BOSTON UNIVERSITY Global Development Policy Center





Devika Dutt is a pre-doctoral fellow at the GDP Center. She is a Ph.D. candidate in the Department of Economics of the University of Massachusetts in Amherst, writing a dissertation about the political economy of the costs of foreign exchange intervention, with a focus on developing economies.



Rachel Thrasher is a research fellow at the GDP Center, studying policy issues related to trade and investment agreements, trade law and development, and economic relations between developing countries. She also teaches International Trade Regulation at Boston University School of Law.

Growing Share of Online Trade Undercuts Government Ability to Pull in Revenue

DEVIKA DUTT AND RACHEL THRASHER

The internet and rapid development in information technology (IT) has revolutionized the way we trade and conduct business. Much of our buying and selling of goods and services moved online through online marketplaces. Indeed, the IT revolution has meant that some goods are not traded physically at all, or on a much more limited scale, and have been replaced almost entirely by electronic transmissions. For example, media that we purchased in the form of physical goods such as CDs/DVDs, and even books, are now increasingly purchased through electronic transmission of the content. Furthermore, the trade in several intermediate goods may soon be replaced in a large way by technologies such as 3D printing or other Computer-Aided Design (Banga, 2019).

The changing nature of trade should also mean a change in government policy in response. Governments should be able to harness this activity in order to ensure that it is conducted in a fair manner, and that it contributes to the resources of the government just as every other economic activity is typically required to do. Therefore, if governments decided to tax trade in certain goods, they should be able to do so even if the form in which those goods are traded has changed. It is challenging to design efficient policy measures to tax electronic transmissions and other forms of digital trade, given the rapid evolution of this trade. However, governments face an additional constraint: the WTO Moratorium on Custom Duties on Electronic Transmissions (Moratorium).

In 1998, at the Second Ministerial Conference of the World Trade Organization in Geneva, the members adopted a resolution to impose a Moratorium on imposing custom duties on electronic transmissions. Since then, this moratorium has been extended from Ministerial Conference to Ministerial Conference, despite the changing nature of trade and the growing share of electronic transmissions. This is especially significant given the importance of trade taxes (tariffs) for total tax revenue in lowerand middle-income countries. Since 1990, tariffs have constituted an average of 20 to 50 percent of total tax revenue in low-income countries, while the same contribution in high-income countries ranges from 5 to 20 percent. The Moratorium has tied the hands of WTO members in deciding whether they would like to impose tariffs on any of these electronic transmissions. This is not to suggest that governments would necessarily impose customs duties on electronic transmissions if this Moratorium were not in place; merely that they would have the option to tax them if they deemed necessary, as long as it is in keeping with their negotiated obligations at the WTO. However, this Moratorium has meant that customs duties on electronic transmissions have not been negotiated in the past 22 years. This leads to the remarkably inefficient situation in which similar goods (e.g., e-books and physical books) are receiving different policy and tax treatment.

Based on the method used in Banga (2019), we estimated the value of online trade in digitizable goods. Digitizable goods are a concrete subset of goods which people buy and sell in both physical and digital form. By comparing the projected volume of physical trade in digitizable goods for 2010-2018 with the actual trade volume of those goods, we found that the difference (estimated online trade in digitizable goods) amounted to about USD 4.7 billion per annum (Figure 1). Moreover, this estimate may be conservative given that the shift away from consumption of the physical forms of digitizable goods was already in full swing in the early 2000s.

This has meant that many governments are missing out on the potential of collecting tariff revenue from taxing some or all of this online trade. This is a global average, and different countries face different effects. Table 1 breaks down the estimates of online trade by country groups (according to the World Bank Income classification). The Table shows that online imports constitute a much higher share of total imports in Low-Income countries (1.22 percent) and Lower-Middle Income countries (1.66 percent) as compared to Upper-Middle Income countries (0.31 percent) and High-Income countries (0.24 percent). Furthermore, according to our estimates, USD 1,612.57 billion of online trade has escaped potential trade taxation by governments.



Figure 1. Average Digitizable Imports Per Annum, 1988-2018 (Billions USD)

Table 1: Online Imports by Country Classification, 2009-2018

	Share of Online Imports in Total Imports	Total Cumulative Value of Online Imports, billions USD
Low-Income Countries	1.22%	10.78
Lower-Middle Income Countries	1.66%	285.85
Upper-Middle Income Countries	0.31%	245.90
High-Income Countries	0.24%	1070.04
Total	0.69%	1612.57

The revenue implications of this Moratorium are substantial. According to the calculations in Banga (2019), assuming that online imports would be subject to average Most-Favored-Nation applied duties at 6.5 percent, developing countries (excluding Least Developed Countries or LDCs) face a potential annual revenue loss of USD 5.2 billion. Similarly, Sub-Saharan African countries and countries in the Middle East and North Africa face a potential annual revenue loss of USD 0.62 billion and USD 0.45 billion, respectively.

If, instead, we use the average bound rate (the upper boundary of tariff rates permitted under the WTO) to calculate these revenue losses, they are much higher: USD 10.1 billion for developing countries, USD 2.63 billion for Sub-Saharan African countries, and USD 1 billion for countries in the Middle East and North Africa. These revenue losses are particularly problematic if countries cannot make up for the lost revenue by imposing other taxes.

In our study, we found that this concern is not hypothetical. Indeed, countries with a higher value of online trade share are associated with a decline in trade tax revenue and an increase in government debt.¹ Moreover, there is no evidence of an increase in indirect tax revenue with trade liberalization, which many assume will make up for any losses of trade tax revenue (Dutt & Gallagher 2020).

It is clear, therefore, that the continued Moratorium on the imposition of custom duties on electronic transmissions has serious consequences, especially for developing countries and LDCs, and we must re-evaluate its purported benefits. Currently, the WTO rules are based on the assumption that keeping digital trade from the confines of customs duties will lead to growth in those sectors of the global economy, thus producing more wealth, which can be efficiently distributed to people everywhere (Baldwin 1989, Wacziarg 2001). When countries struggle to meet the needs of their constituents in the wake of rapid liberalization, international institutions suggest that they are not liberalized enough, not going far enough, and that's why they are losing global market share or unable to compete in these new sectors (IMF, 2001). However, as countless studies have now shown, it may be the case that there are either very small, no gains, or even losses related to trade liberalization for the majority of the world's countries (e.g., Ackerman & Gallagher 2008). Given this evidence, the Moratorium undermines many governments' ability to respond to changes in the global economy. Furthermore, there is plenty of evidence that companies in the digital sector have been able to avoid, not only customs duties, but all manner of taxation globally (Boccia & Leonardi 2016). In that way, we have huge global multinational corporations which do not contribute to the general coffers of any country whether through Value Added Taxes, income tax, or corporate taxation.

¹ Specifically a 1 percent increase in online trade share is associated with a 0.13-0.18 percent decline in trade tax revenue as a share of GDP and a 1 percent increase in online trade share is associated with a 0.07-0.17 percent increase in government debt as a share of GDP.

Therefore, we need to enable countries to impose customs duties on digital trade. This could happen through ending the Moratorium and allowing countries to schedule bound tariff levels for this new(er) kind of international trade. Countries might accomplish this in a couple of ways. On the one hand, they could establish new goods classifications for these "digitized" commodities using their domestic classification system, as Indonesia did in 2018 (Global Business Guide 2018). In the alternative, they may apply the same tariffs to digitized commodities, in accordance with the Harmonized System (HS) of tariff classification, as they do to the corresponding physical commodity. Countries should have the opportunity to notify the WTO members of their new tariff rates (applied on an MFN basis) without risk of consultations at the WTO. Furthermore, developing countries should have greater flexibility to apply different tariff rates to digitized goods, in accordance with the flexibilities of special and differential treatment. This is crucial to rationalize and update the rules of the multilateral trading system and bring them up to speed to the evolving global, and increasingly digital economy.

BOSTON UNIVERSITY Global Development Policy Center

Boston University 53 Bay State Road Boston, MA 02215 ▲ gdp@bu.edu
✓ www.twitter.com/gdpc_bu
⊕ www.bu.edu/gdp

GLOBAL ECONOMIC GOVERNANCE INITIATIVE

The Global Economic Governance Initiative (GEGI) is a research inititiative at Boston University's Global Development Policy Center. The GDP Center is a University wide center in partnership with the Frederick S. Pardee School for Global Studies. The Center's mission is to advance policyoriented research for financial stability, human wellbeing, and environmental sustainability.

www.bu.edu/gdp

The views expressed in this Policy Brief are strictly those of the author(s) and do not represent the position of Boston University, or the Global Development Policy Center.

REFERENCES

Ackerman, F. & Gallagher, K.P. (2008). The Shrinking Gains from Global Trade Liberalization in Computable General Equilibrium Models: A Critical Assessment. International Journal of Political Economy, 37(1), pp. 50-77. DOI: 10.2753/IJP0891-1916370103.

Baldwin, R. (1989). Measurable Dynamic Gains from Trade. Working Paper No. 3147. Cambridge, MA: National Bureau of Economic Research. Retrieved from <u>https://www.nber.org/papers/w3147.pdf</u> (May 8, 2020).

Banga. R. (2019). Growing Trade in Electronic Transmissions: Implications for the South. UNCTAD Research Paper No. 29. Retrieved from <u>https://unctad.org/en/PublicationsLibrary/ser-rp-2019d1</u> <u>en.pdf</u> (May 12, 2020).

Boccia, F. & Leonardi, R. (2016). *The Challenge of the Digital Economy: Markets, Taxation and Appropriate Economic Models*. Palgrave MacMillan. DOI: 10.1007/978-3-319-43690-6.

Dutt, D. & Gallagher, K. (2020). The Fiscal Impacts of Trade and Investment Treaties. Global Economic Governance Working Paper (*forthcoming*).

Global Business Guide Indonesia (2018). "Legal Updates: Intangible Goods are Now Subject to Import Duty." Retrieved from: <u>http://www.gbgindonesia.com/en/main/legal_updates/intangible_goods_are_now_subject_to_import_duty.php</u> (May 28, 2020).

International Monetary Fund (2001). Global Trade Liberalization and Developing Economies. Retrieved from <u>https://www.imf.org/external/np/exr/ib/2001/110801.htm#iii</u> (May 12, 2020).

Waczairg, R. (2001). Measuring the Dynamic Gains from Trade. The World Bank Economic Review, 15(3), pp. 393-429.