting sustained, inclusive, and sustainable economic growth. The relationship between trade and growth is not as simple and direct as was believed by some commentators in the 1990s, but there is a broad consensus that without openness to international markets for goods, services, labor, and capital, it is difficult if not impossible to bring about rapid economic growth and development.

The motivation for this Policy Brief is not, however, to delve further into the links between trade and economic outcomes, such as growth and poverty reduction. Instead, it examines the ways in which openness to trade can help improve development outcomes other than through channels like income and productivity. It focuses specifically on the case of health. The intuition is simple: trade openness reduces prices and increases access and variety for consumers. The point holds just as strongly for products that are important for health-related development outcomes as it does for consumer goods. This Policy Brief makes a case for priority liberalization of trade policies affecting "development products" like those used in health services. It argues that trade can, and should, play a role in attaining SDGs other than 1 and 8, in particular SDG3: ensuring healthy lives and promoting well-being for all ages.

The Policy Brief proceeds as follows. The next section outlines trade policies affecting three core groups of health-related products, and identifies their effects on the world's poor. Section 3 examines the special case of vaccines, and reports on an econometric analysis that establishes the important role of logistics services—which are traded internationally—in promoting access. The final section concludes, and addresses policy implications.

2   TRADE POLICIES AND HEALTH-RELATED PRODUCTS

Figure 1 presents average applied tariff rates by World Bank developing region for three health-related products: pharmaceuticals, medical instruments, and treated bed nets. To be clear, non-tariff measures (NTMs) also affect these sectors. Consideration is limited to tariffs in the interests of precision, cross-country comparability, and data availability. It is important to emphasize that these are statutory tariff rates that apply to everyday imports of health-related products. In cases of emergency relief, countries typically do not levy customs duties on incoming supplies. So the focus here is on policies that can affect the general level of health and healthcare service provision in a country in ordinary times, not emergencies.

Figure 1: Simple average effectively applied tariffs on selected health products, 2012, by developing region.
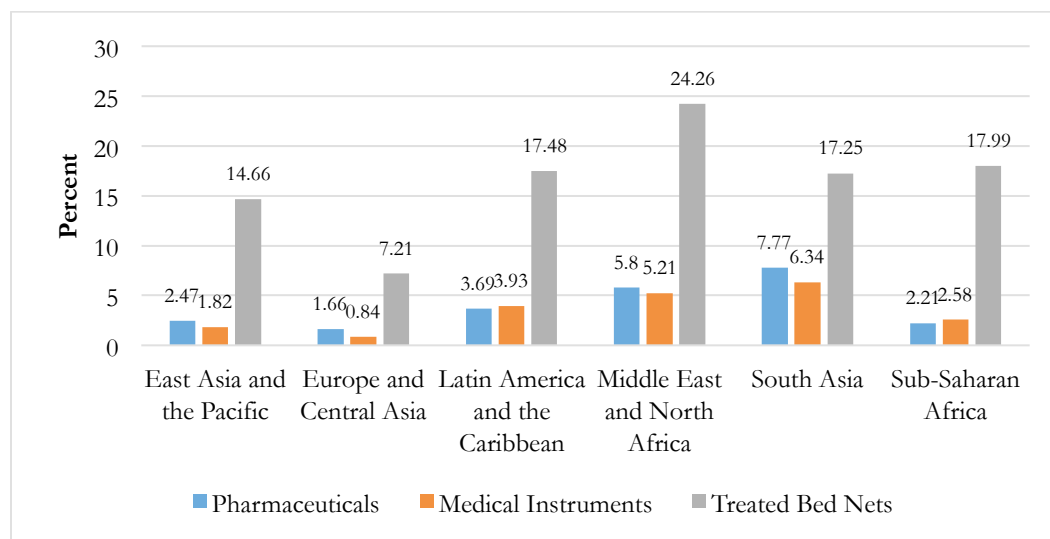
Source: WITS-TRAINS. Note: Regional classifications use the World Bank system, and therefore exclude high income countries. Pharmaceuticals are defined as all products in Harmonized System (HS) Chapter 30, medical instruments are products with the 9018 classification at the four digit level, and bed nets are products 630491, 630492, 630493, and 630499 at the six digit level. The bed net codes correspond with the products excluded as treated bed nets from Nigeria's import prohibition on a wide range of textile articles (https://trade.gov.ng/tariff/prohibitionList_Import.do).

On average, tariff rates on pharmaceuticals and medical equipment are relatively low, and a wide range of countries allow duty free access. However, the fact that tariffs persist at all is puzzling in light of the importance of ensuring access to affordable medicines for poor people. On average, the most protected developing region is South Asia. Although the average tariff is relatively low, at about 8% for pharmaceuticals and 6% for medical instruments, it seems difficult to justify at all on development grounds.

Moreover, the regional averages conceal considerable variation across countries. The two largest countries in South Asia, India and Pakistan, also have the highest tariffs at 10% and 12% respectively. In the Indian case, protection of the domestic pharmaceuticals industry is one possible political economy explanation for the existence of this significant import tax. However, that industry is already globally competitive and seems to have little need of protection on infant industry grounds. Countries in other regions, often without significant domestic manufacturing capacity, also impose significant tariffs on pharmaceuticals. Examples include Tunisia and Djibouti (11%), Ghana (9%), and Lao PDR (8%).

In most regions, average tariff rates on medical equipment are lower than for pharmaceuticals. However, the averages again mask considerable cross-country variation: in fact, the countries with the highest tariffs in this sector apply them at levels that far exceed those for pharmaceuticals. For example, Djibouti taxes foreign medical instruments at an average rate of 24%, Iran applies a 14% tariff, and rates in the next ten most protected countries (covering five of the six World Bank regions) are approximately 10%. There are undoubtedly political economy motivations for these tariffs in each country, in addition to possible revenue raising objectives.

Although the focus of this section is on tariffs, it is important to note one prominent example of an NTM that affects some pharmaceuticals: Nigeria's import ban on various pharmaceutical products. The ad valorem tariff in that case is effectively infinite on the covered products. Of particular concern is the fact that the prohibition list includes chloroquine, a drug used in the prevention and treatment of malaria, as well as various antibiotics and deworming treatments. All of these products have special significance in terms of health outcomes in a developing country like Nigeria. The rationale for the import bans is unclear, but there is likely to be a political economy motivation.

By far the highest level of protection on a regional average basis is the case of bed nets. This result is unsurprising given the generally high levels of protection that exist for textile products all around the world, but troubling in light of the high importance attached to these products in the context of global efforts to combat malaria. The most restrictive region in this case is the Middle East and North Africa, although malarial zones there are relatively limited. Protection rates in Asia, Africa, and Latin America, where malaria is more prevalent, are also high, however, at 15%-20%. Individual countries sometimes lie considerably above the relevant regional averages: 15 countries from five of the six World Bank regions (but mostly in Sub-Saharan Africa) impose tariffs of greater than 30% on average.

This quick review of the data on three health-related products reveals that active trade policies undercut some countries' ability to move forward on SDG3. The effect of tariffs on health-related products is to push prices up, and limit availability on the domestic market. There is no health rationale for putting in place tariffs and NTMs that make it harder for consumers to access important health-related goods. Indeed, the opposite is true: increased openness would undoubtedly result in lower prices and improved availability, which would help promote improved health outcomes. In this case, tariffs and NTMs are bad for health.

It is important to emphasize that this section has examined just three types of health-related products, albeit important ones. The findings are symptomatic of a more general problem: activist trade policies that insulate countries from world markets can push up prices and limit availability of important development products, meaning goods that play a particular role in promoting the SDGs other than through income channels. Trade can be a lever to promote non-income objectives in the SDGs, such as the health goals of SDG3.

3   TRADE POLICY AND HEALTH OUTCOMES

The previous section showed that a variety of countries continue to apply active trade policies to health-related products, and it argued that the result would be to decrease availability and increase cost, which is a negative outcome in terms of SDG3. So what do the data say about trade policy and health outcomes? This section provides some basic exploratory analysis, focusing on two cases: treated bed nets, and vaccination.

Figure 2 shows the statistical association between a country's tariff level for treated bed nets, and bed net prevalence, measured as the use of insecticide treated bed nets as a percentage of the under 5 population. The line of best fit is downwards sloping, which indicates that higher tariff rates are associated with lower bed net prevalence. The association is statistically significant at the 10% level (R2 = 0.13), despite the very small sample size. Of course, this analysis does not control for intervening causal factors that might also affect bed net prevalence. Nonetheless, it is suggestive in light of the mechanism put forward above: tariffs increase prices and decrease availability, which is reflected in decreased use—a bad outcome in terms of SDG3.

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Figure 2: Correlation between tariff rates and bed net prevalence, latest available year.
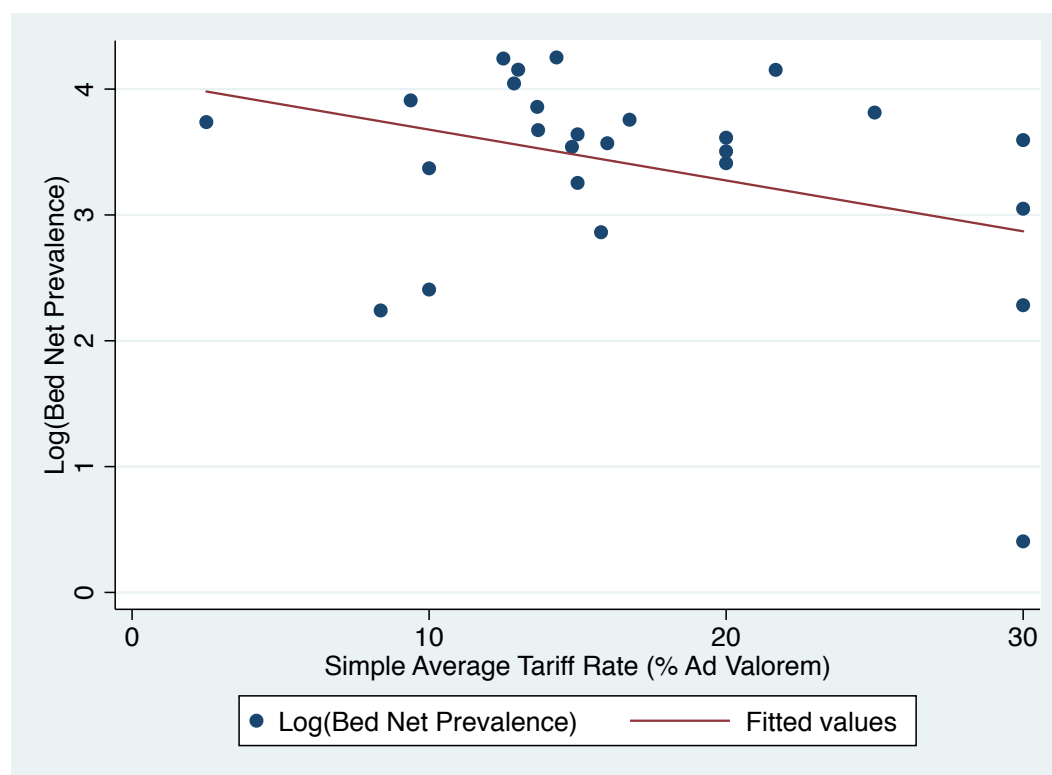
Source: World Development Indicators; and WITS-TRAINS. Note: Tariffs are calculated based on effectively applied rates. The product classification for bed nets is as in Figure 1.

A second example looks at the links between logistics and trade facilitation on the way hand, and vaccination rates on the other.[1] The rationale for expecting a connection between the two is that vaccines require careful handling if they are to be moved from port or factory to the hinterland in a usable state. To measure trade policy, the World Bank's Logistics Performance Index is used, specifically the sub-index measuring the competence and quality of logistics services—a variable that should be linked to trade policy. Results are presented using the immunization rate for diphtheria, pertussis, and tetanus, but similar conclusions follow if the measles immunization rate is used instead.

Figure 3 shows the association between the two variables. The line of best fit is upward sloping, in line with the contention that better logistics and trade facilitation performance is associated with better handling of vaccines, which in turn increases the immunization rate. The association is statistically significant at the 1% level ($R2 = 0.16$). Moreover, the association between these two variables remains strong even when confounding influences are accounted for. Shepherd and Pasadilla (2011) report results from an OLS regression of the immunization rate on the LPI logistics competence index, with a set of control variables including per capita GDP, the percentage of GDP spent on health, and an index of government effectiveness from the World Governance Indicators. The coefficient on the LPI remains statistically significant at the 1% level. In addition, an interaction

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[1] This section draws on Shepherd, B., and G. Pasadilla. 2011. "Trade in Services and Human Development: A First Look at the Links." In P. Sauve, G. Pasadilla, and M. Mikic (eds.) *Service Sector Reforms: Asia-Pacific Perspectives.* Tokyo: ADBI.

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term with per capita GDP is negative, which indicates that the association between logistics performance and the vaccination rate is stronger in lower income countries. The evidence in this case connecting better trade policy—in this case improved logistics and trade facilitation—with improved health outcomes in terms of SDG3 is strong.

Figure 3: Correlation between logistics competence and DPT immunization rate, latest available year.
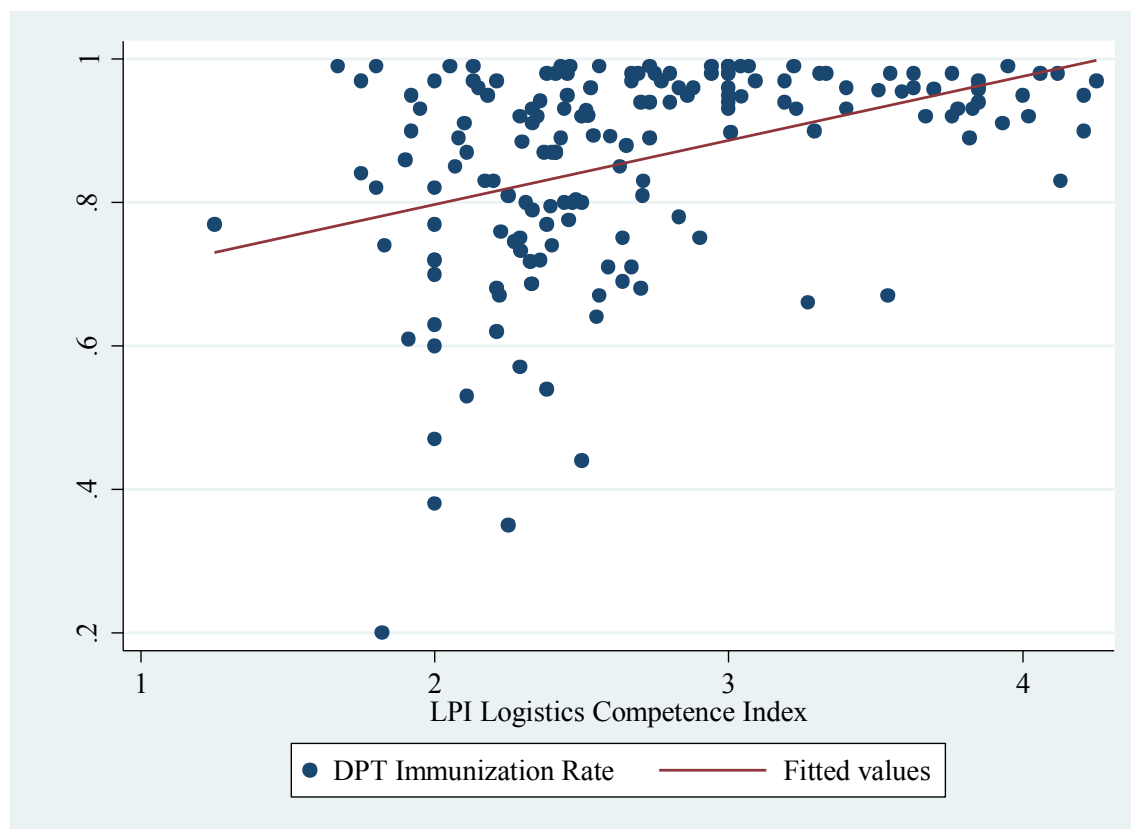
4   CONCLUSION AND POLICY IMPLICATIONS

This Policy Brief has provided a first look at one important non-income linkage from a more open trading system to the SDGs, specifically SDG3, which deals with health. There is clear evidence that developing countries apply tariffs and NTMs that have the effect of increasing prices and decreasing availability of health-related products, such as pharmaceuticals, vaccines, medical equipment, and treated bed nets. The case for liberalizing trade in these products is strong. In addition, there is compelling evidence that improving trade facilitation performance—using the WTO's Agreement on Trade Facilitation as a starting point—could be linked to improved handling of health-related products such as vaccines, which in turn would boost usage.

Although trade has a relatively low profile in the SDGs and their companion targets, it is by no means absent from the package of measures available to policymakers to promote the SDGs. Trade economists need to do more to show that trade can benefit sustainable development through non-income channels. Work on liberalization of environmental goods and services is another important example from outside health: by the same reasoning as was presented here, liberalization in these sectors can directly help achieve the SDGs by promoting sustainability. Future policy research could usefully concentrate on identifying more examples like health and the environment—areas in which

trade can promote sustainable development through non-income channels. Similarly, analysts in other areas featured more prominently in the SDGs should be looking to include trade in the conversation on how best to promote sustainable and inclusive growth.

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