UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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KEY STATISTICS AND TRENDS

in Trade Policy 2016



G20 POLICIES AND EXPORT PERFORMANCE
OF THE LEAST DEVELOPED COUNTRIES



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NOTE

Key Statistics and Trends in Trade Policy 2016 is the fourth annual edition of the study initiated in 2013. It is a product of the Trade Analysis Branch, Division on International Trade in Goods and Services, and Commodities, UNCTAD secretariat. This study is part of a larger effort by UNCTAD to analyse trade-related issues of particular importance to developing countries in terms of their participation in the international trading system, as requested by the mandate of the fourteenth session of the United Nations Conference on Trade and Development. This study was prepared by Alessandro Nicita.

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OVERVIEW

During the last decade international trade has been characterized by a progressive shift in the use of trade policy instruments. Tariffs have remained substantially stable during the last few years with tariff protection remaining a critical factor only in certain sectors in limited number of markets. On the other hand, the use of regulatory measures and other non-tariff measures such as antidumping has become more widespread. The recent years have also been characterized by substantial movements in some of the major currencies.

Overall, tariffs have remained substantially stable during the last years. As of 2015, developed countries import restrictiveness is at an average of about 1.2 per cent. However, import restrictiveness remained higher in many developing countries, especially in South Asia and sub-Saharan African Countries. Although low on average, tariffs remain relatively high in some sectors. Moreover, tariff peaks are present in important sectors, including some of key interest to low income countries such as agriculture, apparel, textiles and leather products. Tariffs also remain substantial for most South–South trade. As of 2015, international trade is increasingly subject to and influenced by a wide array of policies and instruments reaching beyond tariffs. Technical measures and requirements regulate about two thirds of world trade, while various forms of sanitary and phytosanitary measures (SPS) are applied to almost the totality of agricultural trade. The past few years have also seen a general increase in the use of trade defence measures within the World Trade Organization (WTO) framework.

In spite of the effects of the economic crisis, the process of deeper economic integration has remained strong at a regional and bilateral level, with an increasing number of preferential trade agreements (PTAs) being negotiated and implemented. PTAs increasingly address not only goods but also services and increasingly deal with rules beyond reciprocal tariff concessions to cover a wide range of behind the border issues. As of 2015, about half of world trade has occurred under some form of PTAs. The economic turbulence of recent years has been reflected in exchange rate markets, both for developing and developed countries' currencies. Exchange rate movements are playing an important role in shaping international trade in the last few years as they have influenced countries' external competitiveness. In particular, 2015 saw the value of the United States dollar appreciate against most major currencies.

This report is structured in two parts. The first part presents an overview of the effects of G20 policies on LDCs exports. The second part discusses trends in selected trade policy instruments including illustrative statistics. The second part is divided in six chapters: tariffs, trade agreements, non-tariff measures, trade defence measures, exchange rates and trade costs. Trade trends and statistics are provided at various levels of aggregation illustrating the use of the trade policy measures across economic sectors and geographic regions.



Glossary

Antidumping: A trade policy instrument within the WTO framework to rectify the situation arising out of the dumping of goods and its trade distortive effect

Applied tariff: The actual tariff rate in effect at a country's border

ASEAN: Association of Southeast Asian Nations

Binding overhang: The extent to which a country's WTO bound tariff rate exceeds its applied rate

Bound tariff line: See tariff binding.

CIS: Free Trade Agreement of the Commonwealth of Independent States

COMESA: Common Market for Eastern and Southern Africa

Countervailing duty: A tariff designed to counteract the effect of export subsidies

Coverage ratio: The percentage of trade affected by a measure or set of measures

Currency appreciation: An increase in the value of a country's currency on the exchange market

Currency depreciation: A fall in the value of a country's currency on the exchange market

Currency misalignment: An index measuring the divergence of the exchange rate from its long-term equilibrium

Deep trade agreements: Agreements that include provisions that go beyond reciprocal reductions of tariffs

Duty-free: Not subject to import tariffs

ECOWAS: Economic Community of West African States

Effective exchange rate: An index of a currency's value relative to a group of other currencies

Exchange rate volatility: The tendency for currencies to appreciate or depreciate in value within a period

Export restrictiveness: The average level of tariff restrictions imposed on a country's exports as measured by the MA-TTRI

Frequency index: The percentage of tariff lines covered by a measures or set of measures

GDP: Gross domestic product

HS: Harmonized System - An international system for classifying goods in international trade

Import restrictiveness: The average level of tariff restrictions on imports as measured by the TTRI

LDC: Least developed country

LSBCI: Liner Shipping Bilateral Connectivity Index

MA-TTRI: An index measuring the average level of tariff restrictions imposed on exports

MERCOSUR: Mercado Común del Sur (Southern Common Market)

MFN (most favoured nation) tariff: The tariff level that a member of the General Agreement on Tariffs and Trade /WTO charges on a good to other members

NAFTA: North American Free Trade Agreement

Nominal exchange rate: The actual rate at which currencies are exchanged on the exchange market

NTM: non-tariff measure - Any policy, other than tariffs, that alters the conditions of international trade

Preferential scheme: An arrangement under which countries levy lower (or zero) tariffs against imports from members than outsiders

PTA: preferential trade agreement. This includes what WTO refers to as regional trade agreements and also free trade areas, custom unions and common markets.

REER: real effective exchange rate -The effective exchange rate adjusted for the rate of inflation

RPM: relative preferential margin – A measure of the preferential margin for a given country relative to foreign competitors

Safeguard: A WTO-compliant import protection policy that permits restricting imports if they cause injury to domestic industry

Shallow trade agreement: Preferential agreements including only a reduction of tariffs

SPS: Sanitary and phytosanitary measures

Tariff binding: A commitment, under the General Agreement on Tariffs and Trade, by a country not to raise the tariff on an item above the specified bound

Tariff escalation: Higher tariffs on processed goods than raw materials from which they are produced

Tariff line: A single item in a country's tariff schedule

Tariff peak: A single tariff or a small group of tariffs that is/are particularly high

Tariff water: See binding overhang.

TBT: Technical barriers to trade

Technical NTM: Non-tariff measure related to SPS and TBT

TPP: Trans-Pacific Partnership

Trade defence measure: Policies within the WTO framework preventing or correcting injury to domestic industry due to imports

True tariff water: Tariff water that takes into account implicit bindings imposed by PTA obligations

TTIP: Transatlantic Trade and Investment Partnership

TTRI: Tariff trade restrictiveness index – An index measuring the average level of tariff restrictions imposed on imports

Unbound tariff line: See tariff binding.

Weighted average tariff: Average tariffs, weighted by value of imports

WTO: World Trade Organization



Data sources

All statistics in this publication have been produced by the UNCTAD secretariat by using data from various sources. Data on tariffs and non-tariff measures originate from the UNCTAD Trade Analysis and Information System (TRAINS) and Integrated Trade Intelligence Portal (I-TIP) databases (http://i-tip.unctad.org/), while data on bound tariffs derive from the WTO's Consolidated Tariff Schedules database (tdf.wto.org). Trade data are from the United Nations Commodity Trade Statistics Database (COMTRADE; comtrade.un.org). Data on trade defence measures are sourced from the WTO I-TIP (i-tip.wto.org). Tariff and trade data are at the Harmonized System 6-digit level and have been standardized to ensure comparability across countries. Data related to preferential trade agreements are derived from various databases, including the WTO regional trade agreement gateway (rtais.wto.org) and the World Bank global preferential agreements database (wits.worldbank.org/gptad/trade_database.html). Yearly exchange rate data originate from financial statistics of the International Monetary Fund, and other macro level data used in the figures originate from UNCTADstat (unctadstat.unctad.org). Unless otherwise specified, aggregated data cover more than 160 countries representing over 95 per cent of world trade. Data on non-tariff measures only cover around 60 countries, and therefore may not be representative of world trade.

Countries are categorized by geographic region as defined by the United Nations classification (UNSD M49). Developed countries comprise those commonly categorized as such in United Nations statistics. For the purpose of this report, transition economies, when not treated as a single group, are included in the broad aggregate of developing countries. Product sectors are categorized according to the Broad Economic Categories (BEC) and the International Standard Industrial Classification (ISIC). Preferential trade agreements that relate to both goods and services are counted as one. Non-tariff measures are classified according to UNCTAD classification 2012 (http://unctad.org/en/PublicationsLibrary/ ditctab20122_en.pdf).

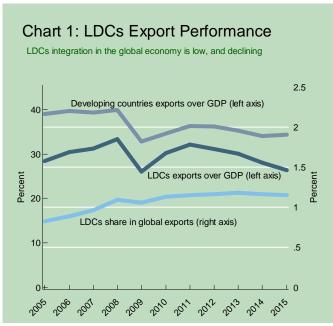
Further information relating to the construction of data, statistics, tables and graphs contained in this publication can be made available by contacting tab@unctad.org.

VII



In focus: G20 policies and export performance of the least developed countries

Despite some progress in the last decade, the participation of least developing countries (LDCs) in the global economy remains marginal. While the 48 LDCs account for about 12 per cent of the world's population, their share in global merchandise exports has remained at about 1 per cent since 2008. The weak integration of LDCs is not only due to their relatively small economies, but also to the fact that LDCs generally trade much less than the size of their economies would suggest. LDCs' export-to-GDP ratios are on average at about 25 per cent, substantially below the average for developing countries, which is about 35 per cent. Moreover, the fact that this indicator has been on a clear downward trend since 2011 highlights the LDCs' progressive struggle in the global economy.



Source: UNCTAD secretariat calculations based on UNCTADStat data

The international community has long recognized the export constraints of LDCs as an important element hindering their economic growth. Indeed, one of the main features of the international cooperation agenda in the last 50 years has been to promote the economic integration of poorer countries into the global economy through enhanced participation in proposition international trade. This appeared in many multilateral declarations, including the United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals. In particular, Goal 17 specifically calls for facilitating the integration of poorer countries into the global economy. The rationale is that stronger integration would enhance economic growth, industrial transformation and ultimately provide resources for sustainable and inclusive development. For this purpose, Goal 17 identifies two targets: target 17.11 ("Increase significantly the exports

of developing countries, in particular with a view to doubling the least developing countries' share of global exports by 2020") and target 17.12 ("Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries"). Target 17.11 explicitly recognizes the persistent problem of the weak economic integration of LDCs, while target 17.12 identifies facilitating market access as a one of the solutions to such a problem.

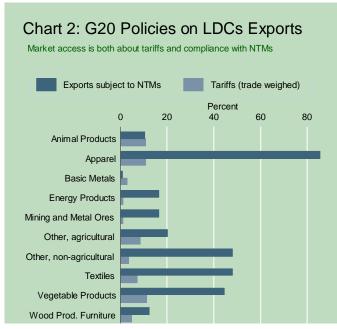
G20 policies on the least developed countries

The G20¹ generally provides LDC exporters with mechanisms which facilitate trade, or at least do not impose additional burdens. The means through which the larger and more advanced economies try to compensate for LDCs¹ poor export capacities and lack of competitiveness in global markets take the form of duty-free quota-free access, softer rules of origin, broader lists of eligible products, special and

1

¹ The following are members of the Group: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, the Russian Federation, Saudi Arabia, South Africa, Turkey, the United Kingdom of Great Britain and Northern Ireland, the United States and the European Union.

differential treatment in implementation of trade agreements, Aid for Trade initiatives and technical facilitation programmes to reduce trade costs and boost productive capacity.



Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

The most common instrument to facilitate exports from LDCs is by granting them preferential access in order to provide them with a competitive edge, the preferential margin. Indeed, many high-income countries provide tariff preferences to LDCs under the General System of Preferences and specific arrangements. Non-reciprocal preferential access for LDCs is also provided by some of the G20 developing countries such as China and India, which have recently started their own preferential schemes. Most of the preferential schemes. although generous, come with conditions attached. Rules of origin, though necessary, often make preferential schemes less effective and many preferential programmes often exclude products importance for LDCs on the basis of sensitivity concerns. In practice, many of the products originating from LDCs often continue to face significant import tariffs in G20 countries. Moreover, tariff peaks - tariffs that are

substantially higher than the average – are often present in products of importance to LDCs, therefore hindering LDCs exports. One issue of relevance is that, due to the proliferation of trade agreements, preferential margins are not always in favour of LDCs. Exporters from LDCs often face tariffs barriers that are higher than those faced by their competitors that are parties to the regional trade agreements, thus further limiting their export competitiveness in many of the G20 countries. For example, United States apparel imports from Bangladesh are often taxed at a higher rate than from Mexico. All considered, LDCs still face substantial tariffs in many of the sectors in which they enjoy comparative advantages. Moreover, in these sectors their international competitiveness is often eroded by the proliferation of preferential agreements.

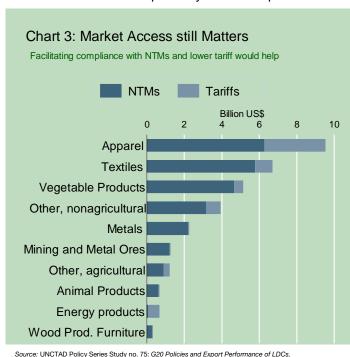
Tariffs represent the most obvious impediment to market access, but they are hardly ever the most important one. Access to markets depends on and is administered by a large and increasing set of regulations and requirements that traded goods need to comply with.² These regulatory measures are generally referred to as non-tariff measures (NTMs) and include a wide array of policies which have a direct or indirect effect on trade costs. Virtually all countries regulate their trade with some forms of NTMs. However, the regulatory framework, and thus the incidence of NTMs, is more pervasive in the advanced economies, where the use of NTMs tend to be more complex, as they are intended to serve a large number of policy objectives. In practice, many of the G20 countries rely on NTMs to administer and regulate their trade. This has important repercussion on international trade, especially in regards to LDC exports. One reason is that NTMs, although generally non-discriminatory, often pose particular challenges to LDCs. The compliance costs of NTMs, especially in regard to SPS and TBT, depend on technical know-how, production facilities and an infrastructural base. While usually available in developed and emerging markets, these are lacking in many LDCs. Therefore, NTMs often divert trade away from less competitive countries such as LDCs.

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² UNCTAD, 2012, *Non-Tariff Measures to Trade: Economic and Policy Issues for Developing Countries*, Developing Countries in International Trade Studies.

Effect of G20 policies on exports of the least developed countries

G20 trade policies, both tariffs and non-tariff measures, have a substantial effect on LDCs export potential. A recent UNCTAD study quantifies the merchandise export loss resulting from the remaining tariffs that the G20 apply to LDCs is about \$10 billion.³ That is, granting LDCs truly duty-free access to G20 markets would lead to an increase in LDCs' total export of almost five per cent. In regard to non-tariff measures, the distortionary effect of the regulatory framework related to technical NTMs is estimated at a \$23 billion export loss for LDCs. Eliminating the distortionary trade effects of such NTMs would increase LDC exports by about 10 per cent. Taken together, fully liberalizing market access for



LDCs and eliminating the negative trade effect of NTMs on LDCs would increase their exports by about 15 per cent. These aggregate effects mask the heterogeneity of effects across LDCs and G20 countries. In practice, most of the effects of tariff liberalization and eliminating the negative trade effects of NTMs would concentrated in the textile and apparel sectors, as well as in some of the agricultural (vegetable categories products). diverse sectoral effects would result in substantial heterogeneity across LDCs. In practice, the benefits would be concentrated in countries whose export potential is oriented towards agriculture and light manufacturing (e.g. Asian LDCs and some of the African agricultural exporters). Improved market access would have a substantially smaller effect for LDCs that are exporters of natural resources.

Trade policy effects are also heterogeneous across G20 members. In general, while NTMs remain the most important trade policy hurdle limiting LDC exports to all G20 markets, and especially so for entering European Union markets, there is still room for tariff concessions. Providing LDCs with duty-free access remains important for the United States, as well as for many of the smaller G20 economies. With regard to China, the effects are relatively milder. This is because Chinese imports from LDCs are largely concentrated in natural resources and other commodities, which already face very low tariffs and relatively few NTMs. In non-commodity sectors, effects remain substantial in the Chinese market as well.

Is improved market access a solution for the economic integration of the least developed countries?

Market access should be seen as part of the approach to facilitate LDCs' exports expansion. However, alone it will fall short of meeting the ambitious Sustainable Development Goal target of doubling the LDCs' export share by 2020. Moreover, while LDCs will surely benefit from the elimination of the remaining tariffs imposed on their exports, it is of primary importance to reduce the distortionary effects of NTMs when addressing market access constraints faced by LDCs. In this regard, target 17.12 falls short of recognizing these constraints.

³ A Nicita and J Seiermann, 2016, *G20 Policies and Export Performance of Least Developed Countries*. Policy Issues in International Trade and Commodities Research Study Series No. 75, UNCTAD.



An issue of fundamental importance relates to the implementation of the policy options to improve LDCs' market access. Providing full duty-free access for LDCs is definitively more straightforward than reducing the distortionary effects of NTMs. Enlarging preferential schemes to cover all LDC exports would be much easier to implement, with the only difficulties originating from limiting possible trans-shipments. In practice, LDC exports still face significant tariffs in many G20 markets, and there is ample room for enlarging and strengthening the G20 preferential schemes to LDCs. In this regard, G20 countries should review their eligibility rules, product coverage and exemptions, rules of origin, and administrative costs, all of which often limit the effectiveness of their preferential schemes towards LDCs.

On the other hand, reducing the distortionary effects of NTMs requires a much more complex approach. Many NTMs serve public policy objectives and are instruments of domestic economic policy. Therefore, these measures cannot be removed, or waived, without disrupting the very purpose they serve.⁴ Reducing the distortionary effects of NTMs against LDCs has to originate not so much from the removal of NTMs but from helping LDCs to comply with them on a cost-efficient basis. This insight gives rise to two policy recommendations. First, the G20 countries should design and amend their regulatory framework so that it does not unnecessarily create discrimination against LDC exporters. Second, the G20 countries should provide LDC exporters with the necessary information and support so as to minimize unavoidable distortions against LDC exports. In this regard also, G20 countries should improve assistance specifically targeted to reduce the relatively higher cost of LDCs' compliance with NTMs. Further progress in Aid for Trade initiatives and increases in technical assistance programmes both at the bilateral and multilateral levels would help to minimize LDCs' cost of compliance with NTMs and therefore facilitate the integration of LDCs in the global economy.

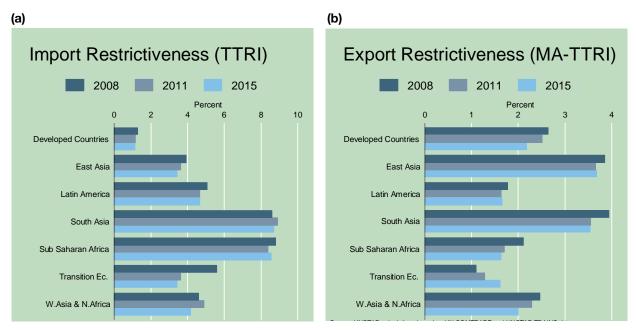


⁴ UNCTAD, 2016, *Trading into Sustainable Development: Trade, Market Access and the Sustainable Development Goals*, Developing Countries in International Trade Studies.

1. TARIFFS

Tariffs have remained substantially stable since 2008. In 2015, developed countries import restrictiveness was about 1.5 per cent. Import restrictiveness remained relatively high in developing countries, especially in South Asia and sub-Saharan Africa. Exporters in East and South Asia face the highest tariffs.

Figure 1
Average import and export restrictiveness, by region



Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

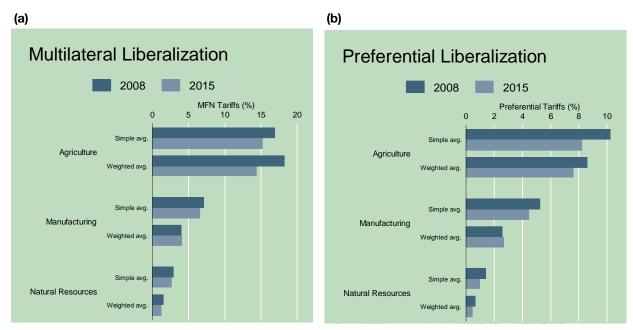
Figure 1a portrays the tariff trade restrictiveness index (TTRI), which measures the average level of tariff restrictions imposed on imports. The index is weighed so as to control for different import values and import demand elasticities. The market access counterpart (MA-TTRI) summarizes the tariff restrictiveness faced by exports (Figure 1b). Both indices are calculated on the basis of applied tariffs (ad valorem and specific tariffs), including tariff preferences. Multilateral and unilateral liberalization contributed to the decline of tariff restrictions during the last decade. Nevertheless, despite a continuing declining trend, the tariff liberalization process has largely stalled since 2008. In 2015, tariff restrictiveness was still substantially higher in developing countries than in developed countries. Among developing countries, import restrictiveness is highest in South Asia and sub-Saharan Africa.

In terms of export restrictiveness, transition economies and sub-Saharan African countries faced the most liberal market access conditions with an MA-TTRI of about 1.5 per cent in 2015. This was largely due to unilateral preferences granted by developed countries and an export composition tilted towards natural resources that typically face low tariffs. In contrast, exports from East and South Asia faced a higher average level of restrictiveness, about 3.5 per cent. For many countries in these regions, trade liberalization in major trading partners aimed at lowering tariffs can still produce substantial export gains.



Since 2008, tariffs have somewhat declined on a multilateral and preferential basis. World trade in agriculture and natural resources has been liberalized both through most-favoured-nation (MFN) treatment and more widespread preferential access. In regard to manufacturing, liberalization has occurred mainly through preferential access.

Figure 2
Multilateral and preferential tariff liberalization

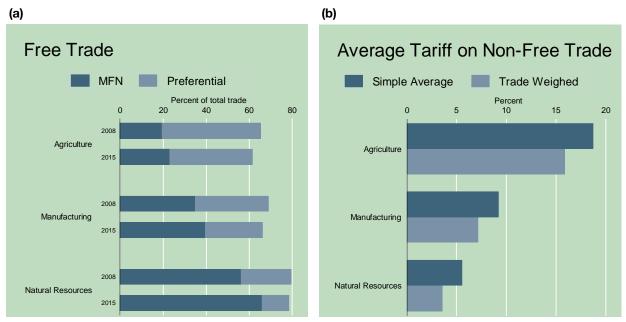


Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

Figure 2a and 2b illustrate average MFN and preferential tariffs for 2008 and 2015 in three main sectors. For agriculture, the decline in tariffs that occurred since 2008 is the result of both MFN and preferential liberalization. Simple average MFN tariffs in agricultural products have declined by about 2 percentage points since 2008, and trade-weighted averages by more than 3 percentage points. Preferential liberalization has contributed another 2 percentage points to the reduction of simple agricultural tariffs, and much less on a trade weighted basis. In regard to manufacturing, MFN tariffs have remained largely stable. The proliferation of preferential schemes has resulted in relatively larger reductions in this sector, amounting to about 1 percentage point. Still, a shift in trade composition towards products affected by higher tariffs has tilted the average preferential tariff for manufacturing to about 2.7 percent. Liberalization both in MFN and preferential terms has also occurred in natural resource trade, further reducing the already low levels of tariffs in this sector.

Although to a lower extent than in 2008, international trade continues to be largely free from tariffs both as a result of zero MFN duties and because of duty-free preferential access. However, tariffs applied to the remainder of international trade can be high. Preferential access continues to play a key role for agricultural market access, but also remain significant for manufacturing products.

Figure 3
Free trade and remaining tariffs, by broad category

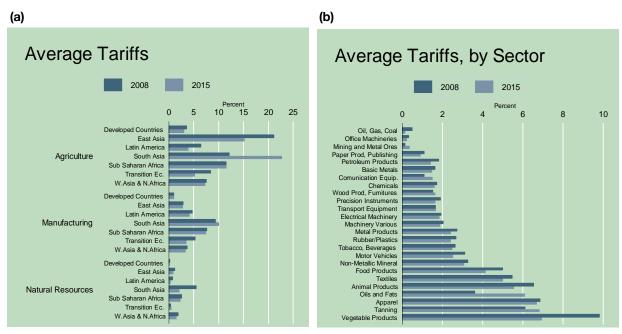


Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

International trade has been largely liberalized owing to both zero MFN tariffs as well as preferential duty-free access. Although to a lower extent than in 2008, a substantial part of world trade continues to be free from tariffs (Figure 3a). Still, tariffs applied to the remainder of international trade are often high (Figure 3b). Importantly, there are differences between agriculture, manufacturing and natural resources. Agricultural trade is free largely due to preferential access (as opposed to zero MFN tariffs). In this regard, preferential access and reciprocal concessions continue to play a key role for agricultural market access, as the remaining tariffs are fairly high (averaging almost 20 per cent). Preferential access is also important for manufacturing products, for which the simple average tariff is at almost 10 percent. On the other hand, preferential access is of limited importance in the case of natural resources, as trade in this category is largely tariff-free under MFN rates, and remaining tariffs are generally very low (on average about 6 per cent).

Low average tariffs mask large differences across economic categories and product sectors. In general, international trade in agriculture is taxed at a much higher rate than trade in manufacturing and natural resources. Tariffs also remain relatively high for manufacturing products, such as textiles and apparel, which are important for developing countries.

Figure 4
Trade weighted average tariffs, by region, broad category and sector

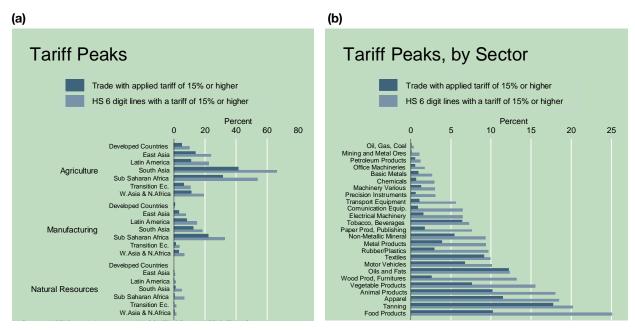


Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

Figure 4 (a, b) depicts the trade weighted average tariff for broad as well as specific categories of products. Tariff restrictions remain quite different across geographic regions and economic sectors. In general, international trade in agriculture is taxed at a much higher rate than trade in manufacturing and natural resources. Even within agriculture, tariffs vary greatly across geographic regions. South Asian and East Asian countries and transition economies tend to apply relatively high tariffs in agriculture, while such tariffs are on average much lower in Latin American and developed countries. Manufacturing tariffs remain high only in the South Asian region (almost 10 per cent on average), and in sub-Saharan Africa (about 7 per cent on average). Average tariffs vary greatly across product sectors, ranging from about 8 per cent for vegetable products to almost zero for fuels, ores and office machineries. Even considering all concessions and preferential schemes, international trade is subject to high tariffs not only in relation to agricultural products but also in the case of manufacturing products of importance for developing countries such as textiles (almost 5 per cent) and apparel (almost 7 per cent). Finally, although tariffs have been declining in most sectors, they have increased in others. Nonetheless, the trend of increasing tariffs has been limited to a number of cases (for example, rise in tariffs on vegetable oils in South Asia).

Amid generally low tariffs, there are a significant number of products where tariffs are relatively high. Tariff peaks are part of the tariff structures of many developing and developed countries. Tariff peaks tend to be concentrated in products of interest to low income countries, such as agriculture as well as apparel, textiles and tanning.

Figure 5
Tariff peaks, by region, broad category and sector

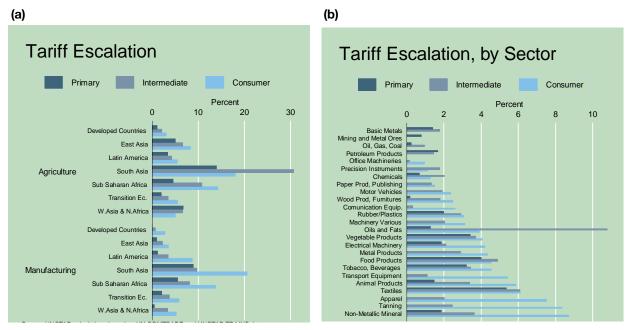


Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

In view of generally low tariffs, and even when all concessions such as unilateral and reciprocal preferential schemes are taken into account, there remain a significant number of products for which tariffs are relatively high. These high tariffs (above 15 per cent) are generally referred to as tariff peaks and are usually levied on sensitive products. Tariff peaks appear in the tariff structure of many developing countries, but with different patterns. For example, tariff peaks are a large part of the tariff structure of agricultural products of developing countries in South Asia and sub-Saharan Africa, but this is not the case in the transition economies (Figure 5a). Tariff peaks tend to be less prevalent in manufacturing, especially in natural resources. They tend to be concentrated in products of interest to low income countries, such as most agricultural sectors, but also apparel, textiles and tanning. For example, tariffs on about 10 per cent of international trade in food products (and 25 per cent of the products in this group) are higher than 15 per cent (Figure 5b). Similarly, about 10 per cent of international trade in apparel is subject to a tariff of 15 per cent or more.

Tariff escalation remains a feature of the tariff regimes of both developed and developing countries. It is more pervasive in manufacturing products than in agriculture. Tariff escalation is prevalent in most sectors, including those of importance (e.g. apparel) to developing countries.

Figure 6
Tariff escalation by region, broad category and sector



Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data

Tariff escalation – the practice of imposing higher tariffs on consumer (finished) products than on intermediates and raw materials – is present in the tariff structure of many countries. This practice favours processing industries closer to consumers, while discouraging the undertaking of processing activities in countries where raw materials originate. Most developing and developed countries adopt escalating tariff structures, but to varying degrees. Tariff escalation is more pervasive in manufacturing products than in agriculture (Figure 6a). Indeed, the tariff structure of countries in South Asia, West Asia and North Africa is not escalating in the agricultural sector. Tariff escalation is prevalent in most sectors, including those of importance to developing countries: apparel, animal products, tanning and many light manufacturing sectors (Figure 6b).

The pattern of trade restrictiveness varies greatly among regional trade flows. Intraregional trade is generally subject to lower TTRI than interregional trade. A large number of South-South regional trade flows are still burdened by relatively high tariffs. The tariff liberalization process of the past five years is reflected in lower tariffs for most intra- and inter-regional flows.

Table 1
Tariff restrictiveness, matrix by region

Exporting Region							
Importing region	Developed countries	East Asia	Latin America	South Asia	Sub- Saharan Africa	Transition economies	West Asia and North Africa
Developed	1.4	2.6	1.1	2.8	0.3	1.3	0.5
countries	-0.7	0.2	0.3	-0.1	-0.1	0.4	-0.1
East Asia	5.1	2.7	5.2	3.2	1.9	3.8	1.7
EdSt ASId	-0.6	-0.7	-0.3	-0.8	0.0	0.9	-0.3
Latin America	3.8	8.8	1.1	10.5	1.6	2.1	3.2
Latin America	-0.3	-0.6	-0.7	-0.8	-0.6	0.4	-0.2
South Asia	10.7	11.7	12.5	7.2	9.0	7.2	9.0
Journ Asia	0.7	0.5	-2.2	-0.8	-1.6	0.4	-1.5
Sub-Saharan	7.8	10.9	8.9	8.4	3.7	6.9	5.8
Africa	-0.6	-0.5	0.3	0.8	-0.6	-0.6	-0.1
Transition	4.1	4.0	5.1	6.1	1.2	0.8	5.7
economies	-2.2	-3.7	-5.7	-3.6	-1.7	0.6	-1.9
West Asia and	3.4	5.5	5.5	4.1	3.2	7.0	2.0
North Africa	-0.8	-0.4	-1.3	0.3	-0.1	2.7	-0.1

Note: Changes between 2008 and 2015 are shown in a smaller font.

Table 1 represents a matrix of the average levels of tariffs imposed on trade flows between regions in 2015. Differences in the rates exhibited in the table arise from different patterns of both market access and trade composition. The effect of regional trade agreements is reflected in the relatively lower degree of restrictiveness on intraregional compared with interregional trade. However, this is not the case for exports from sub-Saharan Africa, for which market access is often better for interregional trade than for intraregional trade. This is partly due to preferences granted to LDCs, but also owing to the tariff barriers imposed by sub-Saharan African countries on trade among each other. A large number of South–South trade flows are still burdened by relatively high tariffs. For example, East Asian exports are subject to an average tariff of about 11 per cent in South Asia and sub-Saharan Africa. Trade flows between many regions have been liberalized over the past five years as a result of an increasingly diverse geographic pattern of regional trade agreements. However, some interregional trade flows have also become subject to higher tariffs. The latter phenomenon is mainly caused by a shifting composition of trade flows (as opposed to an increase in tariffs on particular product lines).

The system of tariff preferences affects international competitiveness by providing various countries with different market access conditions. Because trade agreements are often regional, the system of preferences tends to favour regional trade over interregional trade. Still, the magnitude of the effect of preferences differs widely across regions. Latin American countries enjoy the highest preferential margins in trading with regional partners, estimated at about 4.3 percentage points.

Table 2
Relative preferential margins, matrix by region

Exporting region							
Importing region	Developed countries	East Asia	Latin America	South Asia	Sub- Saharan Africa	Transition economies	West Asia and North Africa
Developed	0.4	-1.1	0.8	-0.5	0.3	-0.5	0.2
countries	0.1	-0.3	0.4	0.4	0.2	-0.3	0.0
East Asia	-0.4	0.5	-0.8	-0.2	-0.4	-0.7	-0.4
Last Asia	0.0	0.2	-0.8	-0.1	-0.3	-0.6	-0.3
Latin America	0.3	-1.7	4.3	-3.5	-0.7	-1.0	-0.9
Latin America	-0.7	0.9	-0.1	-0.7	0.1	-0.5	0.1
South Asia	-0.4	-0.1	-0.1	2.0	-0.2	-0.1	-0.1
South Asia	-0.2	-0.2	-0.1	0.5	-0.1	0.0	0.0
Sub-Saharan	0.1	-0.9	-1.0	-0.9	3.2	-0.2	-0.5
Africa	0.7	0.9	0.0	-0.2	0.6	0.6	-0.1
Transition	-0.6	0.3	0.3	-1.2	0.4	2.9	-1.1
economies	0.0	1.3	0.6	-0.5	0.4	-0.2	-0.2
West Asia and	0.3	-1.1	-0.7	-0.9	-0.3	-1.5	2.0
North Africa	0.2	0.1	0.0	-0.1	-0.2	-0.6	-0.2

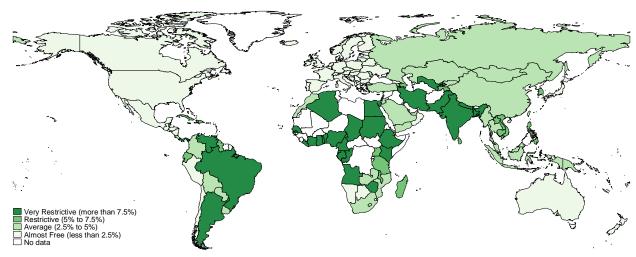
Note: Changes between 2008 and 2015 are shown in a smaller font.

Table 2 reports relative preferential margins (RPMs) calculated at the regional level for 2015 and their changes since 2008. RPMs provide a measure of the average preferential margin for a given country by taking into consideration any preference provided by its trading partners to foreign competitors. RPMs can be positive or negative, depending on the advantage or disadvantage a country has in terms of preferences with respect to other competing exporters. The RPM is exactly zero when there is no discrimination; it is largest for Latin American countries which enjoy about a 4.3 percentage point advantage on foreign competitors when trading within their region. On the other hand, the system of preferences provides only half of a percentage point advantage to East Asian countries trading in their own region. With very few exceptions, interregional trade faces a negative RPM, suggesting that the tariff structure negatively impacts non-regional exporters' competitiveness. The least favoured are exporters of South Asia and East Asia seeking to trade with Latin America. For sub-Saharan exporters, the effects of the system of preferences for interregional trade are often negligible.

Import restrictiveness differs substantially across countries, and even within the same region. Preferential schemes allow LDCs to enjoy duty free access to many developed country markets. However, developing country exports, especially those in Eastern Asia, Latin America and East Africa, still face relatively high tariffs.

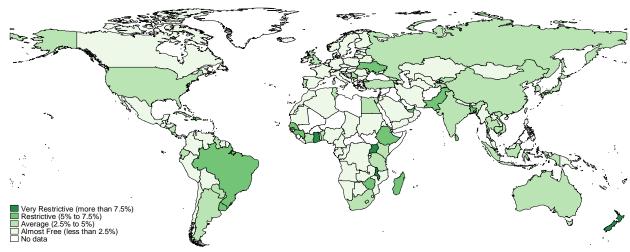
Figure 7
Import restrictiveness

(a) Import restrictiveness (2015)



Source: UNCTAD secretariat calculations based on COMTRADE and UNCTAD TRAINS data.

(b) Export restrictiveness (2015)



Source: UNCTAD secretariat calculations based on COMTRADE and UNCTAD TRAINS data.

Figure 7a illustrates the average level of tariff restrictions imposed on imports (as measured by the TTRI). The level of tariffs differs substantially across countries, and even within the same region. Figure 7b reports the overall level of tariff restrictions faced by exporters (as measured by the MA-TTRI). Many Latin American countries face high tariffs because a large share of their exports consists of agricultural products. Due to export composition, and also because of limited preferential rates, Chinese exports face relatively higher tariffs than those of many other developing countries.

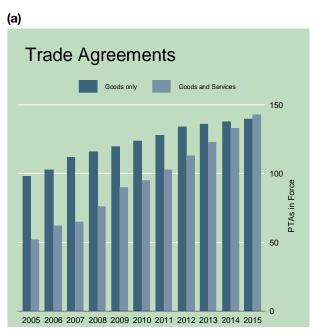


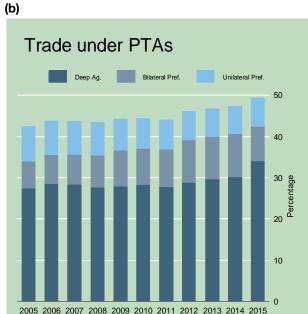
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2. TRADE AGREEMENTS

The international trading system is regulated by an increasing number of preferential trade agreements (PTAs). Most of the recent trade agreements address not only goods but also services, and deal with rules beyond reciprocal tariff concessions. In 2015 about half of world trade was taking place between countries that had signed a PTA, and one third was regulated by deep trade agreements.

Figure 8
Trade agreements





Source: UNCTAD secretariat calculations based on WTO RTAIS data.

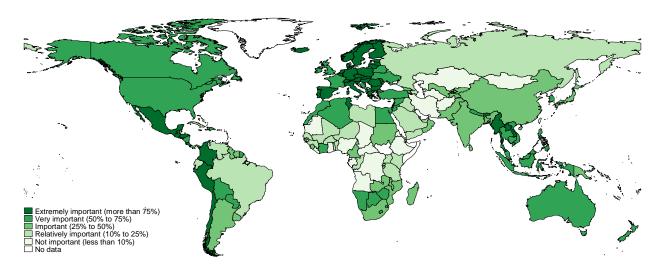
Source: UNCTAD secretariat calculations based on WTO RTAIS data and COMTRADE data.

Figure 8a illustrates the number of PTAs that have been in force in each year since 2005. The number of PTAs in force has approximately doubled from less than 150 in 2005 to almost 290 in 2015. This upward trend is likely to continue, as additional PTAs are still in the negotiation phase and likely to be implemented in the next few years. About half of all trade agreements in force go beyond tariff concessions, to cover services and behind-the border measures. Although the number of PTAs has increased dramatically, the percentage of trade taking place under PTAs has not increased as much (Figure 8b). Still, even without considering trade within the European Union, about one third of world trade took place under deep trade agreements (i.e. those with trade rules going beyond traditional tariffs and existing WTO agreements, to cover deeper behind-the-border measures) in 2015. Almost 10 per cent of world trade was covered by trade agreements limited to preferential access, and about 7 per cent was under unilateral preferences such as the ones provided by developed countries to LDCs.

The importance of trade agreements is high for many developed countries, but not as much for the majority of developing countries; notable exceptions include a number of countries in South East Asia, Southern Africa and Latin America.

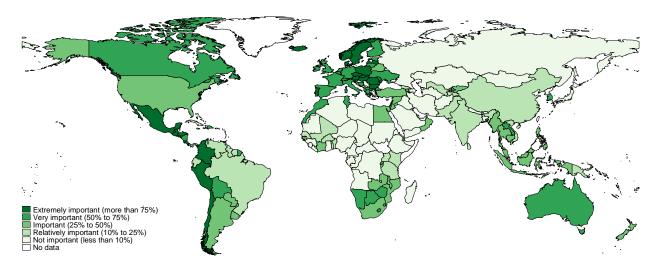
Figure 9 Importance of preferential trade agreements

(a) Importance of PTAs, as measured by percentage of trade (2015)



Source: UNCTAD secretariat calculations based on WTO RTAIS and COMTRADE data.

(b) Importance of deep PTAs, as measured by percentage of trade (2015)



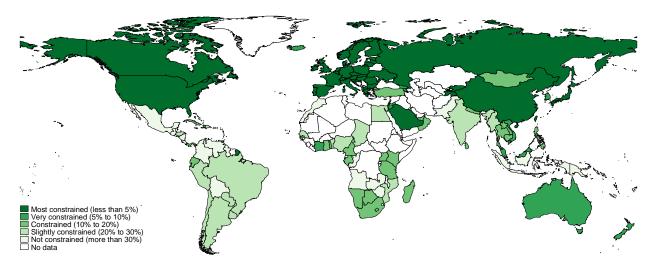
Source: UNCTAD secretariat calculations based on WTO RTAIS and COMTRADE data.

A large share of international trade of many developed countries occurs under some form of PTA, and in many cases under trade rules going beyond traditional reciprocal market access concessions. For countries of the European Union, more than 75 per cent of trade occurs under some form of PTA (Figure 9a), and more than 50 per cent under deep agreements (i.e. those with trade rules going beyond traditional tariffs and existing WTO agreements, to cover deeper behind-the-border measures) (Figure 9b). However, most developing countries' trade still occurs outside PTA rules, with notable exceptions in some countries of South-East Asia, Southern Africa and Latin America.

Trade agreements result in different degrees of policy space across countries. Developed countries and economies in transition tend to have very limited policy space, as most tariff lines are bound by WTO obligations with little tariff water. Policy space within WTO is greater for sub-Saharan African countries, and lower-income countries in general. Once PTAs are accounted for, a substantial amount of trade is locked under preferential tariffs, which in turn means that the amount of "true" tariff water in many cases is less than half of the WTO binding overhang.

Figure 10
Policy space: Multilateral constraints

(a) Tariff water (2015)



(b) True tariff water (2015)

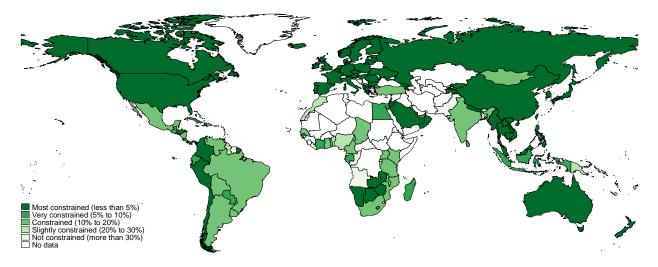


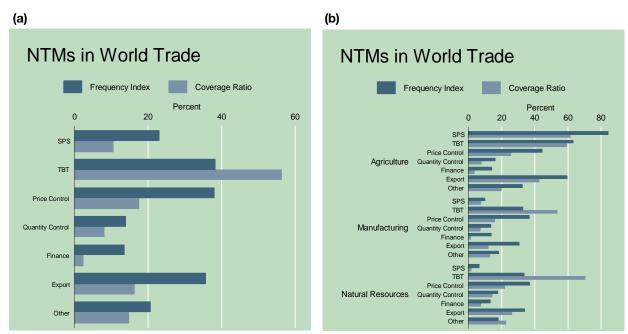
Figure 10a portrays the average tariff water (trade weighed) calculated as the difference between WTO bound tariffs and applied MFN tariffs. Policy space within WTO is greater for developing countries, especially those of lower income status. Figure 10b portrays the average tariff water calculated as the difference between bound and applied tariffs, taking into account the implicit bindings imposed by both WTO and PTA commitments. Countries that have a large share of trade under preferential commitments and/or have low true tariff water cannot raise their tariffs without infringing WTO or PTA commitments.



3. NON-TARIFF MEASURES

Non-tariff measures include a diverse array of policy measures serving different purposes. Among the various types of non-tariff measures, technical barriers are the most pervasive, as the majority of international trade is regulated by some form of technical barrier. Quantity and price control measures cover a much smaller, but still significant, share of world trade.

Figure 11
Prevalence of non-tariff measures, by type and broad category (2015)

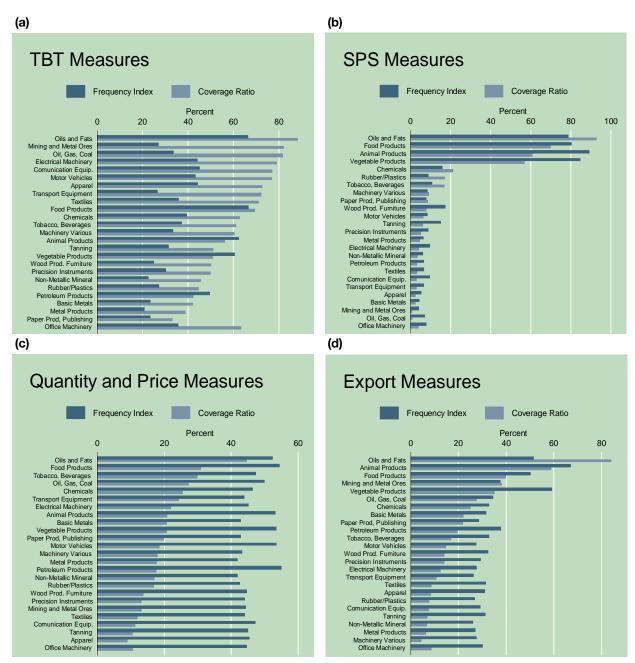


Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

Data on non-tariff measures (NTMs) is still fragmentary and therefore does not allow computation of comparative statistics across countries. Although the data may also not be fully representative of world trade, some preliminary statistics can be derived from the available data. Figure 11a illustrates the distribution of NTMs across broad categories. For each category, both the frequency index (i.e. the percentage of HS 6 digit lines covered) and coverage ratio (i.e. the percentage of trade affected) are reported. International trade is highly regulated through the imposition of TBT, with more than 30 per cent of product lines and almost 70 per cent of world trade affected. Quantity and price control measures affect about 15 per cent of world trade. SPS affect about 10 per cent of world trade. Export measures are applied to international trade less frequently, as their use is specific to particular sectors and generally used only by a small number of countries. Coverage of NTMs by broad category (Figure 11b), shows that agriculture is the most affected, with most of world agricultural trade subject to forms of SPS and TBT.

The prevalence of various types of non-tariff measures differs by economic sectors. Sectors related to agriculture tend to be regulated by SPS and export measures. TBT are used to regulate most economic sectors. Quantity and price measures although used in many sectors cover only much smaller percentage of trade.

Figure 12 Non-tariff measures, by sector



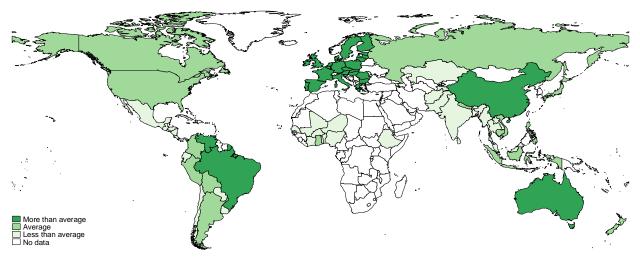
Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

TBT are widely used to regulate international trade in most sectors and concern the vast majority of world trade flows (Figure 12a). SPS are typically applied to agricultural products, and to some extent to other products that may have inherent health hazards due to contaminants (Figure 12b). Quantity and price control measures are widely applied to many sectors, mostly by developing countries. They cover a large share of world trade, mainly agricultural related products. (Figure 12c). Finally, agricultural sectors as well as petroleum products and chemicals are generally affected by export measures, often in the form of export subsidies (Figure 12d).

The regulatory framework related to technical non-tariff measures (SPS and TBT) differs across countries. The use of technical measures tends to be more pervasive in the European Union, China, Brazil and Australia and less so in many low-income countries. Developed countries' use of technical non-tariff measures tends to be more targeted to specific products. This applies also to China and Brazil. Other developing countries tend to use technical non-tariff measures in a more homogenous manner.

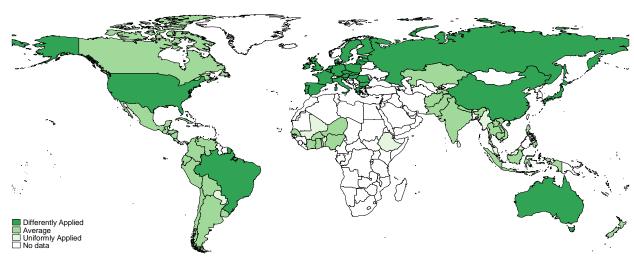
Figure 13
Technical non-tariff measures, by country

(a) Technical non-tariff measures, relative intensity across countries (2015)



Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

(b) Technical non-tariff measures, intensity across products (2015)



Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

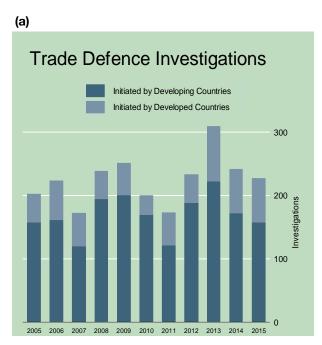
The use of TBT and SPS differs across countries. To capture the diverse use of non-technical measures across countries Figure 13a illustrates an intensity. This index is computed by calculating the difference between the number of non-technical measures applied by a given country in each product and the average number of measures applied to that product. Then, country averages are computed by weighing each product by its importance in world trade. Figure 13b reports the standard deviation of product level differences within each country. This illustrates whether non-technical measures tend to be uniformly applied across products or are applied with different intensity across products.

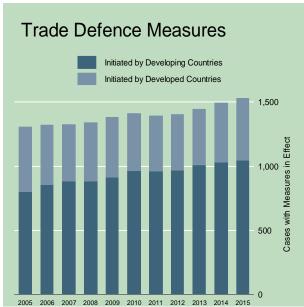
4. TRADE DEFENCE MEASURES

The use of trade defence measures resulted in more than 200 new investigations started at the WTO in 2015. Cumulatively, there were more than 1,500 instances involving trade defence measures in effect in 2015. During the last decade, developing countries have become increasingly more active users of trade defence measures.

(b)

Figure 14
Trade defence measures





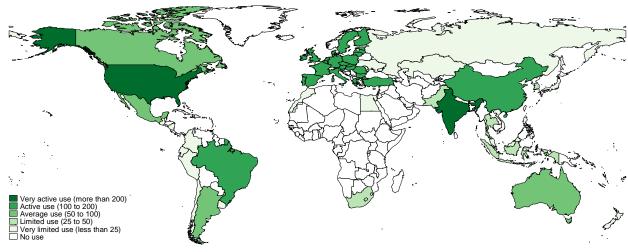
Source: UNCTAD secretariat calculations based on WTO I-TIP data.

Trade defence measures in the form of antidumping, countervailing duties and safeguards allow countries to actively respond to import-related concerns within an established WTO mechanism. During the past decade, between 150 and 250 antidumping cases were brought annually before WTO (Figure 14a). However, the number of antidumping cases brought to WTO spiked in 2013, with more than 300 new cases but then subsiding in 2014 and 2015. Generally, trade defence measures remain in effect for five years and sometimes more, and therefore the stock of measures affecting trade in any given year is significantly higher than the corresponding number of new cases each year. As of 2015, there were more than 1,500 antidumping measures in effect (in general, specific or ad valorem duty) (Figure 14b). Both developed and developing countries make use of trade defence measures. Still, developing countries have become increasingly more active users of trade defence measures.

The use and impact of trade defence measures vary greatly across countries. Trade defence measures are imposed mainly by developed and emerging economies, and are largely targeted against products originating from China, the European Union and the United States.

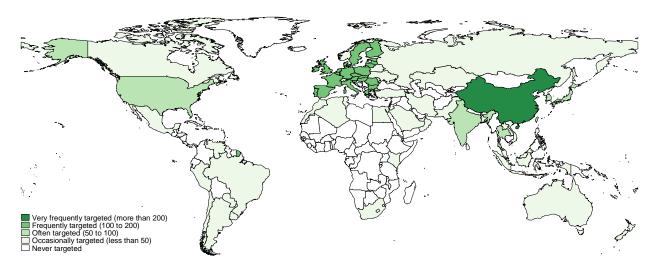
Figure 15
Trade defence measures in effect, by country

(a) Trade defence measures in effect, by imposing country (2015)



Source: UNCTAD secretariat calculations based on WTO I-TIP data.

(b) Trade defence measures in effect, by targeted country (2015)



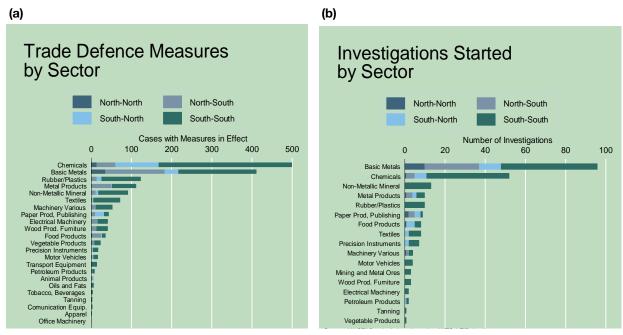
Source: UNCTAD secretariat calculations based on WTO I-TIP data.

Most cases relating to trade defence measures are brought to WTO by major economies. The main users of such measures include India, the United States, the European Union, China and, more recently, Turkey, Brazil and Argentina (Figure 15a). China is by far the most targeted county with more than 400 measures in effect as of 2015 (Figure 15b). A large number of trade defence measures are also imposed against the European Union, the United States and India.



In 2015, about two thirds of trade defence measures were targeted at firms operating in two sectors: chemicals and basic metals. Most trade defence measures were initiated by developing countries against other developing countries. Investigations started in 2015 were mainly in basic metals and chemicals.

Figure 16
Trade defence measures and investigations, by sector



Source: UNCTAD secretariat calculations based on WTO I-TIP data.

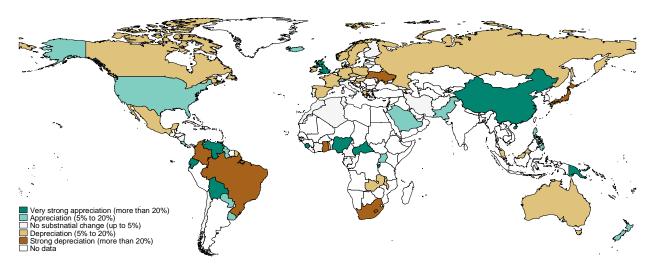
Trade defence measures are largely targeted at firms operating in two sectors: chemicals and basic metals (Figure 16a). Other sectors including metal products, rubber and plastics, textiles and to non-metallic minerals are also targeted by such measures, but to a much lower extent. Most trade defence measures are initiated by developing countries against other developing countries (South–South). Measures imposed by developing countries and those targeting developed countries (South–North) are less common and largely confined to the case of chemicals, basic metals and paper products. Measures applied by developed countries are largely concentrated in metals and chemicals and mostly directed against firms in developing countries. With regard to investigations started in 2015, these were mainly carried out against firms operating in the basic metals sector. Most of these investigations targeted firms in developing countries (Figure 16b).

5. EXCHANGE RATES

As measured by the real effective exchange rate, changes in external competitiveness have been diverse across countries. The United States' competitiveness has declined, while that of the European Union and Japan has increased. In regard to developing countries, Brazil and South Africa have seen their competitiveness increase, while China's competitiveness has decreased. In 2015, the external competitiveness of China and the United States declined further.

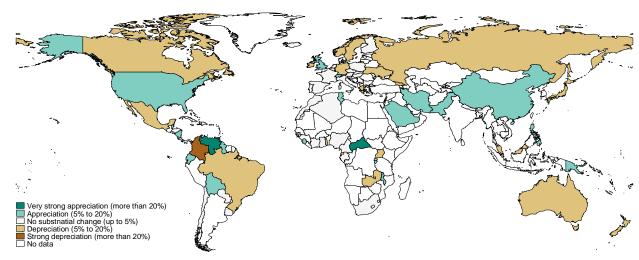
Figure 17 International competitiveness, real effective exchange rate

(a) REER changes between 2010 and 2015



Source: UNCTAD secretariat calculations based on IMF financial statistics.

(b) REER changes between 2014 and 2015



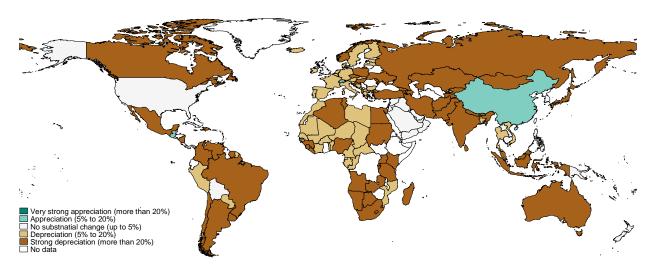
Source: UNCTAD secretariat calculations based on IMF financial statistics.

The real effective exchange rate (REER) is a measure of the trade-weighted average exchange rate of a currency against a basket of currencies after adjusting for inflation differentials (consumer price index). It measures external competitiveness. In general, an appreciation in the REER results in a loss of competitiveness, while a decline in the REER indicates an increase in external competitiveness.

Movements in the nominal exchange rates versus the dollar can play a substantial role in determining the competitiveness of countries. Since 2010, with the notable exception of China, most currencies depreciated against the dollar, sometimes substantially. The dollar remained strong during 2015, with most currencies further depreciating.

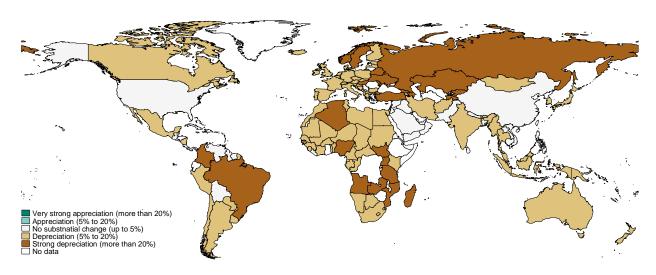
Figure 18
Change in the nominal exchange rate vs US dollar

(a) Exchange rates changes vs US dollar (2010-2015)



Source: UNCTAD secretariat calculations based on IMF financial statistics.

(b) Exchange rates changes vs US dollar (2014-2015)



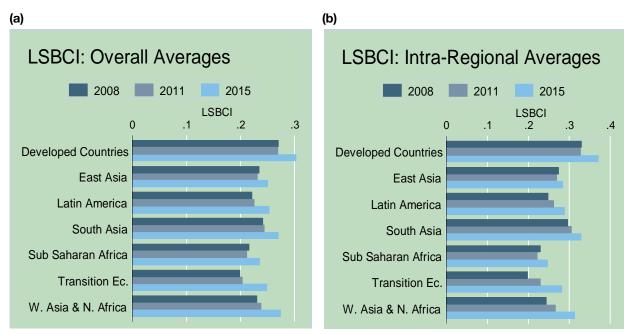
Source: UNCTAD secretariat calculations based on IMF financial statistics.

As international trade transactions are generally in dollars, appreciation and depreciations against the dollar can play a substantial role in the competitiveness of countries. Figures 18a and 18b portray the percentage change in nominal exchange rates of world currencies against the dollar between 2010 and 2015, and between 2014 and 2015, respectively (annual average).

6. TRADE COSTS

Liner shipping bilateral connectivity improved between 2008 and 2015 in all regions. Progression has been strong for economies in transition and but relatively weak for sub-Saharan countries. Overall trends have been driven by intraregional evolution.

Figure 19
Liner shipping bilateral connectivity index



Source: UNCTAD secretariat calculations based on UNCTAD LSBCI data.

UNCTAD recently proposed an extension of the well-established country-level Liner Shipping Connectivity Index (LSCI) based on a proper bilateralization transformation to generate the Liner Shipping Bilateral Connectivity Index (LSBCI).⁵ The LSBCI is meant to reflect specifically the liner shipping connectivity between pairs of countries. The LSBCI includes five components: (a) the number of transhipments required to get from country A to country B; (b) the number of direct connections common to both country A and country B; (c) the geometric mean of the number of direct connections of country A and of country B; (d) the level of competition on services that connect country A to country B; and (e) the size of the largest ships on the weakest route connecting country A to country B. In order to establish a unit-free index, all components are normalized.⁶ The LSBCI is then computed by taking the arithmetic average of the five normalized components. As a consequence, the LSBCI can only take values between 0 and 1.

The world average LSBCI was about 0.23 in 2006. In 2015, the corresponding value was almost 0.26. This upward trend characterizes most regions during the same period as shown in Figure 16a. Unsurprisingly, the Figure also shows a period of clear stagnation and even regression between 2008 and 2011. Over the whole period, the strongest progression is found for the group of economies in transition. While their average LSBCI was about 0.20 in 2006, it reached almost 0.25 in 2015, catching up with East Asia and Latin America countries. Countries in North Africa and West Asia have also performed relatively in terms of their average LSBCI, driven to a large extent by Morocco's remarkable integration in the world maritime network. The average LSBCI of sub-Saharan countries has grown little between 2008 and 2015. Figure 16b shows the evolution of intraregional LSBCI. Country group values are larger than the corresponding overall ones. Moreover, country groups trends and tendencies are similar to overall ones. This indicates that bilateral connectivity has been driven essentially by intraregional connections.

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⁵ The LSCI and the LSBCI are available on-line via http://stats.unctad.org/LSCI and http://stats.unctad.org/LSBCI respectively.

⁶ The formula used is standard and is given by: Normalized_Value=(Raw-Min(Raw))/(Max(Raw)-Min(Raw))