

THE GLOBAL TRADE SLOWDOWN: STRUCTURAL OR CYCLICAL?

Philippe ITHURBIDE, Global Head of Research, Strategy and Analysis



Abstract



This paper focuses on the sluggish growth of world trade in absolute terms and relative to GDP growth. Data suggest that world trade is no longer a growth engine and many factors (the rise of protectionism and the massive introduction of non-tariff measures, China's new role, low level of investment, the falloff in FDIs, the structure of world trade, the decline in potential growth, the lack of potential to significantly reduce tariffs, etc.) suggest that the “new normal” for the next 15 years may look like the five years that have just passed (with world trade growth lower than the growth of the world economy), and not the last 30 years which preceded this period.”

Keywords: growth, world trade, China

“ This is a fraught time for global trade. In many countries, trade is under siege, raising the spectre of protectionism. Alongside the anti-trade rhetoric, there is the notion that we have reached ‘peak trade’ or that globalisation has ground to a halt.”

Roberto Azevedo, Director-General, World Trade Organization

World Trade Symposium, organised by the Financial Times and Misys, on the topic ‘Trade and Globalisation in the 21st Century: the Path to Greater Inclusion’, London, June 7, 2016



“ Even if inequality on a global, cross-country scale has been declining, it is no wonder that perceptions abound that the cards are stacked against the common man – and woman – in favor of elites. These frustrations are leading people to question established institutions and international norms. To some, the answer is to look inward, to somehow unwind these linkages, to close borders and retreat into protectionism. As history has told us – time and again – this would be a tragic course. The answer to the reality of our interconnected world is not fragmentation. It is cooperation.”

Christine Lagarde, Managing Director, International Monetary Fund

“Decisive Action to Secure Durable Growth” - Lecture by Christine Lagarde, IMF Managing Director, at an event hosted by Bundesbank and Goethe University, Frankfurt, Germany, April 5, 2016

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THE GLOBAL TRADE SLOWDOWN: STRUCTURAL OR CYCLICAL?

Introduction

Between the 1950s and 2000s, trade liberalisation was accompanied by a long period of economic growth. Free trade was a much sought-after goal and we saw the proliferation of trade agreements. These agreements took a long time to negotiate (between 7 and 10 years) and the stakes were high, as were the advantages that were supposed to revert to the two negotiating parties, with growth (and hence employment) and lower prices being the most frequently cited.

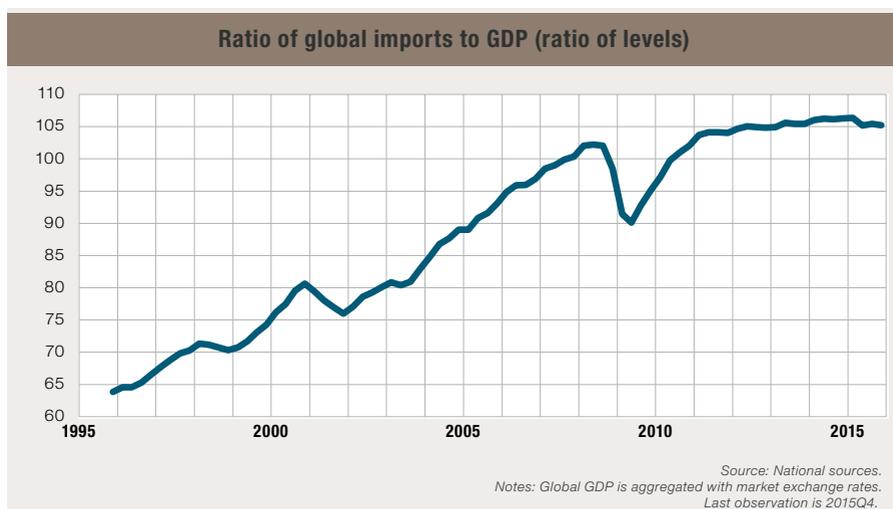


The WTO continues to work along these lines and the negotiation of mega-regional trade agreements, such as the Transatlantic Trade and Investment Partnership (TTIP)⁽¹⁾ and the TransPacific Partnership (TPP) are among the most important current developments of the world trade system. Over and above the elimination of tariffs, these agreements aim at improving regulatory compatibility and providing a clear framework for cross-border transactions. Although there is a lot of uncertainty about the impact of these agreements, the models suggest that the TTIP could increase EU trade flows into the US by between 16% and 28%, with this percentage depending mainly on the degree to which non-tariff measures (NTMs) are relaxed. Gains in terms of per capita GDP are estimated at between 0.5% and 4% for the EU (Felbermayr 2016). However, President Trump has rejected the TPP (something Hillary Clinton also wished to do), which sends out a strong signal of the current increase in protectionism and a rejection of globalisation. Why this step backwards? How strong is world trade today? What are the determinants of world trade? Are these determinants structural or cyclical?

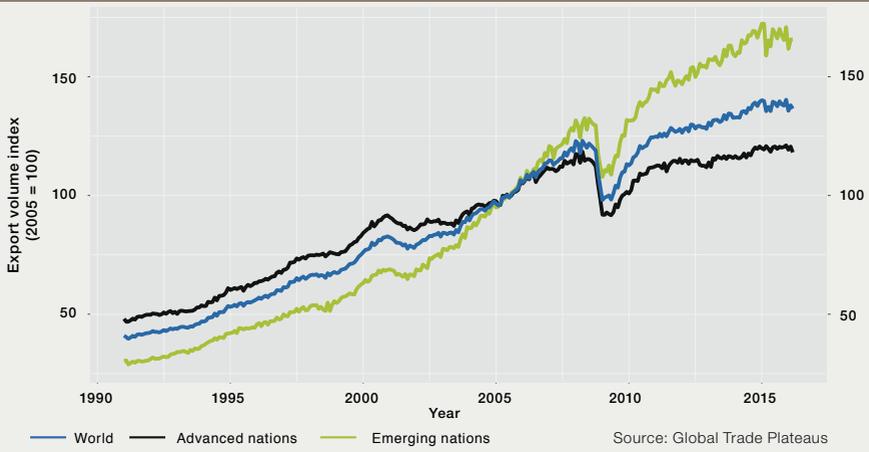


I. World trade: where do we stand?

These are important questions to ask because world trade, which is so important for the development of the world economy (for growth, for political and diplomatic relations, for international legislation, etc.) is no longer a key growth factor. It has been growing at a slower pace than GDP since 2011, a clear break from developments over the past thirty years. While world trade grew twice as fast as world GDP between 1980 and the 2008 financial crisis, this growth is now much slower (1.8% vs 3% for world GDP). In 2006, it even remained stable when world growth exceeded the 3% mark.

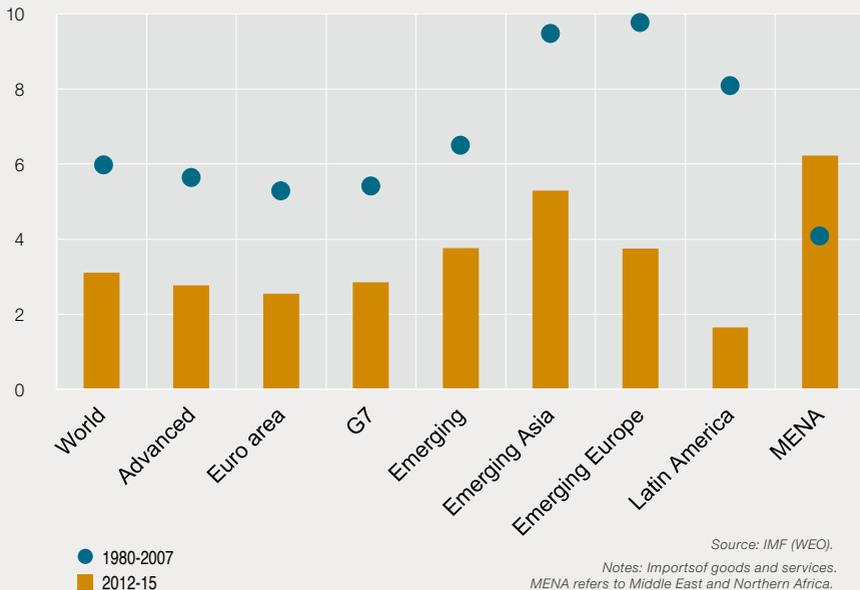


World trade plateaued around the start of 2015



The graph below clearly shows the substantial dip in trade, both for advanced as well as emerging countries, including in Asia. Apart from the MENA (Middle-East and North Africa) countries, import growth has halved.

Average import growth across countries (annual growth rates)



II. Declining world trade: the determinants

Several factors can be highlighted.

1. The decline in potential growth. Potential growth across the world has declined, whether in Europe, Japan, the United States, China and most of the emerging countries. The “major” structural factors behind this falloff include:

- **Decline in the working-age population and/or falling activity rates.** We see this in most of the advanced countries and in China, a country whose population would be better described as ageing rather than rich;
- **Slow-down in the rate of technical progress,** which is reducing productivity gains. This is an issue (along with demographics) that is frequently cited by proponents of secular stagnation;
- **Massive increase in inequalities** which severely impacts on potential economic growth, a topic discussed by Robert Gordon, amongst others;
- **Drop or stagnation of real disposable income:** here we see the results of wage and taxation policies;

The impact of the debt burden. In many countries (United States, Spain, etc.), excess credit “artificially” boosted growth until the financial crisis. The generalised deleveraging that followed (which has yet to be completed) is now dragging growth downwards. Worse still, economic policy, constricted by debt, will have to improve overall solvency, including government solvency and can no longer remain out of synch with economic cycles. In other words, debt is keeping natural interest rates very low. Moreover, given that deleveraging is far from complete, this drain on growth remains dominant. This is also one of the themes developed by proponents of the great stagnation hypothesis.



Secular Stagnation or Secular Deflation?

Secular stagnation has become a popular topic in the past years. Some observers go even further, considering that we are entering a phase of secular deflation, which means a sustainable contraction of both economic activity and inflation:

- Global demography (with widespread aging of the population) is deflationary;
- Technical advances (new technologies, computers, robotics ...) are deflationary because they allow to produce much more and much better with fewer and fewer employees. The theme of “jobless growth” is increasingly being discussed.
- Extremely strict tax or fiscal austerity policies, particularly with regard to competitiveness, are deflationary: their objective is almost unique in allowing the payment of interest on the debt.
- Extremely strict income policies are deflationary: their main concern is not to deteriorate competitiveness undermined by international competition.
- Globalization is deflationary if the main objective is to produce cheaper further.
- Tax and social competition organized within Europe is deflationary.
- Migration policies are deflationary. They weigh on wage increases.

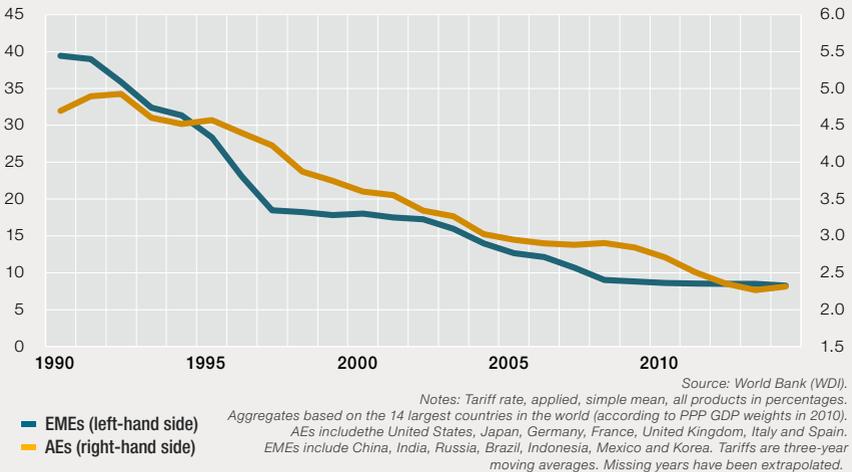
2.Weak investment, investment being one of the key factors for the development of trade. Many observers have been intrigued for some years now and especially since the financial crisis, by the weak investment and low productivity gains observed, notwithstanding the economic recovery. It is hard to point to exact causes, as there seem to be so many of them. Some believe that this is due to the severity of the financial crisis and lack of available credit for new companies. Others point to weak domestic demand, while still others suggest that broad demographic trends are to blame. All this is feeding fears of a “great stagnation” or “secular stagnation”. If an economy is unable to expand the quantity of factors of production, if it does not invest in education, and if it is unable to accumulate productive capital, it does not generate growth, barring technological progress. In the long term, technical progress is the main factor in growth. In other words, any decline in innovative capacities inevitably produces a decline in potential growth.

The secular stagnation phase is the persistent inability of the economy to simultaneously achieve full employment, stable inflation and to maintain financial stability (Summers). In other words, when the economy veers off the sustainable growth trajectory as a result of technological developments, demographic changes, an increase in inequality, or because of large-scale financial imbalances, it will be unable to bounce back spontaneously.

3.It would be hard for tariffs to get any lower, which explains the stagnation in progress made in reducing tariffs and liberalising trade policies. The GATT and WTO negotiations resulted in substantial reductions in tariffs after the Second World War. Since the early 1990s, average rates in emerging countries have fallen by three-quarters to below 10%. Tariffs between advanced economies have been halved and are now below 2.5%. However, since the 2008 financial crisis, tariffs have remained generally stable between emerging countries, with rather modest reductions among advanced countries. Tariffs have been considerably reduced over the course of the last two or three decades. As they are now so low, trade agreements have less of an impact and serve more to create a framework for trade than to increase volumes.

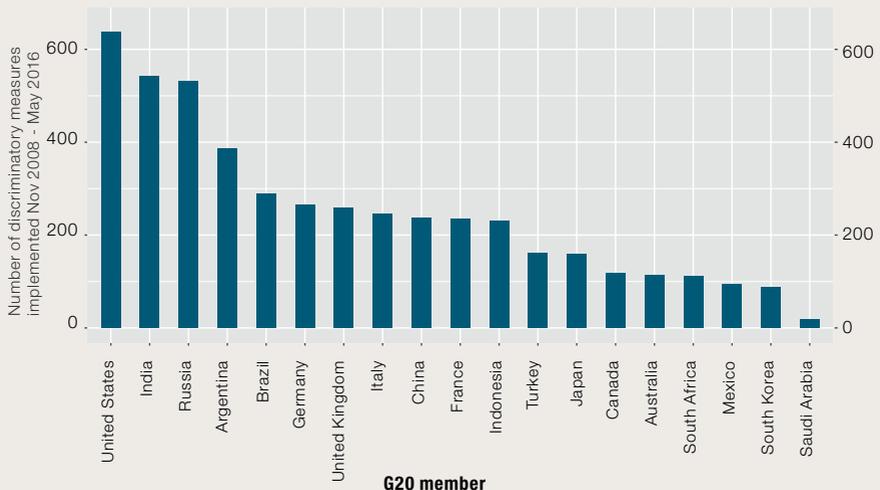
4.While tariffs continue to decline, non-tariff measures (NTMs) have been rising since 2012. NTMs include all measures that restrict or distort trade flows, such as export subsidies, national clauses in public contracts and restrictions on granting licenses, technology transfer or FDIs. The financial crisis and the period known as the “great recession” (2008-2010) had major consequences on trade. It can easily be demonstrated that countries implement more restrictive trade policies during recessions or during periods when they are less competitive. Over recent years, it has been the G20 countries (with the US and Russia leading the way) which have introduced NTMs on a massive scale. The role of NTMs should not be overestimated because overall, their impact on the volume of world trade has been relatively modest, with average estimated tariff equivalents of all measures remaining low. There is, however, a clear trend. Germany, the United

Average tariffs in advanced economies and emerging market economies (percentages)



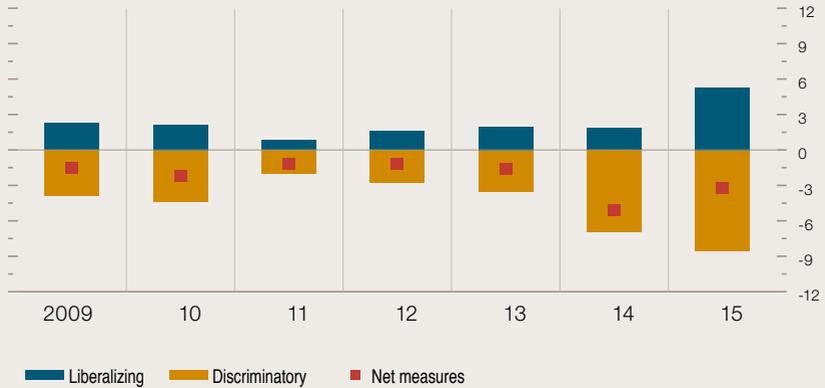
Kingdom, China and France, for example, which had around 50 NTMs in 2009, created around 200 since then. As for the United States and Russia, they have now over 600 NTMs (United States) and over 500 (Russia) in 2016 (with less than 100 each in 2009).

Protectionism by the G20: A Ranking



What is striking is that since 2009, the number of discriminatory and binding measures on world trade has become far superior to measures to promote trade liberalization.

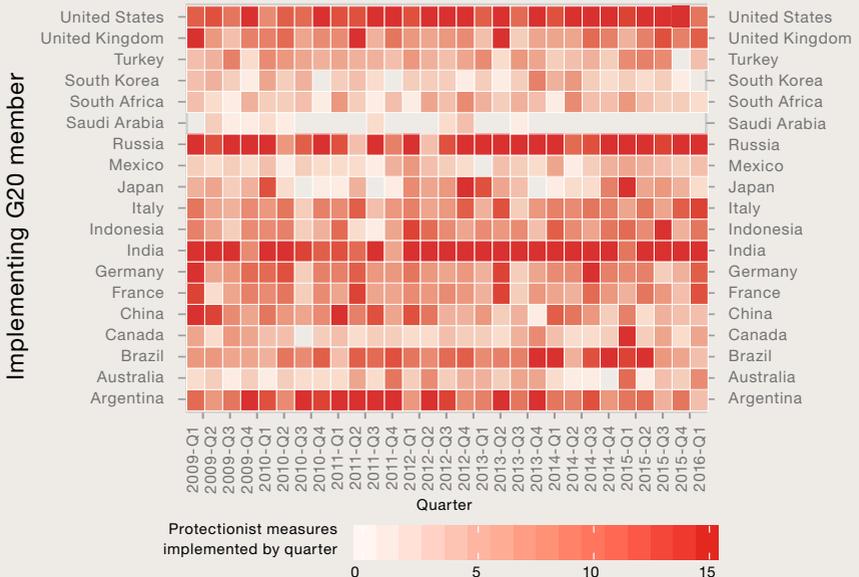
Measures Recorded by Global Trade Alert (Number of products; thousands)



Source: IMF (WEO).

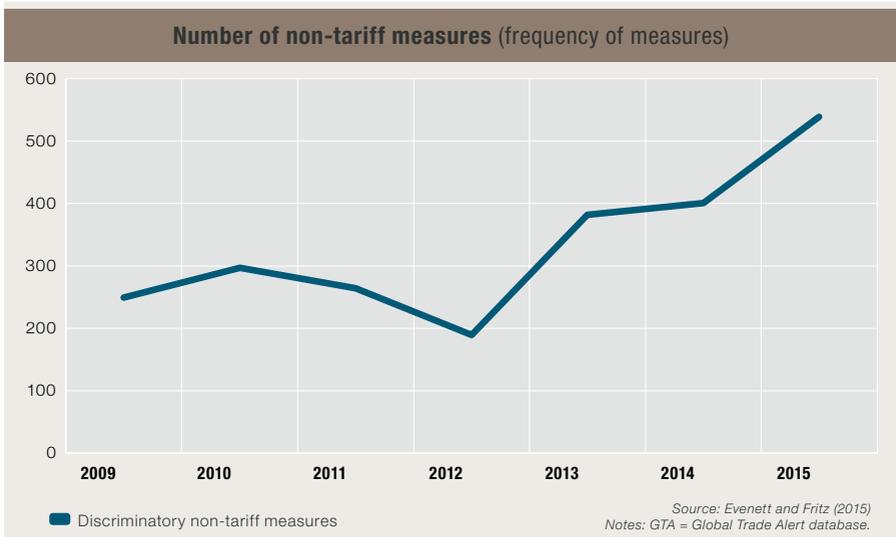
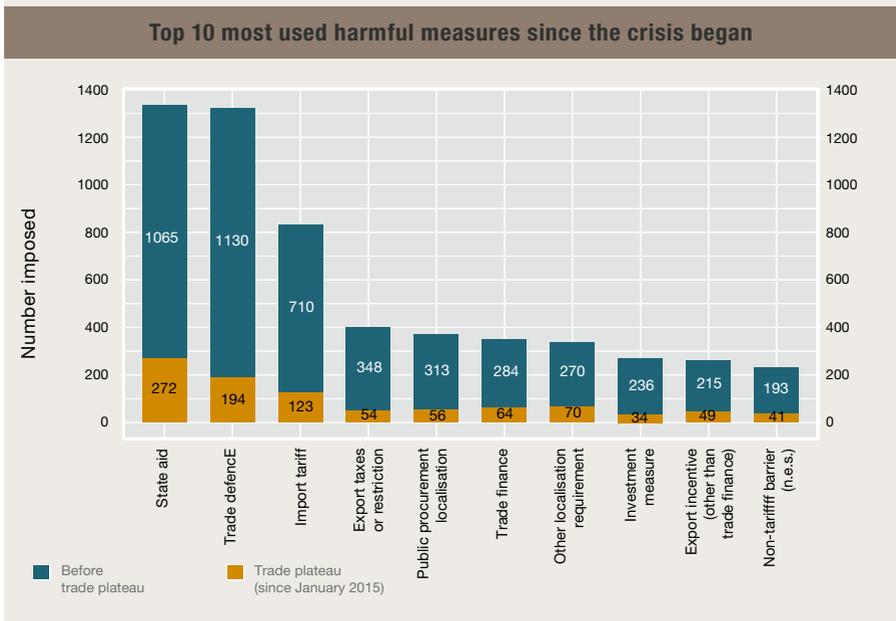
The graph below shows the intensity of protectionist measures, country by country. There is no particular indication of an increase in the frequency of implementation of such measures, but rather it makes it possible to identify countries that are structurally more protectionist than others since the Great Financial Crisis.

Quarterly resort to protectionism by each G20 member

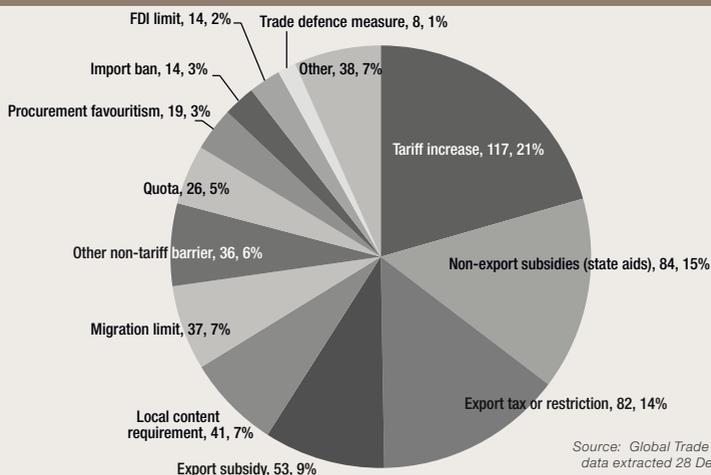


The chart below is a little more explicit. It shows two important things:

- The most commonly used measures include state aid, import tariffs;
- The number of measures has been much higher since world trade has peaked, i.e. since 2015.



Foreign protectionism harming LDC commercial interests, by type of policy instrument



Source: Global Trade Alert website, data extracted 28 December 2014.

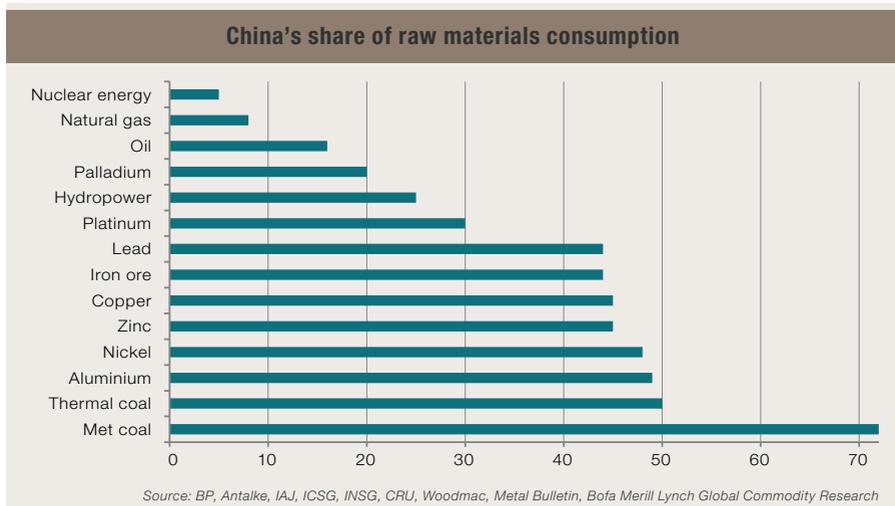
5. The moderation of foreign direct investments (FDIs) has also played a role in explaining the low growth in trade. Empirical data tend to suggest that FDIs and trade have a complementary relationship. Following strong growth in the 1990s, worldwide FDIs have fallen off over recent years, which could also be an explanatory factor for the modest expansion of world trade.

6. A trend towards local production influences trade volumes. Dynamic interaction between trade and foreign investment lies at the heart of globalisation as investments abroad generate trade, but they can also reduce it. Over recent decades, many companies have also introduced consumer-proximity strategies. This proximity means that there has been a shift towards local production which means that trade is drying up. What has happened is that in the 20th and 21st centuries, we have shifted from a form of trade that helps to “sell” goods to a form of trade that helps to “manufacture” goods (this phenomenon is referred to as the global value chain). Over the last few decades, the rapid integration of the emerging markets into the world economy has stimulated the expansion of global value chains. This process of cross-border production fragmentation appears to be mature as labour costs in the main emerging markets have increased. Companies have also taken another look at the risks of long supply chains and are increasingly tending to produce within export markets.

7. The development of services, in particular financial services, plays a not insignificant role. Deciding to export products abroad means thinking about the substantial initial costs involved, such as an analysis of the export market and the establishment of international distribution networks. Working capital requirement is often much higher as a result of the longer periods involved in international

transactions. Companies had to deal with these issues and costs early on in their contribution to globalisation, and they are – except for new entrants – well identified and already amortised. It should also be noted that international shipping takes longer than domestic shipping, which means that producers have to incur production costs before receiving any income. Exporters approach banks seeking assurances and payment guarantees. The development of the financial sector has always been considered as an important factor in bolstering export capabilities in a number of industrial sectors. Finance plays two key roles: it provides working capital to support international commercial transactions and it provides the means of reducing payment risks. Banking systems are highly developed in all countries: i) it is no longer necessary to approach foreign banks for these requirements, unlike in past periods which were dominated by US and UK banks; ii) however, since the financial crisis, these developments have experienced a hiatus which is not facilitating trade as much as before; iii) across the world, including in emerging countries, the rate of indebtedness has increased markedly – over two-thirds of countries have reached a private debt/GDP ratio of over 100%, a threshold which limits activity and trade. If one-third of countries with a ratio of below 100% could fill the gap, the impact on trade would be marginal.

8. The role of China in world trade has changed substantially over the last decade. For over 20 years, China was the main supplier of consumer goods to the world. Accordingly, the very rapid development of China increased supply of and demand for trade. During this period, this development acted as a global supply shock. It contributed to the fall in relative prices of exchangeable goods and stimulated world trade. China very quickly became the largest consumer of raw materials (see graph below and in appendix). With the exception of oil and gas, China is the largest consumer of most raw materials in the world.



Before the Great Recession, China expanded its export capacity considerably. It specialised in industries that were highly labour-intensive in which it had a comparative advantage in terms of production. This exports-driven growth strategy resulted in the rapid expansion of the manufacturing base in China, which sustained the growth of world trade. These factors are, however, diminishing: the current rebalancing of the Chinese economy and the shift in its model towards an economy that is driven more by consumption than by exports, have gradually slowed the growth of imports from China. This is how the income elasticity of demand for Chinese imports has dropped sharply, contributing to a falloff in world trade. China's trade elasticity fell from 1.8 over the 1980-2007 period to 0.8 over 2012-2015. Imports and exports fell sharply, as did market shares. The cause is the low level of competition during this period, especially wage rises, the arrival of new competitors and the appreciation of the real effective exchange rate in China (close to 25% since 2005). The Chinese exports sector (10% of worldwide exports), could quite simply have reached maturity (the exports/GDP ratio has continued to fall since 2010). Its export capacity has gradually been reduced as a result of its development and the rise in its production costs (China is no longer really competitive compared with Vietnam or Mexico for example). Its growth model has evolved and is no longer linked to world trade. It is domestic demand that will have to ensure development in China.

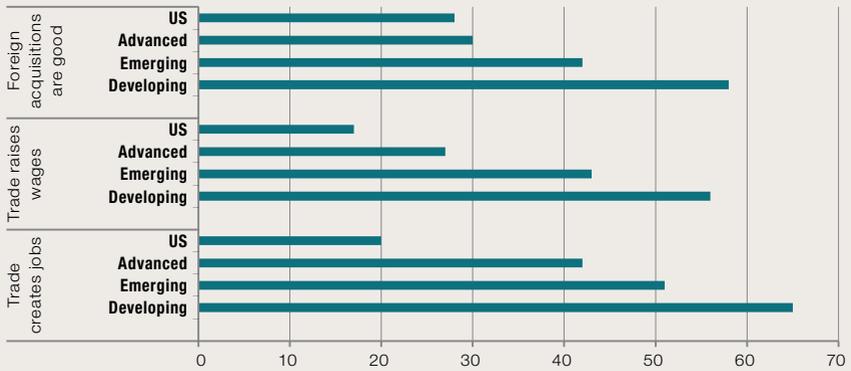


9. The structure of world trade has changed. Empirical data show that composition effects have played a major role in the slowdown of world trade.

- Firstly, the shift in economic activity from advanced economies to emerging economies, which generally have weaker trade elasticities, has had a negative impact on the elasticity of world trade. This geographical composition factor is responsible for around half of the decline in world trade elasticity over recent years.
- Next, we see that trade elasticities have also declined in most countries. This composition of demand effects has also been a drag on world trade.

10. The increase in behavioural protectionism and hostility towards free trade and globalisation have become tangible realities. This is what the graph below shows (IMF). Here we see that emerging or developing countries are more favourable to free trade, and that the USA does not see many advantages in it, not in terms of job creation and even less so in terms of wage rise prospects. The temptation to “buy national” (and now even local), a “historical” trait of the Japanese, has spread across the continents.

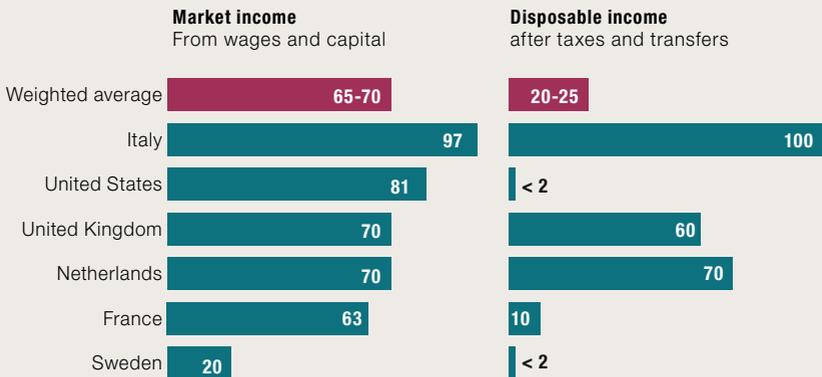
Stand against globalisation, especially in the United States



Source: IMF

The evolution of wages and taxation over the past decade explains the hostility towards globalisation. According to a recent McKinsey survey, real income (wages and capital) in 25 advanced economies¹ was flat or fell for 65 to 70% of households (the equivalent of more than 540 million people) between 2005 and 2014, up from less than 2% between 1993 and 2005 (less than 10 million people), i.e. a real break. Some of the biggest supposed winners from globalization such as the US or Italy were big losers, with the proportion being at respectively 81% and 97%.

% of households in segments with flat or falling income, 2005-14¹



Source: ??????????????????????

¹ The 25 advanced economies are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

When one takes into account taxes and transfers, only 20 to 25% of households were in income segments that had flat to falling incomes between 2005 and 2014. In other words, labour-market practices, government taxes and transfers can undoubtedly make a difference in some countries. In the US, for example, the percentage falls from 81% to less than 2%. In Italy, it goes up from 97% to 100% due to tax and fiscal rigour / austerity implemented following the debt crisis. In France, where the government welfare is efficient, the percentage falls from 63% to 10%. Netherlands are different, and are definitely an interesting example: adopting austerity and reforms to address high unemployment and twin deficits broke the “welfare model” (lower unemployment, but a surge in precariousness and poverty) and the percentage of households in income segments that had flat to falling incomes is very high: 70% before and after taxes and transfers. Current account surplus and low unemployment were back, as populism and extreme-right party do.

The question also lies on the sustainability of the transfers and “welfare models” at a time when many governments have high debt levels. The global debt rose to around 300% of GDP – 250% in 2000 – should one consider the largest 25 countries.

The economic and social impact of such a situation and such a trend is significant: losing faith in the global economic system, in institutions, in economic policy, in political leaders, in globalisation... The surge in populism, protectionism, anti-establishment (with the rise in extreme right parties in core Europe, extreme left parties in peripheral Europe), the will to eradicate inequalities and the desire for a better sharing of added value are new realities. The referendum on Brexit and the US elections represent the realization of these new trends. **Addressing financial stability, inflation, banking systems solvency, wealth effects (through support to equities and real estate) is not sufficient.** That is the reason why the IMF recently “slammed” globalisation and why the BIS also “slammed” central banks for merely boosting capital markets as a reaction to what is now clearly the failure of globalisation.



III. Outlook and Conclusion: A “new normal” or a return to the “Ancien Régime”?

- 1. The last 50 years have been characterised by a globalisation of the world economy, driven by world trade. This is no longer the case with the decline of globalisation** (more so on the market for goods than for services). What we are now seeing is fragmentation, with national, even regional ways of thinking.
- 2. The volume of world trade is now around 20%-25% below** where it would be had it grown at pre-2008 crisis trend. World trade grew twice as quickly as world GDP pre-crisis, but the trend has dramatically declined since 2011.
- 3. Today, the increase in protectionism** (non-tariff measures, behavioural protectionism, stronger rejection of globalisation than before, etc.) and the limitations reached in tariffs reductions, are very tangible realities.
- 4. Low growth potential and low investment rates** are factors that explain the slowdown in world trade, even more so given the fact that income trade elasticities have declined in many countries.
- 5. The changing structure** of world trade has also played a part in the falloff of world trade.
- 6. The role of China has evolved considerably over the past decade or so.** China has changed its model (growth is balanced and no longer driven by exports), its aims (turn the renminbi into an international currency, develop the debt market, attract international investors, etc.), and its constraints (minimise interest rate and exchange rate volatility, stabilise the renminbi, etc.).

Overall, world trade is no longer a growth factor and among the many factors explaining the weakest growth in trade (rising protectionism and massive use of non-tariff measures, China's new role, low investment, the floor reached on tariffs ...), some of them, and not the least, are structural. This suggests that **the "new normal" for the next 15 years may well look like the past five years (growth of world trade well below the growth of the world economy), not the 30 years prior to this period. The IMF examined the issue and assessed the challenges of the three groups of countries, advanced economies, emerging economies, and developing and low-income countries:**

- **Advanced economies** can further reduce remaining protection in traditional sectors such as agriculture and textiles, open up their service markets (e.g. transport), make their regulatory systems more coherent, and reduce boundaries of trade policy. To achieve this, these countries should instead adopt non-discriminatory approaches that minimize fragmentation and facilitate multilateral initiatives.
- Many **emerging and developing countries**, including Latin America and South Asia, can still benefit greatly from integration through traditional

liberalization, including on a unilateral basis. They should seek to anchor their economies to global value chains, move away from import substitution policies and avoid protectionism through opaque non-tariff measures. Trade reform would complement the strengthening of policy and institutional frameworks.

- To foster development and growth, most low-income countries must prioritize trade facilitation in order to integrate into global value chains, in particular by improving their trade infrastructure and institutional structures. They should also tackle traditional trade barriers and promote competition in service industries that are essential to local participation in global value chains, such as transport and financing services. Technical assistance (e.g. international organizations) can support the development of the necessary infrastructure for this trade organization, identify the budgetary implications of the reform and help to sequence and coordinate the reform process.

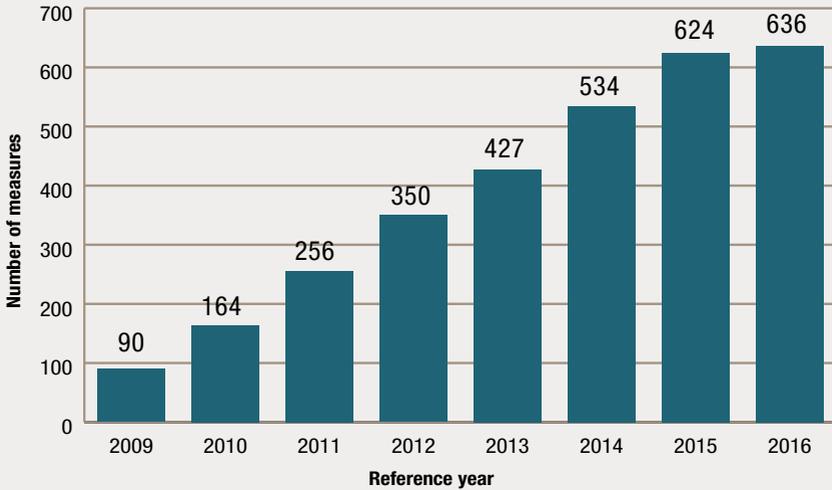
A new impetus for global trade will require new trade agreements and closer integration of the countries of the southern hemisphere into the global economy. It will also be necessary that the protectionist temptations visible in many countries fade behind collective interests: it is indeed the struggle between the temptations to withdraw into oneself and the necessary international cooperation.

Note (1): The Transatlantic Trade and Investment Partnership (TTIP), covering the Transatlantic Free Trade Area (TAFTA), is a trade agreement currently being negotiated between the EU and the United States, that makes provision for the creation of a transatlantic free trade zone, often called the big transatlantic market

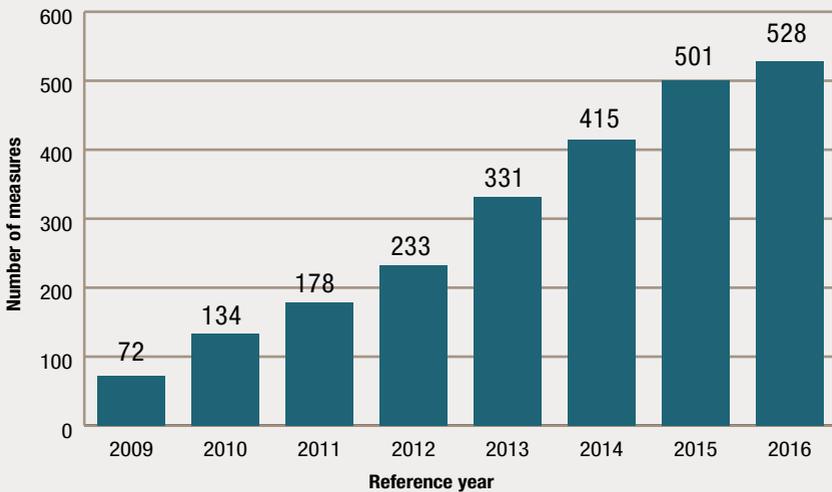
APPENDIX

Non-tariff measures since the financial crisis

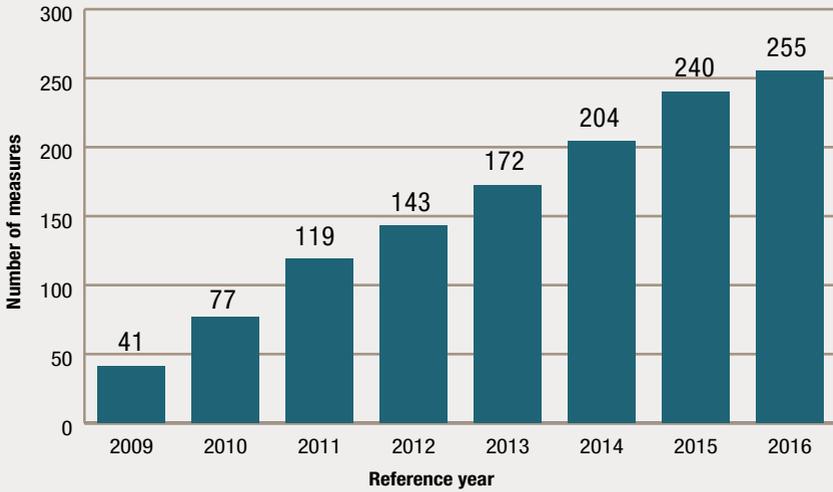
UNITED STATES - Number of discriminatory measures imposed since November 2008



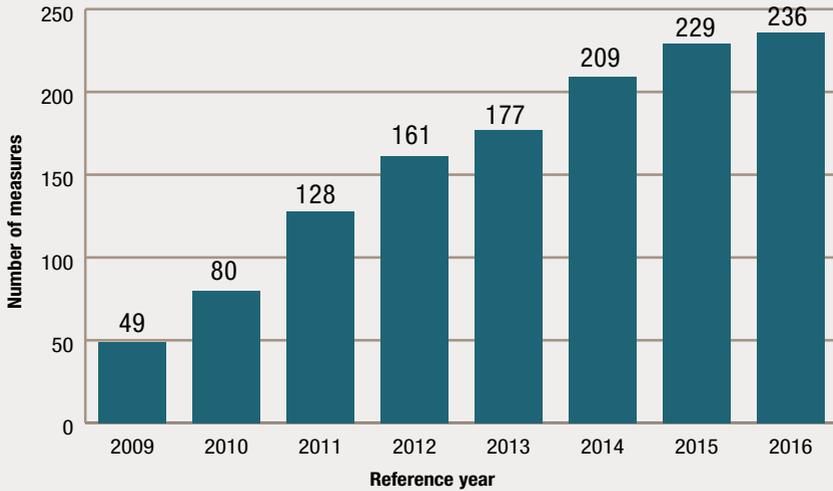
RUSSIA - Number of discriminatory measures imposed since November 2008



UNITED KINGDOM - Number of discriminatory measures imposed since November 2008



CHINA - Number of discriminatory measures imposed since November 2008



Bibliography

Bems R., Johnson, R.C. and Yi, K.-M. (2013), "The Great Trade Collapse", Annual Review of Economics, Vol. 5, pp. 375-400.

Borin, M., Di Nino, V., Mancini, M. and Sbracia, M. (2016), "The Cyclicity of the Income Elasticity of Trade", MPRA Paper, No 73000, University Library of Munich: Germany.

Boz E., M. Bussiere and C. Marsilli (2014), "Recent Slowdown in Global Trade: Cyclical or Structural?" VoxEU.org, 12 November.

Boz E., M. Bussière and C. Marsilli « Recent slowdown in global trade: Cyclical or structural? » in Hoekman, B. Editor (2015), "The Global Trade Slowdown. A New Normal?", VoxEU ebook, London: CEPR Press and EUI.

Bussière, M. and Mehl, A. (2008), "China's and India's roles in Global Trade and Finance: Twin Titans for the New Millennium?", ECB Occasional Paper, No 80, January.

Claessens, S., Hassib, O. and Van Horen, N. (2015), "The role of foreign banks in trade", mimeo, De Nederlandsche Bank.

Constantinescu C., A. Mattoo and M. Ruta « The global trade slowdown », in Hoekman, B. Editor (2015), "The Global Trade Slowdown. A New Normal?", VoxEU ebook, London: CEPR Press and EUI.

Constantinescu C., A. Mattoo and M. Ruta, 2015, "The Global Trade Slowdown: Cyclical or Structural?," IMF Working Paper No. 15/6, Washington, DC.

Constantinescu C., A. Mattoo and M. Ruta (2015), "The global trade slowdown. Cyclical or structural?" World Bank Policy Research Working Paper No. 7158, Washington, DC.

Crozet M., C. Emlinger and S. Jean « On the gravity of world trade's slowdown », in Hoekman, B. Editor (2015), "The Global Trade Slowdown. A New Normal?", VoxEU ebook, London: CEPR Press and EUI.

Davies G. (2013), "Why world trade growth has lost its mojo", Financial Times blog, 29 September.

Deutsche Bundesbank (2016), "On the weakness of global trade", Monthly Report, March, pp. 13-35.

Escaith, H. and Miroudot, S. (2015), "World trade and income remain exposed to gravity", in Hoekman, B. Editor (2015), "The Global Trade Slowdown. A New Normal?", VoxEU ebook, London: CEPR Press and EUI.

European Central Bank (2016) « Understanding the weakness in global trade: What is the new normal? » Occasional Paper Series, IRC Trade Task Force, N° 178, September.

Evenett S. J. and J. Fritz (2016) « Global Trade Plateaus: The 19th Global Trade Alert Report », Global Trade Alert, CEPR Press

Felbermayr, G. (2016), "Economic Analysis of TTIP", in: Gnan, E. and Kronberger, R. (eds.): Schwerpunkt Aussenwirtschaft 2015/2016. Transatlantische Handels- und Investitionspartnerschaft (TTIP), Vienna: Facultas, pp. 153-172.

Felipe, J. and A. Mehta (2016), “Deindustrialisation? A global perspective,” *Economics Letters*, 149: 148-51.

Ferrantino M. J. and D. Taglioni (2014), “Global Value Chains in the current trade slowdown”, World Bank Economic Premise No. 137, Washington, DC.

Francois, J. and al. (2013). “Reducing Transatlantic Barriers to Trade and Investment. An Economic Assessment”, Final Project Report, Centre for Economic Policy Research.

Freund C. (2009), “The Trade Response to Global Downturns: Historical Evidence”, World Bank Policy Research Working Paper Series 5015, Washington, DC.

Gächter, M. and Gkrintzalis, I. (2016): “The finance–trade nexus revisited: Is the global trade slowdown also a financial story?”, mimeo, European Central Bank.

Gangnes, B., Ma, A.C. and Van Assche, A. (2015). “Global value chains and the trade-income relationship: Implications for the recent trade slowdown”, in Hoekman, B. Editor (2015), “The Global Trade Slowdown. A New Normal?”, VoxEU ebook, London: CEPR Press and EUI.

Gaulier G., Steingress, W. and Zignago, S. (2016), “The role of China in the trade slowdown”, mimeo, Banque de France.

Gaulier G., G. Santoni, D. Taglioni and S. Zignago « The power of the few in determining trade accelerations and slowdowns », in Hoekman, B. Editor (2015), “The Global Trade Slowdown. A New Normal?”, VoxEU ebook, London: CEPR Press and EUI.

Hoekman, B. (Editor) (2015), “The Global Trade Slowdown. A New Normal?”, VoxEU ebook, London: CEPR Press and EUI.

IMF (2016), « Global Trade: What’s behind the Slowdown ? » in « World Economic Outlook: Subdued Demand—Symptoms and Remedies », Chapter 2, pp. 63-119, October.

Irwin D. (2002), “Long-Run Trends in World Trade and Income”, *World Trade Review* 1(1), pp. 89–100.

Kee H. L. and H. Tang (2014), “Domestic Value Added in Exports: Theory and Firm Evidence from China,” mimeo, World Bank, Washington, DC.

Levchenko A., Lewis, L. and Tesar, L. (2010), “The collapse of international trade during the 2008-2009 crisis: in search of the smoking gun”, *IMF Economic Review*, Vol. 58, No 2, pp. 214–253.

McKinsey (2014), “Global flows in a digital age: How trade, finance, people, and data connect the world economy”, McKinsey Global Institute, April.

Ollivaud P. and C. Schwellnus (2015), “Does the Post-Crisis Weakness of Global Trade Solely Reflect Weak Demand?”, *OECD Economics Department Working Papers*, Paris.

Ollivaud P. and C. Schwellnus « Does the post-Crisis weakness of global trade solely reflect weak demand? », in Hoekman, B. Editor (2015), “The Global Trade Slowdown. A New Normal?”, VoxEU ebook, London: CEPR Press and EUI.

Pei J., C. Yang and S. Yao « Trade impact of China’s transition to the ‘new normal’ », in Hoekman B. Editor (2016)

Slopek, U. (2015), “Why has the income elasticity of global trade declined?”, mimeo, Deutsche Bundesbank.



Stratford, K. (2015), “Why has world trade been so weak in recent years?”, mimeo, Bank of England.

Subramanian, A. and Kessler, M. (2013), “The Hyperglobalization of Trade and Its Future”, Peterson Institute for International Economics Working Paper, No 6.

Wood A. (2017) “How globalisation affected manufacturing around the world”, Vox, 18 March

Wood A. (2017), “Variation in structural change around the world, 1985–2015: Patterns, causes and implications », United Nations University, UNU-WIDER Working Paper, February

World Bank (2015), “What Lies Behind the Global Trade Slowdown?”, Chapter 4 in Global Economic Prospects, Washington, DC: World Bank.





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