TRADE

Chief Economist Note

TRADE FOR YOU TOO:

Why is trade more important than you think?

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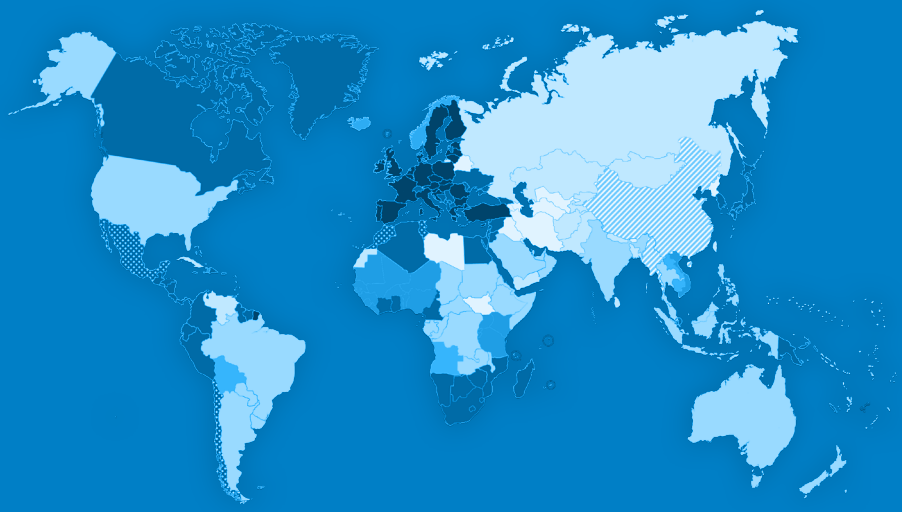

Editor:

Lucian Cernat

PREFACE BY MR JEAN-LUC DEMARTY

Global trade and trade policy has been under pressure recently, with many voices, often based on misinformed views, questioning its benefits. Through its trade policy, the EU is building strategic alliances with partners around the world and the importance of concrete facts and figures, offering a balanced view of the benefits and challenges generated by EU trade policy is crucial.

The latest analytical evidence within this Chief Economist Note provides a comprehensive and balanced set of arguments responding to the new political realities that will shape EU trade policy over the coming years. Analytical work forms an important element in defining EU trade policy positions and we always strive to take policy decisions based on a clear understanding of the economic effects of our actions.

When reviewing these arguments it is undeniable that Europe's economic prosperity is dependent on preserving its trade openness and a strong international competitiveness. Today, European companies and citizens benefit from 41 trade agreements with 72 countries around the world. Trade with countries outside the EU provides jobs for 36 million Europeans. That means 1 in 7 jobs in the EU depends on exports.

But at the same time in the next few years the analytical challenges related to trade policy making will become even more complex. Our tools need make a more convincing case that resonates with citizens. The new "Trade Policy 2.0" approach based on firm-level data has already made a difference in our communication strategy on recent FTAs.

The next steps are to upgrade our toolbox to better capture the trade-related labour and environmental issues and to further reflect on the impact of major technological disruptions on our future comparative advantages.

I remain convinced that only by strengthening our analytical capacities we can offer convincing arguments in favour of our future EU trade policy initiatives. This report shows the way forward and offers a solid base for evidence-based policy making in the years to come.

Mr Jean-Luc Demarty,
Director- General for Trade,
European Commission,
DG Trade.
May 2019

TRADE Chief Economist Note

TRADE FOR YOU TOO:

WHY IS TRADE MORE IMPORTANT THAN YOU THINK?

Abstract

This paper highlights the importance of international trade to economic prosperity based on recent economic evidence. It shows how EU trade policy supports the three key principles of the European Commission's 'Trade for All' strategy. Communicating these results in a more meaningful way can ensure a wider audience, and help dispel some of the myths around globalisation and trade liberalisation. Building a successful communication strategy needs to be based on macro and micro level evidence, presenting results through data visualisation and infographics.

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This paper is the result of a collective effort by the Chief Economist team in DG TRADE: Lars Nilsson, Brian Kennedy, Stefan Nolte, Zornitsa Kutlina-Dimitrova, Alessandra Tucci, Beatriz Velazquez, Paul Verburgt, Nicolas Preillon, Lorenzo Isella and Segundo Perez-Gibaja. The views expressed in this paper are those of the authors and do not necessarily reflect the views of the European Commission.

TABLE OF CONTENTS

1. WHY IS OPEN TRADE SO IMPORTANT FOR THE EU?

The EU's common commercial policy is one of the oldest Community competences of the EU, and is carried out by the European Commission in close cooperation with EU Member States and the European Parliament. Nowadays, it covers trade in goods and services as well as several other trade related areas such as foreign direct investment (FDI), public procurement and technical barriers to trade.

International trade is a part of everyone's life. Whether it is the fruit we have at breakfast or the electrical devices we use, our daily routine depends on complex trade flows and production processes scattered across multiple countries and are hardly noticed by the final consumer. To cater for a globalized economy, thousands of companies around the world sign business deals every day, either as exporters or importers. Trade flows have evolved over time and are becoming increasingly intricate, with countless parts and components crossing multiple borders at different stages of production along global supply chains, before reaching the final consumer. These "globalisation examples" provide a quick snapshot of the realities of world trade, as it happens. But is this multifaceted reality fully accounted for in trade theories and well reflected in the statistical and analytical support available to trade policy makers?

The importance of international trade to economic prosperity is well documented and has been acknowledged for centuries. Countries open up to trade because it gives them the incentive to produce what they are relatively better at producing. This in turn leads them to import goods and services that other countries are more efficient in producing. Trade also leads to downward pressure on consumer prices and greater product variety for importing companies and consumers. Over time, openness to trade allows ideas and technologies to flow more freely and encourages innovation and productivity growth.

Trade is therefore a powerful source of economic, technological and even societal change. However, trade can also sometimes be disruptive and lead to adjustments costs. These costs are often felt in certain regions and sectors, while the benefits of trade, although larger in overall magnitude, can be more diffuse. Sometimes these benefits are so diffuse that they are dismissed by opponents of trade as purely theoretical propositions that do not materialise in reality. This makes the political economy debate around trade challenging.

While it is true that the costs of open trade are more easily detected than its gains, there is a wealth of evidence that demonstrates how trade liberalisation has underpinned the rise in prosperity for an ever-increasing part of the global population, thanks to a consistent rise in productivity levels. In light of current populist shifts in public opinion and the ensuing stark anti-trade and anti-globalisation rhetoric from both the far-left and the far-right, the purpose of this note is to highlight the importance of trade in general and of EU trade policy in particular, by reviewing the evidence available.

The Commission's current trade and investment policy, outlined in the 2015 'Trade for All' communication, highlights that trade and investment are powerful engines for growth and job creation. It also highlights that the EU is adapting its policy instruments to recognise modern issues in international trade such as the digital economy or values and is delivering benefits to EU workers and consumers. The policy is based on three key principles: pursuing economic objectives, level playing field, values and transparency/inclusiveness.[1] Overall, EU trade policy aims to ensure that the EU continues to safeguard its existing social and regulatory model, while using trade policy to promote EU values around the world and steps up its efforts to address contemporary trade issues. It also aims to provide more information to the public and stakeholders by publishing key negotiating texts from all negotiations. The EU also encourages stakeholders to contribute through consultations, publish mandates, civil society dialogue and domestic advisory groups. The EU economy exchanges goods and services with the rest of the world to the tune of €14 billion per day. While the vast majority of this trade is needed by EU companies for their efficient production processes, around €840 billion of the goods imported annually are bought by consumers in the EU. Trade is therefore an inescapable reality in the lives of each and every European citizen: it defines the choices we all make as consumers and producers and provides the livelihood for many of us, as exports alone support around on 1 in every 7 jobs in the EU.

The link between trade and income levels is not always directly perceptible to the common citizens in their daily lives. It is also difficult to show empirically in a robust and unambiguous fashion the direction of causality between income level and trade[2] or to disentangle the impact of trade policy on income from that of other factors like geography and overall economic governance.[3] Nevertheless, economists have found that an increase of one percentage point in the ratio of trade to GDP increases income per capita by at least half a percentage point.[4] The conclusion is that countries that trade more get richer however, there is no evidence on how this increase in wealth is distributed among different sectors of the economy.

There is certainly no evidence that trade has ever obstructed economic growth and welfare improvements in the long run. However trade openness is not a sufficient condition for growth to take off and for societies to attain high levels of income. Trade must be

[1] European Commission. (2015). Trade for all: Towards a more responsible trade and investment policy. Available at: http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf

[2] The bidirectional link between trade and income makes it difficult to establish whether it is trade that causes higher income or if it is higher income level that leads to more trade.

[3] On the other hand, no economy in the world has ever managed to reach high-income levels by shutting itself out from trade with others.

[4] Frankel, J. and D. Romer (1999), "Does Trade Cause Growth?", *American Economic Review*, 89(3), pp. 379-399. Then confirmed by Irwin, D. and M. Tervio (2002), "Does Trade Raise Income? Evidence from the Twentieth Century", *Journal of International Economics*, 58, pp. 1-18, http://www.dartmouth.edu/~dirwin/docs/jie-tervio.pdf, Noguer, M. and M. Siscart (2005), "Trade Raises Income: A precise and Robust Result", Journal of International Economics, 65, pp. 447-460 and by Feyrer, J. (2009), "Distance, Trade, and Income - The 1967 to 1975 Closing of the Suez Canal as a Natural Experiment", NBER Working Papers n. 15557. The paper is available on http://www.nber.org/papers/w15557.pdf.

accompanied by adequate policies and institutions conducive to a stable macroeconomic environment. Trade must also be combined with efficient labour, product, and capital markets and the steady supply of adequate skills and expertise.[5]

These gains from trade arise as specialisation allows different countries to focus on what they do best given their resources and technologies. Welfare gains are delivered by exports as much as by imports[6]. It is important to recognise the fallacy of mercantilism according to which a country can only gain from exporting goods and services to others and that imports are negative as they amount to foregone domestic economic activity.

Ultimately, from a country perspective, you only export to be able to import. Why produce goods using scarce resources when someone else can do it cheaper and better? It is through imports that a country taps into others countries' resources, production of new and/or cheaper goods and services, ideas and technologies, etc. In other words, it is through importing that a country can gain the very ingredients needed for sustainable long-term growth.

Specialisation derives from differences between countries. The underlying concept of "comparative advantage"[7] postulates that countries gain if they specialise in what they produce relatively more efficiently than their trading partners. The benefits come from putting resource to their best possible use and using the output of these resources to acquire all other goods and services that the country may need or want.

Each country should specialise in the industries that are relatively intensive in the factors of production in which that country is relatively abundant. Even a country that is better at producing everything (because its technology is superior or because it is better endowed with the production factors) is better off specialising in producing those goods and services that it is relatively better at while importing the rest. Thus, trade will deliver a better outcome in the use of limited resources than autarky would.

However, it is also true that the countries that trade the most are remarkably similar in terms of factor endowments and technological development. This means that trade may just reflect a decision by firms to meet demand by consumers in other markets for the products they produce while expanding the scale of their production in order to streamline their costs by further reaping economies of scale.[8] As a result, producers gain because they become more efficient and consumers gain because they obtain access to a greater variety of goods at lower

[5]OECD (2012) "Towards a More Open Trading System and Jobs Rich Growth" Report available at: http://www.nber.org/papers/w15557.pdf.https://www.oecd.org/trade/50452757.pdf

[6] Buffie, E. (1995) "Import Liberalization vs. Export Promotion." The Canadian Journal of Economics / Revue Canadienne D'Economique, vol. 28, no. 3, 1995, pp. 603–616. JSTOR, JSTOR, www.jstor.org/stable/136051

[7] The concept dates back to the early nineteenth century work of David Ricardo, which was further developed in the seminal 1930s work by Hecksher and Ohlin.

[8] Krugman, P. (1979), "Increasing Return, Monopolistic Competition, and International Trade", *Journal of International Economics*, 9(4), pp. 469-479; and Krugman, P. (1980), "Scale Economies, Product Differentiation, and the Pattern of Trade", *American Economic Review*, 70(5), pp. 950-959.

prices given the increased competition pressure that will prevail in the integrated marketplace.

Finally, the latest development in trade theory[9] point out that trade can also be driven by the dynamics of firm heterogeneity. In each country the most productive firms in a sector take advantage of trade openness and export to foreign markets, thus increasing overall production and becoming more efficient. Trade benefits come from the intra-industry reallocation of market shares as the less efficient firms are driven out of the market, lifting the average aggregate productivity in the sector.

These efficiency gains are exhausted once the underlying reallocation of factors of production has run its course. However, trade can also deliver dynamic efficiency gains. These dynamic efficiency gains can be traced back to increased investments in innovation and faster technological progress that result from the greater competition pressure imposed by greater openness and from knowledge spill-overs. This is because trade can also make knowledge capital more transferable across borders, as it is embodied in imports of foreign varieties of final goods and intermediate inputs.[10]

In recent years, a lot of attention has been focused on the cross-border fragmentation of production processes due to increased economic openness and the shrinking role of distance caused by of the information technology revolution. As a result, global value chains (GVCs) grew to become the backbone of global commerce as firms actively sought to take advantage of the gains from specialisation by relocating their production activities across different countries according to the profile of their comparative advantage. The resulting production networks structured along both upstream and downstream activities have become increasingly dependent on extensive cross-border exchanges of intermediate goods and services.

The latest data from the OECD Trade in Value-Added (TiVA) database shows that 70% of international trade involves a variety of transactions where services, raw materials, parts and components are exchanged in GVCs across countries, before being incorporated into final products that are shipped to consumers all over the world.[11] As a result of new technological developments, services are also a big part of what we trade internationally, both directly and indirectly. It is estimated that between 25% and 40% of the content of manufacturing exports in most OECD and G20 countries is requested by services in a box (i.e. services embedded in

[9] Melitz, M. (2003), "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity", *Econometrica*, 71(6), pp. 1695-1725.
[10] This has been showed by Romer, P. (1990), "Endogenous Technological Change", *Journal of Political Economy*, University of Chicago Press, 98(5), pp. 75-102, Melitz, M. and S. Redding (2014), "Missing Gains from Trade", *American Economic Review*, 104(5), pp. 317-321, Grossman, G. and E. Helpman (1991), *Innovation and Growth in the Global Economy*, Cambridge, Mass., MIT Press and Rivera-Batiz, L. and P. Romer (1991), "International Trade with Endogenous Technological Change", *European Economic Review*, 35(4).
[11] OECD (2018), Trade Policy Implications of Global Value Chains, December 2018, Paris. Available at: http://www.oecd.org/tad/trade-policy-implications-global-value-chains.pdf

manufactured products). For a number of countries the foreign share of services value added is greater than the domestic share.[12] This indicates of the role that services play in the integration of the manufacturing sector in GVCs.

Since 2011, different structural factors such as rising wages in Asia and the shift in China from export-driven manufacturing to its domestic markets appear to have slowed the pace of GVC expansion[13]. Although the pace of growth is slowing, the overall level of GVC integration (fragmentation of production) remains high and only slightly below what it was in 2005. This highlights how important it is for trade policy makers to ensure that firms of all sizes can take advantage of cross-border business opportunities.

The economic benefits of GVCs are similar to those of traditional trade relationships as evidence shows that gains arise from the liberalisation of both imports and exports.[14] In a world where firms scatter parts of the production process across different locations, unconstrained access to imports is key for competitiveness in export markets, as any tariffs and non-tariff barriers on imports are ultimately a burden on a firm's own exports. GVCs also provide participating parties with access to new knowledge and skills. Lead firms often make investments abroad to seek technological assets while non-lead firms tap into proprietary technology and productivity gains that enhance the possibility of technology spillovers through contact with highly specialised customers and inputs.

GVCs tend to reduce the fixed costs associated with breaking into foreign markets and allow the benefits of globalisation to trickle down to additional developing countries and firms, including small and medium-sized enterprises (SMEs).[15] Breaking down production processes into separate and autonomous activities, allows firms to specialise and become competitive in certain parts and/or tasks of the production chain.

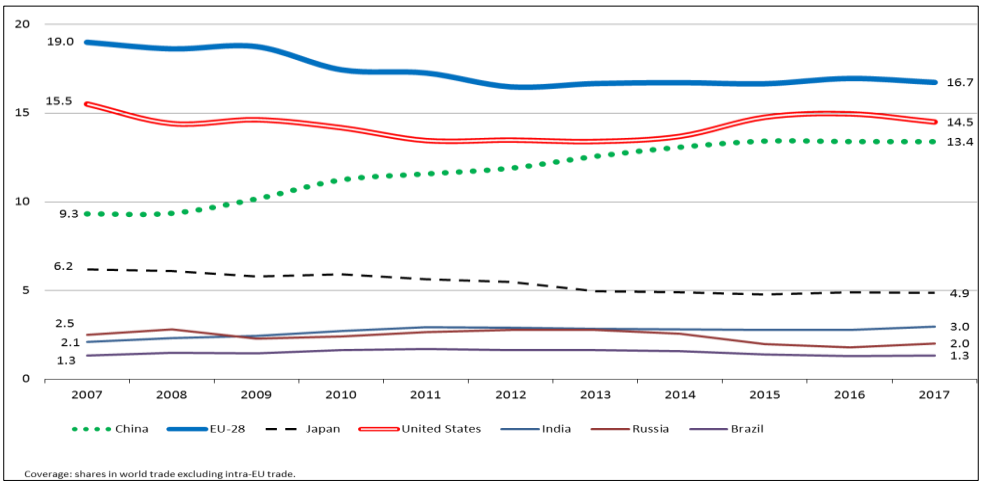
[12]OECD (2018), The changing nature of international production: Insights from Trade in Value Added and related indicators, TiVA Indicators 2018 Update, December 2018, Paris. Available at: http://www.oecd.org/industry/ind/tiva-2018-flyer.pdf
[13] Source: OECD TiVA database. Available at: http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm#country-notes
[14] OECD (2013), "Interconnected Economies: Benefiting from Global Value Chains", available at: http://www.oecd-ilibrary.org/science-and-technology/interconnected-economies_9789264189560-en.
[15]Baldwin, R. and J. Lopez-Gonzalez (2015), "Supply-Chain Trade: A Portrait of Global Patterns and Several Testable Hypotheses" *The World Economy.*

2. EUROPE IS STILL GOOD AT TRADE AND TRADE IS GOOD FOR EUROPE

2.1 TRADE IN GOODS AND SERVICES

Europe's trade with the rest of the world is a major driver of economic prosperity, both at home and abroad. Even though the EU share of world goods and services trade has decreased over the past ten years, it should be recalled that in absolute terms trade has increased substantially. Since 2007, the value of both EU exports and imports has increased by 59% and 37%, respectively. In addition, the foreign value added content of total EU exports increased from €446 billion in 2005 to €732 billion in 2016 showing the importance and success of EU trade policy.[16] The EU accounts for more than 16.7% of world goods and services trade (see Figure 1).

Figure 1: Share in world trade of goods and services, selected countries, 2007-2017 (%)



Source: Eurostat (Comext, Statistical Regime 4), Eurostat (bop_its_tot; bop_its6_tot) IMF DOTS, WTO

Data for 2017 shows that total exports for goods and services in the EU are worth €2.8 trillion while total imports of goods and services are €2.6 trillion. The USA is by far the biggest trading partner of the EU accounting for just over a fifth of total trade in goods and services, however the EU is particularly reliant on China for imported goods (see Table 1). EU trade in goods and services accounts for 34.7% of its GDP[17] and it is the biggest trading partner for 61 countries compared to 41 for China and 29 for the US.[18]

[16] 2016 OECD TiVA database. Accessed on at 28 Feb 2019 14:19 UTC (GMT)
[17] Source: Eurostat Comext (Statistical regime 4)
[18] Source: IMF DOTS

Table 1: EU28 trade, Top-ten partners (€ billion and %)

EU trade with	Exports		Imports		Share of total trade (%)
	Merchandise 2017	Services* 2017 (p)	Merchandise 2017	Services* 2017 (p)	Merchandise + services
USA	376	236	257	213	20.3
China	198	45	375	28	12.1
Switzerland	150	129	110	70	8.6
Russia	86	28	145	12	5.1
Turkey	84	12	70	14	3.4
Japan	61	32	69	18	3.4
Norway	51	28	77	15	3.2
South Korea	50	13	50	7	2.3
India	42	16	44	16	2.2
Canada	38	21	31	13	1.9
Subtotal	*1,136*	*560*	*1,229*	*406*	62.5
Total	***1,879***	***884***	***1,859***	***696***	100

Source: Eurostat, (p)= provisional data

* Eurostat International Trade in Services Statistics (ITSS) cover modes 1, 2 and 4. While data from the Eurostat Foreign Affiliates Statistics (FATS) has been used to estimate mode 3 this is not available from Member States so is calculated as an EU aggregate.

Despite the rapid expansion of GVCs, trade in goods is still affected by tariff and non-tariff barriers.[19] While the EU simple average applied tariff rate is relatively small (5.2%), it is evident that tariffs on agricultural products are considerably higher that non-agricultural products (See Table 2). Nevertheless, the EU is the world's largest importer of agricultural goods from both developing countries and Least Developed Countries. It imports from developing countries more than the US, Japan, Canada, Australia and New Zealand put together. The EU absorbs 30.2% of Africa's agricultural exports while Africa exports 7.5 times more agricultural goods to the EU than to the US[20].

[19] A bound tariff rate is the maximum tariff level for a given commodity line. When countries join the WTO or when WTO members negotiate tariff levels with each other during trade rounds, they make agreements about bound tariff rates, rather than actually applied rates. As is the case for the majority of developed countries, 100% of EU product lines are covered with an agreed bound rate.

[20] Source: COMTRADE Agri database (2016)

Table 2: Tariff profile of the EU (in %)

	Total	Agricultural Products	Non-Agricultural Products
Simple average MFN applied (2016)	5.2	11.1	4.2
Trade weighted average (2015)	3	7.8	2.6
Tariff quotas (in % of tariff lines)		13.2	
Duty free (MFN applied 2016, in % of tariff lines)		31.7	26.4

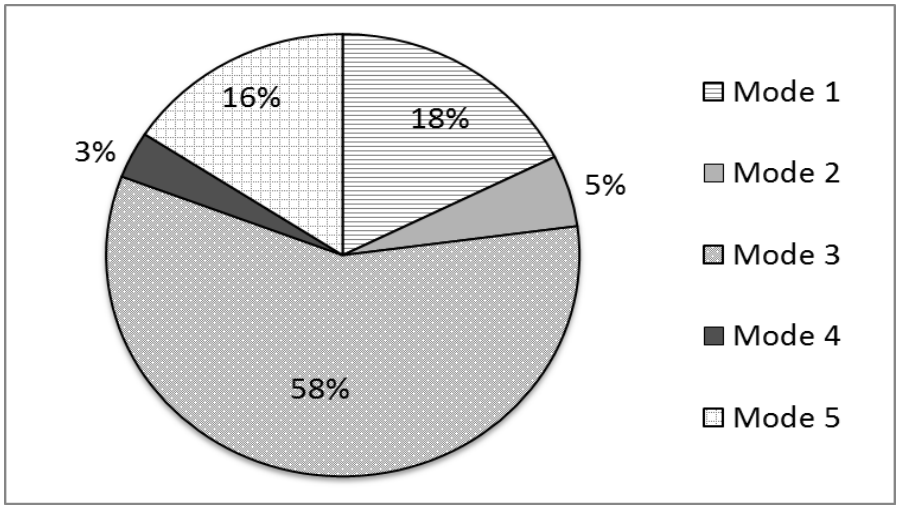
Source: WTO tariff profiles available at http://stat.wto.org/

Alongside merchandise exports, services trade is one of the mainstays of Europe's external competitiveness. EU services trade reported under BOP statistics (modes 1, 2 and 4) amounted to €1,580 billion in 2017, an increase of 2% on the previous year. Services trade have some special features that set them apart, when compared to trade in goods. One of the specificities of services is that they can be traded in several distinct modes of supply. The WTO General Agreement on Trade in Services defines four distinct modes of supply for international trade in services[21] but nowadays a substantial and increasing share of services is also being embodied and traded around the globe as part of goods, a process commonly known as the servicification of manufacturing. Unlike GATS services, mode 5 services still pay tariffs when crossing borders as a part of goods. This is the case for software, for example, despite it being a key services input in today's increasingly digital economy. Research form the European Commission shows that the global GDP gains from liberalizing mode 5 services at multilateral level could reach up to €300 billion by 2025 while world trade could increase by over €500 billion.[22]

[21] According to the WTO General Agreement on Trade in Services (GATS) classification services trade can take place under four different modes of supply: cross-border (mode 1), consumption abroad (mode 2), commercial presence (mode 3), and temporary labour (mode 4). Unlike other modes, mode 1 services do not require physical proximity between service providers and consumers. For further information see https://www.wto.org/english/tratop_e/serv_e/cbt_course_e/c1s3p1_e.htm

[22] Antimiani and Cernat, L (2017), Liberalizing global trade in mode 5 services: How much is it worth?, Chief Economist Note no 4/2017, Brussels: DG TRADE, available at: http://trade.ec.europa.eu/doclib/docs/2017/july/tradoc_155844.pdf

Figure 2: EU services exports, by modes of supply



Source: Authors' calculations, based on Rueda-Cantuche et al. (2016)[23] and Rueda-Cantuche, Cernat and Sousa (2019).[24]

In the EU alone services account for 34% of manufacturing and primary sectors exports.[25] Taking account of this phenomenon a new indirect mode of services supply (mode 5 services) has been described in the literature. One characteristic of mode 5 services is that it simultaneously relates to goods and services as it focuses on the interrelation between merchandise and services trade. Several mode 5 services such as design, R&D, architectural and engineering services are high-value added and intrinsically linked to technology. Their importance for securing competitive advantages in manufacturing trade and especially in the context of global production networks is indisputable as they account for 16% of total EU services exports (see Figure 2). While GATS services are not subject to tariffs, services trade is still hampered by other types of barriers. Reducing barriers to trade in services can have a significant impact on trade flows. Simulation results using a standard gravity model show that the impacts on trade flows of a 10% decrease in services policy restrictiveness are much larger than those for elimination of manufacturing tariffs. Changes in exports and imports are typically 2–3 times higher under the first scenario than under the second.

[23] Rueda-Cantuche, J. M., Kerner, R., Cernat, L., Ritola, V. (2016) Trade in Services by GATS Modes of Supply: Statistical Concepts and First EU Estimates, Chief Economist Note No 3/2016, Brussels: DG TRADE, available at: http://trade.ec.europa.eu/doclib/docs/2016/december/tradoc_155119.pdf

[24] Rueda-Cantuche, J., Cernat L., Sousa, N. (2019) Trade and jobs in Europe: The role of mode 5 service exports, International Labour Review, Vol. 158 (2019), No. 1.

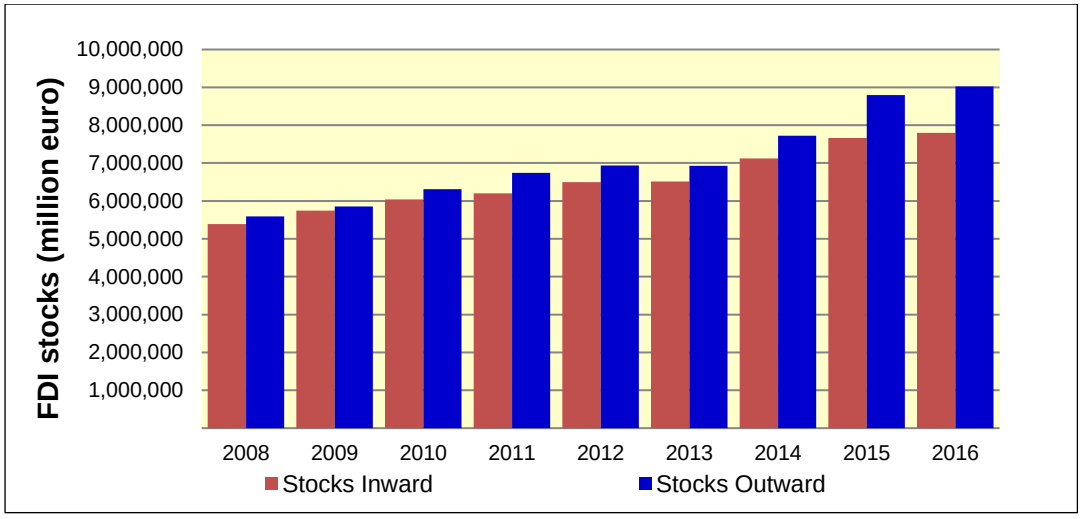
[25] Cernat, L. and Kutlina-Dimitrova, Z. (2014), Thinking In a Box: A 'Mode 5' Approach To Service Trade, Chief Economist Note no 1/2014, Brussels: DG TRADE, available at: http://trade.ec.europa.eu/doclib/docs/2014/march/tradoc_152237.pdf

2.2 FOREIGN DIRECT INVESTMENT (FDI)

The EU trade and investment policy also provides EU investors and investments with market access through legal certainty and a stable, predictable and properly regulated environment in which to conduct their business. The EU is the origin of €5.7 trillion outward FDI stocks worldwide and hosts inward FDI stocks of around €4.5 trillion (see Figure 3).

The latest data shows that over 14.2 million people worldwide are employed in foreign affiliates of EU enterprises.[26] Foreign companies established in the EU also bring many benefits for the host countries such as creating jobs, optimizing resource allocation, transferring technology and skills, increasing competition and boosting trade. EU Member States make significant efforts to attract foreign investment and latest figures show that there are over 90,000 foreign enterprises in the EU employing 7.9 million people.[27] An econometric analysis carried out by DG Trade[28] shows that multinational companies and their affiliates abroad do not only represent vital elements of each other's domestic economy but are also major determinants of the movement of goods and capital across borders. Results, using a standard gravity model, show that given a 1% change in EU-US tariffs, inter-firm[29] imports will increase 4.8% more than arm's length imports between unrelated companies.

Figure 3: EU Foreign Direct Investment Stocks (€ million)



Source: Eurostat (bop_fdi_main; bop_fdi6_flow) (Break in series in 2013)

26 Source: Eurostat (fats_g1a_08) and Eurostat (fats_out2_r2)
27 Eurostat :Foreign Affiliates Trade in Services (FATS) statistics 2014
28 Lakatos, C. and T. Fukui (2013), EU-US economic linkages: The role of multinationals and intra-firm trade, Chief Economist Note no 2/2013, Brussels: DG TRADE, available at:
http://trade.ec.europa.eu/doclib/docs/2013/november/tradoc_151922.%202_November%202013.pdf
29 Inter-firm or related-party trade covers trade between parties who are joined by a pre-existing relationship. For example, this includes trade between US and EU affiliates and their parent companies, as well as all trade between affiliated parties (for instance trade between Korean affiliates that are located in the US and EU. Arm's length trade is defined as trade between unrelated parties.

3. ADVANCING A PROGRESSIVE TRADE AGENDA: TRADE, JOBS AND EUROPEAN VALUES

The EU remains a top trading partner for most countries worldwide and hundreds of thousands of EU companies are taking advantage of the benefits of a liberal EU trade policy. However while trade in goods and services, as well as FDI, are the primary metrics of a successful trade policy, the ultimate objective of EU trade policy is not to increase trade and investment flows for their own sake.

In recent years, we have witnessed a "big switch" in stances on economic globalisation.[30] Civil society movements have lost political momentum since the global financial crisis of 2008, and attitudes toward globalisation changed. Countries realised that, in a more interconnected world, economic interdependencies might come along with both benefits and costs. Some countries, convinced about the benefits of free trade and further integration, aim to tackle the issues caused by globalisation while emphasising its benefits. Others feel that economic integration might be hampering their economic prosperity or autonomy. Although there are many examples of resistance to globalisation, the most prominent ones are recent political developments in the USA and United Kingdom.[31] The UK's referendum decision to leave the EU has been done amid expression of anti-globalist, anti-immigrant, nationalist sentiments.

Reasons behind this turn round in US policy can be linked the negative impact of trade, especially the steady increase of Chinese imports over the last two decades.[32] US import competition costs have been borne by more exposed industries located in the Midwest and Southeast. Industries contracted, and surviving firms have strongly reduced employment levels. Negative shocks on one industry have been transmitted to other industries via downstream and upstream linkages, and then to the same regional or national market. [33] However, a number of papers and studies have shown that there has been significant benefits from increased US trade with China. Feenstra et al (2017) find that although the rise in Chinese imports has reduced jobs in the US, the global export expansion of US products also creates a considerable number of jobs which offsets the impact of the increase in import competition.[34] Jaravel and Sager (2018) estimate the effect of trade with China on U.S. consumer prices across industries between 2000 and 2007. It finds that a one percentage point

30 Horner R., Schindler S., Haberly D., Aoyama Y (2017) Globalisation, uneven development and the North–South 'big switch', Cambridge Journal of Regions, Economy and Society, Volume 11, Issue 1, 10 March 2018, Pages 17–33, https://doi.org/10.1093/cjres/rsx026
31 Johns J. (2017) The G20 summit shows a world divided in its attitudes toward globalisation. https://theconversation.com/the-g20-summit-shows-a-world-divided-in-its-attitudes-toward-globalisation-80517
32 After China joined the WTO, its exports towards European countries and the US has increased notably, thanks to a sustained productivity grow (+8% per year in 1998-2007), privatisation and related technology/productivity improvements, and greater access to markets.
33 Autor D., Dorn D., Hanson G. (2016), The China Shock: Learning from Labor-Market Adjustment to Large Changes in Trade, Annual Review of Economics 2016 8:1, 205-240.
34 Feenstra, Robert, Hong Ma, and Yuan Xu, 2017, "US Exports and Employment", NBER Working Paper No. 24056.

increase in Chinese import penetration in a given industry led to a three percentage point fall in the Consumer Price Index in that industry, generating over $202 billion in consumer benefits via lower prices.[35] The Federal Reserve Bank of San Francisco found that, around 56 cents of every dollar that Americans spent on "Made in China" imports in 2018 went to American firms and workers, which is the highest share of any country. It also found that one-third of all Chinese imports were intermediate goods (e.g., manufacturing inputs like auto parts) used by American companies to produce globally competitive goods and services.[36]

Domestic, tax and welfare policies have played an important role in shaping how countries cope with the consequences of import competition. In some instances, external blame has been invoked for internally generated economic problems. Unfortunately, given the influence on the income distribution, it is not evident to separate economic globalisation from skill-biased technological changes, as well as other factors that influence industry and country resilience.

3.1 TRADE AND JOBS

Gains from trade are expected to have a long-run impact on aggregate employment to the extent that in policy circles there are demands to use estimates of job creation as a main metric to decide whether trade liberalisation initiatives are worthwhile pursuing. This issue has taken centre stage in the political debate about trade even though the link between trade and employment is less than obvious. Aggregate employment levels in the long-run are determined by macroeconomic conditions (notably demand cyclical fluctuations), population growth and labour markets regulations and institutions. While the main objective of open trade policies is to reap efficiency gains, their impact on the level of employment is difficult to gauge as it depends on policy constraints that go well beyond trade policy.

If no changes are made to other policy settings then overall employment will remain unaffected in the long-run as wage adjustments brings it back to the initial equilibrium. Empirical evidence finds no statistically significant correlation between aggregate unemployment rates in a number of industrialised countries between 1970 and 2005 and various measures of openness (e.g. exports share of GDP, imports share of GDP, total trade as a share of GDP, services trade as a share of GDP and trade taxes as a share of total government tax revenue).[37]

35 Jaravel, X. and E. Sager, (2018) "What Are the Price Effects of Trade? Evidence From the U.S. and Implications for Quantitative Trade Models," Technical Report, February 2018.
36 Hale G, B Hobijn, F Nechio, and D Wilson, (2019). How Much Do We Spend on Imports? Federal Reserve Bank of San Francisco Economic Letter 2019/01, January 2019.
37 Hill, S., M. Lesher and H. Nordås (2008), "Trade and Labour Market Adjustments", *OECD Trade Policy Working Paper* n. 64. Available at: http://dx.doi.org/10.1787/241811413374

In the long-run, technology-driven structural changes in the economy play an important role and cause changes in employment patterns. Because technology progress and trade are so closely intertwined it is often difficult to disentangle the role of each when working with historical data. However, what can be estimated is the number of jobs supported by exports at any given moment. For instance, in 2017, 36 million jobs in Europe were supported by EU exports to the rest of the world which is 15 million (66%) more than in 2000. This means that every 1 in 7 jobs in the EU depends on exports to the world. These job opportunities benefit both skilled and unskilled workers and on average EU export-related jobs are 12% better paid than jobs in the rest of the economy. Data for 2017 shows that the export related wage premium amounts to 12% on average, ranging from 5% for low-skilled jobs, 9% for medium-skilled jobs and 16% for high-skilled jobs.[38]

European workers from all Member States benefit from EU exports. These job opportunities emerge not only because exporting firms are expanding sales outside the EU but also because firms supplying goods and services to exporters also sustain millions of jobs along respective supply chains within the Single Market. These upstream jobs may be located in the same Member State or elsewhere in the EU. On average, almost one fifth of the jobs supported by extra-EU exports are facilitated by the EU Single Market. With the expansion of global value chains, EU exports support more and more jobs not only in the EU but also in our trading partners. Almost 20 million jobs beyond the EU are supported by EU exports, thanks to EU firms participating in global supply chains.

Box 1. Dealing with labour adjustment costs – the European Globalization Fund (EGF)

In 2007, the European Globalization Adjustment Fund (EGF) was established as a means to assist workers and self-employed people who lost their job as a result of globalization. It can be mobilized in the case of major restructuring events and provides various ways of supporting redundant workers in finding a new job or starting-up their own business. In 2009, the target group of the fund was broadened by including redundancies caused by the economic and financial crisis. The EGF is a relatively small part of the EU's adjustment policy as other measures that also deal with structural adjustment include the ESIF, Semester and MS level measures,

In spring 2018, the proposal for the new EGF regulation covering the period of the upcoming multiannual financial framework was finalized. It includes various measures to increase the uptake of the EGF, which has never fully utilized its financial potential. More specifically, its scope is broadened, its budget ceiling increased, the minimum threshold of redundancies is reduced, the procedure is sped-up, and perhaps most importantly the co-financing rate, which

[38] Kutlina-Dimitrova Z., J M. Rueda-Cantuche, A F. Amores and M. Victoria Román (2018) How Important are EU Exports for Jobs in the EU?, DG TRADE. Chief Economist Note no 4/2018, Brussels: Available at: http://trade.ec.europa.eu/doclib/docs/2018/november/tradoc_157551.pdf

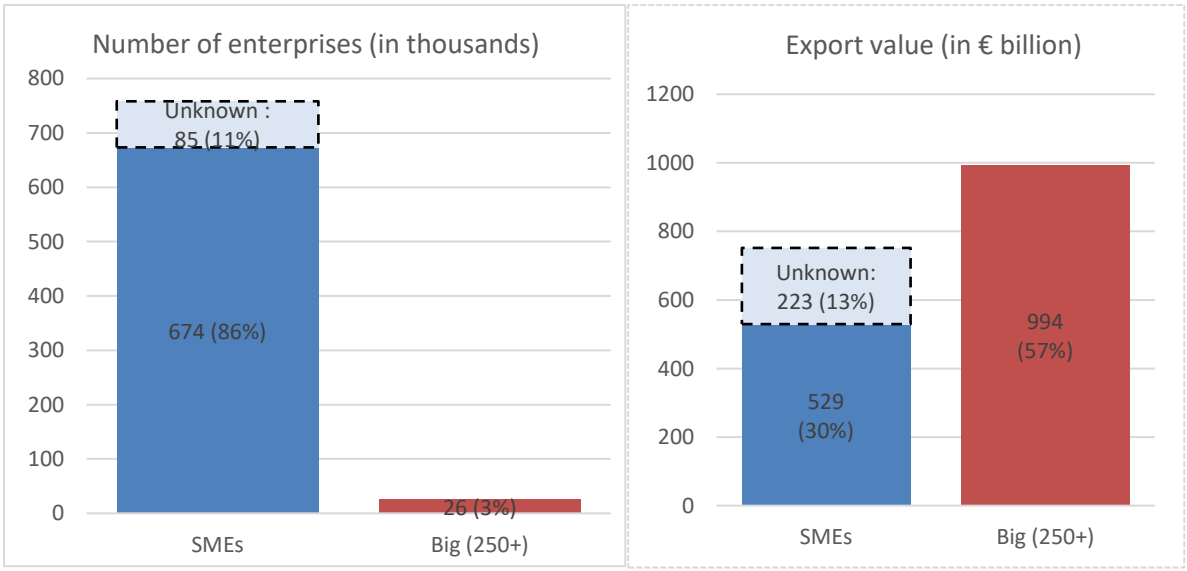
used to be a flat 60%, is set at the usually more generous one applying to the member state in question under the upcoming European Social Fund (ESF)+.

These changes are critical in a time when EU trade policy is under intense scrutiny. Therefore, active labour market policies are preferable to safety-net-type policies when it comes to managing the negative consequences of trade and globalization more generally.[39]

3.2 SMEs AND TRADE

The expansion of European small and medium sized enterprises (SMEs) into international markets is an important EU policy objective that can significantly benefit the European economy. Facilitating the internationalisation of EU SMEs is part of the objectives set out by the European Commission in several flagship initiatives and policy instruments which currently help a large number of EU SMEs reach international markets outside the EU. In 2016, over 674,000 small and medium firms exported to various destinations across the world. Furthermore, over 84,000 companies with "unknown" status in terms of their size[40] are also exporting to extra-EU countries. This clearly shows that SMEs are a major driving force for EU export performance, not only in terms of the number of exporters but also in terms of value of exports. Although large enterprises (250+ employees) accounting for a large share of EU exports by value, EU exporting SMEs generate between 30-43% of the total value of EU exports, depending on the treatment of "unknown" exporters (see Figure 4)

Figure 4. The share of SMEs in total number of exporters and value of EU exports, 2016



Source: Eurostat, Trade by Enterprise Categories database

[39] Cernat, L. and F. Mustilli (2017), Trade and Labour Adjustment in Europe: What Role for the European Globalization Adjustment Fund, Chief Economist Note no 2/2017, Brussels: DG TRADE. Available at: http://trade.ec.europa.eu/doclib/docs/2017/may/tradoc_155512.pdf

[40] Reporting requirements in some EU member states do not oblige companies to indicate their size however, in all likelihood, most of these are SMEs.

Despite exporting SMEs representing a large share of total exporting enterprises outside the EU, they represent a small share of the millions of existing SMEs in the EU.[41] So indeed, the relatively few SMEs successfully exporting outside the EU could be considered as the "happy few". This highlights another important fact: given that a small share of EU SMEs account for one third of "direct" exports outside the EU in value, there could be a large untapped potential for the European economy if more SMEs were targeting international markets outside the EU. A survey conducted on behalf of the European Commission has already pointed out a positive correlation between SMEs being internationally active (importing and/or exporting) and those achieving a higher turnover and employment growth.[42]

In addition, international trade statistics count only direct exports, which may significantly underrepresent the number of SMEs indirectly supplying other exporters, such as large local firms or multinational companies. Research from the World Bank and the OECD on a selection of OECD countries where data was available shows that the indirect contribution of SMEs in global value chains is sizable and significantly greater than what the value of direct exports would suggest.[43] Accounting for the contribution that SMEs make to exports as upstream producers, in the majority of cases, SMEs account for more than half of the total exports of domestic value added. At the total economy level, for example, the contribution of SMEs nearly doubles, from around 16 to about 33 percent of total exports of domestic value added.

However, there is potential for an even larger number of EU SMEs to reach international markets. This is because barriers specific to individual SMEs, the sector in which they operate, and other barriers outside the SMEs' control can prevent them from reaching international markets. Even those firms already targeting markets outside the EU could enhance their performance in international markets. Most EU exporting firms continue to have a narrow export strategy. The data available from Eurostat Trade by Enterprise Characteristics (TEC) database suggests that 60% of all exporting firms (including SMEs) depend on exports to only one or two extra-EU markets.

SME exporters suffer from relatively higher costs and challenges than larger exporters due to lower human resources and capital. These barriers include tariffs, quotas and stringent rules of origin.[44] Non-tariff measures (NTMs) may affect SMEs disproportionately due to fixed

[41] Gagliardi, D., Muller, P., Glossop, E., Caliandro, C., Fritsch, M., Brtkova, G., Bohn, N. U., Klitou, D., Avigdor, G., Marzocchi, C., and Ramlogan, R., 2013. A recovery on the horizon? Annual report on European SMEs 2012/2013. Final Report. European Commission, October.

[42] European Commission 2010. Internationalisation of European SMEs – Final Report. Prepared by EIM Business & Policy Research for DG Enterprise and Industry. Brussels: Directorate-General for Enterprise and Industry, European Commission

[43] OECD and The World Bank (2017), Inclusive Global Value Chains: Policy Options in Trade and Complementary Areas for GVC Integration by Small and Medium Enterprises and Low-Income Developing Countries, The World Bank, Washington, D.C., https://doi.org/10.1787/9789264249677-en

[44] United States International Trade Commission (USITC), 2010. Small and Medium-Sized Enterprises: Characteristics and Performance.

compliance costs that do not vary with the amount traded and the inability of SMEs to spread these costs over large export values. Examples of NTMs include compliance with certain foreign technical standards, difficult licensing procedures and certifications. Other challenges that SMEs are faced with include complex custom procedures, export controls, and lack of IPR enforcement. The lack of transparency regarding trade rules and other relevant domestic regulations pose additional difficulties to exporting SMEs. One empirical paper found that exchange rate fluctuations may have a worse impact on SME exporters than large exporters.[45]

One possible measure that tackles several NTMs systematically affecting SME export performance is the creation of a common SME help desk for FTA partners that provides an official "one-stop shop" for technical and trade facilitation information, with advice on export procedures. The EU has already taken the initiative and put in place such a system for both EU importers and exporters. The European Commission has launched several helpdesks (the IPR SME Helpdesks, a TDI SME Helpdesk, Export Helpdesk) and the Market Access Database[46] with product specific information on tariffs, import formalities and other relevant import information on main EU export markets.

New tools of interest to SME exporters are also under development: a new Rules of Origin online assessment portal with step by step easy access and product by product details on the exact procedural elements required under the rules of origin applicable under each EU FTA. A new notification system “SMS4SMEs” which informs registered SMEs of relevant trade rule changes applicable to their products and destination markets based on the existing databases, is also under development. Last but not least, the EU is actively monitoring trade impediments, including those for SMEs, and has been implementing an ambitious Market Access Strategy.

3.3 TRADE AND CONSUMER BENEFITS

Trade affects consumers and firms via multiple channels, such as productivity gains and sectoral reallocation of production affecting employment, wages and prices. In addition, there are also indirect effects, such as quality improvements and more product varieties. These consumer benefits are estimated to have a stronger positive effect on the poorest households.

Investigation Number 332-510, USITC Publication 4189. Washington, DC: U.S. International Trade Commission. and European Parliament (EP), DG External Policies, 2008. SMEs and International Trade, EXPO/B/INTA/2008/50. Report to the International Trade Committee, November 2008. Brussels: European Parliament.

[45] Amiti, M., Itskhoki, O. and Konings, J., 2014. Importers, Exporters, and Exchange Rate Disconnect. American Economic Review, 104(7), pp.1942-1978.

[46] See the information provided by the EU Export Helpdesk (Available at: http://exporthelp.europa.eu/thdapp/index.htm) and the EU Market Access database (Available at: http://madb.europa.eu/madb/indexPubli.htm).

Low-income families spend proportionally more of their budget on consumer goods and as such lower import prices since tariff dismantling is more important for them.[47]

However, a growing number of people are wondering why FTAs are being negotiated and who benefits from tariff dismantling. A 2010 Eurobarometer found that 44% of Europeans think they have benefitted from trade, while almost 20% of them do not know if they were positively or negatively affected by trade.[48]

In principle, this agnostic attitude should be less widespread as consumers benefit from free trade in many ways, notably from lower prices, more product varieties, and higher quality. However, these sources of consumer gains are often very difficult to document and disentangle from other economic factors, not only from a research perspective but even more so from an individual consumer point of view. Research on the empirical effects of tariff dismantling on consumer benefits in the EU is still scarce.

Notwithstanding the foregoing, evidence shows that international trade promotes higher quality products[49] and lower tariffs lead to lower prices. Furthermore, the quality adjusted prices for imported goods have decreased by 19% and the quality of goods increased 26% for the UK due the FTAs concluded by the EU.[50] Evidence also indicates that a quality increase of 7% on average for the EU arises due to trade agreements resulting in a fall in the consumer price index[51]. Research also finds that average clothing prices dropped 16.2% relative to the general price level between 1996 and 2005 thanks to the agreement on Textiles and Clothing that ended the old system of quotas.[52] Similarly, tariff liberalization led to drop in consumer prices by 18% in India[53] while 31% of the wider consumer choice and product variety in India is associated with tariff reductions.[54]

In sum, there is plenty of evidence that consumers gain from trade liberalisation in many ways, not just lower prices (e.g. quality improvements and the introduction of new varieties) but such gains may not necessarily be obvious to individual consumers. One simple, albeit incomplete, metric trying to capture the benefits of EU trade policy since the Uruguay round,

[47] Fajgelbaum, Pablo D., and Amit K. Khandelwal. 2014. "Measuring the Unequal Gains from Trade." National Bureau of Economic Research Working Paper 20331
[48] European Commission (2010) Special Eurobarometer 357. Available at: http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_357_en.pdf
[49] Hummels, D. and Skiba, A. (2004) "Shipping the Good Apples Out? An Empirical Confirmation of the Alchian-Allen Conjecture", Journal of Political Economy, 112:6, pp 1384-1402
[50] Breinlich, H., Dhingra, S. and Ottaviano, G. (2016) "How have EU's trade agreements impacted consumers", CEP Discussion Paper No. 1417, London.
[51] Berlingieri, G., Breinlich, H. and Dhingra, S. (2017) The impact of trade agreements on consumer welfare – evidence from the European Union's common external trade policy, Journal of the European Economic Association.
[52] Francois, J., Manchin, M., Norberg, H. and Spinanger, D. (2007), "Impacts of textiles and clothing sectors liberalisation on prices", The Kiel Institute for the World Economy. Report for the European Commission – Directorate-General for Trade, Brussels.
[53] De Loecker, J., Goldberg, P. K., Khandelwal, A. K. and Pavcnik, N. (2016), "Process, Mark-ups, and Trade Reform, Econometrica, 84:2, pp 445-510
[54] Goldberg, P. K., Khandelwal, A. K., Pavcnik, N. and Topalova, P. (2010), "Imported Intermediate Inputs and Domestic Product Growth: Evidence from India", The Quarterly Journal of Economics, 125:4, pp 1727-1767

is provided in a recent DG Trade Chief Economist Note.[55] Using a novel technique matching very detailed household consumption and import data, the authors quantify one narrow aspect of the multitude of consumer gains from trade - the potential tariff savings for EU households and consumers over the last two decades, as a result of multilateral and bilateral trade agreements. In the absence of reliable data on the tariff pass-through rate, the total tariff savings for all EU households amount to around €60 billion annually, under the assumption of a full pass through.

3.4 SUSTAINABLE DEVELOPMENT

Sustainable development means meeting the needs of the present whilst ensuring future generations can meet their own needs. All EU free trade agreements seek to use the trade platform to promote sustainable development in line with European values. In this context, the EU is committed to including a chapter on Trade and Sustainable Development (TSD) in trade agreements, to harness globalisation to promote a value-based trade agenda. The EU-Korea FTA was the first time a TSD chapter was included and this is now in its sixth year of implementation. TSD chapters are also included in EU agreements with Canada, Central America, Colombia, Peru, Ecuador, Georgia, Moldova, Singapore, Ukraine and Vietnam.[56]

These TSD chapters form part of the EU's attempt to link the EU's policies to the attainment of the 17 Sustainable Development Goals (SDGs) proposed by the United Nations in 2015, which are built around three pillars: economic, environmental and social.

Examples of sustainable development in EU FTAs include non-discrimination in the work place in the EU and Korea agreement, projects in El Salvador and Guatemala focusing on fundamental conventions on freedom of association, collective bargaining and non-discrimination and projects in the field of Corporate Social Responsibility in Asia and Latin America.[57]

Surveys[58] conducted for the ex-post evaluation of the EU and Korea FTA found that approximately half of respondents indicated that EU-Korea trade has contributed either very much or moderately to economic development, social development and environmental

[55] Cernat L., D. Gerard, O. Guinea and L. Isella (2018), Consumer benefits from EU trade liberalisation: How much did we save since the Uruguay Round? Chief Economist Note no 1/2018, Brussels: DG TRADE, available at: http://trade.ec.europa.eu/doclib/docs/2018/february/tradoc_156619.pdf

[56] The EU has recently developed a 15-point plan following a consultation process with Member States, MEPs as well as a wide variety of interested stakeholders to make EU trade and sustainable development chapters more effective. The 15 actions are organized under four headings: Working Together; Enabling Civil Society; Delivering; and Communicating and Transparency. Available at: http://trade.ec.europa.eu/doclib/docs/2018/february/tradoc_156618.pdf

[57] European Commission (2017) Implementation of Free Trade Agreements (SWD 2017 364). Available at: https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-654-F1-EN-MAIN-PART-1.PDF

[58] Two targeted surveys were conducted. One which focused on industry and SMEs. The other focused on consumer organisations and NGOs that work in the field of trade and sustainable development.

protection, with the other half indicating that EU-Korea trade did not contribute to these aspects of sustainable development.[59]

In terms of unilateral agreements, the GSP+ is an EU trade policy instrument devised to encourage third countries to comply with 27 core international standards in the areas of human rights, labour rights, environmental protection and good governance. It allows exporters from developing countries to pay lower customs duties however if there are serious and systematic violations of human rights the EU can withdraw this benefit until the situation improves sufficiently.

A mid-term evaluation of the EU GSP scheme found that overall, GSP is considered to have had a positive impact on social and human rights in the beneficiary countries. It found that the Commission has successfully affected Sri Lanka's compliance with the UN human rights conventions and that the prospect of GSP+ status has led to the ratification and implementation of human rights conventions in Pakistan and Tajikistan. However, in several cases, economic growth and export opportunities did not go hand-in-hand with adherence to fundamental labour and human rights. An examination of Ethiopia and Cambodia show that there have been reported cases of land grabbing or inadequate compensation to grant land for companies in the floriculture sector, rice and sugar industries.[60]

In addition, a recent European Commission study[61] showed that all 14 GSP+ beneficiary countries strengthened their domestic institutions responsible for the implementation of the 27 international conventions, improved relations with the international bodies responsible for monitoring their implementation, and upgraded their reporting activities.

3.4.1 ENVIRONMENTAL PROTECTION

Through its trade policy the EU supports the implementation of international environmental rules, set mainly in multilateral environmental agreements. In addition, the EU is working with 16 trading partners within the WTO to conclude an Environmental Goods Agreement. The agreement will remove tariffs on environmental technologies, including goods crucial for mitigating climate change.

Recognizing the need to support the effective implementation of the 2015 Paris Agreement on climate change, references to the support and implementation of that landmark agreement

[59] European Commission (2017) Evaluation of the Implementation of the Free Trade Agreement between the EU and its Member States and the Republic of Korea, Interim Technical Report Part 2. Available at: http://trade.ec.europa.eu/doclib/docs/2017/june/tradoc_155674.pdf
[60] European Commission (2018) Mid-Term Evaluation of the EU's Generalised Scheme of Preferences (GSP). Available at: http://trade.ec.europa.eu/doclib/docs/2018/january/tradoc_156566.pdf
[61] European Commission (2016) The EU Special Incentive Arrangement for Sustainable Development and Good Governance ('GSP+') covering the period 2014 – 2015. Available at: http://trade.ec.europa.eu/doclib/docs/2016/january/tradoc_154178.pdf

have been strengthened. This has started with the recently concluded FTA negotiations with Japan.

While the majority of literature indicates that freer trade is likely to increase CO_2 emissions as a result of increased economic activity[62] (the scale effect), there is evidence that trade opening could facilitate both the adoption of technologies that reduce the emission-intensity of goods and their production process (technique effect) and the change in the mix of a country's production from energy-intensive sectors towards less energy-intensive sectors if it is where it has a comparative advantage (composition effect).

Managi et al. (2008)[63] suggests that the impact of trade openness on CO_2 emissions may differ between developed countries (OECD members) and developing countries. They find that trade openness reduces CO_2 emissions in OECD countries because the technique effect dominates the scale and composition effects, but that it has a detrimental effect on carbon dioxide emissions in non-OECD countries, where the scale and composition effects prevail over the technique effect. They also find that the long-term impact of trade on CO_2 emission levels is large, although it is small in the short term.

OECD research[64] finds that membership in Regional Trade Agreements, either with or without environmental provisions, led to improved environmental quality. Results showed that higher levels of trade arising from RTAs do not seem to increase concentrations of sulphur dioxide (SO^2) and nitrogen oxide (NOx). However, the extent to which RTAs with environmental provisions makes an additional difference on emissions in comparison to those without environmental provisions could not be concluded with enough statistical certainty.

While international transportation is a small fraction of overall emissions, it is a surprisingly large fraction of trade-related emissions. International transport is responsible for 33 percent of world-wide trade-related emissions, and over 75 percent of emissions for major manufacturing categories like machinery, electronics and transport equipment. Production methods, however, are substantially different between countries and geographic areas depending on the climate. This seems to be a more important factor for the emission of a good than the distance it has been shipped.

Cristea et al (2011)[65] find that if a country has very high output emissions, and transports goods efficiently, importing the good from a low emission producer can reduce emissions.

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[62] Tamiotti, L., A. Olhoff, R. Teh, B. Simmons, V. Kulaçoğlu, and H. Abaza (2009). Trade and Climate Change. A Report by the United Nations Environment Programme and the World Trade Organization, World Trade Organization, Geneva, Switzerland

[63] Managi, S., Hibiki, A. and Tsurumi, T. (2008), "Does Trade Liberalization Reduce Pollution Emissions, Research Institute of Economy, Trade and Industry (RIETI) Discussion Paper Series 08E-013.

[64] Martínez-Zarzoso, I. (2018), "Assessing the Effectiveness of Environmental Provisions in Regional Trade Agreements: An Empirical Analysis", OECD Trade and Environment Working Papers, 2018/02, OECD Publishing, Paris. http://dx.doi.org/10.1787/5ffc615c-en

[65] Cristea, Anca D. and Hummels, David L. and Puzzello, Laura and Avetisyan, Misak, Trade and the Greenhouse Gas Emissions from International Freight Transport (June 2011). NBER Working Paper No. w17117. Available at SSRN: https://ssrn.com/abstract=1861858

Results from data simulations show that one-quarter of cases, the difference in output emissions is more than enough to compensate for the emissions cost of transport. Emission reducing trades are more likely to occur in agriculture and mining sectors while reducing emissions through trading manufactures is relatively difficult.

3.4.2 PROMOTING CORE EUROPEAN VALUES

The EU's trade policy, alongside its foreign policy and development cooperation, supports respect for human rights and improved labour standards in non-EU countries. Modern EU trade agreements oblige the EU and its partners to respect and implement the International Labour Organization's fundamental conventions on:

- allowing freedom of association and the right to collective bargaining
- getting rid of all forms of forced or compulsory labour
- abolishing child labour
- ending discrimination in the workplace

The objective of these labour clauses is to make preferential market access to a partner's market conditional on the respect of workers' rights in the exporting country. It has been argued that labour clauses are set for protectionist reasons and have led to the refusal by developing countries to engage in a labour agreement at the World Trade Organization.[66] On the other hand, some have claimed that the external enforcement of minimum labour standard through labour clauses in trade agreements can help increase the demand for products by concerned consumers in the developed countries, leading to more, not less trade.[67]

Research shows that neither of these arguments hold as the introduction of labour clauses in a trade agreement has, on average, no significant impact on bilateral trade flows.[68] Interestingly, the study finds that exports of low-income countries benefit from the introduction of labour clauses in North-South trade agreements and the impact is stronger when accompanied by deep cooperation. Labour clause enforcement mechanisms, on the other hand, do not seem to lead to a stronger impact on trade flows. Therefore, in order to promote trade and reduce the risk of a protectionist backlash, cooperation rather than enforcement provisions should be pursued in labour clauses between developing and developed countries.

[66] Bhagwati, J, (2001). "After Seattle: Free Trade and the WTO." International Affairs 77 (1), 15-29. *and* Bhagwati, J. (1995). "Trade Liberalization and 'Fair Trade' Demands: Addressing the Environmental and Labour Standards Issues." World Economy 18, 745-759.
[67] Brown, D, R Dehejia, and R Robertson (2013). "Is there an efficiency case for international labour standards?" Better Work discussion paper series, No. 12. *and* ILO, (2016). Assessment of labor provisions in trade and investment agreements. Geneva: ILO.
[68] Carrère, C, M Olarreaga and D Raess (2017), "Labor clauses in trade agreements: worker protection or protectionism?", CEPR Discussion Paper Series No. 12251.

The EU also employs strict monitoring and control procedures of EU exports of goods that can be used to carry out torture or death sentences and is modernising its policy on export controls of 'dual use' goods that can be used for both civilian and military applications. One of the objectives is to prevent the misuse of digital surveillance and intrusion systems that can lead to human rights violations.

EU trade policy aims to help ensure that production at each stage of the global value chain is carried out responsibly so that it respects workers and the environment. This consists of a number of measures including a recently developed law targeting conflict minerals and voluntary labelling schemes to promote fair and ethical trade.

Box 2. Conflict minerals

In politically unstable areas, the minerals trade can be used to finance armed groups, fuel forced labour and other human rights abuses, and support corruption and money laundering. These so-called 'conflict minerals' such as tin, tungsten, tantalum and gold, also referred to as 3TG, can be used in everyday products such as mobile phones and cars or in jewellery.

There are several points in the 3TG minerals and metals supply chain (e.g.: extraction, refining, transportation) where money from the sale may go to armed groups or criminals. Making sure that these armed groups and criminals can no longer rely on the purchase of 3TG as a source of income is a way of making it more difficult for them to continue their activities and tackling human rights abuses.

The EU regulation agreed in November 2016 will come into force on 1st January 2021 and aims to:

- Ensure that EU importers of 3TG meet international responsible sourcing standards, set by the Organisation for Economic Co-operation and Development (OECD).
- Ensure that global and EU smelters and refiners of 3TG source responsibly.
- Help break the link between conflict and the illegal exploitation of minerals.
- Help put an end to the exploitation and abuse of local communities, including mine workers, and support local development.

The regulation will directly apply to companies that import 3TG minerals and metals into the EU, no matter where these originate from and it also requires EU companies in the supply chain to ensure they import these minerals and metals from responsible and conflict-free sources only.

4. FIGHTING UNFAIR TRADE PRACTICES

Protectionist measures have become a major talking point of trade policy over the last few years with the USA carrying out the most definitive action by increasing tariffs on over US$200 billion worth of Chinese products. Various quantitative analyses have been carried out by a number of institutions in response to the increasing threats of protectionism.

One of those is the International Monetary Fund's (IMF) most recent World Economic Outlook from October 2018.[69] The authors use the IMF's Global Integrated Monetary and Fiscal Model to simulate a scenario of a trade war that consists of different layers. The first of these layers implements protectionist measures that are already in place or scheduled, including the US measures under sections 232 and 301 of the 1974 Trade Act and the countermeasures by affected trade partners. Subsequent layers impose tariffs of 25% on all US imports from China, on cars and car parts from all trading partners and an equivalent retaliation. In the case of China, equivalent retaliation is not possible and therefore a 25% tariff on all goods imports from the US is assumed. The final layers add effects of increased uncertainty on US investment and deteriorating financing conditions. The first layer, i.e. the existing or confirmed upcoming measures lead to a long-term decrease in US and Chinese GDP of about 0.3%, whereas for the rest of the world, the impact is negligible. An all-out trade war between the US and China would see a drop in GDP of about 0.5% for both economies. Tariffs on cars and parts will impose significant negative effects also on other countries which hitherto are essentially unaffected. Japan (0.2% fall) and in particular NAFTA countries (falling by 1.4%) are affected, but also the additional blow to the US is significant, bringing the cumulative effect to a drop of 0.8%. The Euro area (the EU is not modelled as a region in the IMF model) suffers losses to GDP of about 0.1%. Global GDP goes down by approximately 0.4%. Confidence and financial market effects unfold particularly in the short run, but tend to subside in the long run. The authors stress, though, that these results likely underestimate the full effect of the protectionist measures in the scenarios for various reasons.

The European Commission also ran several scenarios.[70] The first of these imposes a stock of currently applied and announced measures. The EU is only affected in the short run, whereas for the US and China, these measures lead to more significant long-run effects with 0.5% and 0.8%, respectively. These results are the compound of direct effect, confidence effects – as in the IMF model – and a productivity effect. The impact of the latter on the results is rather negligible, whereas the confidence effect makes up for about 10% to 25% of the total effect. The second, more speculative scenario increases all tariffs worldwide by 2 percentage points. The effects are spread over more countries now, with notably the EU suffering a loss of about

[69] International Monetary Fund. 2018. World Economic Outlook: Challenges to Steady Growth. Washington, DC, October 2018.
[70] European Commission (2018), European Economic Forecast: Autumn 2018, Institutional Paper 089. November 2018. Brussels.

0.3% of GDP in the long run. The US and the rest of the world are affected similarly, whereas the effect on China is about double the effect on other countries.

World Bank[71] research quantifies the wide-ranging costs of potential increases in worldwide barriers to trade using two scenarios. First, a coordinated global withdrawal of tariff commitments from all existing bilateral/regional trade agreements, as well as from unilateral preferential schemes coupled with an increase in the cost of traded services, is estimated to result in annual worldwide real income losses of 0.3% (US$211 billion) by 2020 with global trade declining by 2.1% or more than US$606 billion relative to the baseline. The second scenario estimates a worldwide increase in tariffs up to the legally allowed bound rates coupled with an increase in the cost of traded services. Results here show an annual global real income losses of 0.8% (US$634 billion) with global trade declining by 9% or US$2.6 trillion.

Finally, a recent IMF working paper finds that tariff increases lead to economically and statistically significant declines in domestic output and productivity. Tariff increases also result in more unemployment, higher inequality, and real exchange rate appreciation, but only small effects on the trade balance. The effects on output and productivity tend to be magnified when tariffs rise during expansions, for advanced economies, and when tariffs go up, not down.[72]

In addition to improving human rights and labour standards, there are various trade policies and tools used by the EU to tackle unfair trading practices. This section discusses the impact of these policies on areas such as public procurement, geographical indications and intellectual property rights.

4.1 TRADE DEFENCE

The EU is a moderate user of trade defence with less than 1% of total imports covered by Trade Defence Instrument (TDI) measures. It puts great emphasis on and devotes considerable resources to tackling unfair trade and currently has 110 trade defence measures in force.[73]

In the past year, the EU toolbox for remedies against unfair trade practices by third countries has been thoroughly overhauled. A new anti-dumping methodology entered into force on the 20th December 2017.[74] It keeps a delicate balance between maintaining the effectiveness of

[71] "Kutlina-Dimitrova, Z & C. Lakatos, (2017), The Global Costs of Protectionism. Policy Research Working Paper;No. 8277. World Bank, Washington, DC. World Bank.
[72] Furceri A, S.A. Hannan, J.D. Ostry, and A.K. Rose (2019) The Macroeconomic Consequences of Tariffs. IMF Working Paper No. 19/9 International Monetary Fund, Washington DC, January 2019.
[73] European Commission (2018) Trade Defence Statistics. June 2018 Available at: http://trade.ec.europa.eu/doclib/docs/2018/august/tradoc_157236.pdf
[74] Regulation (EU) 2017/2321 of the European Parliament and of the Council.

the EU TDI, while at the same time complying with the EU's international obligations. The new methodology also allows for new dumping calculations in case of significant distortions in the country of origin.

According to the European Commission impact assessment accompanying the legislative proposal, the new methodology will avoid increases of imports from China in certain sectors on account of unfair trade practices by about 18-28% and thereby protecting between 50,000-74,000 EU jobs from unfair competition.[75]

More recently, on 8 June 2018, modernized anti-dumping and anti-subsidy rules entered into force.[76] These include quicker procedures leading up to provisional measures, stronger rules on the calculation of the injury margins and changes in the application of the lesser duty rule.

4.2 PROTECTING OUR KNOWLEDGE-BASED COMPETITIVENESS

Protection and enforcement of intellectual property is crucial for the EU's ability to stimulate innovation and to compete in the global economy. Intellectual Property Rights (IPRs) such as patents, trademarks, designs, copyrights or geographical indications enable European inventors, creators and businesses to prevent unauthorized exploitation of their creations, and in return to get compensation for their investment. Over 42% of total economic activity in the EU (some €5.7 trillion annually) is generated by IPR-intensive industries, and approximately 38% of all employment in the EU (82 million jobs) stems from businesses that have a higher than average use of IP rights. Average wages in IPR-intensive industries are more than 46% higher than in other industries.[77]

One of the EU's objectives is to improve the protection and enforcement of IPRs in third countries. This objective is being pursued through an effective enforcement regime as well as through multilateral and bilateral trade agreements. In addition, the EU offers a number of support actions such as technical assistance focusing on IPR or including an IPR component, intended to help third countries improve their IPR system and support services targeting EU right-holders doing business in or with certain third countries (e.g. the China IPR SME Helpdesk).

Geographical indications are crucial IP elements for EU agrifood exporters. A geographical indication is used to identify a product as originating in the territory of a particular country, region or locality where its quality, reputation or other characteristic is linked to its geographical origin. The protection of geographical indications matters economically and culturally. They are a useful intellectual property right for developing countries and can

[75] European Commission (2016) Impact Assessment: Possible change in the calculation methodology of dumping regarding the People's Republic of China (SWD 2016 370). Available at: http://trade.ec.europa.eu/doclib/docs/2016/november/tradoc_155080.pdf
[76] http://europa.eu/rapid/press-release_IP-18-3973_en.htm
[77] https://www.epo.org/news-issues/news/2016/20161025.html

create value for local communities through products that are deeply rooted in tradition, culture and geography. They support rural development and promote new job opportunities in production, processing and other related services. Examples of GI products include Cognac, Roquefort cheese, Parmigiano Reggiano, Teruel and Parma hams.

A study conducted by AND-International for the European Commission found that the worldwide sales value of GI products registered in the EU 27 was estimated at €54.3 billion in 2010, a 12% increase on 2005 figures. It also found that GIs represented 5.7% of the total food and drink sector in the EU27 (€956.2 billion). [78]

However, geographical names with commercial value are exposed to misuse and counterfeiting. The abuse of geographical indications limits access to certain markets and undermines consumer loyalty. Fraudulent use of geographical indications hurts both producers and consumers. The EU is active in multilateral and bilateral negotiations protecting EU geographical indications.

At a multilateral level, The Agreement on Trade-Related aspects of Intellectual Property Rights contains a specific section on geographical indications. It enhances their protection and expands it to a significantly higher number of countries than previous international agreements. At a bilateral level, the EU is negotiating GI protection under two different frameworks: specific Stand Alone agreements on GIs (e.g. China) and broader trade agreements, such as CETA and the EU-Japan FTA. Therefore, EU FTAs offer additional export opportunities and better protection for hundreds of European GIs.

4.3 PROMOTING OPENNESS IN INTERNATIONAL PUBLIC PROCUREMENT

Public procurement is becoming increasingly important in trade negotiations, at both the bilateral and plurilateral level. These developments are driven by the economic importance of government procurement markets as the size of government procurement accounts for a double-digit share of gross domestic product (GDP) in most developed economies. In fact, in the EU alone, government procurement of goods, services and works reached around €2 trillion or 13.4% of EU GDP in 2016.[79]

At the plurilateral level, 47 WTO members have signed up to the revised government procurement agreement (GPA).[80] The revised GPA includes additional commitments in terms of government entities as well as new services and public procurement activities.

[78] European Commission (2012) Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication. Available at: https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2012/value-gi/final-report_en.pdf
[79] Eurostat 2017 data, downloaded on 28 February 2018
[80] https://www.wto.org/english/docs_e/legal_e/rev-gpr-94_01_e.pdf

Protectionism in this field has been on the rise as the stock of harmful public procurement measures has increased from just over 50 in 2009 to around 500 by the end of 2017.[81] Public procurement has traditionally been used as a means to protect domestic industries and hence discriminate against foreign suppliers. Economic research shows that the presence of local preferences, or the so called home bias, distorts international specialisation and resource allocation and hereby affects prices, trade flows and national income.[82] Furthermore, economic literature suggests that home bias is particularly distortive if there are barriers to competition in domestic markets preventing firms from entering.[83] This is particularly worrying as recent advances in the quantification of impact stemming from opening up international procurement markets show that there are sizable benefits to be reaped from extending the scope and coverage of the GPA[84] or from scrapping the *Buy America* provisions in the United States.[85]

Protectionism in international public procurement is generally enacted by introducing procurement barriers. Data on procurement restrictive practices needs to be collected and the impact assessed in order to analyse the distortive effect of the measures. However there is a lack of reliable, detailed data and internationally agreed methodology for standardising and collecting government procurement contract award data therefore a global database needs to be created which combines both procurement barriers and flows. This type of information is indispensable for in-depth assessment of any bilateral and/or multilateral initiative in the field of government procurement as well as for monitoring the outcome of these international agreements over time.

The Public Procurement Initiative[86], which has recently been launched by DG TRADE, can be an important driver for global government-procurement data collection. This EU-funded project develops a methodology for data collection and assessment of public procurement barriers and collects comprehensive government procurement data at covering micro- and macro-level covering all procurement modalities[87] as well as corresponding barriers on seven beneficiary countries.

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[81] Kutlina-Dimitrova, Z. (2018), Government Procurement: Data, Trends and Protectionist Tendencies, DG TRADE Chief Economist Note 2018-3, Brussels. Available at: http://trade.ec.europa.eu/doclib/docs/2018/september/tradoc_157319.pdf

[82] Lowinger, T. (1976), 'Discrimination in government procurement of foreign goods in the US and western Europe', Southern Economic Journal, Vol. 42, No 3, pp. 451-460. Miyagiwa, K. (1991), 'Oligopoly and discriminatory government procurement policy', American Economic Review, Vol. 81, No 5, pp. 1321-1328. *and* Trionfetti, F. (2000), 'Discriminatory public procurement and international trade', The World Economy, Vol. 23, No 1, pp. 57-76.

[83] Evenett, S. J. and Hoekman, B. (2005), 'Government procurement: market access, transparency, and multilateral trade rules', in: European Journal of Political Economy, Vol. 21, No 1, Elsevier, pp. 163-183.

[84] Kutlina-Dimitrova, Z, (2017), Can we put a price on extending the scope of the GPA? First quantitative assessment, DG TRADE Chief Economist Notes 2017-1, Brussels.

[85] Dixon, P. B., Rimmer, M.T. and Waschik, P.G. (2017), Macro, Industry and Regional Effects of Buy America(n) Program: USAGE Simulations, Center of Policy Studies (CoPS), Working Paper No. G-271 (April), Victoria University

[86] https://ec.europa.eu/fpi/announcements/tenders/partnership-instrument-%E2%80%93-public-procurement-initiative_en

[87] Cernat, L and Kutlina-Dimitrova, Z. (2015), International public procurement: from scant facts to hard data, DG TRADE Chief Economist Notes 2015-1, Brussels: available at http://trade.ec.europa.eu/doclib/docs/2015/april/tradoc_153347.pdf

While the EU's procurement policy favours greater openness, many non-EU countries are reluctant to open their public procurement markets to international competition. According to the European Parliament, while the EU opened some €352 billion of EU public procurement to bidders that came from member countries to the GPA in 2012, foreign bidders only had access to €178 billion of US procurement and €27 billion of Japanese procurement in that same year. In addition, only a fraction of Chinese procurement is open to foreign bidders.[88]

As a result, the European Commission proposed a new legislative instrument the International Procurement Instrument (IPI). It aims to strengthen the position of the EU when negotiating access for EU businesses to the public procurement markets of non-EU countries and to clarify the legal situation for foreign bidders, goods, and services participating in the EU market.

5. THE MAIN EU TRADE POLICY INSTRUMENTS: STOCKTAKING AND LOOKING FORWARD

The EU pursues a free trade agenda along four distinct avenues: multilateral trade liberalisation, bilateral/regional trade liberalisation, plurilateral trade liberalisation and unilateral trade liberalisation.

5.1 MULTILATERAL AND UNILATERAL AGREEMENTS

Multilateral free trade negotiations are carried out under the auspices of the World Trade Organization (WTO). The WTO is made of governments and customs territories that set, apply and enforce the global rules for trade between themselves. The WTO is not only a forum for international trade negotiations; it also resolves trade disputes, sets legal rules for trade in the form of trade agreements and monitors members' trade policy through the Trade Policy Review Mechanism. Alongside multilateral agreements, the WTO members have concluded several plurilateral agreements (e.g. on government procurement, information technology) and have been negotiating several other plurilateral initiatives recently (e.g. The Trade in Service Agreement (TiSA) and the Environmental Goods Agreement (EGA)).

However in recent years the WTO has not functioned as effectively as it should. Its negotiating system has not been able to deliver any significant improvements in the trade rulebook apart from the agreements reached on trade facilitation and export competition. The system remains blocked by an antiquated approach to flexibilities which allows over 2/3 of the membership including the world's largest and most dynamic economies to claim special treatment. Its monitoring function is crippled by ineffective and repetitive committee

[88] EP Legislative Observatory, Procedure file on Public procurement: access of third-country goods and services to the Union's internal market and procedures supporting negotiations on access of Union goods and services to the markets of third countries, 2012/0060(COD)

procedures which are based on insufficient transparency. The core of the dispute settlement system is being challenged, with the distinct possibility of its paralysis in the near term. It is clear that the multilateral system is in need of change and while the broader WTO membership may have different views regarding the details of this change, it is unquestionable that a discussion needs to take place on the question of how to make the WTO relevant again.

In this context the European Commission has produced a concept paper that aims to initiate the process of WTO modernisation.[89] It outlines a number of solutions that aim to modernise the WTO's rulemaking activities and identifies approaches that make the WTO's regular work and monitoring function more effective and transparent. Finally it proposes more effective and transparent approaches to dispute settlement, with a view to ensuring a level playing field for all members.

In spite of the challenges facing the WTO, a number of trade policies have been initiated and are discussed in more detail in table 3 below.

Table 3 Main Multilateral and Plurilateral trade policies initiated

Trade Policy	Description	Assessments/Expected Outcomes
MULTILATERAL		
Trade Facilitation Agreement (TFA)	The TFA establishes measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues.	WTO economists estimate that the TFA will reduce trade costs by 14.3% on average and increase global trade by $750 billion to $1 trillion per year, with the greatest gains in LDCs.[90]
PLURILATERAL		
Agreement on Government Procurement (GPA)	Under the GPA, 47 WTO members undertake to provide national treatment and non-discrimination to goods, services and suppliers of other signatories, ensuring equal chance to compete for government contracts above specified threshold values.	Estimates made by the WTO Secretariat show that the revised GPA has expanded the market access opportunities under the Agreement by US$ 80-100 billion annually, bringing the total coverage of the Agreement to US$ 1.7 trillion annually.[91]
Information Technology Agreement (ITA)	An expansion of the 1996 Information Technology Agreement (ITA) was agreed upon by 25 WTO members at the 10th Ministerial Conference of the WTO in Nairobi in December 2015. The signatories agreed to cut MFN tariffs for 201 tariff lines on high-tech products to zero.	The ITA accounts for 9-13% of world trade while a DG Trade analysis found that total EU exports of goods and services increase between €5.0 and €8.3 billion thanks to the Agreement.[92]

[89] European Commission (2018) Concept Paper: WTO modernisation. Available at : http://trade.ec.europa.eu/doclib/docs/2018/september/tradoc_157331.pdf

[90] World Trade Organization (WTO) (2015),World Trade Report 2015: Speeding up trade: benefits and challenges of implementing the WTO Trade Facilitation Agreement Geneva: WTO. Available at: https://www.wto.org/english/res_e/booksp_e/world_trade_report15_e.pdf

[91] https://e-gpa.wto.org/en/GPAInBrief

[92] European Commission (2016). "The Expansion of the Information Technology Agreement: An Economic Assessment", European Commission - DG Trade Chief Economist Note.

5.2 BILATERAL AGREEMENTS

As part of its efforts to improve market access for European businesses, the EU has also been pursuing an ambitious bilateral negotiating agenda, based on the principle of reciprocity while still taking into account the economic realities of its partners.

The last half decade has been the most prolific ever for the EU in terms of concluding FTAs with the rest of the world. Currently, the EU has 36 FTAs in force with countries in virtually all continents (see Figure 5). However, increasing the number of partnerships is not the only way the EU has strengthened its bilateral trade agenda. Responding to today's trends and greater economic complexity, the EU has moved from 'traditional' FTAs focused on tariff reductions and trade in goods, to a new generation of FTAs. These aim to unlock the untapped potential of trade in services, public procurement, investment and regulatory cooperation.

Figure 5: EU Trade and Investment Relations

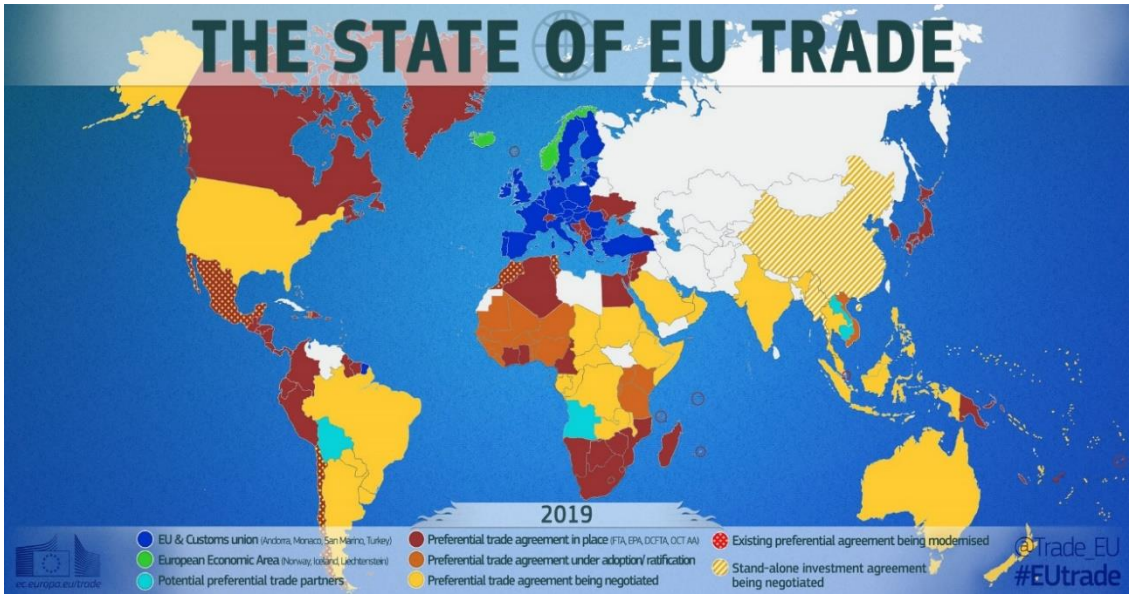
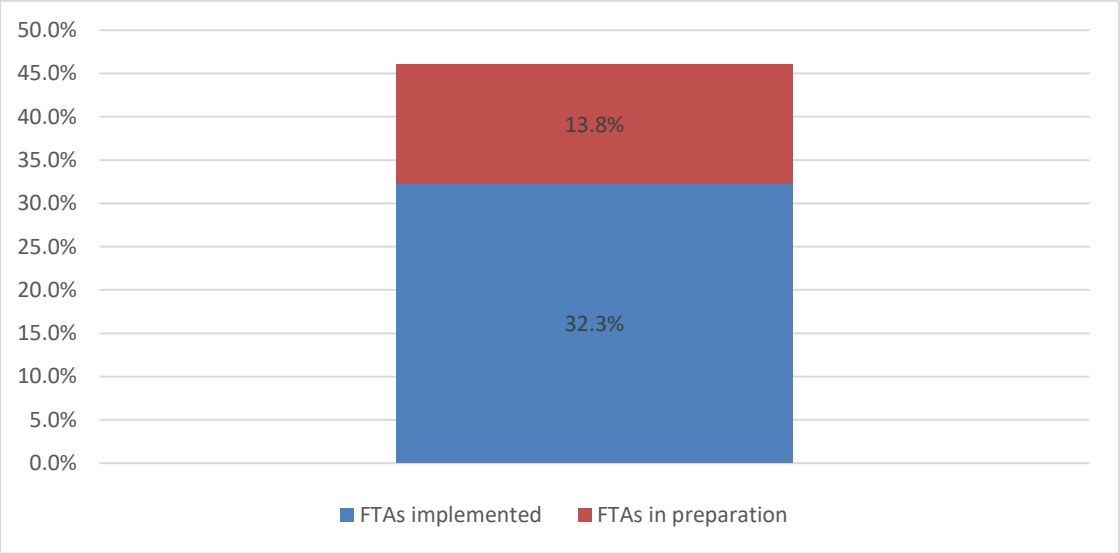


Figure 6 shows that FTAs cover just over €1,200 billion (32%) of EU trade in goods and an estimated 45% expected when FTAs that have not entered into force yet or that are still under negotiation are included. This shows the importance of FTAs as a policy for the EU to open up more market opportunities for European businesses.

Figure 6: Share of EU trade in goods covered by FTAs, 2017 (%)



Source: DG Trade Chief Economist Unit calculations (see figure 5 for details of applied, concluded and on-going negotiations)

Table 4 provides a general overview of the economic impact estimated to be generated by the main EU bilateral agreements.

Table 4 Bilateral trade agreements in force or recently negotiated

BILATERAL		
Trade Policy	**Description**	**Assessments/Expected Outcomes**
The EU-South Korea Free Trade Agreement	This was the first EU FTA with an Asian country and saw import duties covering 98.7% of traded value eliminated within five years. The agreement also offers unprecedented liberalisation of trade in services across all modes of supply.	Between 2010 and 2016, EU goods exports to South Korea benefited from an increase of almost 60%, turning the EU's €11.6 billion trade in goods deficit in 2010 into a €3.1 billion surplus by 2016. EU services exports also saw an increase of almost 50% between 2010 and 2015, whereas outward FDI stocks increased by nearly 60%. On the other hand, EU imports of services and inward FDI stocks both increased by approximately 33%.[93]
EU and Canada Comprehensive Economic Trade Agreement (CETA)	CETA was ratified in February 2017 after receiving approval from Member States in the Council and from the European Parliament. One of the most innovative features of CETA is the inclusion of an ambitious chapter on public procurement that will open new business opportunities for EU companies looking to bid for public contracts in Canada at all levels.	CETA removes duties on 98% of products the EU trades with Canada, saving EU businesses approximately €590 million a year in customs duties. It is expected to increase bilateral trade by 8% (€12 bn) a year by 2030 and will also contribute between €1.7-2.1 billion to EU GDP on an annual basis.[94]
EU-Singapore Free	The EUSFTA essentially eliminates all tariffs	The potential benefits of the EUSFTA

[93] http://ec.europa.eu/trade/policy/countries-and-regions/countries/south-korea/

[94] European Commission (2017), The Economic Impact of the Comprehensive Economic and Trade Agreement (CETA), An analysis prepared by the European Commission's Directorate-General for Trade.

Trade Agreement (EUSFTA)	on goods, addresses a number of Non-Tariff Barriers, opens up mutual access to procurement markets, contains enhanced provisions on Geographical Indications and binds level of market access for services.	are estimated at €550 million over a 10-year period, with EU exports to Singapore rising by €1.4 billion.[95]
EU-Japan Economic Partnership Agreement	This agreement was entered into force in February 2019. The EU will liberalise 99% of tariff lines and 100% of imports, with Japan liberalising 97% of tariff lines and 99% of imports.	The reduction of tariffs and NTBs covered by this agreement is expected to add €33 billion (0.14%) to EU GDP by 2035.[96]
EU-Mexico Global Agreement	This agreement came into force in 2000 and negotiations on a comprehensive update are ongoing. The updated Global Agreement will remove virtually all tariffs on trade in goods, including in the agricultural sector. There will be no duties on 98% of goods once the updated agreement comes into effect.	Since this trade agreement came into force in 2000, trade between the EU and Mexico has risen at a rate of around 8% per year, resulting in an overall increase of 148% in trade in goods over the period.[97]
EU-Vietnam Free Trade Agreement	The trade agreement with Vietnam marks the most ambitious negotiation that the EU has ever concluded with a developing country. It will lead to the elimination of almost all bilateral tariffs and also offers substantial reductions of non-tariff barriers (NTBs) in the areas of services, and investment.	EU exports to Vietnam are expected to increase by around 28% while Vietnam exports to the EU are expected to grow by around 18%. The aggregate economic impact of the FTA on the EU is expected to reach €1.9 billion, mainly due to terms of trade improvements.[98]
Trade with Southern and Eastern neighbourhoods	The EU has concluded FTAs – referred to as "Stabilisation and Association Agreements" (SAA) with each of its partners in the Western Balkans. In addition to this, the EU has also established three trade areas with Georgia, Moldova and Ukraine, known as the Deep and Comprehensive Free Trade Agreements (DCFTA). In the southern neighbourhood, the EU has implemented several Euro-Mediterranean Association Agreements with FTA provisions, which govern trade relations with Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia. In addition to this, the EU has been in negotiations with Morocco and Tunisia for a DCFTA.	The change in national income for Georgia is estimated to be around €292 million, an increase of 4.3%. Georgian exports are estimated to increase by 12%, while imports are expected to rise by 7.5% due to the DCFTA. For Moldova the change in national income is estimated to rise by 5.4% (€142 million). Moldovan exports are estimated to increase by 16% with import rising by 8%. The overall employment and wage levels are likely to increase in line with rising output in both countries and this, combined with predicted fall in consumer price inflation is expected to support improvements in average living standards.[99]

[95] European Commission (2013), The Economic Impact of the EU-Singapore Free Trade Agreement, An analysis prepared by the European Commission's Directorate-General for Trade - Chief Economist Note, Special Report.
[96] European Commission (2018), The Economic Impact of the EU-Japan Economic Partnership Agreement, An analysis prepared by the European Commission's Directorate-General for Trade, (2019)
[97] http://trade.ec.europa.eu/doclib/press/index.cfm?id=1830
[98] European Commission (2018), The Economic Impact of the EU-Vietnam Free Trade Agreement, An analysis prepared by the European Commission's Directorate-General for Trade, (2019)
[99] European Commission (2012) Trade Sustainability Impact :Assessment in support of negotiations of a DCFTA between the EU and Georgia and the Republic of Moldova DG Trade, Brussels.

5.3 UNILATERAL AGREEMENTS

Last but not least, the EU has been implementing for several decades a number of unilateral preferential trade schemes in favour of developing countries. Under the general EU Generalised Scheme of Preferences (GSP), the EU unilateral market access allows vulnerable developing countries to pay fewer or no duties on exports to the EU, giving them vital access to the EU market and contributing to their growth. It provides a sliding scale of preferences within three schemes according to the different needs of developing countries:

- Standard GSP for low and lower-middle income countries
- GSP+ for vulnerable low and lower-middle income countries
- EBA (Everything But Arms) for least developed countries

Table 5 provides a general overview of the economic impact estimated to be generated by the these trade policy instruments.

Table 5 Unilateral trade agreements currently in force

UNILATERAL		
Trade Policy	**Description**	**Assessments/Expected Outcomes**
Generalised Scheme of Preferences (GSP)	The GSP General Arrangement, of which 23 countries and territories are currently beneficiaries, remains an important tool to stimulate growth in developing countries by facilitating their exports to the EU. It reduces import duties for approximately 66% of all EU tariff lines for low-income or lower-middle income countries that do not benefit from other preferential trade access to the EU market.	In 2016, the EU imported goods worth €32 billion from the 23 Standard GSP beneficiaries.[100]
GSP+	GSP+ beneficiaries export around 66% of all product categories duty free in return for their commitment to effectively implement 27 international core conventions covering labour rights, human rights, good governance and environmental concerns.	In 2016, the EU imported goods worth €7.5 billion from the 10 GSP+ beneficiaries.[101]
Everything But Arms (EBA)	The EBA introduced in in 200, allows duty-free and quota-free access to the EU Single Market for all products except arms and armaments. A country may benefit from EBA status if it is listed as a Least Developed Country (LDC) by the UN Committee for Development Policy. Unlike the Standard GSP, countries do not lose EBA status by entering into a Free Trade Agreement with the EU.	In 2016, 49 EBA beneficiaries exported €23.5 billion to the EU. Exports of a product granted duty-free access to the EU witnessed a 10% growth on average, roughly twice the average across all countries. Results also show that they doubled the export of products under the GSP General Arrangement and GSP+ scheme.[102]

[100] http://europa.eu/rapid/press-release_MEMO-18-350_en.htm
[101] http://europa.eu/rapid/press-release_MEMO-18-350_en.htm
[102] European Commission (2015), Assessment of the economic benefits generated by the EU Trade Regimes towards developing countries. Directorate-General for International Cooperation and Development, EU Development Policy and International Cooperation, Policy and

In addition to individual economic assessments, the European Commission also produces an annual monitoring report on the Implementation of all EU Free Trade Agreements[103]. Findings from the 2018 report show that EU trade agreements have contributed to a significant growth in EU exports with total EU trade under FTAs in 2017 amounting to €1,200 billion. The EUs largest trade partners for trade under FTAs are Switzerland, accounting for 7% of total EU external trade, followed by Turkey with 4.1%, Norway with 3.4% and South Korea with 2.7%.

A recent study prepared for the European Parliament Committee on International Trade (INTA) examined the costs and benefits of all EU FTAs.[104] It found that across all FTAs, trade and economic metrics are improved for both trading parties by a trade agreement. However, indirect effects such as human rights and the environment are less likely to change.

Despite the existence of a trade agreement, goods may continue to be traded under MFN tariffs. This is due to the fact that complying with the necessary administrative requirements to obtain the tariff preferences is more costly than the gains from the preferences, or that, in some cases, operators may not be aware of that potential preferential treatment is possible. A DG Trade analysis on this issue shows that, based on data for (mainly 2016) for 18 partner countries with which the EU has FTAs, the overall preference utilisation rate stands at 77.4% with significant variations across country-pairs and products.[105] Similarly, the report shows that duty savings of EU exports under the FTAs totalled €11.5 billion in that year. An approximate additional €3.5 billion could have been saved if the FTAs had been fully used.

6. NEW CHALLENGES AND OPPORTUNITIES

This section outlines some of the main challenges facing the EU and global trade landscape. While these challenges encompass wide ranging and complex issues such as Brexit, anti-globalisation and protectionism, a number of tools and methods are identified to help reduce their negative impact. Globally, anti-trade sentiment is on the rise, so it is vitally important that policymakers explore and explain the benefits of free and open trade. Rigorous analysis using a number of methodologies and instruments can quantify the impact of trade

Coherence – Economic Analysis Team.

[103] European Commission (2018), Implementation of Free Trade Agreements 2017 report. Available at: http://trade.ec.europa.eu/doclib/docs/2018/october/tradoc_157468.pdf

[104] European Parliament (2018), Finding the right balance across EU FTAs: benefits and risks for EU economic sectors, EP/EXPO/B/INTA/2018/1, October 2018, Brussels. Available at: http://www.europarl.europa.eu/RegData/etudes/STUD/2018/603881/EXPO_STU(2018)603881_EN.pdf

[105] Nilsson, L and N. Preillon (2018), EU exports, preference utilisation rates and duty savings by member state, sector and partner country, Chief Economist Note, Issue 2/2018, http://trade.ec.europa.eu/doclib/docs/2018/june/tradoc_156931.pdf

agreements and trade policy on the economy and can also identify potential opportunities and challenges. The various analytical instruments used by the European Commission are described in detail as are ways to better communicate the results from these analyses to stakeholders.

6.1 TRADE AND NEW TECHNOLOGIES

New technologies create an array of promising avenues, but also new challenges for international trade. Since the invention of the standardised container, an entire logistics industry is in place to ensure over 30 million containers a year are seamlessly shipped so that our daily routines unfold smoothly. The revolutionary technological changes did not stop with the invention of the container. Today, a limited but growing number of these containers are equipped with sophisticated global tracking technologies (GPS, radio frequency identification, satellite communications, etc.) that can locate products and shipments in real time, optimizing supply chains and inventories for the ultimate benefit of consumers. Detailed firm- level trade data on actual shipments, by exporting and importing firms, with specific product details and their port of origin and entry are publicly available. The data does not stop at the docks: producers can track in real-time their stocks on each supermarket's shelf and plan the next shipment to make sure consumers do not face shortages, while avoiding waste and costly warehousing. Firms engaged in global supply chains and those specialised in logistics have developed detailed classifications that allow the identification of producers, the location of their production facilities and the most detailed product characteristics about brands, quantity (weight, number of units, pack sizes), quality (concentration levels of various key ingredients) as well as pricing, delivery and invoicing information.

Just like the standardised container more than 50 years ago, blockchain technology is credited with considerable potential to facilitate international trade, in terms of customs procedures, generating trust among various partners and the ability to empower consumers in terms of traceability and fighting counterfeit products.

While the blockchain technology offers only interesting promises based on various pilot projects currently unfolding across the world, the e-commerce has become a major driver for the internationalisation of many small exporters. Online B2C transactions have been growing exponentially on major online platforms, like Amazon, EBay and Alibaba.

The European Commission is working closely with the Member States, through the European Blockchain Partnership and a broad set of stakeholders through the EU Blockchain Observatory and Forum[106]. The Observatory and Forum supports progress in this new area by

[106] Further information can be found at: https://ec.europa.eu/digital-single-market/en/eu-blockchain-observatory-and-forum

organising online community building, workshops and blockchain-focused events across Europe, as well as peer-reviewed expert reports on specific themes.

Over 1500 stakeholders have joined the EU Blockchain Observatory and Forum and its working groups. Interoperability between blockchain systems is a major concern in these discussions, but also scalability, sustainability, compliancy, implementation, and the legal obstacles for Blockchain systems deployment.

Big data is another new technological development that is making major inroads in economics and has caused a shift in the way policy decisions are made. It has led to major improvements in the efficiency of policies and enables policymakers to do more with fewer resources (e.g. from detecting flu outbreaks quicker to improving public health risk assessments, or crime prevention). It allows farmers to use satellite data to decide which crops to plant and firms to launch new products based on social media trends or organise a global supply chain on cloud computing. Even in the developing world, specialists analysing newly available firm-level data have begun to formulate better-informed policy advice to develop concrete policy responses to food shortages, drought, epidemics and educational gaps in poor countries. The European Commission has already identified firm-level statistics and "big data" as a major EU policy priority. Eurostat has worked since 2008 (Decision No 1297/2008/EC) on a Programme for the Modernisation of European Enterprise and Trade Statistics) on "connecting the dots" at firm level between national and EU sources. The European Commission has also launched under the FP7 programme a "Policy Making 2.0" research project aimed at providing concrete recommendations on the potential use of existing and future ICT and "big data" technologies for policy-makers to improve their work.

6.2 IMPROVING OUR ANALYTICAL AND COMMUNICATION TOOLS

The European Commission undertakes assessments of the impact of all significant new trade policy proposals in order to quantify and investigate the impact of all possible threats, challenges as well as the potential opportunities associated with these policies.

The European Commission Impact Assessments (IAs) identify and describe the problem to be tackled, establish objectives, formulate policy options and assess the impacts of these options, thus examining whether major new free trade initiatives should be launched. IAs assess the environmental, social and economic impacts of not only bilateral FTAs, but also of multilateral trade rounds and for sectoral multilateral agreements that are likely to have significant economic, social or environmental impacts. IAs are accompanied by a consultation of stakeholders. The Regulatory Scrutiny Board (RSB) examines and issues opinions on the European Commission's draft IAs and major evaluations and provides a central quality control function. An impact assessment on a significant new policy proposal requires a positive opinion from the RSB before it can materialise.

Trade Sustainability Impact Assessments (SIAs**)** are studies conducted by independent consultants once negotiations have been launched, which are commented upon by the European Commission in terms of the identified impacts and the policy measures proposed to address them. Trade SIAs consist of (i) an analysis of the potential economic, environmental and social impacts that the trade agreement might have, both in the EU and in the partner countries; and (ii), a wide consultation process.

Once an FTA is concluded, the Economic Assessments of the Negotiated Outcome (EANOs) analyse the economic value of trade barrier reductions based on actual outcome of the negotiations. The analysis examines the text of an agreement, including tariff reduction schedules and agreements in the areas of NTBs. However, the EANOs do not look into the potential social and environmental impact of the agreement.

Last but not least, the European Commission conducts ex-post evaluations, whose aim are to provide an assessment of how efficient and effective a trade policy initiative has been. Civil society organisations participate and provide input specifically on social and environmental issues.

While these instruments provide policy makers with invaluable information on the impact of potential trade policies, most trade economists have not been able to communicate effectively the benefits from trade to politicians and voters and until recently, that didn't really matter. Trade policy used to be circumscribed to a small circle of experts, academics, policy wonks or lobbyists with a business background. But in recent years, trade-related issues percolated to a much wider audience, notably after the anti-trade campaign enlarged the spectrum of interest to capture a lot more people, particularly millennials. In the current environment, a successful trade policy communication needs to address the wider set of stakeholders: businesses, trade unions, NGOs, local politicians, and ultimately EU voters. The positive benefits of global trade are abstract, part of the "invisible hand" logic. The anti-trade campaigners are also very good at using simple, visual and often distorted messages on social media to appeal to people's emotions. A compelling social media campaign about the benefits of trade could be a great way to build awareness of the importance of trade in our daily lives. Hence, an honest and successful communication strategy about the benefits of trade for the EU society has to allow people to resonate personally with our messages. Trade benefits are often like a "misty imperceptible rain" which voters or consumers will not notice directly, unless prompted with factual, relevant information.

For example, the Transatlantic Trade and Investment Partnership (TTIP) with the US has been subject to criticism and to negative campaigning in several EU Member States, but perhaps particularly in Germany. Anti-TTIP groups managed to collect more than 1.5 million

signatures of Germans against TTIP, while the European Commission's German language website on TTIP received less than 30,000 visits.[107]

A successful social media communication on trade therefore needs to be based on a new Trade Policy 2.0 logic[108]: for social media messages to be impactful, we need to unpack the main traditional narrative of EU trade policy based on macroeconomic indicators into a wider set of detailed, firm-level, factual, local and more visible metrics. We need to do this so each and every individual (be it a consumer, a worker, an entrepreneur, an NGO activist or a local politician) can understand the economic case for trade in a way that resonates with them. It is about more direct messages that can speak to politicians who care about local impact, to individual consumers or to workers affected by (or afraid of) globalization.

Even among business stakeholders, the actors most directly impacted by EU trade policy, there is a communication deficit, notably with small and medium size enterprises that currently engage in trade, often with insufficient support and information.[109] Deploying the Trade Policy 2.0 logic led to a first initiative and a first major communication success during the CETA ratification process. By creating a catchy Twitter hashtag – #CETAcomes2town[110] – and by producing a simple set of infographics and an interactive map showing European firms exporting to Canada that stand to benefit from CETA, DG TRADE provided for the first time a real picture of the benefits of trade. Voters and politicians could finally see how EU trade policy benefits their city or region.

The new type of information, presented through data visualisation and infographics, and supported with concrete examples of exported products and the number of jobs supported by exports to Canada, has made a difference in the policy debates surrounding the CETA ratification process. The #FTAcomes2town facts and figures help politicians justify to their local constituency why they voted in favour of a particular FTA. By adopting a novel and dynamic data visualisation approach, the Trade Policy 2.0 firm-level approach was able to reach out to a wider audience at a rate that would not have been achievable just with a few advocacy events or a couple of newspaper articles.

In parallel, a better explanation of complex CGE modelling to a wider audience is also be necessary as well as introducing a number of sensitivity analyses to simulations in order to provide the results in ranges showing the magnitude and direction of the estimated impact.[111]

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[107] Bauer, M. (2016), Manufacturing Discontent: The Rise to Power of Anti-TTIP Groups, ECIPE Occasional Paper 02/16.

[108] Cernat, L. (2014), Towards "Trade Policy Analysis 2.0": from national comparative advantage to firm-level trade data, Chief Economist Note 4/2014, DG Trade.

[109] Cernat, L. (2018) How to make trade policy cool (again) on social media? ECIPE Trade Blog Series. http://ecipe.org/blog/how-to-make-trade-policy-cool-again-on-social-media/

[110] http://ec.europa.eu/trade/policy/in-focus/ceta/ceta-in-your-town/

[111] Nilsson L. (2017), Economic modelling of EU free trade agreements: Reflections by a partial bystander, Journal of Global Economic Analysis, Vol 3, No 1 June 2018. ISSN 2377-2999. Available at:

Therefore, it is fair to say that both technological and analytical developments offer an untapped potential that could lead to better informed trade policy making in Europe. It is time trade policy analysis moves closer to where the action is and benefits more from firm-level trade data and related developments. For some, such benefits may not be obvious and therefore a few examples may help to illustrate this point. While it is true that trade policy is by nature conducted at an aggregate level whereby various trade rules cannot be adapted to the specific needs and economic circumstances found at firm-level, it is also true that trade negotiations cannot remove all possible trade barriers, notably in many key areas like non-tariff measures covered by EU deep and comprehensive free trade negotiations. Prioritisation of those non-tariff measures maximising the benefits of EU trade policy in line with the objectives set out by EU leaders would therefore benefit from having access to the wealth of information that firm-level trade data has generated. Tariffs are well known and their reduction subject to little uncertainty in FTA negotiations but insufficient information regarding the most difficult trade barriers, notably NTBs, is still a prevalent characteristic of trade policy making. For instance, firm-level surveys that may provide an indication of the incidence of non-tariff barriers across different types of firms (small vs. large, existing vs. potential exporters) are difficult to run on a representative sample without better firm level trade data.

Firm-level trade statistics can also improve ex-post assessments. A typical question raised about the benefits of FTAs is how many jobs were actually created as a result of increased bilateral trade. Current analytical tools have several limitations in establishing a causal relationship between the existence of a FTAs and labour market changes (new job creation, job reallocation within and across sectors, etc.). Some policy instruments, such as the European Globalization Fund (EGF) are specifically designed to deal with adjustment costs and facilitate the reinsertion in the labour market of those negatively affected by globalisation. In itself, the EGF enhances the coherence and synergies between trade and other EU policy instruments. Knowing the firm-level characteristics of those EU enterprises negatively affected by globalization and the key factors that facilitated the re-insertion of workers benefited from EGF measures can provide valuable lead indicators and "best practices" that can feed back into trade policy making. In "Trade Policy Analysis 2.0" the unit of analysis shifts from countries and sectors to exporting and importing firms. Once the actual exporters and importers become the unit of analysis, firm-level trade data will also provide a much more refined product disaggregation.

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http://www.etsg.org/ETSG2017/papers/Reflections%20by%20a%20partial%20bystander.pdf

Currently, the most disaggregate cross-country international trade statistics use the Harmonised System classification (HS) at 6 digits. National customs have products defined even more narrowly at eight or ten digit tariff line levels, for instance, but these product codes differ across countries and it is usually hard to come up with accurate concordance tables and do proper comprehensive analyses beyond HS6 product categories. Trade defence actions or WTO trade disputes, let alone sensitive tariff lines in bilateral or plurilateral negotiations, often boil down to very detailed products for which HS6 trade statistics are too aggregate. Within each HS6 codes product differentiation is considerable: the same HS6 code could cover for instance an entire shelf in supermarkets, despite huge variety in product qualities or functionalities. A more detailed, firm-level approach to trade policy could also be beneficial for the monitoring of FTA performance in important policy areas such as geographical indications and public procurement, where the nature of trade policy commitments are intrinsically linked to specific firm-level characteristics.

7. SUMMARY AND CONCLUSIONS

The purpose of this note is to highlight the importance of international trade to economic prosperity by reviewing the evidence available. It uses economic analysis, statistics and background material to show how EU trade policy supports the three key principles of the European Commission's 'Trade for All' communication. It summarises the findings from a wealth of feasibility studies and impact assessments on trade policy issues carried out internally by European Commission services or subcontracted to external researchers. It also refers to relevant publications by academic researchers and international organisations.

Openness to trade allows ideas and technologies to flow more freely and encourages innovation and productivity growth. Since 2007, the value of both EU exports and imports has increased by 59% and 37%, respectively. The EU accounts for more than 16.7% of world trade in goods and services. Data for 2017 shows that total exports for goods and services in the EU are worth €2.8 trillion while total imports of goods and services are €2.6 trillion.

The EU is the origin of €5.7 trillion outward FDI stocks worldwide and hosts inward FDI stocks of around €4.5 trillion. Latest data shows that over 14.2 million people are employed in foreign affiliates of EU enterprises. Foreign companies established in the EU also bring many benefits for the host countries such as job creation, optimized resource allocation, the transfer of technology and skills, increased competition and greater trade. EU Member States make significant efforts to attract foreign investment and the latest figures show that there are over 90,000 foreign enterprises in the EU employing 7.9 million people.

Although FDI and trade in goods and services are the primary metrics of a successful trade policy, the ultimate objective of EU trade policy is not just to increase trade and investment flows. EU trade policy is part of a coherent set of European policies, all aimed at increasing jobs and prosperity in Europe, while promoting EU values and principles abroad.

In 2017, 36 million jobs in Europe were supported by EU exports to the rest of the world which is 15 million (66%) more jobs than in 2000. This means that 1 in every 7 jobs in the EU depends on exports to the rest of the world. With the expansion of global value chains, EU exports support more and more jobs, not only in the EU but also in the countries we trade with. Almost 20 million jobs outside the EU are supported by EU exports, thanks to EU firms participating in global supply chains.

Although large enterprises (250+ employees) account for a large share of EU exports by value, SMEs that export outside the EU generate between 30-43% of the total value of EU exports, depending on the treatment of "unknown" exporters. Given that a small share of EU SMEs account for one third of "direct" exports outside the EU in value, there could be a large untapped potential for the European economy if more SMEs targeted international markets outside the EU.

Consumers benefit from free trade in many ways, notably from lower prices, more product varieties, and higher quality. Evidence shows that the quality-adjusted prices for imported goods have decreased by 19% and the quality of goods increased by 26% for the UK due to the FTAs concluded by the EU. The evidence also indicates that there has been a quality increase of 7% on average for the EU due to trade agreements.

All EU FTAs aim to promote sustainable development in line with European values and the EU is committed to including a chapter on Trade and Sustainable Development (TSD) in trade agreements. In terms of unilateral agreements, the GSP+ is an EU trade policy instrument devised to encourage third countries to comply with 27 core international standards in the areas of human rights, labour rights, environmental protection and good governance. A recent European Commission study showed that all 14 GSP+ beneficiary countries have strengthened their domestic institutions responsible for the implementation of the 27 international conventions.

Most of the literature indicates that trade liberalisation is likely to increase CO_2 emissions as a result of increased economic activity. However, there is evidence that trade opening could facilitate both the adoption of technologies that reduce the emission-intensity of goods and their production process and the change in the mix of a country's production from energy-intensive sectors towards less energy-intensive sectors if that is where it has a comparative advantage.

The EU's trade policy, alongside its foreign policy and development cooperation, supports respect for human rights and improved labour standards in non-EU countries. Research shows that the introduction of labour clauses in a trade agreement has, on average, no significant impact on bilateral trade flows.

In addition to improving human rights and labour standards, there are various trade policies and tools used by the EU to tackle unfair trading practices. The EU is a moderate user of trade defence with less than 1% of total imports covered by TDI measures.

Over 42% of total economic activity in the EU (some €5.7 trillion annually) is generated by IPR-intensive industries, and approximately 38% of all employment in the EU (82 million jobs) stems from businesses that have a higher than average use of IPRs. GIs are crucial intellectual property elements for EU agrifood exporters with worldwide sales value of GI products registered in the EU 27 estimated at €54.3 billion in 2010, a 12% increase on 2005.

Public procurement is becoming increasingly important in trade negotiations with EU government procurement amounting to around €2 trillion in 2016 alone. Protectionism in this field has been on the rise and data on procurement-restrictive practices needs to be collected and their impact assessed in order to analyse the distortive effect of the measures. The Public Procurement Initiative, which was recently launched by DG Trade, can be an important driver for global government-procurement data collection.

To achieve all of these policy objectives, the EU pursues a free trade agenda along four distinct avenues: multilateral trade liberalisation, bilateral/regional trade liberalisation, plurilateral trade liberalisation and unilateral trade liberalisation.

Multilateral free trade negotiations are carried out under the auspices of the WTO. However, in recent years the WTO has not functioned as effectively as it should. In spite of the challenges facing the WTO a number of multilateral and plurilateral agreements have been put into force. These include the Trade Facilitation Agreement (TFA) which WTO economists estimate will reduce trade costs by 14.3% on average and the Information Technology Agreement (ITA) which is expected to increase EU exports of goods and services by between €5.0 and €8.3 billion.

The last half decade has been the most prolific ever for the EU in terms of concluding FTAs with the rest of the world. Currently, the EU has over 35 FTAs in force with countries in virtually all continents. For instance, it is estimated that the recently approved EU-Japan Economic Partnership Agreement, which entered into force in February 2019, will add €33 billion (0.14%) to EU GDP by 2035. The European Commission's 2018 annual monitoring report on the Implementation of all EU FTAs shows that total EU trade under FTAs in 2017 amounts to around €1,200 billion.

The EU has a number of unilateral preferential trade schemes in favour of developing countries. The EU Generalised Scheme of Preferences (GSP), provides a sliding scale of preferences within three schemes according to the different needs of developing countries. Findings from a number of publications show that in 2016 the EU imported goods worth €32 billion from the 23 GSP beneficiaries and €7.5 billion from the 10 GSP+ beneficiaries. In the same year, 49 Everything But Arms (EBA) beneficiaries exported €23.5 billion to the EU.

However, promoting all of these trade policy objectives is not an easy task. The threat of anti-globalisation represents a significant challenge to EU and global trade policy. Anti-globalisation has been on the rise in recent years and has led to an increase in protectionist trade measures. The USA has taken the most striking action by increasing tariffs on over US$200 billion worth of Chinese products. Research from the IMF finds that an all-out trade war between the US and China would decrease GDP in both economies by around 0.5%.

While these challenges encompass wide ranging and complex issues, there are a number of tools and methods that the EU can avail of to help reduce their negative impact. It is vitally important that policymakers explore and explain the benefits of free and open trade. The European Commission undertakes regular assessments, which measure the impact of all significant new trade policy proposals in order to quantify and investigate the impact of all possible threats, challenges as well as the potential opportunities associated with these policies.

The results from a wide range of these assessments and evaluations are summarised throughout this report and highlight the impact that various trade policies have on the overall economy. Communicating these results in a more meaningful way can ensure a wider audience and help dispel some of the myths about globalisation and trade liberalisation. Meaningful communication of this sort requires a successful communication strategy and the presentation of results through data visualisation and infographics. This should be supported by concrete examples of exported products and the number of jobs supported by exports in each EU Member State, city and region.