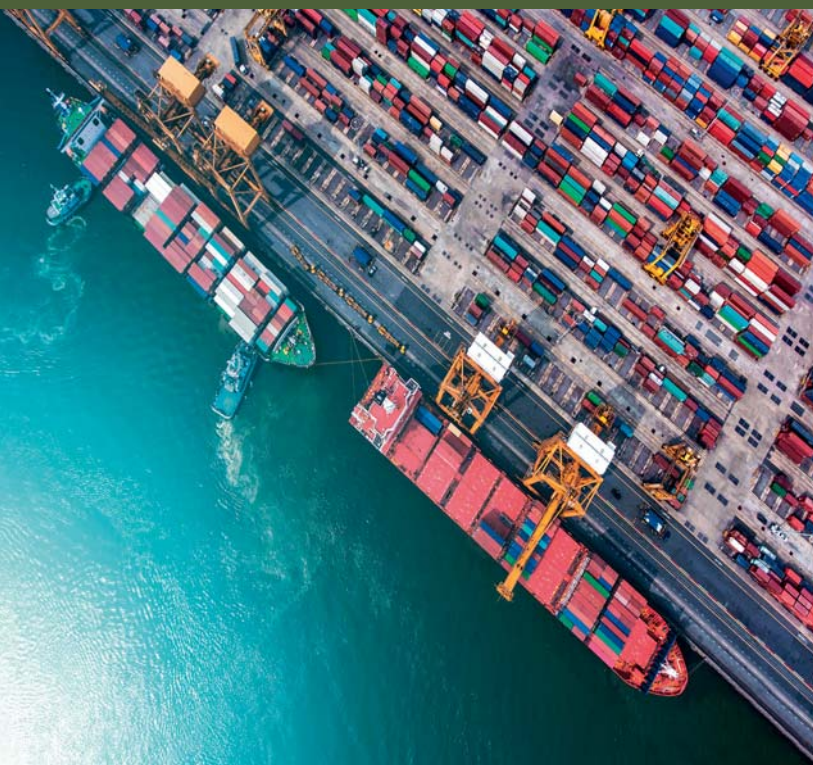




KEY STATISTICS AND TRENDS

in Trade Policy 2017



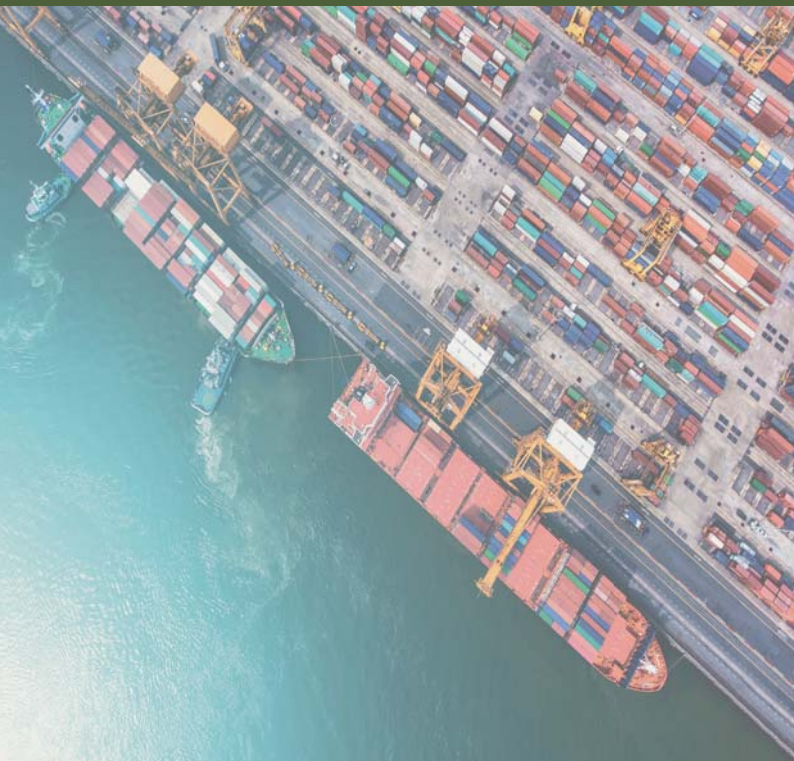
TRADE IMBALANCES





KEY STATISTICS AND TRENDS

in Trade Policy **2017**



TRADE IMBALANCES



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NOTE

Key Statistics and Trends in Trade Policy is a yearly publication of the Trade Analysis Branch, Division on International Trade in Goods and Services, and Commodities, UNCTAD secretariat. The main purpose of this publication is to inform on the use and effects of a wide range of trade policies influencing international trade.

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.



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 a 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. Recent years have also been characterized by substantial movements in some of the major currencies.

As of 2016, developed countries' import restrictiveness was 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 2016, international trade is 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 all 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 current debate on trade agreements, the process of deeper economic integration has remained strong at the regional and bilateral level even in 2016, with an increasing number of preferential trade agreements (PTAs) being negotiated and implemented. Most of the recent PTAs 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 2016, 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. The value of the United States dollar remained strong, continuing to appreciate against a large number of currencies.

This report is structured in two parts. The first part presents a discussion on trade balances. The second part discusses trends in selected trade policy instruments including illustrative statistics. The second part is divided into five chapters: tariffs, trade agreements, non-tariff measures, trade defence measures, and exchange rates. 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

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

Bound tariff line: See tariff binding

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

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

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

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

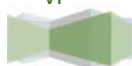
NTM: Non-tariff measure – Any policy, other than tariffs, that alters the conditions of international trade

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

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

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 covers around 80 countries, covering about 90 percent 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.



In focus: Trade imbalances and trade policy

Trade imbalances have always been a contentious issue. The debate is generally two-sided. On the one hand, deficit countries often become wary of any trade imbalances, linking them to job losses while pointing to unfair practices by foreign governments as their major cause. On the other hand, surplus countries deny any blame, while pointing to the virtues of their economies and praising the benefits of free trade. Besides spurring debates, trade imbalances can create significant economic problems for countries, particularly those in deficit.¹

From an economic standpoint, it is important to first debunk the myth that deficit (imports) are losses and surplus (exports) are gains. Surpluses and deficits can arise in a number of different situations, which are not necessarily related to whether an economy is performing well or not. Macroeconomics treats trade balances as symptoms of underlying macroeconomic factors. Whether trade imbalances are good or bad depends on their causes. In addressing global imbalances it is therefore important to identify their determinants and what policies, if any, should be pursued to reduce imbalances.

What is the trade balance?

The trade balance records a country's transactions of goods and services with the rest of the world. A trade deficit occurs when a country imports more than it exports, a surplus occurs when a country exports more than it imports. In the national account system, the trade balance generally represents the largest component of the current account, which in turn is part of the balance of payments (BOP). The BOP is categorized into three accounts: current, financial and capital, the latter generally being the smallest one.² It is important to note that the BOP is an accounting system. That is, the current account and the financial account need to balance, assuming no changes in the capital account. In practice, a current account surplus (trade surplus) can happen only when there is a deficit in the financial account (capital outflow): a country saves more than it invests. Similarly, a current account deficit is inseparably linked to capital inflows.³ Illustrating current account imbalances as the difference between savings and investments is revealing because this definition reflects the main concern of trade deficits: they need to be financed by external borrowing.⁴

What causes trade imbalances?

Trade imbalances can be influenced by a host of policy driven factors such as exchange rate, competitiveness, inflation rate, trade policy and foreign reserves. A current account surplus is also often interpreted as a sign of unfair practices such as an intentionally undervalued currency, trade barriers, or the dumping of export goods. However, economists generally agree that most of these

¹ Moreover, according to some economic literature it is possible for economic growth to be constrained by disequilibrium in the balance of payment (Thirwall's law).

² The sum of the balances on the current and capital accounts represents the net lending (surplus) or net borrowing (deficit) by the economy with the rest of the world. This is conceptually equal to the net balance of the financial account. In other words, the financial account measures how the net lending to or borrowing from nonresidents is financed. For an exhaustive discussion of the BOP see the sixth edition of the IMF Balance of Payments and International Investment Position Manual available at: <https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf>

³ To clarify consider that for a trade deficit to occur a country needs to spend more than it is saving. To finance this spending, it would need to borrow from foreign lenders (e.g. increasing the foreign held debt) or finance it by inflows of foreign investments (e.g. foreigners purchasing assets). This results in a surplus in the financial account.

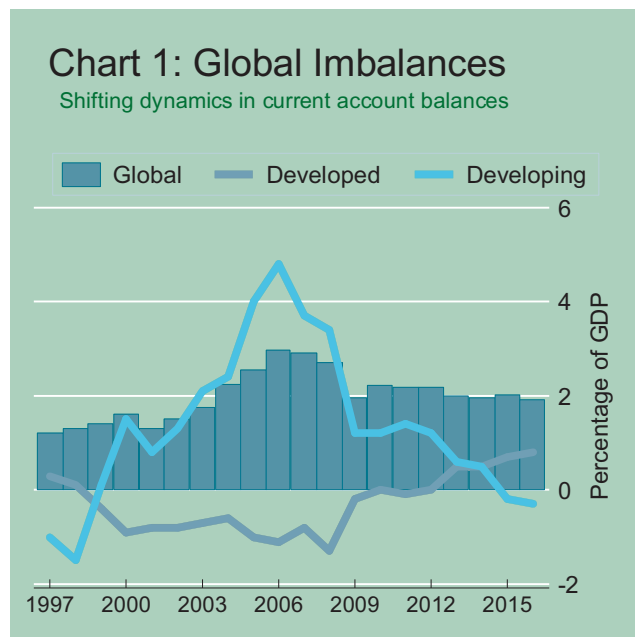
⁴ For capital-poor developing countries, which have more investment opportunities than they can afford to undertake because of low levels of domestic savings, a current account deficit may be normal.

factors are symptoms, not causes, of trade imbalances. Modern macroeconomics considers a trade deficit as an excess of domestic investment over national savings rather than a result of trade policy or competitiveness. This does not imply that the latter do not matter, but only that these factors are not likely to have lasting effects on the balance of trade. For example, sudden changes in trade policy can certainly influence the trade balance. But ultimately, it is the saving rate that determines whether trade policy has an effect on the trade balance or on the exchange rate. Similarly, productivity is often associated with a trade surplus, but an increase in productivity only causes a current account surplus if the resulting earnings are saved rather than being spent on imports. Even the relationship between trade balances and economic cycles is often better explained through the financial account. For example, during an economic recession, investment generally falls faster than savings. Thus, the current account surplus increases, resulting in a decline in the trade deficit. However, once savings also start to fall, imbalances will re-emerge.

In general terms, trade policy or competitiveness have no lasting effects on the trade balance, as they will be compensated by adjustments in the exchange, interest and inflation rates. Ultimately, the long run trends of trade balances are governed by policies that influence savings rates (e.g. fiscal policies) or currency interventions (e.g. currency manipulations and fixed exchange rates). Trade balances are also affected by structural dynamics. For example, trade surpluses are more common in countries with an aging population, as older people tend to save more and invest relatively less. Trade balances are also influenced by the overall level of economic activity in the rest of the world. In general terms, economic recessions abroad result in lower demand for imports, which in turn affects exporting countries' trade balances. Indeed, the decline in demand in developed countries was an important reason why trade imbalances sharply declined during the financial crisis.

The evolution of trade imbalances

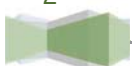
Although the importance of trade imbalances has long been recognized,⁵ policymakers started to be particularly concerned about them only after 2002, when their magnitude increased dramatically. During the period from 2002 to 2008, global imbalances doubled, increasing from about 1.5 percent to almost 3 percent of global GDP (Chart 1).⁶ During the financial crisis this increasing trend reversed. Current account imbalances around the world began adjusting and global imbalances declined. Global imbalances stabilized at around 2 per cent of world GDP in 2010 and remained at this level thereafter. Interestingly, the dynamics of global imbalances have shifted during the last five years. The large trade surplus that developing countries as a group were experiencing before



Source: UNCTAD secretariat calculations based on UNCTADSTAT and IMF financial statistics.

⁵ Current account imbalances were taken into account already in the Bretton Woods Agreement. In particular, the "scarce-currency clause" allows countries, to temporarily impose "limitations on freedom of exchange operations in the scarce currency". With a currency considered scarce if the country imports more than it exports, that is, if it runs a current-account deficit.

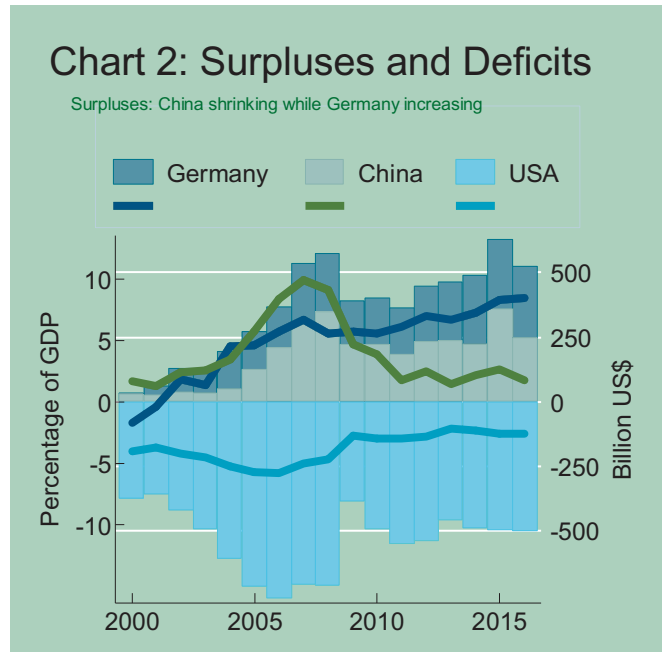
⁶ Global imbalances are calculated as the sum of the absolute values of current account balances across all economies divided by 2.



the crisis was gradually erased during the post-crisis years. On the other hand, developed countries' current account deficit shrunk considerably, and flipped to a surplus after 2010.

Not surprisingly, large economies are the ones contributing most to global imbalances. As of 2016, Germany's trade surplus was about 270 billion USD and China's about 250 billion USD. On the other hand, the current account deficit of the United States was about 500 billion USD in 2016 (Chart 2), accounting for a large part of global deficit positions.⁷

Whether imbalances are sustainable or not depends more on their size in relation to GDP than on their absolute value. In this regard, the post crisis years saw a global rebalancing, with many economies' current account positions coming closer to more sustainable levels. In particular, China's current account surplus decreased from more than 8 percent of GDP in 2008 to about 2 percent in 2016. During the same period, the United States' current account deficit shrank from 5 per cent to about 2 per cent. One notable exception to the rebalancing process has been Germany, whose trade surplus continued to increase, both in value and as a share of GDP. In 2016, Germany was the country with the largest current account surplus in value terms, which as a share of its GDP stood at about 8 percent.



Source: UNCTAD secretariat calculations based on UNCTADSTAT and IMF financial statistics.

Although most of the large economies have constantly remained in surplus or deficit positions during the last decade, trade balances often shift from surplus to deficit and vice-versa. For example, most southern European countries gradually became net exporters after the financial crisis. Similarly, Baltic countries moved from large deficits to substantial surpluses during the last 10 years. Moreover, Japan's trade balance flipped from surplus to deficit in 2010 to turn back to surplus only in 2016.

Bilateral trade imbalances

Bilateral trade balances have received a lot of attention in the policy debate. As international trade is conducted on a country to country basis, policymakers naturally draw on bilateral trade statistics. However, bilateral trade balances are not very meaningful to inform on the strength or weakness of an economy. While the overall trade imbalance is inextricably linked to savings and investment, bilateral trade balances are not. Although it may in some cases be relevant, the effect of trade policy on bilateral imbalances is generally confounded by comparative advantage dynamics (e.g. Norway's trade surplus vis-à-vis the European Union is arguably the result of Norway's oil exports rather than of a biased trade agreement). Moreover, bilateral statistics are heavily influenced by global value chains, and are therefore a poor indicator of economic strength or trade frictions. Overall, bilateral trade balances can be affected by particular trade policies (e.g. trade agreements) but are largely unrelated to the overall balance, which reflects macroeconomic factors. In other words, policies aimed to reduce specific bilateral balances

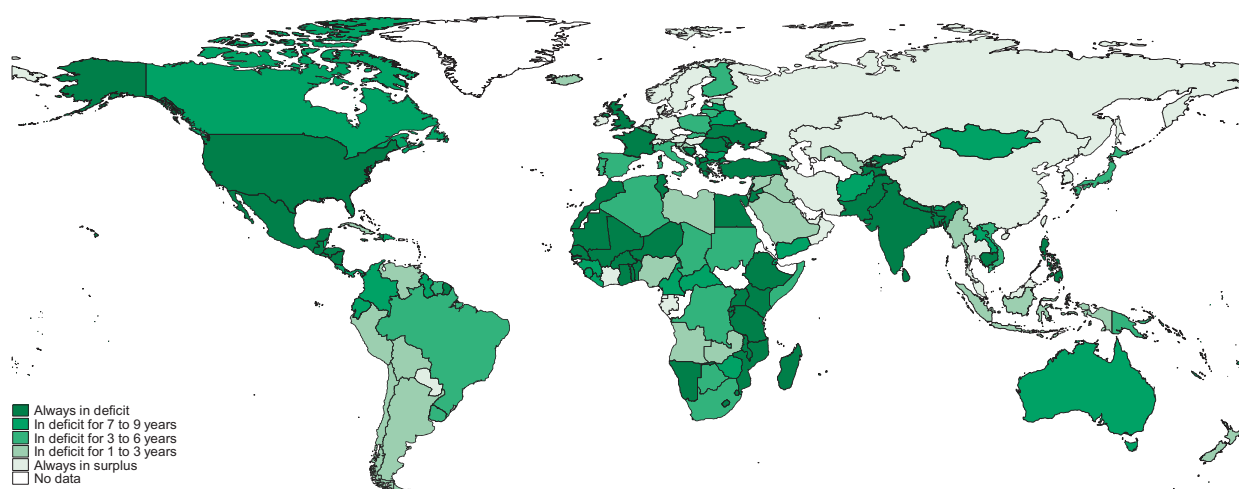
⁷ As an example consider that gross national savings in China were 48 per cent of GDP in 2015. The average for emerging markets and developing economies is 32 per cent, or 21 per cent for advanced economies.

would shift deficits or surplus to the other bilateral balances without having an effect on the current account.

Vulnerability and Sustainability

While bilateral or temporary deficits should be of limited concern, there are valid reasons to worry when countries run persistent trade imbalances. Chart 3 shows the number of years during the last decade in which countries experienced trade deficits. The main concern is vulnerability: countries with a persistent trade deficit may become more fragile to economic shocks. In particular, financial markets might become concerned about growing external debt, increases in interest rates, and the risk of capital flight, which could ultimately result in a financial crisis.

Chart 3: Long run deficits (number of years with current account deficits since 2006)



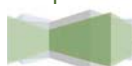
Source: UNCTAD secretariat calculations based on UNCTADSTAT and IMF financial statistics.

However, even large trade imbalances do not necessarily result in financial crises. What matters here is sustainability. As discussed above, a trade deficit relates to insufficient savings, and to inflows of foreign capital. If these capital flows are used to finance productive investment, with a sufficiently high rate of return, it is not difficult for a country with a persistent trade deficit to service its debt. In practice, when a country is growing rapidly, trade deficits are a normal occurrence, as they signal an inflow of capital which is necessary to fund the productive investment needs of a booming economy.

On the other hand, if a country borrows heavily to sustain spending, the deficit may be unsustainable in the long term. Indeed, repayment problems are and have been an issue for many developing countries as well as developed countries in southern Europe. In addition, trade deficits often become problematic during economic recessions or in deflationary periods when the risks of sudden capital flight - and the associated economic disruptions - are very real.⁸ The most problematic cases tend to be those where the current account deficit is financed by debt denominated in foreign currency.⁹

⁸ Such capital flight can be highly disruptive because private consumption, investment, and government expenditure must be curtailed abruptly when foreign financing is no longer available. To make matters worse, countries are often forced to generate large surpluses to repay in short order what it borrowed in the past.

⁹ In such cases any currency depreciation could very well accelerate the crisis as the value of foreign debt (and the burden to servicing it) would increase in terms of domestic purchasing power. This is also the reason why the US deficit is more



Although trade imbalances may not have important implications for individual countries, they can create systemic risk in the global economy due to sudden capital flows and contagion. One concern is that large and persistent trade imbalances are a "crisis waiting to happen" because they raise the risk of future disruptive corrections and will therefore eventually result in a reverse in capital flows. In case of a global downturn, deficit countries generally suffer from higher interest rates and disorderly currency depreciations, while surplus countries often struggle to absorb the reversal of capital flows in a productive manner.

An increasingly important concern is that large trade imbalances are perceived in the public debate as unfair. Persistent trade imbalances may generate mercantilist sentiments, and increase the support for protectionist policies. Therefore, it is important for countries generating persistent and large surpluses to consider how these surpluses are perceived abroad.

Trade policy and rebalancing

Ultimately, trade imbalances should be understood as a symptom of underlying macroeconomic factors, and not as a phenomenon that can be resolved by trade policies. While trade policies affect a country's trade and financial flows with its trading partners, they do not affect the underlying macroeconomic determinants of trade imbalances. Trade policy may be useful to soften the problem in the short term, and indeed international agreements allow for the use of trade policy to address disequilibria in the trade balance (i.e. safeguards). However, even the most severe trade restrictions would generally have limited long term effects on the trade balance, because such policies would ultimately cause exports to decline by almost as much as imports. In this regard, imposing tariffs (or any other trade protectionist measure) to resolve trade imbalances cannot be expected to yield long-lasting results.

Even trade policy measures aimed to facilitate exports, such as export subsidies or increased pressure on other countries to eliminate trade barriers, may not have significant long term effects on trade balances. Any subsequent increase in exports would most likely result in currency appreciation and a consequent increase in imports. In practice, any trade policy measures implemented with the objective of reducing trade imbalances is likely to simply decrease economic welfare without significantly affecting trade imbalances.

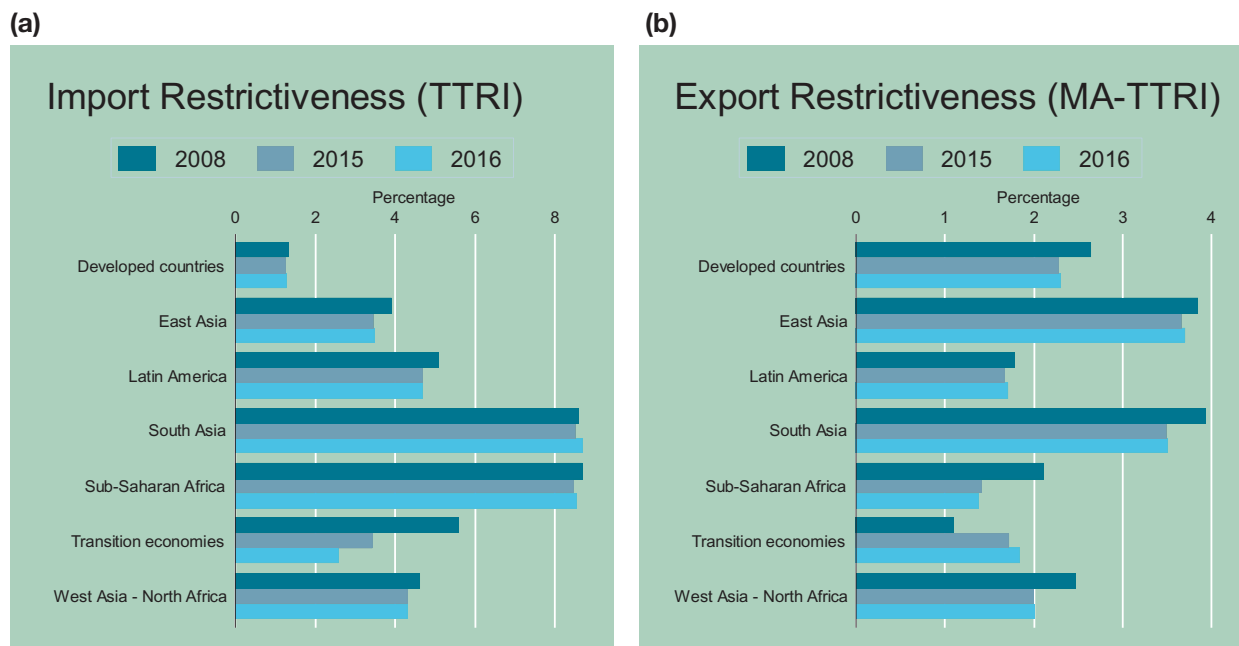
So, what could be done to reduce trade imbalances? Besides domestic policies aimed at reducing the disequilibrium between savings and investments, one important contribution would be to improve global governance to better coordinate macroeconomic policies, especially in relation to exchange rate, fiscal policy, interest rates and capital flows. In addition, the multilateral system should strengthen safety nets that countries can rely on in case they face disruptive capital outflows. Upgrading financial safety nets will be most important for lower income countries where the accumulation of foreign reserves is an unfeasible and costly option.

sustainable. A decline in the dollar has would not affect the value of its debt in terms of domestic purchasing power. Infact, a decline in the dollar would not accelerate the crisis but would be part of the self-correcting mechanism.

1. TARIFFS

Tariffs have remained substantially stable since 2008. Developed countries import restrictiveness is about 1.5 per cent. Although generally declining, 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. For transition economies the import restrictiveness declined, while export restrictiveness increased.

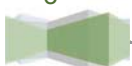
Figure 1
Average import and export restrictiveness, by region



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

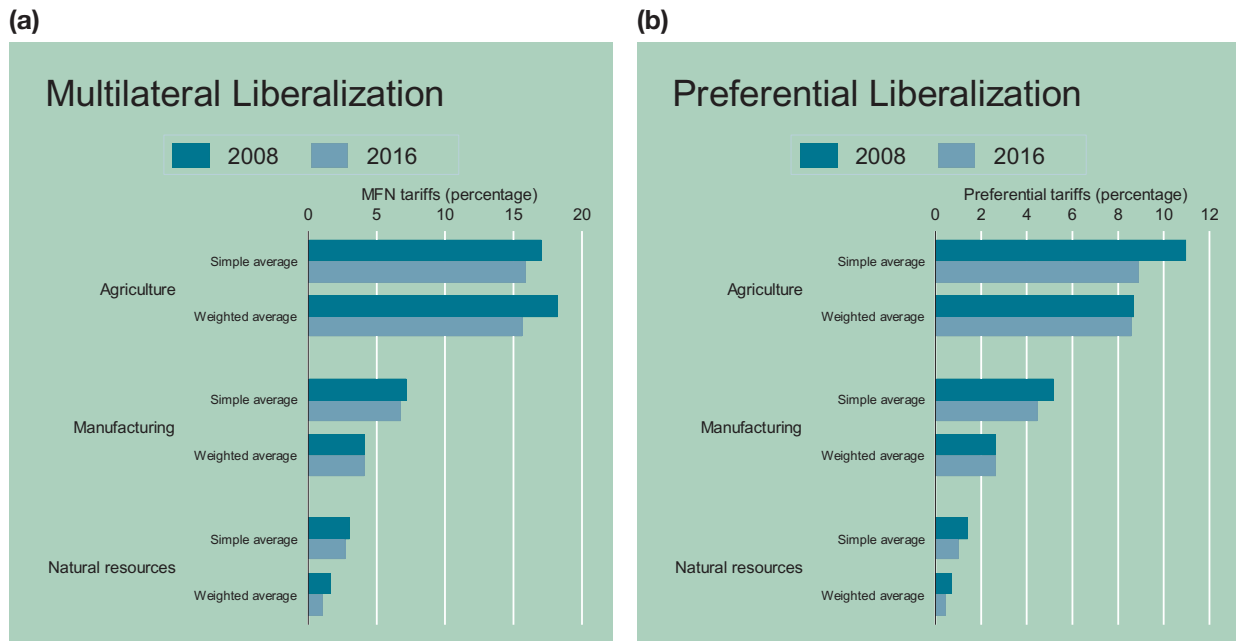
Figure 1a portrays the tariff trade restrictiveness index (TTRI), which measures the average level of tariff restrictions imposed on imports. The index is weighed so as to control for different import values and import demand elasticities. The market access counterpart (MA-TTRI) summarizes the tariff 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 2016, 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 2016. 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

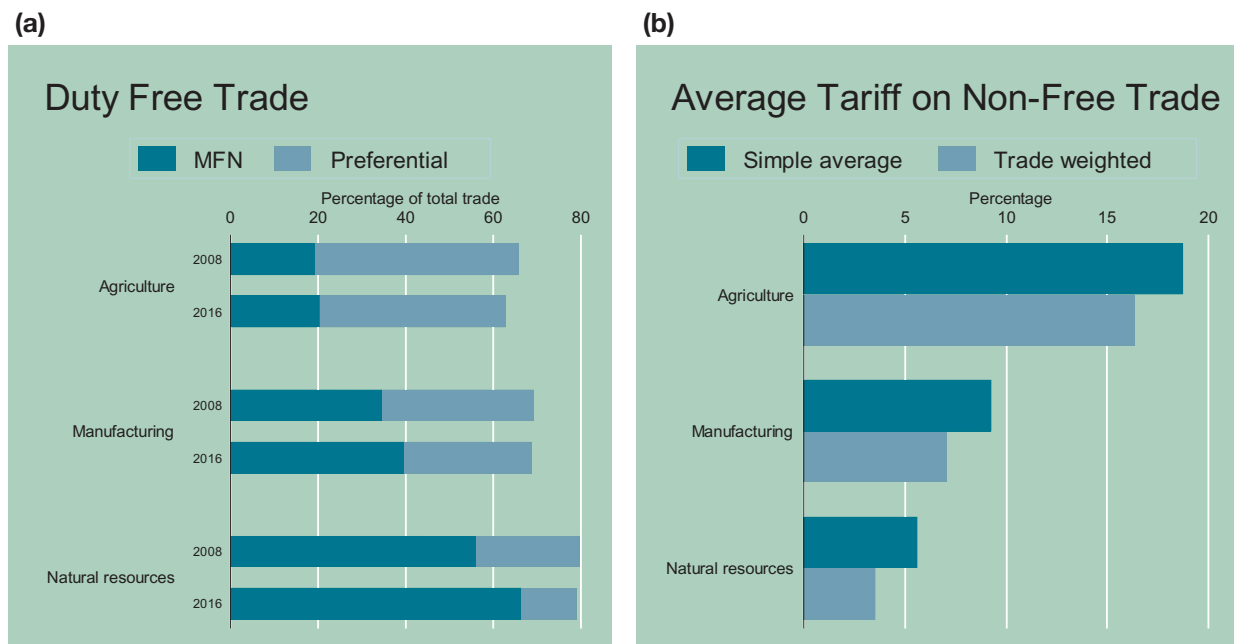


Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

Figure 2a and 2b illustrate average MFN and preferential tariffs for 2008 and 2016 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 2.5 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.

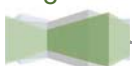
Although to a lower extent than in 2008, international trade continues to be largely free from tariffs both as a result of zero MFN duties and because of duty-free preferential access. However, tariffs applied to the remainder of international trade can be high. Preferential access continues to play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

Figure 3
Free trade and remaining tariffs, by broad category



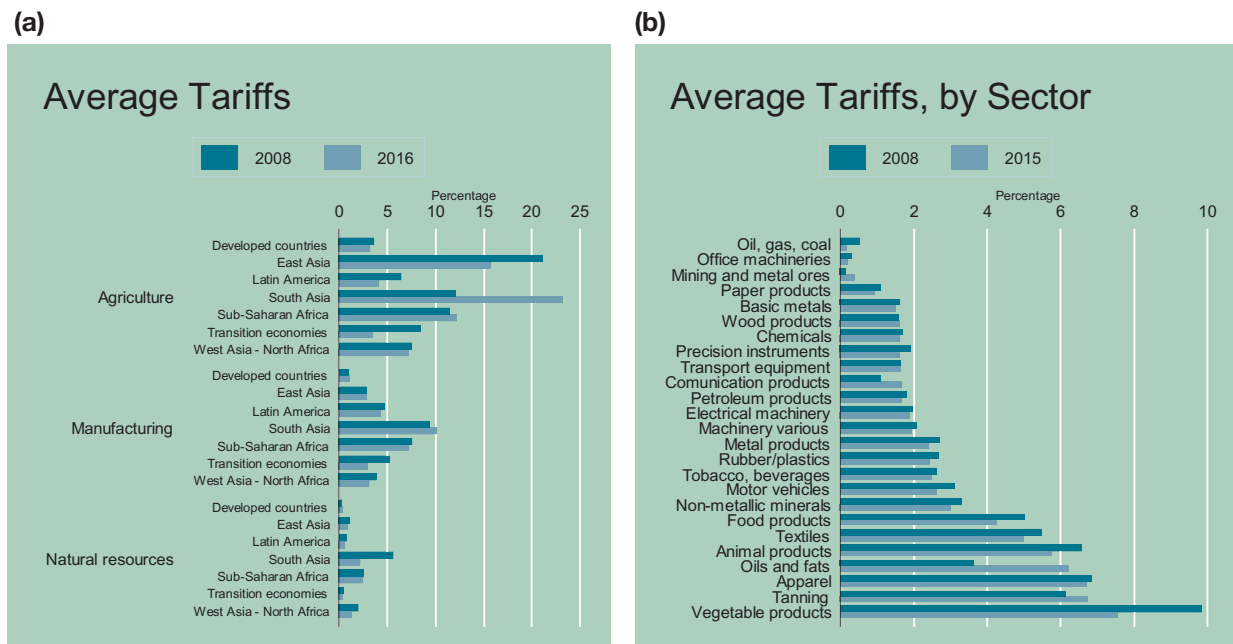
Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

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 per cent. 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



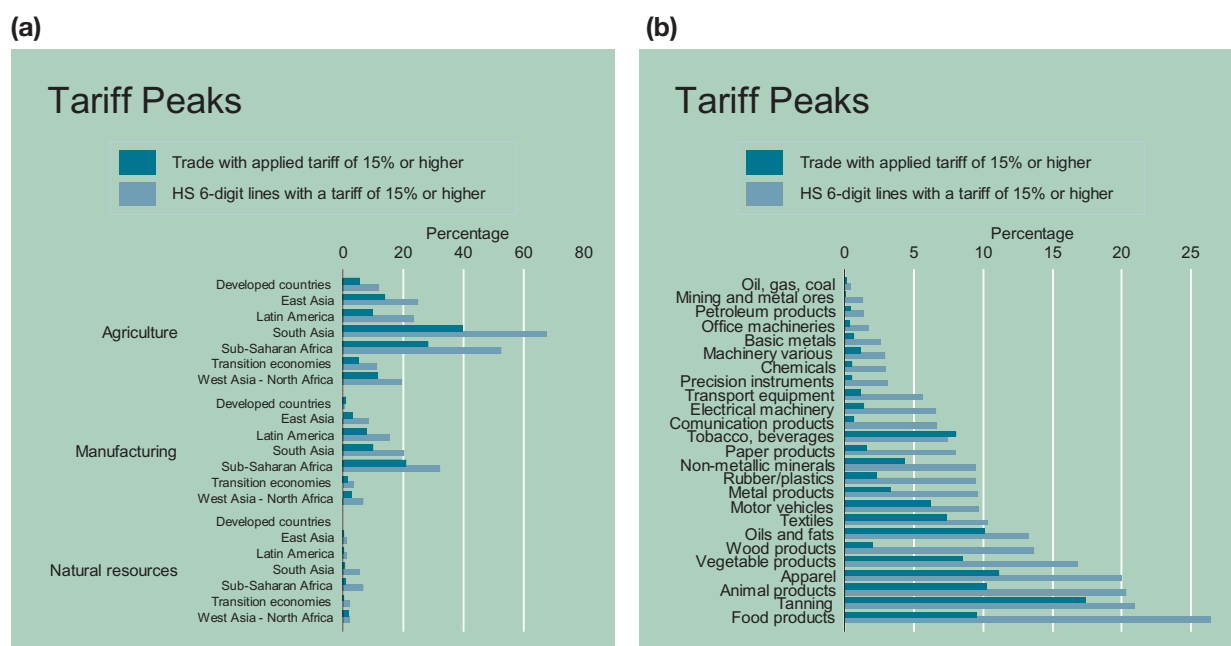
Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

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).



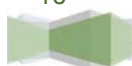
Amid generally low tariffs, there are a significant number of products where tariffs are relatively high. Tariff peaks are part of the tariff structures of many developing and developed countries. Tariff peaks tend to be concentrated in products of interest to low income countries, such as agriculture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

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



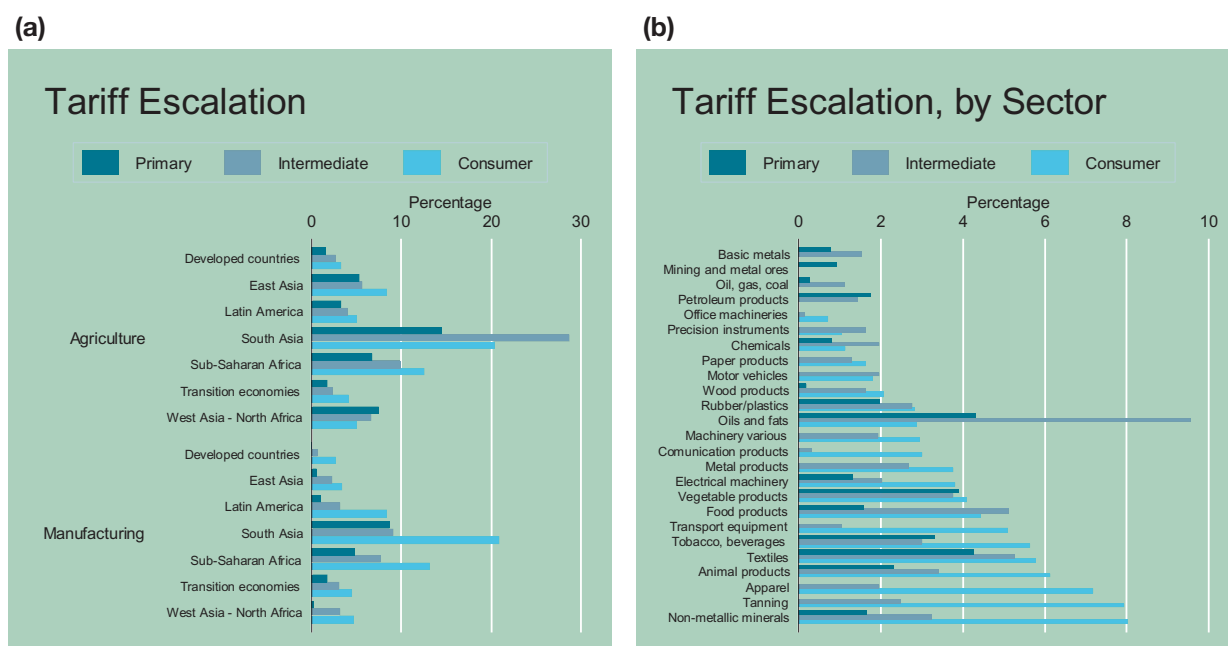
Source: UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

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).

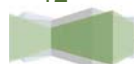
The pattern of trade restrictiveness varies greatly among regional trade flows. Intraregional trade is generally subject to lower TTRI than interregional trade. A large number of South–South regional trade flows are still burdened by relatively high tariffs. The tariff liberalization process of the past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

Table 1
Tariff restrictiveness, matrix by region (percentage)

Importing region	Exporting Region						
	Developed countries	East Asia	Latin America	South Asia	Sub-Saharan Africa	Transition economies	West Asia and North Africa
Developed countries	1.6	2.6	1.2	2.7	0.4	1.7	0.6
	-0.5	0.2	0.3	-0.3	-0.1	0.8	0.0
East Asia	5.1	2.7	5.4	3.2	1.7	3.8	1.8
	-0.7	-0.6	-0.2	-0.9	-0.2	1.3	-0.2
Latin America	3.8	8.4	1.2	11.5	2.4	2.1	3.1
	-0.2	-0.7	-0.5	-0.9	-0.2	0.4	-0.4
South Asia	11.0	11.1	17.8	6.9	5.8	8.3	9.2
	0.8	0.4	-1.9	-1.0	-1.1	1.0	-1.7
Sub-Saharan Africa	7.5	11.6	8.9	8.3	3.1	8.7	5.5
	-0.6	-0.1	0.2	0.8	-0.8	2.2	0.1
Transition economies	3.8	2.1	2.0	5.7	0.7	0.4	5.3
	-2.4	-5.5	-8.3	-4.4	-2.1	0.3	-2.0
West Asia and North Africa	3.2	5.6	6.4	4.0	2.6	6.7	1.9
	-0.9	-0.4	-0.8	0.4	0.0	2.8	-0.1

Note: Changes between 2008 and 2016 are shown in a smaller font.

Table 1 represents a matrix of the average levels of tariffs imposed on trade flows between regions in 2016. 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 and South Asia countries, 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, exports from Latin American countries to the South Asian region face a tariff of almost 18 percent. 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 4.4 percentage points.

Table 2
Relative preferential margins, matrix by region (percentage)

Importing region	Exporting region						
	Developed countries	East Asia	Latin America	South Asia	Sub-Saharan Africa	Transition economies	West Asia and North Africa
Developed countries	0.4	-1.2	1.1	-0.4	0.3	-0.6	0.2
	0.1	-0.4	0.7	0.5	0.2	-0.4	0.0
East Asia	-0.4	0.6	-1.0	-0.2	-0.3	-0.7	-0.4
	0.0	0.3	-1.0	-0.1	-0.3	-0.6	-0.3
Latin America	0.6	-1.7	4.2	-4.7	-1.0	-1.3	-0.8
	-0.4	0.9	-0.2	-1.9	-0.2	-0.8	0.2
South Asia	-0.3	0.3	0.1	2.3	-0.2	-0.1	-0.1
	-0.1	0.2	0.1	0.8	-0.1	0.0	0.0
Sub-Saharan Africa	0.3	-1.0	-1.2	-1.1	4.4	-0.5	-0.2
	0.7	0.7	-0.2	-0.3	1.8	-0.1	0.1
Transition economies	-0.9	1.1	1.5	-2.0	0.7	3.1	-1.0
	-0.4	2.1	1.9	-1.3	0.7	0.0	-0.2
West Asia and North Africa	0.4	-1.3	-0.8	-0.9	-0.4	-1.3	1.9
	0.3	-0.1	-0.1	-0.1	-0.3	-0.4	-0.3

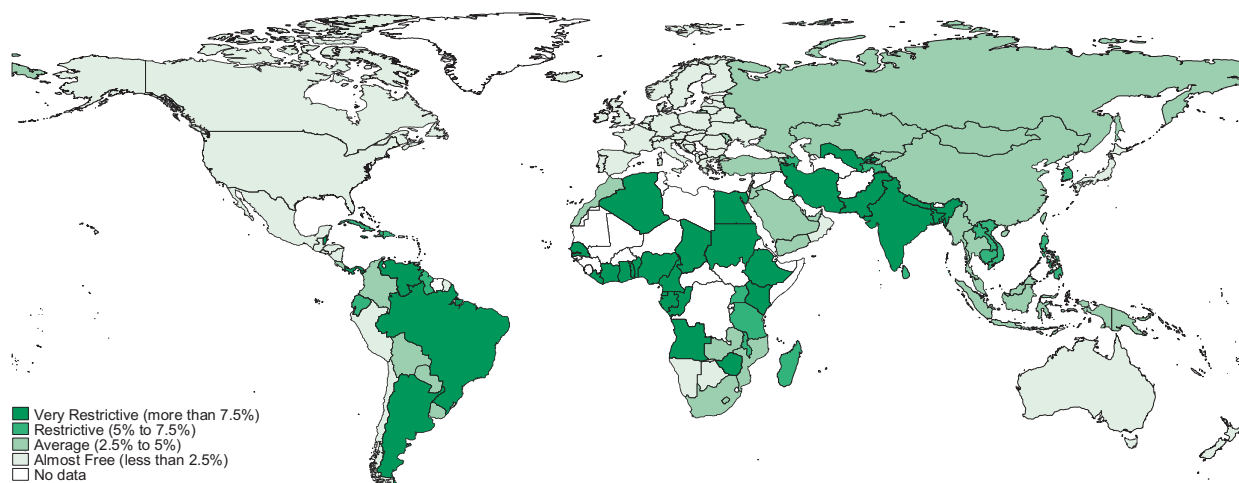
Note: Changes between 2008 and 2016 are shown in a smaller font.

Table 2 reports relative preferential margins (RPMs) calculated at the regional level for 2016 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 4.4 percentage point advantage on foreign competitors when trading within their region. On the other hand, the system of preferences provides only about 0.6 percentage points 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.

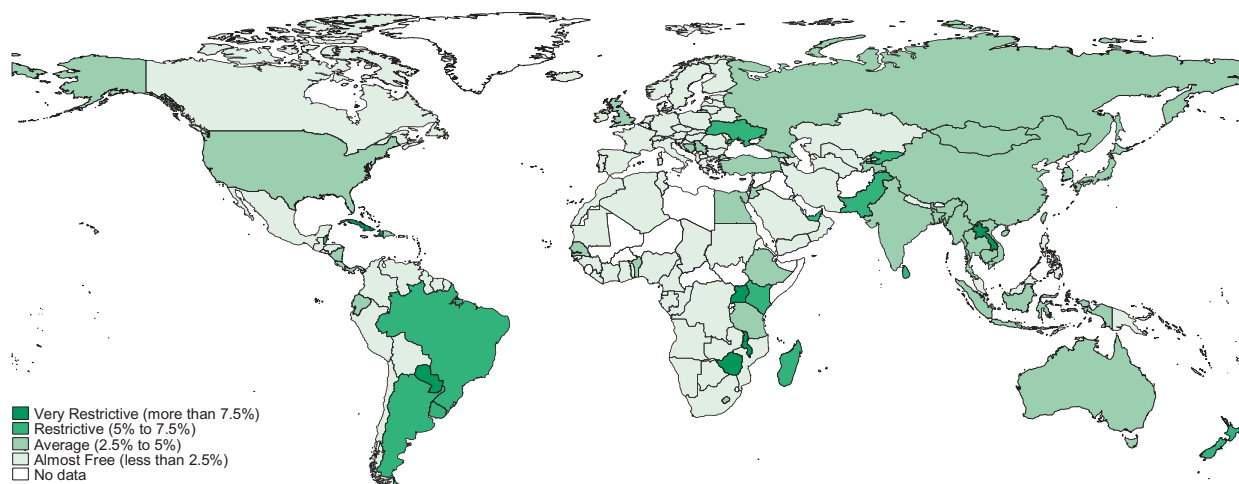
Import restrictiveness differs substantially across countries, and even within the same region. Preferential schemes allow LDCs to enjoy duty free access to many developed country markets. However, developing country exports, especially those in Eastern Asia, Latin America and East Africa, still face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

Figure 7
Import restrictiveness

(a) Import restrictiveness (2016)

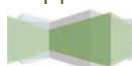


(b) Export restrictiveness (2016)



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

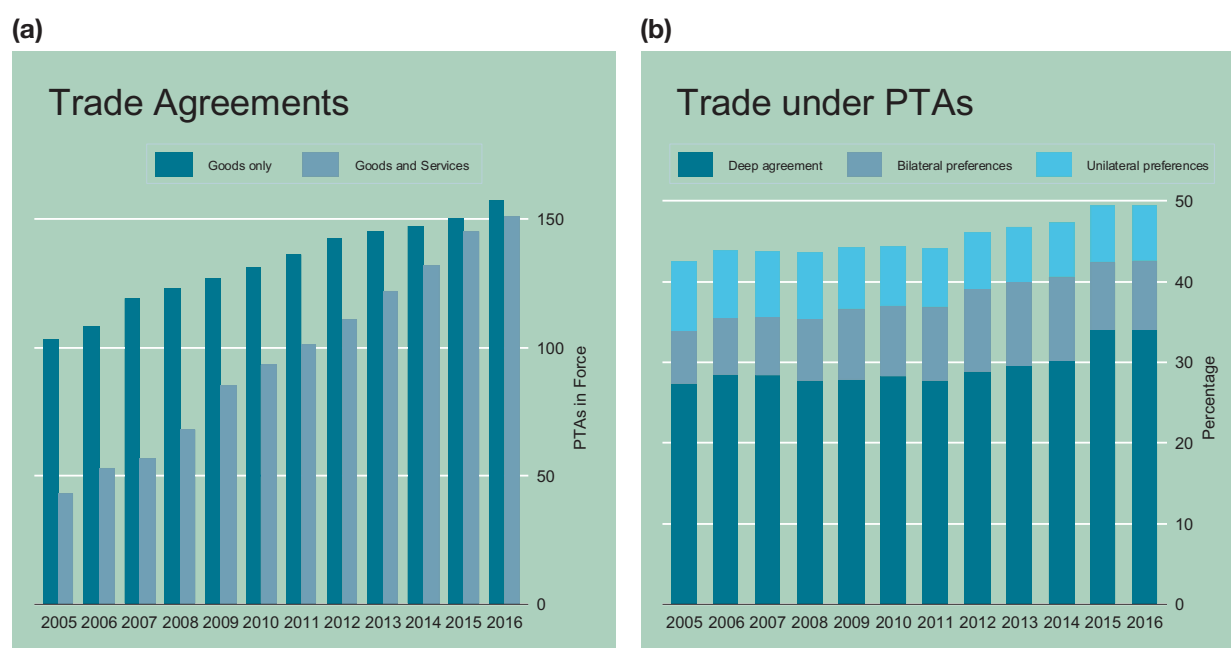
Figure 7a illustrates the average level of tariff restrictions imposed on imports (as measured by the TTRI). The level of tariffs differs substantially across countries, and even within the same region. Figure 7b reports the overall level of tariff restrictions faced by exporters (as measured by the 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 tariffs similar to those of many other developing countries.



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. The percentage of trade within PTAs has continued to increase. In 2016, about 50 per cent 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.

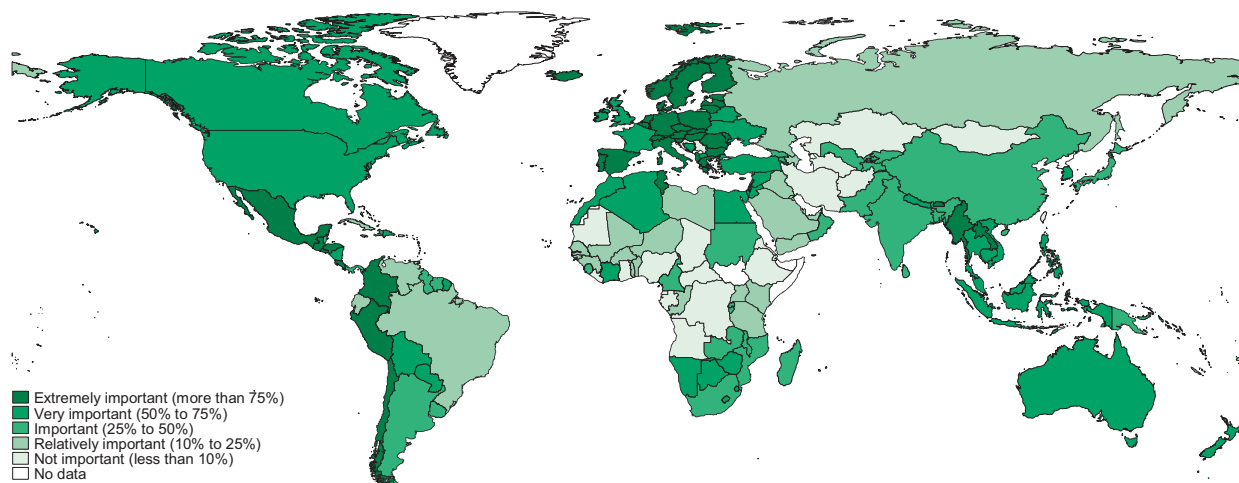
Source: UNCTAD secretariat calculations based on WTO RTAIS data and COMTRADE data.

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 more than 300 in 2016. 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 2016. 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.

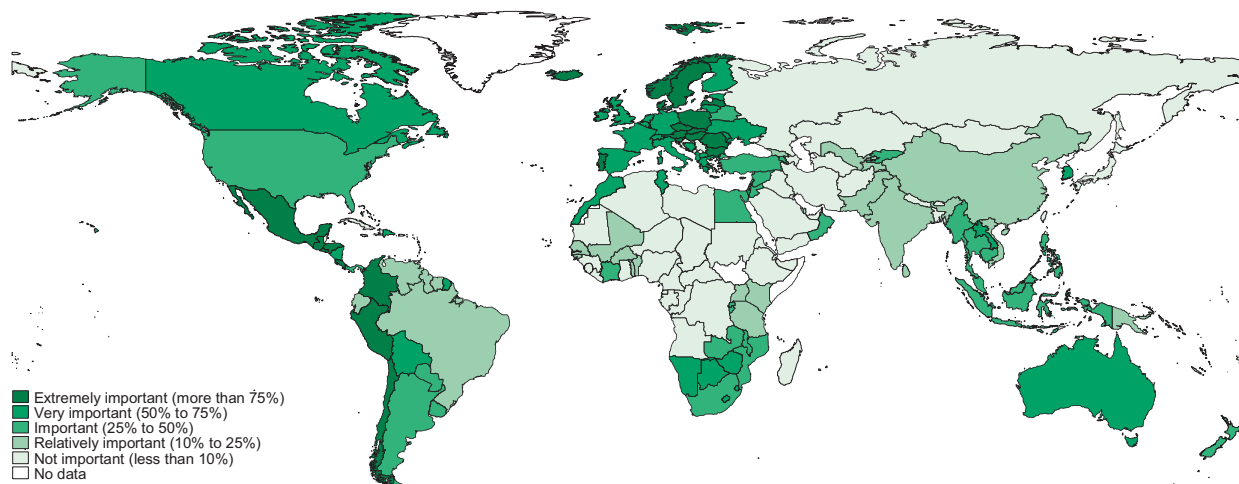
The importance of trade agreements is high for many developed countries, but not as much for the majority of developing countries; notable exceptions include a number of countries in South East Asia, Southern Africa and Latin America.

Figure 9
Importance of preferential trade agreements

(a) Importance of PTAs, as measured by percentage of trade (2016)



(b) Importance of deep PTAs, as measured by percentage of trade (2016)



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

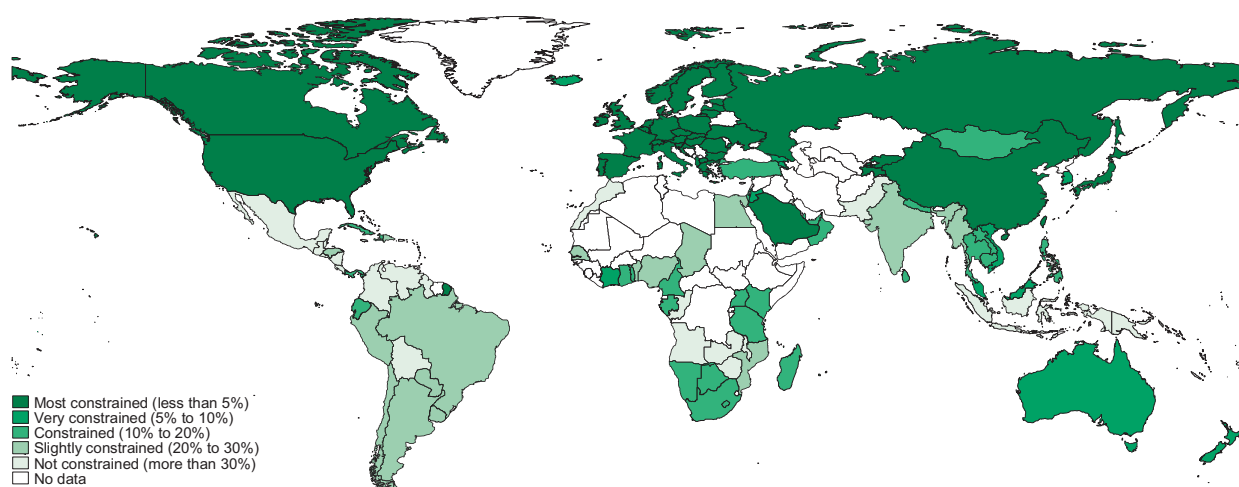
A large share of international trade of many developed countries occurs under some form of PTA, and in many cases under trade rules going beyond traditional reciprocal market access concessions. For countries of the European Union, more than 75 per cent of trade occurs under some form of PTA (Figure 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.



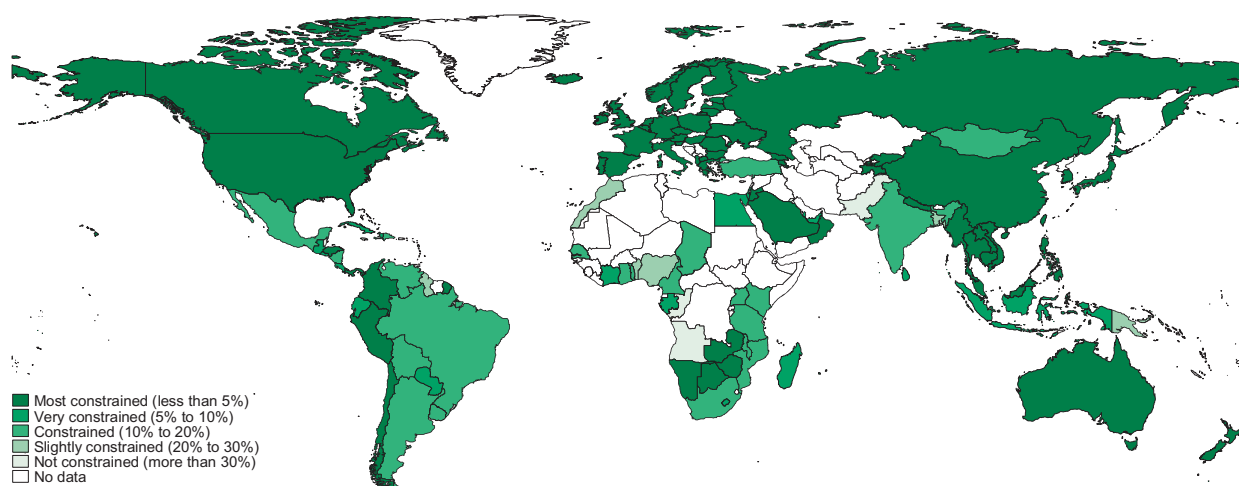
Trade agreements result in different degrees of policy space across countries. Developed countries and economies in transition tend to have very limited policy space, as most tariff lines are bound by WTO obligations with little tariff water. Policy space within WTO is greater for sub-Saharan African 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 (2016)



(b) True tariff water (2016)



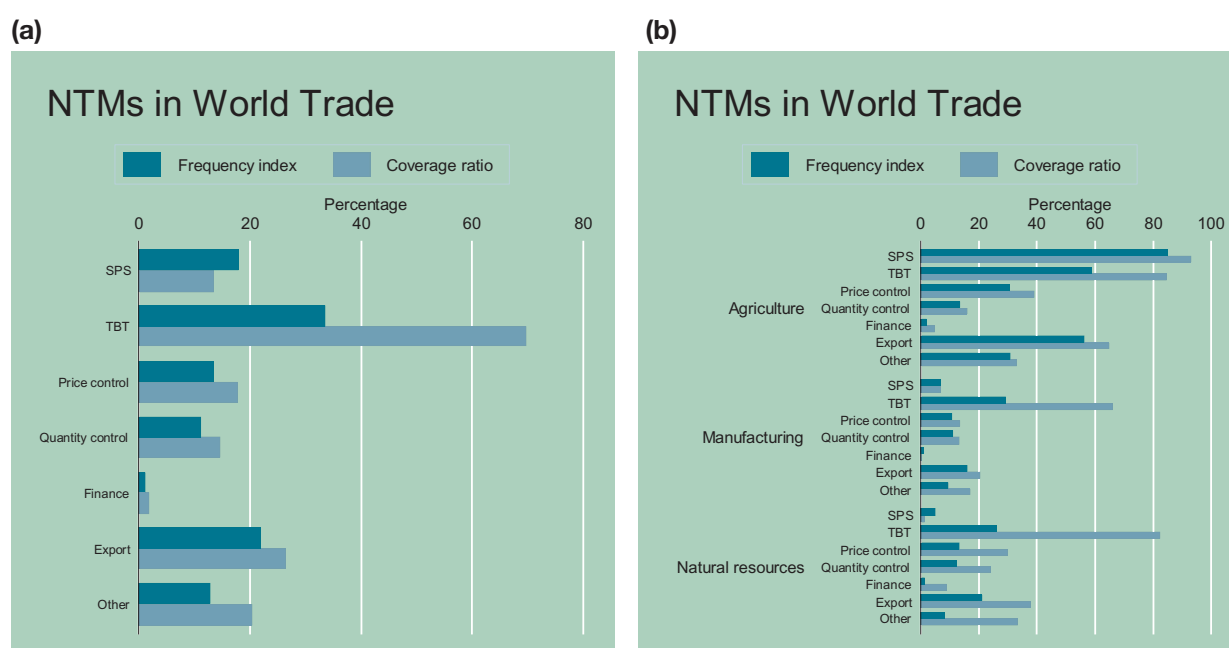
Source: UNCTAD secretariat calculations based on UNCTAD TRAINS.

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)



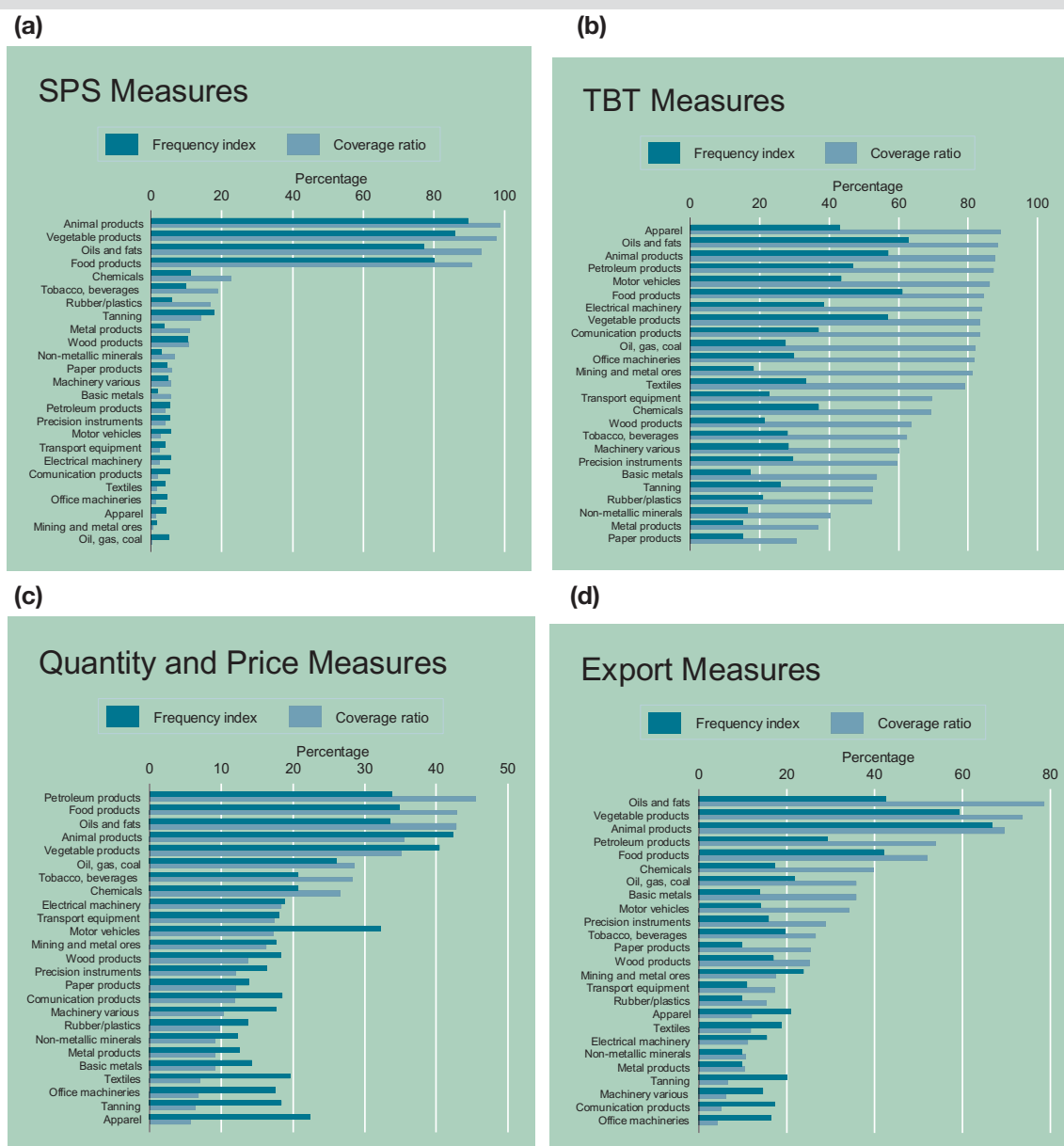
Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

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



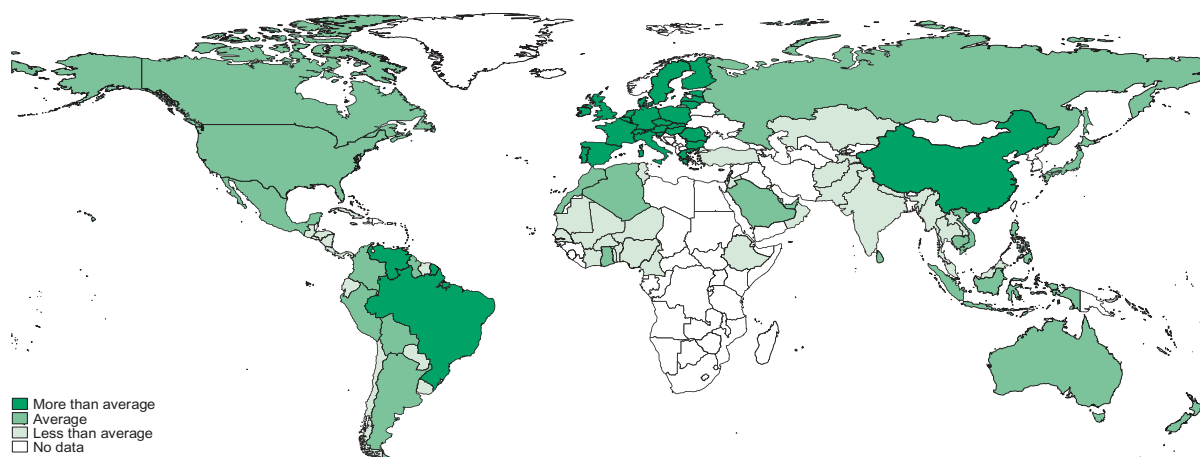
Source: UNCTAD secretariat calculations based on UNCTAD TRAINS I-TIP data.

SPS measures are typically applied to agricultural products, and to other products that may have inherent health hazards due to contaminants (Figure 12a). TBT are widely used to regulate international trade in most sectors and concern the vast majority of world trade flows (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).

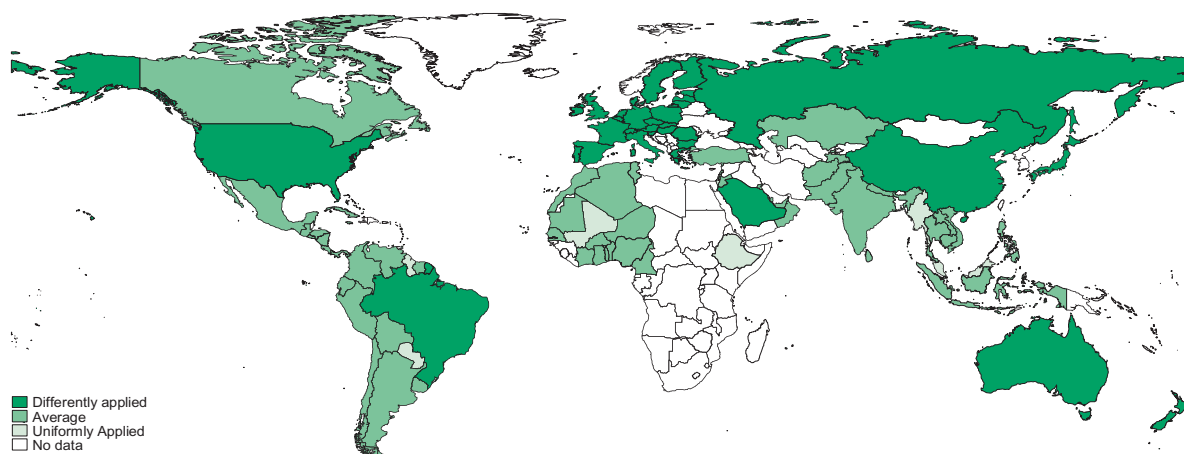
The regulatory framework related to technical non-tariff measures (SPS and TBT) differs across countries. The use of technical measures tends to be more pervasive in the European Union, China, Brazil and Australia and less so in many low-income countries. Developed countries' use of technical non-tariff 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 (2016)

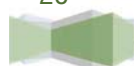


(b) Technical non-tariff measures, intensity across products (2016)



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

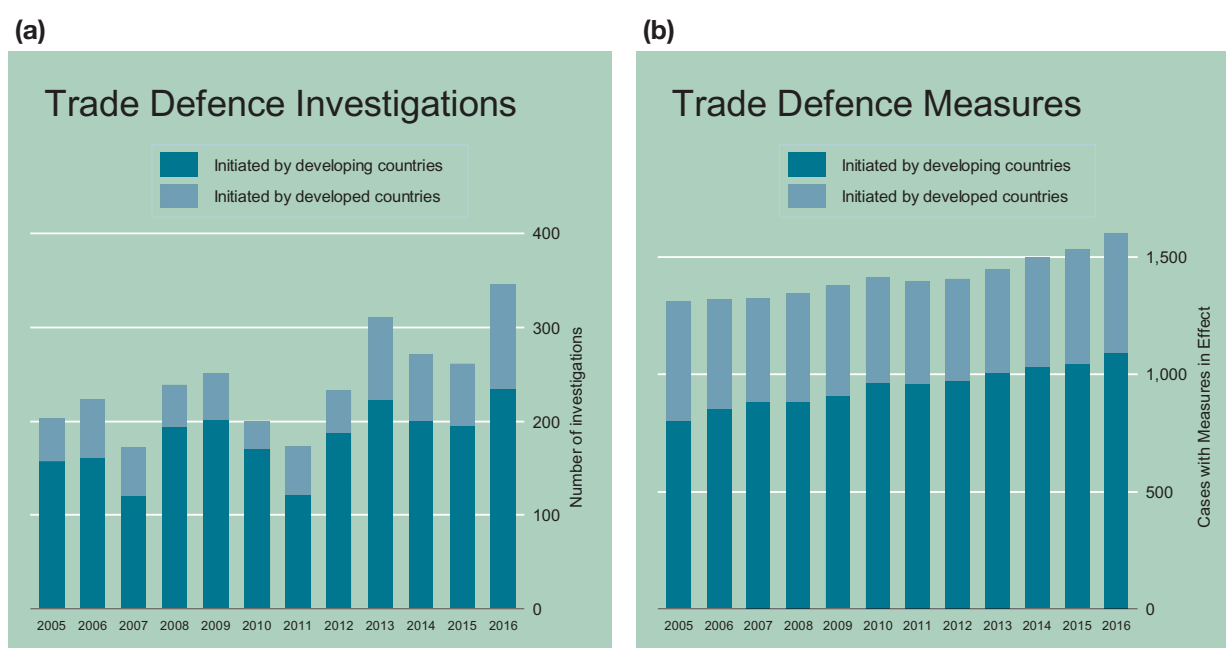
The use of technical NTMs differs across countries. To capture the diverse use of non-technical measures across countries Figure 13a illustrates an intensity. This index is computed by calculating the difference between the number of non-technical measures applied by a given country in each product and 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 remained strong in 2016 with more than 300 new investigations started at the WTO. Cumulatively, there were more than 1,500 instances involving trade defence measures in effect in 2016. During the last decade, developing countries have become increasingly more active users of trade defence measures.

Figure 14
Trade defence measures



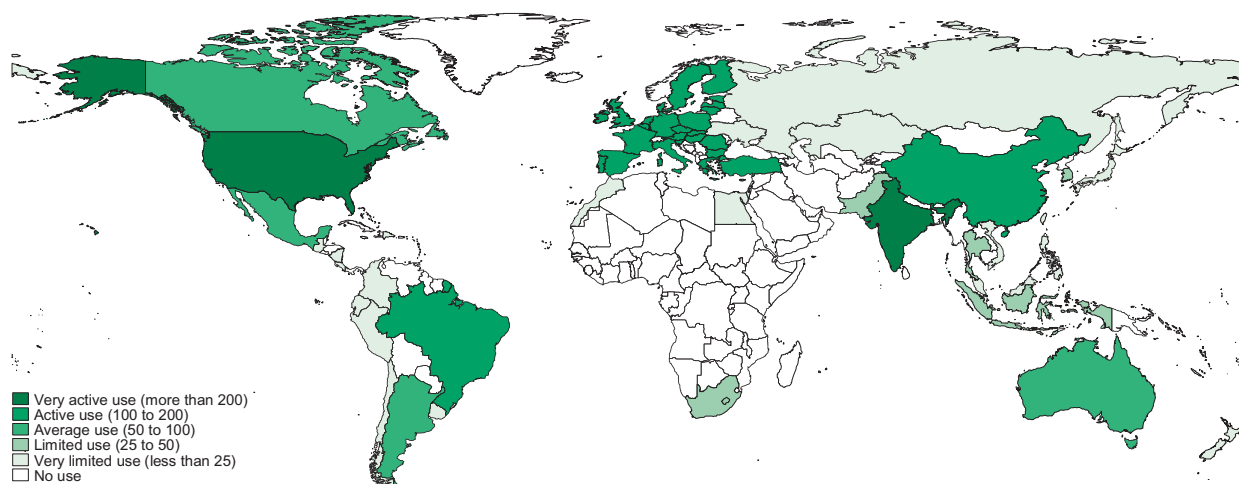
Source: UNCTAD secretariat calculations based on WTO I-TIP data.

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 after 2013, with more than 300 new cases per year, but for 2014. 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 2016, 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.

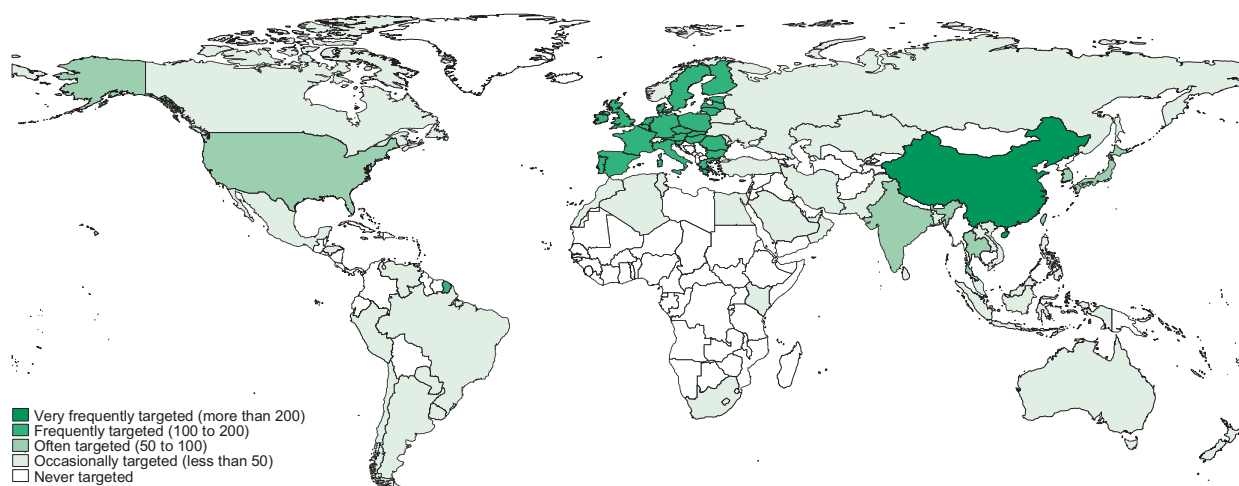
The use and impact of trade defence measures vary greatly across countries. Trade defence measures are imposed mainly by developed and emerging economies, and are largely targeted against products originating from China, the European Union and the United States.

Figure 15
Trade defence measures in effect, by country

(a) Trade defence measures in effect, by imposing country (2016)

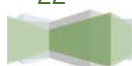


(b) Trade defence measures in effect, by targeted country (2016)



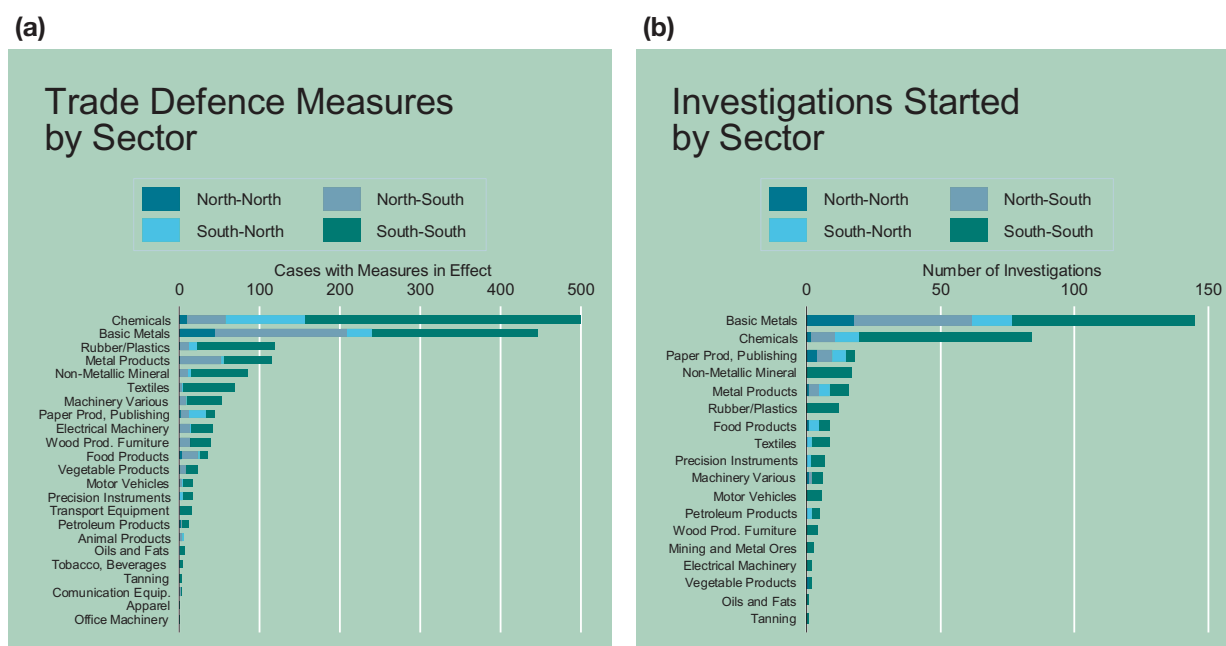
Source: UNCTAD secretariat calculations based on WTO I-TIP data.

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 country with more than 400 measures in effect as of 2016 (Figure 15b). A large number of trade defence measures are also imposed against the European Union, the United States and India.



In 2016, 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 2016 were mainly in basic metals.

Figure 16
Trade defence measures and investigations, by sector



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

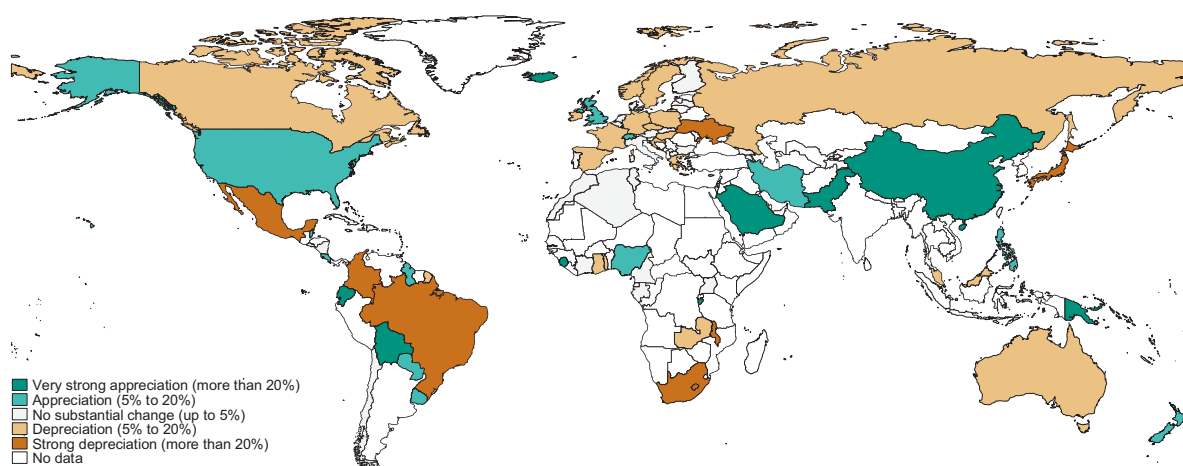
Trade defence measures are largely targeted at firms operating in two sectors: chemicals and basic metals (Figure 16a). Other sectors including metal products, rubber and plastics, textiles and to non-metallic minerals are also targeted by such measures, but to a much lower extent. Most trade defence 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 2016, 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

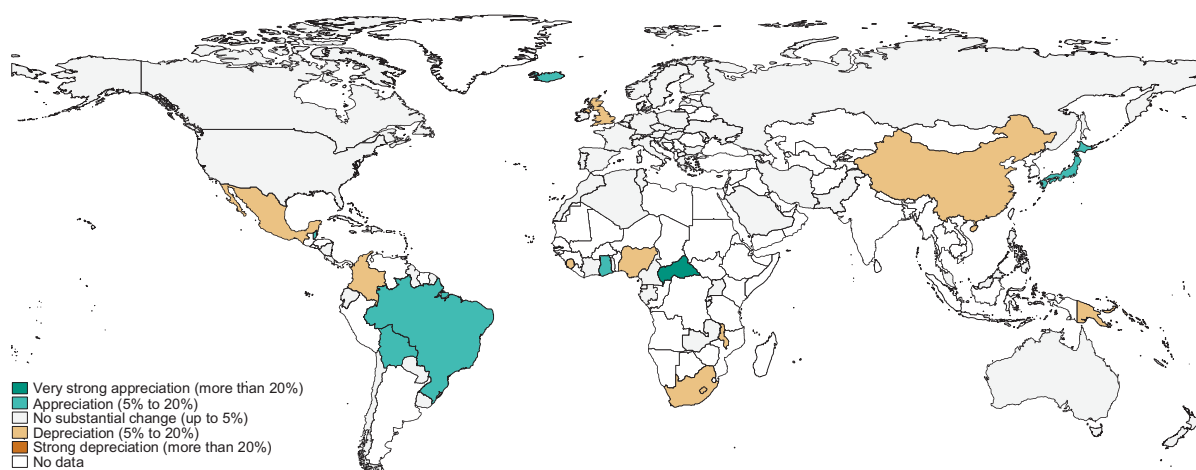
As measured by the real effective exchange rate, changes in external competitiveness have been diverse across countries. The United States' competitiveness has declined, while that of the European Union and Japan has increased. In regard to developing countries, Brazil and South Africa have seen their competitiveness increase, while China's competitiveness has decreased. In 2016, the external competitiveness of China increased, Brazil declined.

Figure 17
International competitiveness, real effective exchange rate

(a) REER changes between 2010 and 2016



(b) REER changes between 2015 and 2016



Source: UNCTAD secretariat calculations based on IMF financial statistics.

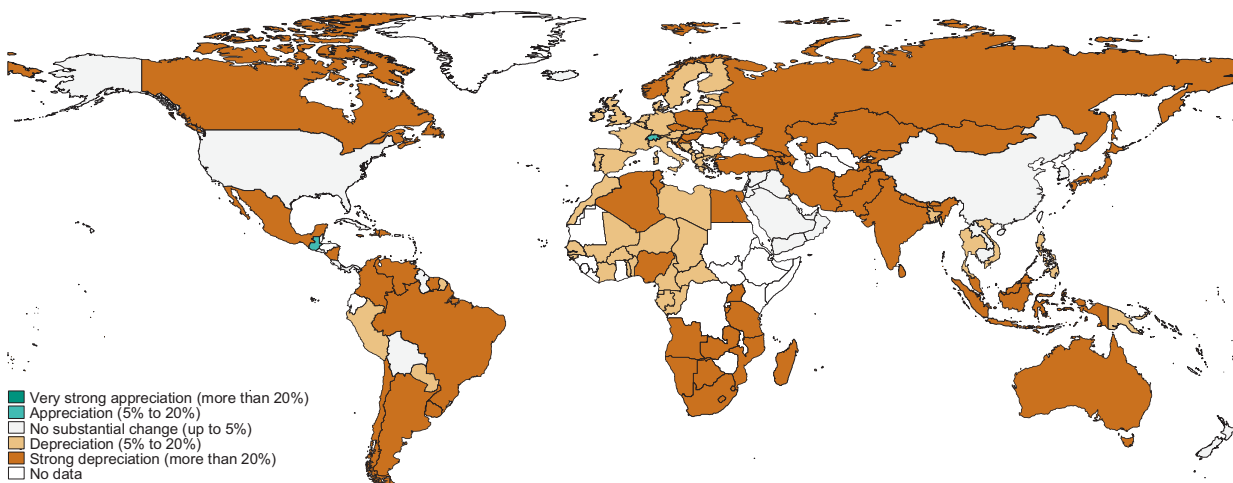
The real effective exchange rate (REER) is a measure of the trade-weighted average exchange rate of a currency against a basket of currencies after adjusting for inflation differentials (consumer price index). It measures external competitiveness. In general, an appreciation in the REER results in a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



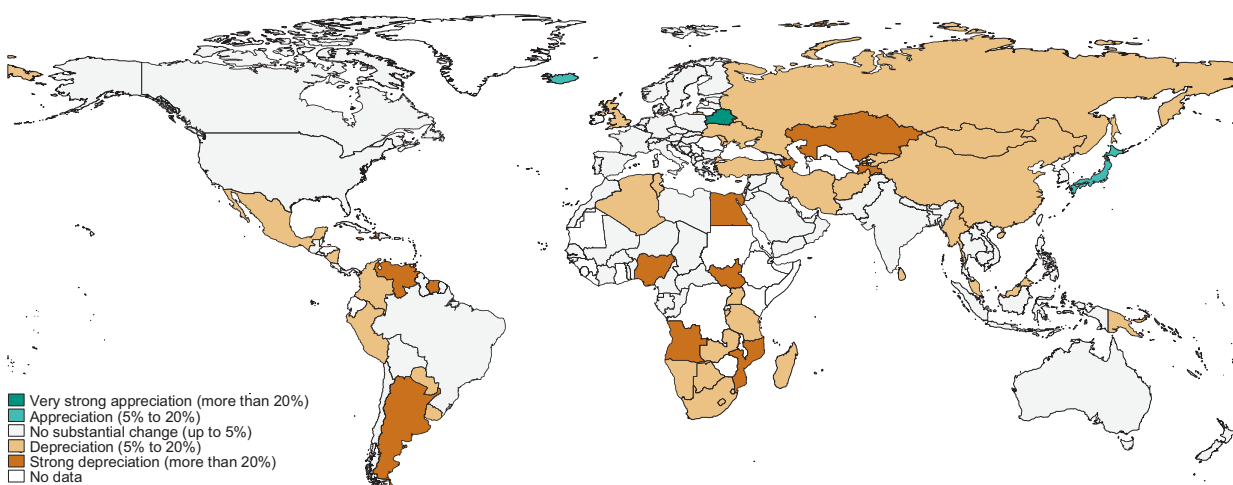
Movements in the nominal exchange rates versus the dollar can play a substantial role in determining the competitiveness of countries. Since 2010, with the notable exception of China, most currencies depreciated against the dollar, sometimes substantially. The dollar remained strong during 2016, with most currencies further depreciating.

Figure 18
Change in the nominal exchange rate vs US dollar

(a) Exchange rates changes vs US dollar (2010-2016)



(b) Exchange rates changes vs US dollar (2015-2016)



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 yearly average percentage change in nominal exchange rates of world currencies against the dollar between 2010 and 2016, and between 2015 and 2016, respectively (annual average).

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