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SOUTH CENTRE

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Abstract

This research paper highlights the adverse impacts of the continuing WTO moratorium on customs duties on electronic transmissions on the developing and least developed countries. The rapidly progressing digitalization along with the ongoing pandemic and the food crisis are creating multiple demands on the government revenues. However, because of the moratorium almost all developing, and least developed countries are losing tariff revenues especially at the time when they are most needed. Not only are they losing the fiscal space but are also losing their regulatory space as they are unable to regulate the growing imports of digitizable products, especially of luxury items like the movies, music and video games. It is estimated that in the period 2017-2020, developing countries and LDCs lost $56 billion of tariff revenue, of which $48 billion were lost by the developing countries and $8 billion by the least developed countries. It is interesting to note that this loss of tariff revenue is from the imports of just 49 products (at HS six-digit). With no clarity on the definition of electronic transmissions (ET) and thereby on the scope of the moratorium, the continuation of the WTO moratorium on customs duties on ET can lead to substantive tariff revenue losses for developing and least developed countries in the future.

Ce document de recherche met en évidence les effets négatifs du moratoire de l'OMC concernant les droits de douane sur les transmissions électroniques dans les pays en développement et les pays les moins avancés. La progression rapide de la numérisation, la pandémie actuelle et la crise alimentaire créent de multiples demandes sur les recettes publiques. Cependant, à cause du moratoire, presque tous les pays en développement et les pays les moins avancés perdent des recettes douanières, surtout au moment où ils en ont le plus besoin. Ils perdent non seulement leur marge de manœuvre budgétaire, mais aussi leur marge de manœuvre réglementaire, car ils sont incapables de réglementer les importations croissantes de produits numériques, en particulier les articles de luxe comme les films, la musique et les jeux vidéo. On estime qu'au cours de la période 2017-2020, les pays en développement et les pays les moins avancés (PMA) ont perdu 56 milliards de dollars de recettes douanières, dont 48 milliards pour les pays en développement et 8 milliards pour les PMA. Il est intéressant de noter que cette perte de recettes douanières provient des importations de seulement 49 produits (à six chiffres du SH). En l'absence de clarté sur la définition des transmissions électroniques (TE) et donc sur le champ d'application du moratoire, la poursuite du moratoire de l'OMC concernant les droits de douane sur les TE peut entraîner des pertes substantielles de recettes douanières pour les pays en développement et les pays les moins avancés à l'avenir.

Este documento de investigación pone de relieve las repercusiones negativas de la moratoria que sigue aplicando la OMC relativa a la aplicación de derechos de aduana a las transmisiones electrónicas en los países en desarrollo y menos adelantados. El rápido avance de la digitalización, junto con la pandemia actual y la crisis alimentaria, están creando múltiples demandas en los ingresos públicos. Sin embargo, debido a la moratoria, casi todos los países en desarrollo y menos adelantados están perdiendo ingresos arancelarios, especialmente en el momento en que más los necesitan. No sólo pierden margen fiscal, sino también margen normativo, ya que no pueden regular las crecientes importaciones de productos digitales, especialmente de artículos de lujo como películas, música y videojuegos. Se estima que en el período 2017-2020, los países en desarrollo y los países menos adelantados (PMA) perdieron 56.000 millones de dólares de ingresos arancelarios, de los cuales 48.000 millones fueron perdidos por los países en desarrollo y 8.000 millones por los PMA. Es interesante observar que esta pérdida de

ingresos arancelarios procede de las importaciones de solo 49 productos (de seis dígitos del SA). Al no estar clara la definición de transmisiones electrónicas (TE) y, por lo tanto, el alcance de la moratoria, la continuación de la moratoria de la OMC relativa a la aplicación de derechos de aduana a las TE puede dar lugar a importantes pérdidas de ingresos arancelarios para los países en desarrollo y menos adelantados en el futuro.

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1. INTRODUCTION

The Covid-19 pandemic has not just slowed the progress of developing countries towards their sustainable development goals (SDGs) but has reversed it in many cases, especially for the least developed countries (LDCs). This health crisis along with the growing food crisis is expected to push an additional quarter of a billion people into extreme poverty, with the poorest being hit the hardest[2]. In this scenario, the governments in the South are struggling to keep pace with the growing demands on their revenues which are needed not just for the social causes but also for their economic recovery. The need to set up adequate digital infrastructure to bridge the fast-growing digital divide is further adding to this growing demand on the government revenues.

In this context, the World Trade Organization (WTO) moratorium on customs duties on electronic transmissions (ET), which was put in place in 1998, and has continued since then, is depriving the opportunity to the developing countries to raise tariff revenues from their fast-growing imports of digitizable products. Not only have the imports of ET grown rapidly since the onset of the digital revolution, but they have grown precipitously during the pandemic. Many of these imports are of luxury items like the movies, music, printed matter, and video games with major exporters being the digital giants like Amazon, Apple, Netflix, Nintendo (Japan), Rockstar (United States of America - USA), etc. In 2020, while many small and medium enterprises (SMEs) were forced to shut their businesses, Apple's market capitalization reached $2 trillion which was higher than the gross domestic product (GDP) of 82% of countries in the world, including countries like Brazil and Canada. While small exporters of physical products like textiles and clothing, footwear, metals, and mineral products, etc., mainly based in the developing countries, are facing both domestic taxes as well as customs duties, the big digital exporters are being exempted from customs duties due to the WTO moratorium on customs duties on ET. This moratorium is not only depriving all developing and least developed countries of the much-needed tariff revenues but is also limiting their regulatory space for providing a level playing field to their domestic SMEs in the digital sector while contributing to the ever-growing profits of the digital platforms.

It has been argued by Evenett (2021) that the loss of tariff revenues due to the moratorium is only a small percentage of government revenues, i.e., 1.4% of LDC government spending and in only some cases like Congo, Fiji, Malawi, and Rwanda, the forgone revenues exceed 3% of total non-trade-related tax revenues, which can be recovered through an increase in the growth rate of domestic tax rates. According to this study, Fiji and Malawi would have to increase the annual real growth rate in their domestic taxes by only more than 1 percent per annum. In the case of Malawi, from 2011 to 2017 the total real tax rate would have had to grow by 2.58% per annum and with respect to Fiji, the annual growth rate of its domestic tax rate would have had to be 1.74% higher to cover the forgone customs duties arising from the moratorium.

However, this claim ignores the current multiple crises facing developing and least developed countries that make raising domestic tax rates unrealistic as well as unjustifiable since it will further penalize their citizens to increase the profits of exporters of digitizable products. Further, these claims are based on the estimates provided for the pre-pandemic year, i.e., 2017 by UNCTAD (2019) and ignore the rapid growth in global imports of electronic transmissions during the pandemic years, which because of the moratorium is leading to further increases in the potential tariff revenue losses for all developing and least developed countries.

[2] See https://www.oxfam.org/en/press-releases/terrifying-prospect-over-quarter-billion-more-people-crashing-extreme-levels-poverty.

This paper provides updated estimates of the increase in global imports of digitizable products in the period 2017-2020, using the same methodology applied by UNCTAD (2017), and estimates how much tariff revenue has been lost by the developing and least developed countries because of the continuation of the moratorium beyond 2017.

Section 2 provides a brief history of the WTO moratorium and highlights the lack of consensus on the definition of electronic transmissions and the scope of the moratorium. Section 3 provides the estimates of the increase in physical and online global imports of digitizable products from 2017 to 2020 and provides predictions for 2025. Section 4 provides the estimated tariff revenue losses for aggregated developing and least developed countries in the period 2017-2020. Section 5 provides the estimates at the country-level of potential tariff revenue losses for developing and least developed countries. Estimates of total tariff revenue loss in the period 2017-2020 are provided for 44 developing countries and 12 least developed countries using the latest data available. It also emphasizes the importance of tariff revenues generated by customs duties and related import duties in small developing countries. Section 6 highlights the importance of regulating the imports of digitizable products and the impact of the moratorium on digital industrialization in developing countries. Section 7 concludes and provides the way forward.

2. Definition of Electronic Transmission and the Scope of the Moratorium

In 1998, WTO Members agreed for the first time to the temporary two-year moratorium on customs duties on electronic transmissions, without specifying what is included in the category of electronic transmissions and thereby the scope of the moratorium. This decision was based on a proposal submitted by the United States[3], and the WTO Members adopted a Declaration on global electronic commerce stating that "Members will continue their current practice of not imposing customs duties on electronic transmissions".

This moratorium has been renewed every two years and most recently in 2017 in the eleventh Ministerial Conference.[4] In December 2019, WTO Members decided to continue with the moratorium till the 12th Ministerial Conference (MC12), when a decision on the moratorium would be taken. The MC12 was originally scheduled for June 2020 but is now taking place in June 2022. This implies that the decision on the Moratorium was also postponed by two years. Despite over twenty years of extension of the moratorium and repeated requests for clarity on the definition of ET and scope of the moratorium by the developing countries[5], there seems to be no consensus on either the definition of ET or the scope of the moratorium.

Literature in the WTO has identified the online trade of 'digitizable products' as ET. These digitizable products are those products which have HS code and were traditionally traded physically but are now being increasingly traded online. In 2003, a WTO Background Note[6] identified 'digitized products' as ET consisting principally of sound recordings, audiovisual works, video games, computer software and literary works, that can be delivered in a physical form such as CDs, CD-ROMs, DVDs, videos, books, newspapers, and magazines, or in an electronic form over the Internet. According to the WTO Note (2016)[7], which was prepared on the request of the Member States to provide fiscal implications of the customs moratorium, five categories of digitizable products were identified, namely, films, music, printed matter, computer software and video games. Using these descriptions and earlier literature on ET, the United Nations Conference on Trade and Development (UNCTAD) (2017; 2019) identified 49 HS 6-digit tariff lines as ET[8].

However, the definition and the scope of ET are being expanded continuously. The European Centre for International Political Economy (ECIPE, 2019) and the Organisation for Economic Co-operation and Development (OECD, 2019) have argued for including digital services in the scope of the moratorium. ECIPE identified 4 broad categories of services as ET. These were wholesale and retail trading services (which include all retail sales, wholesale trade and commission trade, hotels and restaurants, repairs of motor vehicles and personal and household goods and retail sale of automotive fuel); recreational and other services (which include recreational, cultural and sporting activities, other service activities and private households with employed persons-servants); communications services (which include post and telecommunications services); and business services n.e.c. (which include real estate, renting and business activities). OECD (2019) has described the scope of ET as

[3] WT/GC/W/78
[4] WT/MIN(17)/65WT/L/1032
[5] WT/GC/W/774
[6] IP/C/W/128/Add.1
[7] JOB/GC/114
[8] UNCTAD, "Growing Trade in Electronic Transmissions: Implications for the South", Research Paper 29 (February 2019), UNCTAD/SER.RP/2019/1. Available from https://unctad.org/system/files/official-document/ser-rp-2019d1_en.pdf.

'digital deliveries' which covers services like business services, including online financial services, legal services, etc.

However, this definition of ET which includes services will expand the trade coverage of the moratorium on customs duties by manifolds. Using the WTO's database on Trade in Services by Mode of Supply (TISMOS), UNCTAD (2020) estimates the total imports of services via Mode 1 at USD 705 billion in 2017, while total imports of digitizable products were around USD 80 billion in the same year. Using the broader definition of ET can therefore substantially increase the trade coverage manyfold to which the moratorium will then apply. It therefore becomes extremely important to have clear understanding of the definition of ET and the scope and coverage of the moratorium before any decision is taken on it.

3. ESTIMATING GLOBAL TRADE IN DIGITIZABLE PRODUCTS

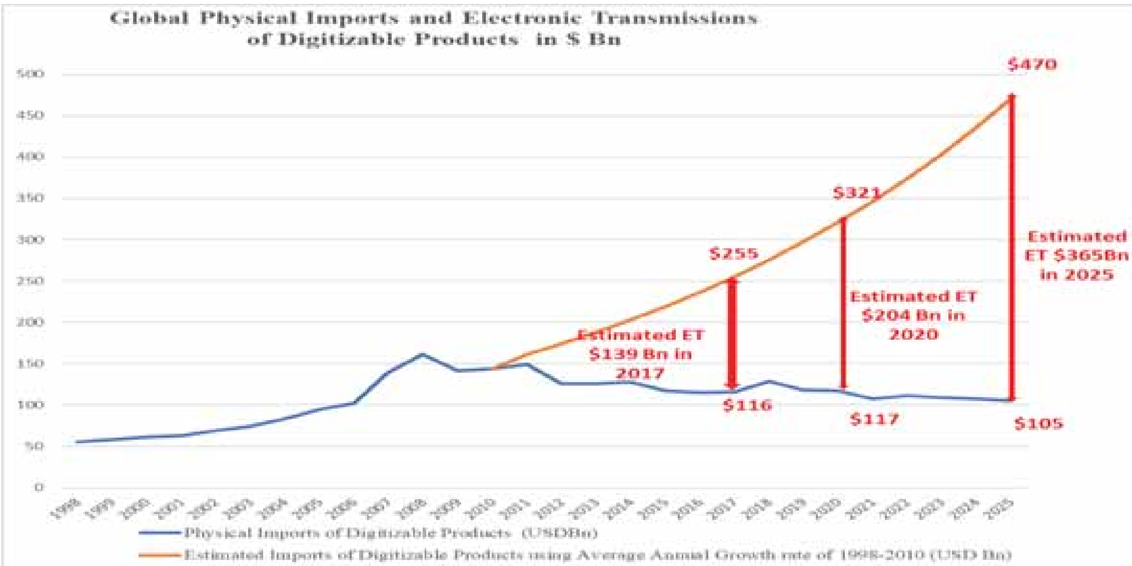
The lack of consensus on the scope of the moratorium makes it difficult to estimate the impact of the moratorium on existing trade and lost tariff revenues. Studies have estimated the tariff revenues collected from the declining imports of physical products which are increasingly being traded online to conclude that the lost revenues are not substantial for developing countries (WTO, 2016). However, the growing online imports of these digitalized products to which the moratorium applies are not being recorded by the countries.

The only study which has estimated the online imports of electronic transmissions or the growing trade in digitizable products and associated lost tariff revenues is UNCTAD (2019). The study uses 49 unique tariff lines at HS 1988/ HS 1996 classifications of digitizable and digitized products, based on existing literature (UNCTAD, 2000; UNCTAD, 2017; WTO, 2016) and estimates their predicted imports in the period 2011-2017, based on the growth rate of their imports from 1998 to 2010. <u>Using conservative estimates, i.e., annual average growth rate of 8 % during 1998-2010</u>[9], the study predicted the global imports of these digitizable products to be $255 billion in 2017 while the actual imports were $116 billion, implying that the online imports in 2017 amounted to $139 billion. Using the simple average of bound duties, i.e., 12.6 %, the study estimated the tariff revenue loss to developing countries to be $10 billion per annum.

However, the digital revolution and the pandemic has propelled digital trade in the period 2017 to 2020, further increasing the potential tariff revenue loss to the developing world because of the existing moratorium which limits their ability to apply customs duties on the growing imports of these digitalized products. Using the same methodology, the updated estimates are provided in Figure 1, which show that there has been an increase of 47% in the estimated online global imports of digitalized products in the period 2017-2020. The estimated global physical import of these ET should have been $321 billion if the same annual growth rate is applied as in the period 1998-2010. However, the actual physical imports increased to only $117 billion, implying that the estimated online imports were $204 billion in 2020, increasing from $139 billion in 2017. Using conservative growth rate of online imports of digitizable products, it is predicted that the online global imports of digitizable products will increase from $204 billion in 2020 to $365 billion in 2025, which is an increase of 79%.

[9] To illustrate that this is a conservative growth rate, growth rates of global revenues of some of the providers of ET are compared. It is estimated that in the period 2011-2017, the global revenue of Netflix (films) grew an average by 37% annually; music streaming by 50%; e-books by 44%; video games by 10%; and global revenue of Microsoft by 10% (UNCTAD, 2019).

Figure 1: Global Physical Imports and Electronic Transmissions (Online Imports) of Digitizable Products: 1998-2025



Source: Author's estimates based on World Integrated Trade Solutions (WITS).

4. Tariff Revenue Loss: Aggregate Level

Table 1 reports the actual physical imports of digitizable products, the estimated ET and associated average bound tariffs and average Most Favoured Nation (MFN) tariffs for WTO developing Members (59) excluding LDCs; and WTO LDC Members (31) in the period 2017 to 2020. The simple averages of bound and MFN duties were 12.6% and 6.5% for WTO developing countries in 2017, while they are much higher for WTO LDCs (50.3% and 11.5% respectively). The WTO high income countries have the lowest duties at 0.02% and therefore the share of WTO high income countries in potential tariff revenue loss due to the moratorium remains insignificant.

The results presented in Table 1 show that using bound rates, the potential tariff revenue loss to developing countries which is estimated at $10 billion in 2017 increased to $14 billion in 2020. **In the period 2017-2020, developing countries (excluding the LDCs) have lost potential tariff revenue of $48 billion while LDCs have lost potential tariff revenue of $7.8 billion because of the WTO moratorium**. Together, developing and least developed countries could have generated $56 billion in the period 2017-2020 on imports of just 49 digitizable products at HS six-digit level.

Estimates are also provided for the year 2025, when the online global imports of digitizable products are expected to reach $470 billion. Developing countries are expected to lose potential tariff revenue of at least $25 billion per annum from 2025 onwards because of the moratorium, while LDCs will lose at least $5.3 billion per annum.

It should be noted that the estimated potential tariff revenue losses are calculated using the most conservative estimates and they also do not include the revenue losses accruing from loss of customs surcharges and additional duties. According to UNCTAD (2000), the additional duties and taxes levied on digitizable products in 120 countries were found to be much higher than the tariffs on digitizable products, i.e., they amounted to 23% on an average compared to the average 6.9% for the tariffs. Customs surcharges in developing countries are found to be on an average around 8.7%. Each country therefore needs to estimate its tariff revenue loss from the moratorium by adding to the estimated revenue loss, the loss of customs surcharges and additional duties that it levies along with customs duties on the imported products.

Table 1: Estimated Potential Tariff Revenue Loss due to the Moratorium on ET to Developing and Least Developed Countries (USD Mn)

WTO Developing Members (excluding LDCs) - 59							
	Physical Imports of Digitizable Products ($Mn)	Estimated On-Line Imports or ET of Digitizable Products ($Mn)	Estimated Total Imports of Digitizable Products ($Mn)	Simple Average of Bound Duties in 2017 (%)	Simple Average of MFN Duties in 2017 (%)	Potential Tariff Revenue Loss using Average Bound Duties ($Mn)	Potential Tariff Revenue Loss using Average MFN Duties ($Mn)
2017	28’399	51’558	79’957	12.6	6.5	10’075	5’197
2018	21’711	67’841	89’552	12.6	6.5	11’284	5’821
2019	21’501	78’797	100’298	12.6	6.5	12’638	6’519
2020	19’853	92’481	112’334	12.6	6.5	14’154	7’302
Total 2017-2020	91’463	290’677	382’141	12.6	6.5	**48’150**	**24’839**
2025	16’271	181’700	197’971	12.6	6.5	**24’944**	**12’868**
WTO LDC Members (31)							
2017	191	2’804	2’995	50.3	11.5	1’506	344.4
2018	747	2’762	3’509	50.3	11.5	1’765	403.5
2019	1’445	2’665	4’110	50.3	11.5	2’067	472.6
2020	762	4’053	4’815	50.3	11.5	2’422	553.8
Total (2017-2020)	**3’146**	**12’284**	**15’429**	50.3	11.5	**7’761**	**1’774**
2025	535	10’091	10’626	50.3	11.5	**5’345**	**1’222**
Total Potential Tariff Revenue Loss to Developing and Least Developed Countries							
Total (2017-2020)	**94’609**	**302’961**	**397’570**			**55’911**	**26’613**

Source: Author’s estimates based on World Integrated Trade Solutions (WITS).

5. Tariff Revenue Loss: Country-Level

A similar exercise is undertaken for 56 countries (44 developing and 12 least developed countries) for the period 2017-2020 and results are reported in Table 2. It is found that using conservative estimates (i.e., using average annual growth rate for the period 1998-2010 for each country), the total potential tariff revenue loss in the period 2017-2020 due to the moratorium has exceeded almost $500 million for many developing countries including Argentina, Brazil, China, Guatemala, Korea, Rep., Panama, South Africa and Tunisia. The tariff revenue loss has exceeded $1 billion for many developing countries like China, India, Mexico, Nigeria, Pakistan, Paraguay and Thailand. For least developed countries, this period, i.e., 2017-2020 has been especially challenging because of the pandemic. **Many LDCs lost potential tariff revenue of more than $100 million** including Cambodia, Ethiopia (excluding Eritrea), Fm Sudan, Malawi, Rwanda and Zambia. Many of the LDCs and developing countries have average bound customs duties higher than 20%. Average bound duties are as high as 92% in Rwanda, followed by Nigeria (80%), Pakistan (62%), Jamaica (50%), Malawi (45%) and Tunisia and Guatemala (40%), while average bound duties on digitizable products is 0.09% in European Union (EU) countries, followed by USA (0.02%) and Switzerland (0%).

The estimated potential tariff revenue loss in 2020 using the bound duties just on imports of 49 digitizable products (at HS six-digit level) has been more than a $100 million for many developing countries including Algeria, Argentina, Brazil, China, Guatemala, Indonesia, Jamaica, Kazakhstan, Korea, Rep., Pakistan, Panama, Paraguay, Russian Federation, South Africa and Tunisia, while this potential tariff revenue loss exceeds $1 billion for some countries like India, Mexico, Nigeria and Thailand. In this year of the pandemic, many LDCs could have raised more than one million USD as tariff revenues from their imports of just 49 digitizable products, these include Fm Sudan, Malawi and Rwanda.

Table 2: Tariff Revenue Loss from Moratorium on Customs Duties on ET in Developing and Least Developed Countries in 2020 and the period 2017-2020

	Reporter Name	Tariff Revenue Loss using Bound Duties (USD Mn)	Tariff Revenue Loss using Applied Duties (USD Mn)	Tariff Revenue Loss using Bound Duties (USD Mn)	Tariff Revenue Loss using Applied Duties (USD Mn)
		2020	2020	Total (2017-2020)	Total (2017-2020)
Developing Countries					
1	Algeria	106	106	368	368
2	Argentina	193	59	759	231
3	Armenia	1	1	4	4
4	Belarus	32	32	99	99
5	Bolivia	14	14	51	51
6	Brazil	126	126	470	470
7	Chile	62	62	222	222
8	China	810	810	2’572	2’572
9	Colombia	39	39	147	147
10	Dominican Republic	25	25	87	87
11	Ecuador	65	37	242	138

12	El Salvador	10	10	35	35
13	Fiji	9	9	28	28
14	French Polynesia	4	4	13	13
15	Guatemala	296	45	950	146
16	Honduras	57	12	193	42
17	India	1’534	796	4’922	2’556
18	Indonesia	112	112	283	283
19	Jamaica	103	17	363	60
20	Jordan	50	50	161	161
21	Kazakhstan	110	110	267	267
22	Korea, Rep.	232	232	747	747
23	Kyrgyz Republic	1	1	4	4
24	Malaysia	62	24	238	93
25	Maldives	6.9	6.9	25	1
26	Mauritius	1	1	4	4
27	Mexico	2’627	439	7’252	1’211
28	Nicaragua	8	8	29	29
29	Nigeria	1’243	184	3’537	523
30	Pakistan	633	88	1’968	274
31	Panama	257	70	850	231
32	Paraguay	500	500	1’488	1’488
33	Peru	20	20	72	72
34	Russian Federation	116	116	326	326
35	Saudi Arabia	60	60	158	158
36	Singapore	43	0	146	0
37	South Africa	212	44	777	161
38	Sri Lanka	37	18	84	41
39	Thailand	3’637	761	11’280	2’361
40	Tunisia	223	33	732	109
41	Turkey	7	7	19	19
42	Uruguay	28	8	103	30
43	Vietnam	60	54	222	200
44	Zimbabwe	22	22	72	72
Total tariff revenue loss of Developing Countries		***13’678***	***5’152***	***42’024***	***16’094***
Least Developed Countries (LDCs)					
1	Cambodia	42	22	139	73
2	Ethiopia (excludes Eritrea)	44	44	146	146
3	Fm Sudan	196	117	541	323
4	Madagascar	18	18	62	62
5	Malawi	124	26	443	92
6	Niger	2	2	6	6
7	Rwanda	118	14	370	45
8	Senegal	15	15	50	50

9	Tanzania	17	16	58	54
10	Togo	7	7	22	22
11	Uganda	25	25	84	84
12	Zambia	72	25	202	70
Total of LDCs		***680***	***331***	***2'123***	***1'027***
Total for developing and least developed countries		**14'357**	**5'482**	**44'148**	**17'121**

Source: Author's estimates based on World Integrated Trade Solutions (WITS).

Some studies like Evenett (2021) have questioned the importance of tariff revenues for developing and least developed countries concluding that these revenue losses are minor, and these losses can be recovered by increasing domestic taxes. However, customs and other import duties as a tax revenue are indispensable to the government revenues in many small developing countries. Table 3 provides an average of customs and other import duties as a percentage of total tax revenue of the government in the period 2017-2021 and it is found that in more than nine countries it is more than 25%; in almost 26 countries it is more than 15%; and in 40 countries it is more than 10%.

Table 3: Customs and Other Import Duties (% of tax revenue), Average of 2017-2021

1	Somalia	60
2	Nauru	44
3	Central African Republic	41
4	Botswana	40
5	Afghanistan	35
6	Namibia	34
7	St. Kitts and Nevis	29
8	Iraq	25
9	Palau	25
10	Marshall Islands	22
11	Philippines	22
12	Togo	21
13	Cabo Verde	21
14	Vanuatu	20
15	Sri Lanka	20
16	Solomon Islands	19
17	Kyrgyz Republic	18
18	Nepal	18
19	Guinea-Bissau	18
20	Jamaica	17
21	Ethiopia	17
22	Lesotho	17
23	Madagascar	16
24	Fiji	15
25	Congo, Rep.	15
26	Senegal	15
27	Burkina Faso	14

28	Bahamas, The	14
29	Cameroon	14
30	Cote d'Ivoire	13
31	Cambodia	13
32	Mongolia	13
33	St. Vincent and the Grenadines	13
34	Ghana	13
35	Saudi Arabia	12
36	Mali	12
37	Uganda	12
38	Samoa	11
39	Paraguay	10
40	Micronesia, Fed. Sts.	10

Source: World Development Indicators, World Bank

6. Impact of Continuing Moratorium on Digital Industrialization and Fiscal and Regulatory Policy Space

6.1 Impact on regulatory space needed for digital industrialization

In addition to the loss of potential tariff revenues, there are broader implications for developing countries with the continuance of the moratorium. The impacts of losing their policy space to develop their digital capabilities as well as their software sectors can have important implications for their digital industrialization.

To remain competitive in the digital era, developing countries will need to build their digital infrastructure and digital capabilities. While developed countries are investing huge amounts in digital technologies like robotics, artificial intelligence, big data analytics and 3D printing, developing countries are still struggling to build their information and communications technology (ICT) infrastructure and improve their internet penetration. The manifestations of this growing digital divide can be seen in manufacturing production, where the digital content in terms of value added by digital services and use of digital technologies is rising much faster in the developed countries as compared to the developing countries (UNCTAD, 2017).

Developing countries need to be cognizant of the rapidly changing landscape of international trade in manufactured products. Digital technologies like robotics are increasing the speed of manufacturing, while 3D printing is changing the nature of manufacturing. Electronic transmissions as well as e-commerce are aiding marketing of manufactured products, supported by big data analytics. These are the areas where the developing world is yet to catch-up and develop competitiveness. Customs duties serve the purpose of providing a level playing field to their domestic producers and develop their competitiveness.

It therefore becomes extremely important to regulate trade in electronic transmissions in a way that provides regulatory policy space to the developing countries to provide a level playing field to their domestic producers as well as protect their infant digital services providers. Making the moratorium on customs duties on electronic transmissions permanent will take away this policy space from the developing world and can make them forever dependent on the developed world for their digital products and technologies.

6.2 Rising product digitalization and losing relevance of negotiated tariffs and GATS flexibilities

Many negotiated outcomes at the multilateral level have the danger of losing their significance if countries lose their power to regulate the imports of ET. For example, as more and more products are digitalized, and their electronic transmissions become possible, with the moratorium in place the hard negotiated customs duties for these products will lose their relevance.

There are attempts to categorize many services associated with manufacturing as electronic transmissions or e-services, which will make the flexibilities provided by the General Agreement on Trade in Services (GATS) in terms of taking commitments irrelevant. While the General Agreement on Tariffs and Trade (GATT) gives developing countries the flexibility of imposing customs duties on digital content and maintaining their negotiated tariffs, GATS can provide them the flexibility of regulating trade in ET according to their domestic laws and regulations. Irrespective of the categorization, it is imperative for developing countries to have policy instruments to control the trade in ET.

6.3 Impact of 3D printing and unregulated imports of software used in 3D printers

The use of 3D printing is no longer a niche area in international trade. It is experiencing exponential growth to become one of the mainstream manufacturing technologies leading to formation of new trade flows, production networks, supply chains and capabilities. Recent technological advances, namely high-speed sintering, indicate that high speed and mass production are becoming possible with 3D printers, where mass-producing up to 100,000 (smaller) components in a day will be possible at a speed which is 100 times faster[10]. While developed countries are fast developing this technology, developing countries are still at a nascent stage. 3D printing allows remote manufacturing i.e., products can be manufactured by foreign firms within the national boundaries of countries without their physical presence and without international trade. This can have serious implications for future industrialization in the developing countries.

An important implication of growth of 3D printing is the accompanied rise in the growth of ET since cross-border transfers of computer-aided design (CAD) files will be done electronically to aide remote printing. While WTO rules are clear in terms of 3D printers crossing borders as physical products, the transfer of CAD files still remains a complex issue and the continuation of the moratorium will mean that regulating the trade in this software will become impossible.

Growth of 3D printing can also jeopardize two decades of negotiated tariffs on industrial products under the Uruguay Round. 3D printers and electronic transmissions of CAD files can be used to ‘print’ manufactured products in any country, irrespective of the protection given by the governments to the sectors in the developing countries through their customs duty regime. For example, if a country is protecting its footwear industry by having relatively higher customs duties on shoes, then with the use of 3D printer and electronically transmitted CAD files, a foreign firm can have mass production of shoes within the national boundary of the country, without exporting shoes or having a physical presence. Anti-dumping measures may also not help as it will be difficult to prove that 3D printed products are imports since they have not crossed borders, and it will be difficult to categorize them as ‘like’ products with different cost structures.

[10] See https://www.ing.nl/media/ING_EBZ_3d-printing_tcm162-131996.pdf.

7. Conclusions and Way Forward

This research paper highlights the adverse impacts that the continuing WTO moratorium on customs duties on electronic transmissions is having on the developing countries. Almost all developing and least developed countries are losing tariff revenues especially at a time when such revenue are much needed to help countries face multiple challenges including the health and food crisis.

It is estimated that in the period 2017-2020, developing countries and LDCs lost $56 billion of tariff revenue, of which $48 billion were lost by the developing countries and $8 billion by the least developed countries. It is interesting to note that this loss of tariff revenue is from the imports of just 49 products (at HS six-digit), which include many luxury items like the movies, music, oriented matter and video games. More than $500 million were lost in this period by a number of countries including Argentina, Brazil, China, Guatemala, Korea, Rep., Panama, South Africa and Tunisia, while more than $1 billion was lost by China, India, Mexico, Nigeria, Pakistan, Paraguay and Thailand. LDCs like Cambodia, Ethiopia (excluding Eritrea), Fm Sudan, Malawi, Rwanda and Zambia lost more than $100 million.

This fiscal loss is accompanied by the loss of regulatory space as the governments are unable to regulate the imports of luxury items like the video games and movies due to the moratorium on customs duties on ET. Customs duties are the most simple and effective policy tool in the hands of the governments to regulate conspicuous consumption through imports and channelize their precious domestic financial resources towards more productive investments. To put it in context, it has been estimated that with a combined population of around one billion, LDCs would need approximately $4 billion to finance two shots of the cheapest Oxford-AstraZeneca vaccine.[11] The LDCs could have generated $7.7 billion if the WTO moratorium on customs duties on ET would have been removed in 2017. The cost of delay of the decision has been extremely high for the LDCs.

As digital revolution progresses, the product digitalization will grow more rapidly in the future and more and more of physical trade will shift online. In this scenario, continuing the moratorium on customs duties on ET will squeeze the existing tariff revenue of governments in the developing and least developed countries. Developed countries have near zero bound duties on digitalized products and therefore will not lose any additional tariff revenue. It will also take away the regulatory space of the governments in the developing and least developed countries who will be unable to control the imports of luxury items like the video games.

With no clarity on the definition of ET and thereby on the scope of the moratorium, the continuation of the WTO moratorium on customs duties on ET can lead to substantive losses for developing and least developed countries. Not only will they lose their fiscal revenues but will also lose their regulatory space. There is also the danger of losing the negotiated tariffs in the GATT and the flexibility offered by the GATS if the scope of the moratorium is widened to include services delivered via Mode 1.

[11] See https://trade4devnews.enhancedif.org/en/op-ed/access-denied-ensuring-vaccines-worlds-poorest-countries.

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