

How to include 'Mode 5' services commitments in bilateral free trade agreements and at multilateral stage?



STUDY

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ABSTRACT

Mode 5 refers to services which are incorporated into goods which are then traded across international borders. Unlike traditional services, Mode 5 services are not subject to the existing international trade regime under the WTO General Agreement on Trade in Services (GATS). Rather, they are subject to trade rules under the framework that governs trade in goods. As a consequence, trade in Mode 5 services is not fully liberalised, even though liberalisation would be in the best interest of international trade and the European Union. This report explores different avenues for including Mode 5 service commitments in multilateral trade agreements and free trade agreements, analyzing benefits and associated challenges. The broad conclusion is that while it may be possible to pursue Mode 5 options at the multilateral level, the most viable immediate strategy would consist in including such commitments in free trade agreements between the EU and its trading partners.

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Executive Summary

This report identifies some options for designing legal disciplines that may resolve the paradox of the trade regime applicable to Mode 5 services. Unlike other GATS recognised modes of supply, when services are traded across the border as part of a good, their fate is determined by the regime applicable to the good into which they are incorporated. This may translate into customs duties being applied to the goods even if most of their value is made up by services, which is increasingly an issue for high value added technological inputs. From a policy perspective, further thinking is necessary regarding the incentives or disincentives that the proposed options will create for companies (e.g. in terms of the location of production, outsourcing, offshoring, innovation decisions, etc.). Any new rules would have to be drafted with due consideration of these factors, as they could not be conceived in a vacuum.

The latest data reveals that Mode 5 trade is responsible for 20 % to 47 % of share of output by sector. All sectors – from advanced manufacturing, technology-driven sectors to more traditional ones – stand only to benefit from further global liberalisation on Mode 5 services. The expansion in Mode 5 services, which concern inputs and services linked to goods, is also expected to have a positive impact on the EU firm's export capability and total factor productivity. This is particularly the case for high-skilled technology-driven industries.

This report assesses the possibility of designing rules in the relevant fora which would liberalise and expand Mode 5 trade. With the assumption that liberalising Mode 5 trade will bring advantages to European firms and global trade more widely, this report finds that:

- The objective of Mode 5 liberalisation may be best served by turning attention to the current legal framework applicable to trade in goods rather than the one applicable to trade in services as defined by GATS.
- Some rudimentary Mode 5-friendly (goods) rules can be found in the WTO, such as those contained in the Customs Valuation Agreement and Decisions of the Customs Valuation Committee linked to guidance on the valuation of media carrier. These rules may provide some inspiration for designing additional rules with a wider scope.
- Although examining a wide range of options, this report attributes higher prominence to the options entailing (preferably small) changes to the already existing rules, as compared to the development of new stand-alone agreements. This does not however rule out the possibility for Mode 5 concerns to be addressed in a new WTO Agreement on Global Value Chains (GVCs), which should be further explored. Defining a more precise scope and coverage for such a treaty would require further research and involvement of other relevant institutions and experts.
- In developing new relevant disciplines at the WTO, the legal venues explored should be squared with the decision-making process required to introduce the desired changes. In this sense, preference is to be given (where possible) to softer options, compared to formal amendments or new treaty development. However, a number of existing on-going WTO negotiation initiatives can be further considered for their suitability to accommodate Mode 5-friendly rules, such as the e-commerce programme, India's proposal on a Services Trade Facilitation Agreement and the Environmental Goods Agreement (EGA) proposal.
- A probable hurdle in designing Mode 5-friendly rules at WTO may lie in the ability of the EU to show benefits across a wide range of its Membership, including developing countries.
- Given the unpredictability of the WTO rule-making process, the EU may decide to address its Mode 5 concerns in the FTAs with its partners. Some FTAs options suggested in this report centre around a possible design of a secondary rule of origin for the relevant goods. The EU institutions may also assess the feasibility of proposing an amendment to the World Customs Organization (WCO) Harmonized System (HS), which may allow for a better reflection of Mode 5 in that system.

This report makes a number of recommendations to be tackled in view of a proper design of future Mode 5-friendly rules, as follows:

- Addressing further the challenges linked to defining Mode 5 and providing a clear legal definition.
- After additional economic analyses of the options examined in this report, there is also need to conduct awareness campaigns among relevant stakeholders. If the WTO track is chosen, awareness about the benefits for the Member States can be raised through organising roundtable discussions and seminars in Geneva or Member States' capitals, with the inclusion of developing countries. At the EU level, and in order to get the support from the private sector, there is a need to further raise their awareness on the topic. Cooperation should be set up with the relevant international organisations, including the WTO, OECD, and UNCTAD, that are already looking into Mode 5 related questions.
- The implementation issues arising from the options explored in this report need to be further assessed. Given the novelty and technicality of the topic, this is to be best entrusted to a Mode 5 Expert Group set up at the EU level to deal with the outstanding issues, and organise additional research on the topic.
- The question of the inclusion of Mode 5-friendly provisions in a WTO multilateral as compared to a plurilateral agreement warrants significant additional attention. For example, a WTO plurilateral Agreement on GVCs could address Mode 5 liberalisation along the development of wider areas, such as e.g. the movement of persons and capital. Given the difficulties in WTO rule-making, a plurilateral agreement may be more suitable for this purpose.

1 Introduction

Today, a significant part of gross merchandise exports consist of service content. This development is linked to the growing ‘servicification’ of manufacturing; non-service sectors of the economy increasingly buy, use and produce services, and at the same time also sell and export more services, often in connection with goods. The term ‘Mode 5 services’ (hereinafter referred to as Mode 5) describes services that are traded with the goods in which they are incorporated as production inputs, or that are linked to those goods.

Trade data that considers the value added by each country in the production of goods and services shows a certain magnitude of Mode 5 trade. Economic modelling estimates that facilitating Mode 5 trade would have a significant positive impact both in terms of GDP gains and job creation. Servicification and Mode 5 exports can strengthen and expand the EU industrial base. It can also contribute to the fulfilment of other EU policies, which are fundamental for the competitiveness of EU firms and more generally for Europe’s industrial future.

Similar to global value chains (GVCs), where different stages of the international production process are located across different regions, the growing relevance of Mode 5 trade calls into question the fitness of current international trade governance. In the case of Mode 5, some inconsistencies in the applicable rules are being observed when trade takes place through different means of delivery. For instance, software can be sold and purchased internationally on a duty-free basis, if it is downloaded from the internet, whereas when the same software is traded as part of a good (e.g. a car or piece of industrial equipment) an import duty may apply. When observed through the lenses of the multilateral trading system, the first transaction involving the software is subject to the General Agreement on Trade in Services (GATS) rules (Mode 1 of supply), whereas in the second case, the rules governing trade in goods apply (General Agreement on Tariffs and Trade (GATT) and other WTO Annex 1 A Agreements).

The fact that the same transaction may lead to two different outcomes depending on the mode of delivery amounts to a paradox. Trade barriers like import duties may penalize services that are traded as part of – or linked to – goods. Thus, Mode 5 challenges the current logic of international trade governance – like the GATT and GATS bifurcation – and demands further policy and legal thinking.

1.1 Report purpose

The purpose of this report is to provide ideas on developing Mode 5-friendly international trade rules. Besides taking stock of the economic importance of trade in Mode 5, this report discusses some legal options for liberalising Mode 5 services.

1.2 Report structure

This report consists of four main sections. Following an introduction presented in Section 1, Section 2 explores a working definition for Mode 5 services, starting from the phenomenon of servicification of manufacturing. Examples are used to explain Mode 5. Although no generally accepted definition exists, this part highlights some of the criteria that could be used to differentiate Mode 5 from other services. Section 2 provides also a summary of references to Mode 5, and analyses how the current multilateral rules or initiatives at the WTO may relate to these services. It reflects on a brief description of the European private sector perceptions of Mode 5, as well as on how Brexit may affect trade in Mode 5 between the United Kingdom and the EU.

Section 3 illustrates the economic importance of Mode 5 and the estimated benefits from its trade liberalization initiatives, using currently available economic data. Section 3 also presents key statistical findings regarding the impact of Mode 5 on GDP, exports, employment, as well as its overall significance to other relevant EU policies.

Section 4 examines some proposals for liberalisation of Mode 5 trade both in the multilateral framework and in free trade agreements (FTAs). At the multilateral level, the possibility of addressing the issue through an extension of the relevant existing WTO provisions is examined, such as those contained in the Customs Valuation Agreement (CVA). In the context of FTAs, the study assesses the possibility of developing Mode 5-friendly provisions through a possible minor re-design of rules of origin (RoO). An additional option links to certain adjustments that could be made to the classification of goods in the Harmonized System (HS) which is administered by the World Customs Organisation (WCO).

Finally, Section 5 presents a summary of the conclusions from this report and recommendations for further work needed to develop Mode 5 international trade disciplines.

2 Explaining Mode 5

2.1 The 'servicification' of manufacturing

The relevance of Mode 5 is tied to the phenomenon of 'servicification' of manufacturing. This term refers to a process whereby non-services sectors of the economy increasingly buy, use and produce services, and at the same time also sell and export more services, often in connection with goods¹. The servicification trend can be observed in companies irrespective of their size and field of activity, in both the primary and industrial sectors. The spectrum of services that these companies consume and supply is broad, and includes financial, transport and logistics, software, research and development (R&D), and environmental services².

The fact that manufacturers need services to trade is as old as trade itself. Several factors explain why manufacturing firms tend to focus on services throughout the various production phases, both as inputs in the production process as well as part of their offer to customers³. These factors include the companies' need (or desire) to increasingly establish, join or manage geographically dispersed production networks and value chains. Companies use logistic, management or engineering services to save time and inputs, improve coordination and thus become more efficient. Servicification also deepens customer relationships and helps firms to stand out among competitors by delivering products that better respond to customers' expectations (e.g. after-sale care). Additionally, the reliance on services helps to overcome barriers to foreign market entry and sustain foreign market sales (e.g. third-party distribution, interpretation, matchmaking, and monitoring services)⁴. The following examples, drawn from sectors as diverse as automotive, textiles, processed food and forestry, illustrate the pervasiveness of services in manufacturing and how services form an important, and often inseparable part of goods.

¹ National Board of Trade Sweden - Kommerskollegium, *The Servicification of EU Manufacturing - Building Competitiveness in the Internal Market*, 2016; United States International Trade Commission (USITC). 2013. 'The Economic Effects of Significant US Import Restraints. Eighth Update 2013. Special Topic: Services' Contribution to Manufacturing.' <http://www.usitc.gov/publications/332/pub4440.pdf>.

² Lodefalk, M., *'Servicification of Firms and Trade Policy Implications'*, World Trade Review, 2017, 16:1, 59-83.

³ See for instance, the services used in the value chain of a video game (Minecraft) in Rentzhog, M. and Anér, E., *The New Services Era – Is GATS up to the Task?*, E15 Initiative, Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2014, <http://e15initiative.org/wp-content/uploads/2015/09/E15-Services-RentzhogAner-FINAL.pdf>.

⁴ Lodefalk, M., *'Servicification of Firms and Trade Policy Implications'*, World Trade Review, 2017, 16:1, 59-83; Wolfmayr, Y., *'Producer services and competitiveness of manufacturing exports'*, FIW research Report (9) 2008, Austrian Institute for Economic Research (WIFO).

Research and development (R&D), engineering, consulting, and design services drive the constant innovation that characterizes the automotive industry. Such services have become as critical as those traditionally needed to run manufacturing operations, such as the power supply to operate the factory and retail services to purchase the necessary inputs. Together, these services are incorporated in the final product (i.e. the car). The share of the value of such services in the product's total value often surpasses that of the steel and rubber components. For instance, Tesla's rapid ascent owes to the value of its software and the synergies that the company builds between traditional automotive engineering and software-driven technological development⁵. The role of software in the car industry, and therefore the total value of the services components of a car, is bound to become even more dominant if (or when) self-driving cars become a reality.

Even one of the oldest trades – the textile industry – is today often conducted as a heavily technology-driven process. Given the advancements in predictive analytics, the Internet of Things (IoT), artificial intelligence, and the integrated management of core business processes, textile companies can achieve automated control over the textile fabrication process 'from a to z', including design, colouring, fibre construction, fabric creation, finishing and delivery⁶. Most of the services that enable such progress are embodied in the apparel itself and worn by the final consumer.

While technological progress and Mode 5 go hand in hand – as best reflected in high-tech products – services drive production of other otherwise less intuitive goods in this respect. A study conducted in Mainland China and in Hong Kong analysed the journey of a loaf of bread from primary ingredients to final consumption. The study revealed that about 30 different services are involved in getting the loaf to the final consumer, more than half of which are outsourced to external suppliers. The service content value of a loaf of bread is equal to 72 % of what the final consumer pays⁷. Many of these services form an inseparable part of the bread making process and are inseparable from the final output (bread). Finally, the analysis of the service content in log exports leads to no less surprising discoveries considering that logs represent a relatively unprocessed commodity. A substantial portion of the value of an exported log comes from services, including logging and loading, harvesting, trucking, marshalling of logs at the port, and fumigation to ensure logs are free from insect pests⁸.

Services also increasingly intervene at different stages of a product life-cycle, including at the development and sales stages, as well as the post-sale stage. For instance, after-sale services offered by companies to their customers may be integrated into the product (such as maintenance of a car), or offered alongside the product (such as installation for complex industrial machines)⁹. As a result of technological advances, what manufacturing firms often offer at the end of the production chain are 'solutions' which combine goods and services.

⁵ Hull, D., *The Tesla Advantage: 1.3 Billion Miles of Data*, Bloomberg Technology, <https://www.bloomberg.com/news/articles/2016-12-20/the-tesla-advantage-1-3-billion-miles-of-data>, 20 December 2016.

⁶ Weisenberger, S., 'Sewing Digital Transformation into the Fabric of the Textiles Industry', 2 February 2017, Industry Week, <http://www.industryweek.com/technology/sewing-digital-transformation-fabric-textiles-industry>.

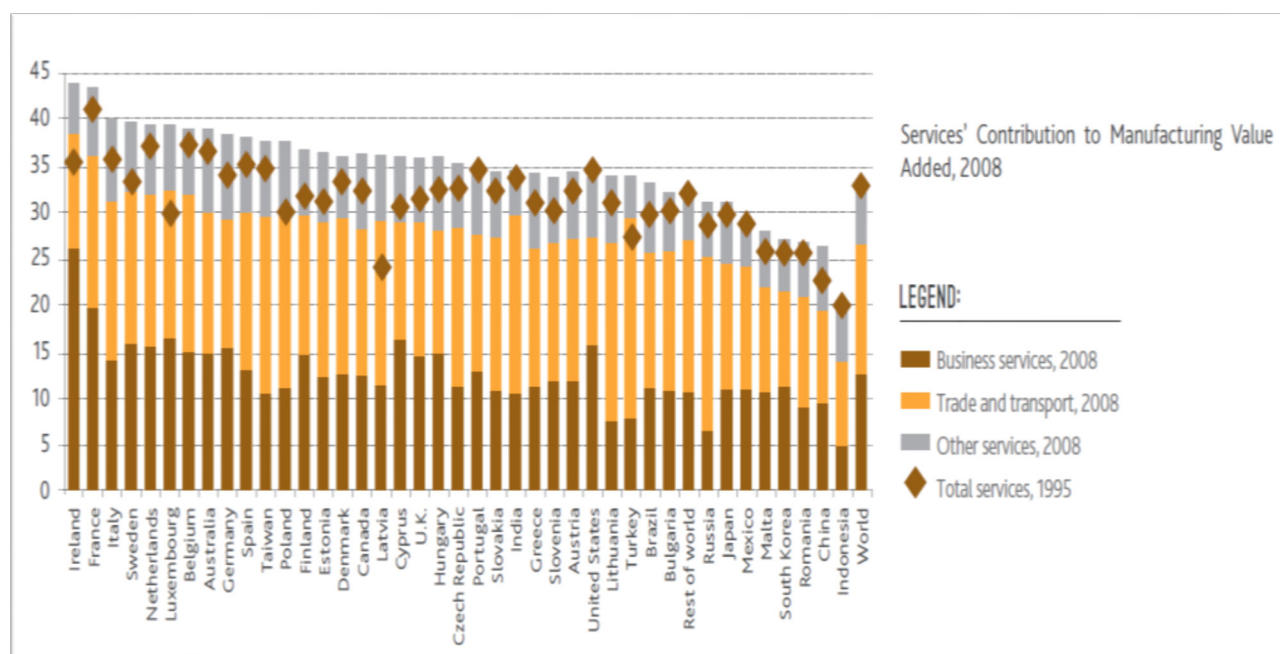
⁷ Low, P., 'A loaf of bread's well-serviced journey', 20 August 2014, South China Morning Post, <http://www.scmp.com/comment/insight-opinion/article/1577631/loaf-breads-well-serviced-journey>.

⁸ See Rajanayagam, S., New Zealand Productivity Commission, *The 'Servicification' of Trade*, Research Note 2016/4, December 2016, p. 13.

⁹ National Board of Trade Sweden - Kommerskollegium, *The Servicification of EU Manufacturing – Building Competitiveness in the Internal Market*, 2016, at 13.

The 2016 ground breaking report by the Swedish National Board of Trade suggests that 'the manufacturing industry is gradually, through 'servicification', becoming a service industry'¹⁰. Services create more and more value in the production process. As highlighted in Figure 1 below, the United States International Trade Commission (USITC) estimates that the value created directly and indirectly by services as intermediate inputs, represents at least 30 % of the total value added in manufactured goods¹¹. In the case of developed economies, this share tends to be higher.

Figure 1: Services' Contribution to Manufacturing Value Added, 2008



Source: USITC, 2013

Going forward, servicification is bound to play an even more prominent role in manufacturing. Digitalisation, fragmentation of production, as well as disruptive technologies that are still in an infant stage, such as the Internet of Things (IoT) and 3-D printing all contribute to further strengthening this trend¹². The IoT, for example, increases the software intensity and R&D content of goods manufacturing, and contributes to further blurring the boundaries between goods and services. Physical devices, such as phones, vehicles, home appliances embedded with electronics, software, sensors and actuators (or 'movers') which enable objects to connect and exchange data are experiencing a rise in popularity.

2.2 The emergence of the Mode 5 concept

The current trade rules have been designed several decades ago. Because of the fast pace of technological change, the current regulatory framework for trade can be deemed as belonging to 'another era'. While the current rules tend to regulate trade in goods and services as distinct worlds (GATT or GATS), there are a few exceptions from this approach in the World Trade Organization (WTO). The WTO Government

¹⁰ Ibid.

¹¹ United States International Trade Commission, 'The Economic Effects of Significant US Import Restraints. Eighth Update 2013. Special Topic: Services' Contribution to Manufacturing', <http://www.usitc.gov/publications/332/pub4440.pdf>.

¹² National Board of Trade Sweden - Kommerskollegium, 'Trade in Regulation in a 3D Printed World', 2016:1, <https://www.kommers.se/Documents/dokumentarkiv/publikationer/2016/Publ-Trade-Regulation-in-a-3D-Printed-World.pdf>, and Caputo, A. and Marzi, G. & Pellegrini, M., 'The Internet of Things in manufacturing innovation processes: development and application of a conceptual framework', Business Process Management Journal, 2016, 22, pp. 383-402.

Procurement Agreement (GPA) is a case in point: the same instrument addresses public procurement of goods and services. Somewhat hidden in technical details is a consideration of service industries, which emerges from the WTO Customs Valuation Agreement (CVA), a treaty applicable to goods subject to customs clearance. Designed in the pre-GATS era and spurring from a Tokyo Round Code, the CVA acknowledges (although to a very limited degree) the fact that goods contain not only physical components but also services. This suggests that in certain circumstances the value of the service components of the goods was meant to be considered along with the value of the tangible (material) component for customs evaluation purposes (for a detailed analysis see Section 4.1.1 below). Other WTO initiatives also seem to partially address or overlap with Mode 5 concerns, such as the WTO Information Technology Agreement (ITA), the Carrier Media Exception, and the proposed Environmental Goods Agreement (EGA).

Still in its infancy, the term Mode 5 eludes precise boundaries and scope. The term has been thus far used in economic literature that explores the importance of services inputs in manufacturing exports, in the EU and elsewhere. Despite their rather explorative character, these studies find that the current state of play provides an opportunity for policy makers to forge trade rules that are better suited for the ways that goods and services interact along GVCs¹³. It can be inferred that the development of Mode 5 rules feeds into this approach.

The related and broader notion of 'servicification' is older and can be traced as far back as 1972 when the American economist Theodore Levitt claimed 'everybody is in services'. In the absence of a precise definition for the increased use of services in the production of goods, different names, such as 'servitization' and 'manuservice economy' have also been used interchangeably¹⁴. Starting in the early 2010's, 'servicification' has gained more recognition, in particular through the work carried out by Sweden's National Board of Trade and by the World Economic Forum¹⁵. Servicification has also been analysed at the WTO and is part of the broader discussion on whether the current set of multilateral rules

¹³ See for instance, Cernat, L. and Kutlina-Dimitrova, Z., *Thinking in a Box: A 'Mode 5' Approach to Services Trade*, Chief Economist Note, DG Trade, Issue 1, March 2014,

http://trade.ec.europa.eu/doclib/docs/2014/march/tradoc_152237.pdf and Lodefalk, M., *Tear Down the Trade-Policy Silos! Or How the Servicification of Manufacturing Makes Divides in Trade Policymaking Irrelevant*, 16 January 2015, <https://voxeu.org/article/servicification-manufacturing-and-trade-policy>.

¹⁴ Foltea, M., *Linking Goods and Services in Global Value Chains*, in Cottier T. and Nadakavukaren-Schefer, K., eds. *The Encyclopaedia of International Economic Law*, Edward Elgar Publishing, 2017, pp. 596-598, at 596.

¹⁵ National Board of Trade Sweden - Kommerskollegium, *At Your Service: The Importance of Services for Manufacturing Companies and Possible Trade Policy Implications*, Stockholm: National Board of Trade, 2010; Ibid, *Servicification of Swedish manufacturing*, Stockholm: National Board of Trade, 2010; Ibid, *Everybody is in Services – The Impact of Servicification in Manufacturing on Trade and Trade Policy*, Stockholm: National Board of Trade, 2012. Stephenson, S. M., *Services and global value chains*, in WEF (ed.) *The Shifting Geography of Global Value Chains: Implications for Developing Countries and Trade Policy*, 2012.

is well equipped to reap the benefits offered by the modern GVC system¹⁶. Apart from the WTO, the concept of servicification has been explored at UNCTAD¹⁷, OECD¹⁸, and to some degree by academia¹⁹.

The use of the term Mode 5 (borrowing it from the four GATS modes of supply) does not necessarily suggest going along an expansion of the existing GATS provisions into a new mode of supply. Rather the word 'Mode' is used in this context to emphasize the fact that a significant amount of services trade takes place outside the current mode-based GATS framework. Thus, Mode 5 may take the form of services incorporated or embodied into goods, also dubbed as 'services traded in boxes'²⁰. They may also be supplied in connection with goods, and known as 'bundled' or 'embedded' services, such as after-sale, or customer care services. Further work and research is necessary in order to delineate more clearly the services concerned under Mode 5. A more precise definition of Mode 5 will help identify those services that may require policy action.

Mode 5 is not defined in the GATS or elsewhere in international trade treaties. In order to facilitate policy and rule development in this area, this report suggests preliminarily defining Mode 5 as services added or linked to goods whose value and origin can be detected for customs valuation of the relevant goods. The term Mode 5 exports used in this report refers to the exports of goods high in service intensity. In order to further improve the definition of Mode 5 services, additional benchmarking may be necessary to describe the intensity of the services in specific goods (e.g. a Mode 5 good is a product whose services value exceeds 50 % of its total value).

2.3 Mode 5 reference at the EU level

In its 2015 Trade Policy Strategy, the European Commission acknowledged the need for a policy that embraces today's trade realities by looking at ways that EU companies interact with the rest of the world²¹. Accordingly, strengthening the place of the EU firms in global supply chains means moving beyond traditional thinking exemplified by the fact that goods and services liberalisation commitments are

¹⁶ Lanz, R. and Maurer, A., *'Services and global value chains: Some evidence on servicification of manufacturing and services networks'*, WTO Staff Working Papers ERSD-2015-03, World Trade Organization (WTO), Economic Research and Statistics Division, 2015. Also, The E15 Initiative, *'Rethinking Services in a Changing World'*, 2016, http://e15initiative.org/wp-content/uploads/2015/09/E15_no17_Services_final_REV_x1.pdf. At WTO, see e.g. contributions by New Zealand and Rwanda, S/WPDR/M/71, 29 September 2017 (17-5219) Page: 1/70 Working Party on Domestic Regulation Report of the Meeting held on 15, 16, 22 June and 5 July 2017 – Note by the Secretariat and by Nepal in relation to the TPR of Switzerland and Liechtenstein, WT/TPR/M/355, 11 July 2017, 16 and 18 May 2017, Trade Policy Review – Switzerland and Liechtenstein – Minutes of the Meeting.

¹⁷ UNCTAD, *'Servicification' of international trade takes centre stage at UNCTAD expert meeting*, <http://UNCTAD.org/en/pages/newsdetails.aspx?OriginalVersionID=1017>.

¹⁸ Miroudot, S. and Cadestin C., *'Services In Global Value Chains: From Inputs to Value-Creating Activities'*, OECD Trade Policy Papers, No. 197, OECD Publishing, Paris, 2017. <http://dx.doi.org/10.1787/465f0d8b-en>.

¹⁹ See e.g. Crozet, M. and Milet, E., *'The future of manufacturing lies in services'*, VOXEU, 14 December 2015, <https://voxeu.org/article/future-manufacturing-lies-services>, and Crozet, M. and Milet, E., *'Should everybody be in services? The effect of servitization on manufacturing firm performance'*, CEPII Working Paper, No 2015-19 – October, http://www.cepii.fr/PDF_PUB/wp/2015/wp2015-19.pdf.

²⁰ Cernat, L. and Kutlina-Dimitrova, Z., *'Thinking in a Box: A 'Mode 5' Approach to Services Trade'*, Chief Economist Note, DG Trade, Issue 1, March 2014, http://trade.ec.europa.eu/doclib/docs/2014/march/tradoc_152237.pdf, published in the Journal of World Trade, Vol. 48, 2014, p. 1109-1126.

²¹ European Commission *'Trade for all – Towards a more responsible trade and investment policy'*, 2015, http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf.

currently dealt with separately in trade negotiations. Although these considerations are closely linked to Mode 5, the latter is not expressly mentioned in the 2015 Trade Policy Strategy.

In preparation for the 11th WTO Ministerial Conference (MC 11) held in Buenos Aires in 2017, the European Parliament highlighted the importance of discussing possible trade policy answers to the increasing phenomenon of servicification, as emerging in the field of trade in goods. Although the request from the Parliament solely suggested launching discussions with fellow WTO Members on the topic, this was not further raised during the Conference²². One MEP brought up the issue of Mode 5 in the context of EU trade negotiations with New Zealand, asking that the negotiating directives include:

Provisions on 'Mode 5' services allowing for duty drawback for the value supplied through a service from a party of the agreement when imported through goods originating from a party outside of the agreement²³.

The final negotiating mandate does not however contain any mention of Mode 5²⁴.

2.4 Reflection of Mode 5 in the WTO

Mode 5 has yet to emerge in the multilateral trade talks. The topic has not been addressed directly at the WTO, and the European Parliament request to raise the issue during the MC 11 in Buenos Aires remained unattended. New Zealand has indirectly contributed to fostering discussions on the topic through a paper on the servicification of trade published by the New Zealand Productivity Commission²⁵. However, there is no public information regarding the placing of the topic on the WTO agenda by New Zealand (or by any other WTO Member) to date.

Common sense would suggest however that any discussions on Mode 5 in the WTO should start from an analysis of the current disciplines and their possible relevance for Mode 5 trade, as discussed in this report. From the outset, Mode 5 seems to be a challenge for international trade rules that govern trade in goods and trade in services separately²⁶. A few provisions and initiatives at WTO link however indirectly to Mode 5 concerns, notably CVA Article 8.1(b)(iv) and the Carrier Media Exception. Certain tangencies may be observed with the E-commerce and Trade Facilitation in Services Agreement initiatives currently under discussion at the WTO. The extent to which these proposed rules and initiatives may be used as a possible entry point for Mode 5 disciplines is analysed further below.

²² See Amendment 43, European Parliament 2014-2019, Committee on International Trade, Draft motion for a resolution, Bernd Lange, Paul Rübig (PE610.732v01-00) on Multilateral negotiations in view of the 11th WTO Ministerial Conference in Buenos Aires, 10-13 December 2017, PE612.222v01-00 23.10.2017 and para. 12 of the European Parliament resolution of 15 November 2017 on multilateral negotiations in view of the 11th WTO Ministerial Conference in Buenos Aires, 10-13 December 2017 (2017/2861(RSP)).

²³ Christofer Fjellner MEP, Amendment 12, European Parliament 2014 – 2019, Committee on International Trade, Recommendation to the Council on the proposed negotiating mandate for trade negotiations with New Zealand, Motion for a resolution PE606.257 - 2017/2193(INI).

²⁴ European Parliament resolution of 26 October 2017 containing Parliament's recommendation on the proposed negotiating mandate for trade negotiations with New Zealand (2017/2193(INI), <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2F%2FEP%2F%2FTEXT+TA+P8-TA-2017-0420+0+DOC+XML+V0%2F%2FEN&language=EN>).

²⁵ Rajanayagam, S., New Zealand Productivity Commission, *The 'Servicification' of Trade*, Research Note 2016/4, December 2016.

²⁶ On the pros and cons of merging goods and services disciplines see Sauv , P., *To Fuse or Not to Fuse, Assessing the Case for Convergent Disciplines on Goods and Services Trade*, The E15 Initiative, 2015, <http://e15initiative.org/wp-content/uploads/2015/09/E15-Services-Sauve-FINAL.pdf>.

2.4.1 The General Agreement on Trade in Services (GATS)

Generally, the GATS does not define services as such. GATS Article I:3(b) however states that the term 'services' includes 'any service in any sector except services supplied in the exercise of governmental authority'. GATS Article I:2 provides that 'trade in services' is 'the supply of a service' within one of four 'modes of supply' depending on the territorial presence of the supplier and the consumer at the time of the transaction. Thus, the GATS is rather concerned with 'measures affecting trade in services', such as nationality requirements for service suppliers, limitations on the participation of foreign capital, or land ownership restrictions.

The way Mode 5 trade takes place may resemble Mode 1 of GATS services supply, also known as 'cross-border supply', when the service 'moves' from the territory of one WTO Member into the territory of another WTO Member. Once incorporated or linked to a good, the relevant services cease however to exist as services. In this case, Mode 5 services are subjected to the trade regime applicable to the goods from which they may become inseparable. Consequently, these international transactions may be subject to import duties at the border. Thus, the fact that the services existed as independent services before manufacturing seems irrelevant in this context. It therefore appears, that it is the GATT that will govern these transactions irrespective of the fact that a high value of the transaction reflected in the price of the good come from services. This penalises trade in high value added goods and indirectly the relevant services. Depending on the volume of Mode 5 trade concerned, this issue may frustrate all the best of intentions in designing GVC-friendly disciplines aimed at reflecting the EU's export realities.

A proposal to modify the GATS in an attempt to accommodate Mode 5 would not only make little sense from a legal standpoint, but would also be very difficult to achieve. Any such attempt (which will have to first modify the GATS definitions) would require consensus among all the WTO Members. The flexibility offered to WTO Members to enter 'additional commitments' reflected in the GATS Article XVIII also does not seem suitable to address Mode 5²⁷. The reason for this is that in the spirit of the GATS, the additional commitments can refer only to 'measures affecting trade in services' as provided above.

Apart from the services used in the manufacturing process, Mode 5 as discussed in this report may also include services that intervene at other stages of a product life-cycle, including at the development and sales stages, as well as after-sale, thus post-importation. A classic example would be installation and maintenance services related to industrial equipment. Depending on specific commitments (which can differ among WTO Member States), measures affecting the entry of suppliers into an export market (market access) and their conditions of operation (national treatment) would be captured by the GATS. The GATS, however, does not apply to measures affecting the transactions which are transferred to the trade in goods (GATT) regime.

All things considered, while the GATS' four modes of supply would retain an important impact on international trade of services (including those incorporated into a good), the concept of Mode 5 services trade as discussed in this report may not be suited for liberalisation under the GATS. To effectively play its current liberalisation role, the 1995 GATS would benefit from finalizing the 'Uruguay Round leftovers'.

²⁷ These additions can relate to trade-restricting measures not covered by the market access and national treatment obligations. One of the most common commitments under Art. XVIII contains the 'Reference Paper on Basic Telecommunications', an outcome of the Uruguay Round negotiations on telecommunications, which aims at strengthening regulatory disciplines to ensure competition in the telecommunications sector.

This is particularly true in the crucial area of domestic regulation²⁸ and for updating the Members' specific commitments by binding the current level of liberalization. This would entail for example, a modernization of the out-dated 'W/120 List' to include new services that manufacturing firms may use at different stages of production²⁹.

2.4.2 E-commerce in the WTO

E-commerce refers to production, distribution, marketing, sale or delivery of goods and services by electronic means³⁰. A significant part of electronic transmissions involve digital products such as software, movies, music, and audio books. As digital trade becomes more and more significant³¹, the first step taken at the WTO to facilitate e-commerce has been a moratorium on customs duties on electronic transmissions applicable since 1998³².

E-commerce, much like Mode 5 services, lies at the intersection between goods and services. In both cases, the 'service part' of the transaction may receive different treatment depending on the 'carriage' used to trade similar or identical content. One may think of a printed book compared to the same book in digital form, as downloadable from the internet. Even more relevant, some digital products, such as video games, may also contain a significant value of services inputs. In this case, with the exceptions of the countries that have chosen otherwise (see the Carrier Medium Exception discussed in Section 4.1.3 below), the value of a product may be subject to duties if sold on a physical carrier medium while the same product will be traded duty free if transmitted (sold) electronically.

At the WTO, progress on e-commerce has been slow, reiterating the difficulty of finding common ground among a very diverse WTO membership³³. Some of the issues brought up in the context of e-commerce could find place in a future debate on Mode 5 as well, including the fiscal implications of liberalization (i.e. lower customs revenues). Despite similarities and points of intersection, with the exception of those services embodied in or linked to digital products, Mode 5 trade is only partially facilitated by the current import duty moratorium on electronic transmissions. The development of any Mode 5-friendly trade disciplines in the future may require a better differentiation between the scope of this moratorium and the scope of Mode 5 services.

²⁸ GATS Article VI.4 calls upon the WTO members to develop any necessary disciplines to ensure that measures relating to qualification requirements and procedures, technical standards and licensing requirements and procedures do not constitute unnecessary barriers to trade in services.

²⁹ The Services Sectoral Classification List (MTN.GNS/W/120 in jargon simply 'W/120 List') was elaborated during the Uruguay Round to facilitate negotiations. It lists 160 sub-sectors defined as aggregate of the more detailed categories contained in the United Nations provisional Central Product Classification (CPC). Attempts to update the W/120 List have not led to a revision of the document to date.

³⁰ WTO Document WT/L/274, *Work Programme on Electronic Commerce*, Adopted by the General Council on 25 September 1998.

³¹ Rashmi, B., 'Permanent Moratorium on Custom Duties on ET Products – Implications for Digital Transformation', South Center, 25 September 2017, https://www.southcentre.int/wp-content/uploads/2017/09/Ev_170925_SC-Workshop-on-E-Commerce-and-Domestic-Regulation_Presentation-Moratorium-on-Custom-Duties-and-Digital-Industrialization-Rashmi-Banga_EN.pdf.

³² WTO Document WT/MIN(98)/DEC/2 25 May 1998 and WTO Document WT/L/274, *Work Programme on Electronic Commerce*, Adopted by the General Council on 25 September 1998, 30 September 1998.

³³ On the latest developments and proposals see Crosby, D., *E-commerce and digital trade for development: Negotiations to soft launch at MC11*, The E-15 Initiative, October 2017, <http://e15initiative.org/blogs/e-commerce-and-digital-trade-for-development-negotiations-to-soft-launch-at-mc11/>.

2.4.3 Trade facilitation of services

Mode 5 exports (indirectly) benefit from the trade facilitation disciplines under the WTO Trade Facilitation Agreement (TFA), which was adopted in 2014 and entered into force in 2017. The TFA seeks to expedite the movement, release and clearance of goods across borders, cutting WTO Members' trade costs and reducing the time needed to import goods³⁴. Inspired by the emergence of the TFA, in 2016 India tabled a proposal for negotiations on a Trade Facilitation of Services Agreement³⁵. The proposal acknowledges numerous border and behind-the-border barriers, as well as procedural bottlenecks that prevent the full realization of the potential of services trade. The proposed treaty mainly focuses on enhancing transparency and streamlining procedures. Disciplines would apply to measures affecting services where GATS commitments have been undertaken, with select provisions applying on a horizontal basis, such as transparency³⁶. The scope of the proposed agreement covers all four GATS modes of supply.

Reducing bottlenecks, increasing transparency, and streamlining procedures would support the servicification of manufacturing, and in general promote trade under the GATS' four modes of supply. The Indian proposal also acknowledges the growing importance of cross-border flows of information in relation to today's internet-driven and highly digitalized economy. Advances on this aspect at the multilateral level may benefit Mode 5 trade as well.

In spite of the effort to develop a comprehensive proposal, India decided not to table it at the MC 11 in Buenos Aires prioritizing negotiations in the field of agriculture. The Indian proposal builds on the existing GATS structure, definitions and obligations. Therefore, and for the same reasons presented above under the GATS section, the proposal seems unfit to deal with liberalising trade in Mode 5 services. However, some of the issues provided in the proposal may help in better understanding and framing future Mode 5 disciplines under the WTO.

2.5 Reflecting Mode 5 outside the WTO

A multilateral approach to developing Mode 5-friendly rules would be most desirable given the geographically widespread nature of production processes in a globalised world. However, given the notorious rule-making difficulties at the WTO, the option of pursuing disciplines outside of this organisation should not be ruled out. The Trade in Services Agreement (TiSA) – a plurilateral treaty under negotiations outside the WTO – would be a natural candidate for the inclusion of Mode 5-friendly provisions. Yet, TiSA's evident GATS-based architecture, coupled with a few setbacks in the negotiating process, could divert the attention of Mode 5-interested countries away from this initiative.

2.5.1 Trade in Services Agreement (TiSA)

Launched in 2012 by the WTO Members participating in the 'Really Good Friends of Services' group, the plurilateral Trade in Services Agreement (TiSA) initiative aims at boosting liberalization of trade in services beyond the GATS³⁷. TiSA is a plurilateral initiative, negotiated by a subset of WTO Members (there are currently 23 parties representing 50 economies), accounting for around 70 per cent of global services trade.

³⁴ WTO, https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm.

³⁵ WTO Communication from India – Concept Note for an Initiative on Trade Facilitation in Services, S/WPDR/W/55, 27 September 2016.

³⁶ WTO Communication from India – Possible Elements of a Trade Facilitation in Services Agreement, S/WPDR/W/57, 14 November 2016.

³⁷ See European Commission, Directorate General Trade http://ec.europa.eu/trade/policy/in-focus/tisa/index_en.htm.

Negotiations are currently on hold, and the latest round of negotiations took place in November 2016. There is no formally set deadline for concluding the negotiations.

The issue of Mode 5 has not been brought up in the TiSA negotiations so far. Although the negotiated text is not public, available information reveals that the structure and the overall logic of TiSA are based on the GATS. TiSA incorporates core GATS articles and obligations, such as provisions on definitions, scope, market access, national treatment and exceptions. This is not a coincidence as the treaty is meant to facilitate participation by a broader number of WTO Members in further service liberalisation, and enable the 'multilateralization' of the agreement. TiSA's higher level of ambition compared to the GATS is mainly reflected in the scheduling technique – a 'hybrid' schedule in which commitments are taken both in a positive and negative manner (e.g. most-favoured-nation treatment: negative; market access: positive; national treatment: negative). In addition, an agreement has been reached that commitments would, in principle, 'freeze' the current regulatory regime, thus preventing the subsequent adoption of more stringent measures (standstill clause). Absent specific exemptions, future unilateral elimination of discriminatory measures would be automatically locked in (ratchet mechanism). In conclusion, just as with the GATS, TiSA would face however structural and conceptual problems in accommodating Mode 5 services.

2.5.2 Free Trade Agreements

In a few instances, regional economic integration initiatives capture Mode 5-related concerns. They do so by including (directly or indirectly) services in the calculation of the rules of origin (RoO) for the importation of products, as sourced from an FTA partner. The EU FTAs seem to already consider the value of services included in goods through RoO, in particular the valued added rule (see Section 4.2.2 below). An example outside of the EU is the RoO set out in the Association of Southeast Asian Nations (ASEAN) Trade in Goods Agreement (ATIGA). The RoO formula in ATIGA explicitly takes into account domestic service inputs (such as design, R&D, architectural, and engineering services) to calculate regional content value³⁸.

Recent proposals that go in the same direction appeared in the on-going negotiations on modernising the North American Free Trade Agreement (NAFTA), specifically in the context of rules of origin for cars. Today, electronics, sensors, cameras, receivers, LIDAR³⁹, and radar systems contribute significantly towards the total value of a vehicle. The U.S. Motor and Equipment Manufacturers Association (MEMA), which supports an integrated North American supply base, has suggested taking into account R&D, engineering, design, and software development expenditures for the purpose of calculating a North American content of a car⁴⁰.

According to its proponents, updating NAFTA to recognize R&D, engineering, design, and software development would provide incentives for this type of activities to continue to take place in the United States⁴¹. By the same token, the EU FTAs may be explored with the view of understanding the extent to which they already provide for Mode 5-friendly provisions. Existing provisions may be expanded in scope, or alternatives may be proposed in order to facilitate trade in Mode 5 and secure the desired outcomes for European exporters.

³⁸ See ASEAN Trade in Goods Agreement, Article 29.1(a), Chapter 3 - Rules of Origin.

³⁹ LIDAR is a surveying method that measures distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor.

⁴⁰ MEMA letter to the United States Trade Representative, 22 January 2018, https://www.mema.org/sites/default/files/resource/MEMA_NAFTA_Lighthizer_letter_Jan-22-2018_FINAL.pdf.

⁴¹ Ibid.

2.6 Private sector awareness and support

European business associations, in particular those representing the interests of exporters of goods with high service content, have voiced their support for Mode 5. Besides recognizing the importance of Mode 5, they encourage further economic assessment of the advantages offered by such services and the development of appropriate policy responses to servicification. A few examples of the interest expressed by such associations are provided below.

Public record reveals for example that the European Services Forum (ESF) invited WTO Members to 'start discussions on a new 'Mode 5' of liberalization for services incorporated in manufacturing products...' ⁴². The ESF also commented on the EU Trade Policy Strategy noting, 'it would have welcomed a mentioning of the so-called Mode 5 in the strategy'. On that occasion, it also mentioned that current statistics (TiVA database) showed that Mode 5 exports make up a substantial share of total merchandise trade ⁴³.

The Eurocommerce and the Foreign Trade Association also expressed support for Mode 5 suggesting that:

'...global value chains have significantly changed the shape of the world economy in the 15 years since the launch of the WTO's Doha Round negotiations. The 'servicification' of trade in goods – also referred to as 'Mode 5' in policy jargon – deserves closer attention in this respect. Retailers and wholesalers stand ready to help working possible approaches and solutions' ⁴⁴.

Referring to exported cars containing high value software, Eurocommerce and the Foreign Trade Association point at the consequences of the current system by noting that:

'...when cleared through customs, these goods are subject to import duties on their value, including the cost of the services included in them, even though the provision of services is normally duty free. This leads to higher import duties for goods with a large service component and, as a result, penalises trade in high value-added products' ⁴⁵.

Furthermore, in a position paper regarding the free trade negotiations with Australia and New Zealand, the German Chambers of Commerce and Industry (GCCI) comments on how existing trade agreements do not yet reflect industry 4.0 realities, and hence they support the inclusion of Mode 5 disciplines in future agreements. According to the GCCI, because of antiquated definitions and extra costs resulting from duties on the re-importation of services components such as design, a concrete risk exists of firms delocalizing R&D activities abroad ⁴⁶.

⁴² European Services Forum (ESF), 'ESF priorities for a European Trade and Investment Strategy for Jobs and Growth', Brussels, 19 June 2015.

⁴³ Ibid, 'ESF Comments on European Commission Trade Policy Strategy', Brussels, 29 April 2016 <http://www.esf.be/new/wp-content/uploads/2016/04/ESF2016-03-ESF-Comments-on-EU-Trade-Policy-Strategy-Final.pdf>.

⁴⁴ Eurocommerce/Foreign Trade Association 'Goods and Services in boxes: European retail and wholesale call for a trade policy response to 'servicification'', Statement 28 September, <http://www.amfori.org/sites/default/files/PRESS%20RELEASE%20WTO%20PANEL%20MODE%205%20%28FTA%29.pdf>.

⁴⁵ Ibid.

⁴⁶ DIHK, 'Stellungnahme zu den geplanten EU-Australien and EU-Neuseeland Freihandelsabkommen' 23 January 2018, <https://www.dihk.de/themenfelder/recht-steuern/eu-internationales-recht/recht-der-europaeischen-union/dihk-positionen-zu-eu-gesetzesvorhaben> (in German).

Expressions of support for Mode 5 have also come from the European Brand Clothing Alliance⁴⁷ and from the World Federation of the Sporting Goods Industry (WFSGI), the latter suggesting that the competitive advantage that the industry enjoys depends on services in the area of research, design and development⁴⁸. According to the WFSGI, under the current system, services are forced into the rules governing trade in goods and are therefore indirectly dutiable; a solution that facilitates Mode 5 trade therefore makes sense in a global economy where services are also ‘sold in boxes’.

2.7 Mode 5 in the Brexit debate

Notably, Mode 5 also came up in the discussions about the effects of Brexit on trade. Brexit provides a tangible example of the barriers that EU Mode 5 exports might face if (and when) the United Kingdom leaves the EU’s Single Market. Depending on the ‘leave’ conditions, EU-UK trade will face increased hurdles, including in the form of tariffs and non-tariff barriers.

Given the way Mode 5 services are currently traded, that is as incorporated or linked to a good, barriers to trade in goods arising in this context would be more relevant than the obstacles to trade in services. From a tariff perspective, both the UK’s and EU’s exports may pay most-favoured nation (MFN) tariffs (under a ‘hard Brexit’ scenario) or preferential/duty free market access (under a ‘soft-Brexit’ scenario)⁴⁹. Because of the high level of integration between the UK and the EU, both parties stand to lose if they are denied free trade access to each other’s market⁵⁰. Should a ‘hard Brexit’ scenario materialize, Mode 5 exports, which are now traded under preferences, would most likely be subject to import duties.

Airbus, a company that builds planes using expertise from across Europe and whose products contain a considerable amount of services, has shown some concerns regarding possible adverse consequences from Brexit. Although Airbus did not refer specifically to Mode 5 in its publicly released statements, the company’s main concerns seems to originate from the barriers that hinder trade in services incorporated into goods, including tariff barriers⁵¹.

This needs to be squared with how much the UK will have to lose from Brexit considering that it is the second largest exporter of services in the world. The UK Trade Policy Observatory (UKTPO) researchers find that the value of service inputs into UK manufacturing exports exceeds £50 billion a year. This is about the same as all financial service exports in a year. Therefore, according to UKTPO, it is necessary to reach a deal that minimises the disruptions to trade in services for the UK economy to thrive after Brexit⁵².

⁴⁷ European Commission, Civil Society Dialogue ‘Post-Nairobi WTO Agenda: Meeting with EU Trade Commissioner Ms Cecilia Malmström’, 26 April 2016, Summary Report of the CSD meeting held on 24 April 2016 http://trade.ec.europa.eu/doclib/docs/2016/june/tradoc_154670.pdf.

⁴⁸ See presentation ‘Inclusive Trade in the Global Sporting Goods Industry’ by WFSGI at 2016 WTO Public Forum referring to services embodied in physical products, including athletic shoes <https://www.wfsgi.org/sites/default/files/inline-files/20160928%20WTO%20PF%20Full%20PPT%20Final.pdf>.

⁴⁹ Norgrove, O., ‘A further complication’, 1 March 2018, <http://www.norgroveblog.co.uk/2018/03/a-further-complication.html>. See also Borchert, I., ‘Services Trade in the UK: What is at stake?’, UK Trade Policy Observatory, Briefing Paper 6 – November 2016, p. 4, <http://sro.sussex.ac.uk/65675/1/Briefing%20paper%206%20final.pdf>.

⁵⁰ Vandenbussche, H., Connell, W., and Simons, W., ‘Global value chains, trade shocks and jobs: An application to Brexit’, VOX, 27 November 2017, <https://voxeu.org/article/global-value-chains-and-brexit>.

⁵¹ Topham, G., ‘Airbus may leave UK unless there is urgent clarity on Brexit trade’, The Guardian, 5 March 2018, <https://www.theguardian.com/business/2018/mar/05/airbus-may-leave-uk-unless-there-is-urgent-clarity-on-brexit-trade>.

⁵² Borchert I., Services and Trade, 23 April, 2018, video presentation available at <https://youtu.be/l7mBGegpfUQ>.

Turning to Mode 5 services linked to goods (as opposed to those incorporated or embodied into goods), abandoning the Single Market may also result in barriers into the UK market. Some studies find possible repercussions of Brexit on the services traded directly (or services 'disembodied' from goods) between the UK and the EU⁵³. Such negative forecasts should be considered for Mode 5 as well. For instance, worsened conditions of entry and operation of natural persons supplying services may negatively impact the work of installers and maintainers as stipulated in a warranty attached to a sale and purchase agreement for industrial machines.

Likewise, in the absence of a comprehensive trade deal, Brexit may also negatively affect the attractiveness of the EU as a hub for high-tech processing of goods manufactured in third countries and destined for the UK. At this stage, it is impossible to quantify the impact of Brexit on EU Mode 5 exports to the United Kingdom. It is nevertheless recommended that EU-Brexit negotiators fully realize and consider the fact that market access barriers that apply to goods may also negatively impact the domestic (EU and UK) services industry.

3 The economic importance of Mode 5

Trade in Mode 5 can be estimated as significant although putting an exact figure on it is not easy. The economic impact of facilitating Mode 5 trade is expected to be important both in terms of GDP gains and job creation. Also, the positive spill over effects that result from the link between Mode 5 and technology should not be underestimated. Several authors have highlighted the positive impact that services inputs have on firms' export capability and on the relationship between firms' services purchases and export intensity, as well as total factor productivity, especially in high-skilled, technology-driven industries⁵⁴.

In a context of rapidly evolving trade realities, timely and comprehensive Mode 5 trade data is essential to support the work of policymakers. Such data is also needed to formulate trade negotiating strategies and guide negotiators towards an optimal outcome. Improved statistics can also provide evidence of the benefits that may result from Mode 5-friendly trade governance for companies and consumers alike, and can be used to counter scepticism over the benefits of Mode 5 liberalization.

3.1 Mode 5 and international trade

Conventional measures of international trade in services, i.e. balance of payments (BOP) statistics measuring the gross value of direct service trade between residents and non-residents (cross-border trade) overlook two important means through which services are traded: services delivered via foreign affiliates (GATS Mode 3 of supply) and services traded indirectly, i.e. with the goods in which they are incorporated or linked to (or Mode 5).

The joint OECD-WTO Trade in Value-Added (TiVA) initiative provides a first indication of the magnitude of Mode 5 trade. TiVA data considers the value added by each country in the production of goods and services that are consumed worldwide⁵⁵. Put differently, it tracks 'how much services' go into the production of exported goods before the goods enter the importing country.

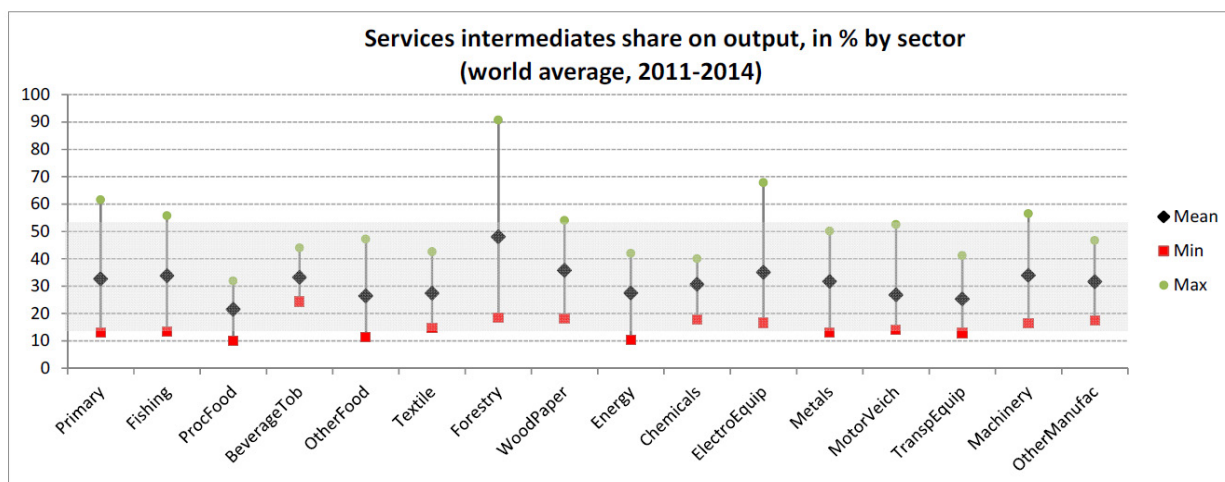
⁵³ Borchert, I. and Tamberi, N., *'Brexit and Regional Services Exports: A Heat Map Approach'*, Briefing Paper 14, January 2018, UK Trade Policy Observatory.

⁵⁴ Lodefalk, M., *'The Role of Services for manufacturing exports'*, Review of World Economics, No. 1, pp. 59-82, 2014; Wolfmayr, Y., *'Producer services and competitiveness of manufacturing exports'*, FIW research Report (9) 2008, Austrian Institute for Economic Research (WIFO).

⁵⁵ OECD, https://www.oecd-ilibrary.org/trade/data/oecd-wto-statistics-on-trade-in-value-added_tiva-data-en.

According to the most recent TiVA figures, the significance of Mode 5, calculated as services intermediates share on output in per cent by sector, is considerable across all sectors, ranging from 20 % to 47 %. Figure 2 below suggest that all countries and all sectors, from advanced manufacturing, technology-driven sectors to more traditional ones, stand to benefit from further liberalization of Mode 5 trade⁵⁶.

Figure 2: Services intermediates share on output in % by sector (world average 2011-14)



Source: Antimiani and Cernat, 2017

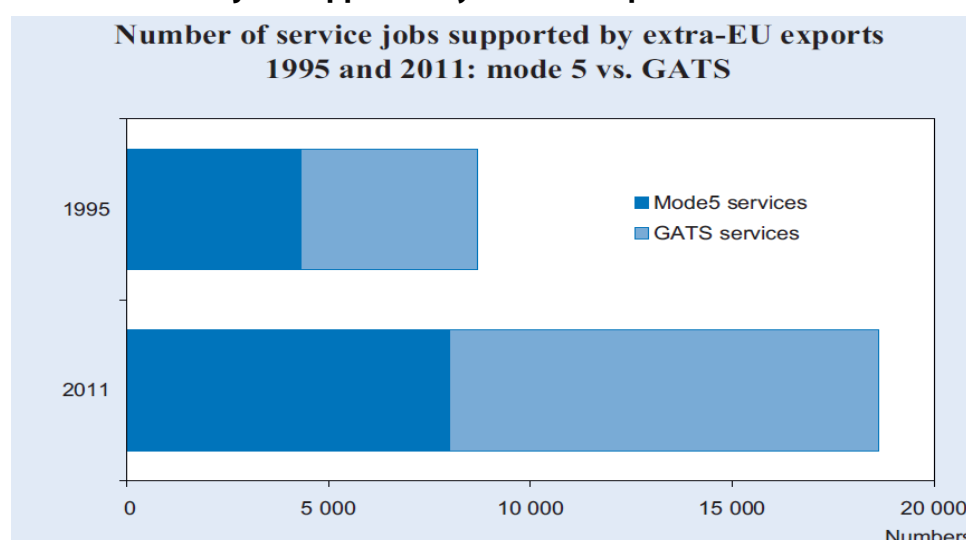
3.2 Mode 5 employment and job creation

The benefits that may derive from policies supportive of Mode 5 trade become evident when observing the impact of Mode 5 exports on jobs. Although manufactured goods are still responsible for the majority of EU jobs linked to exports (roughly 60 %), it is estimated that Mode 5 are behind 40 % of the total employment supported by goods exports, which translated into a total of eight million jobs in 2011, as shown in Figure 3 below⁵⁷.

⁵⁶Antimiani, A., and Cernat, L., 'Liberalizing global trade in Mode 5 services: How much is it worth?,' DG TRADE Chief Economist Notes 2017-4, Directorate General for Trade, European Commission, http://trade.ec.europa.eu/doclib/docs/2017/july/tradoc_155844.pdf, also published on the Journal of World Trade, Volume 52, Issue 1, 2018, 65–83.

⁵⁷ Cernat, L. and Sousa, N., 'The trade and jobs nexus in Europe: How important are mode 5 services exports?', CESifo Forum, 2016, vol. 16, issue 4, 65-67.

Figure 3: Number of service jobs supported by extra-EU exports 1995 and 2011: Mode 5 vs. GATS



Source: Cernat and Sousa, 2016

This figure is even more significant considering that export supported jobs, on average tend to be better compensated and require higher skills than labour activities in the rest of the economy.

The contribution of Mode 5 exports to the overall number of export-supported jobs seems to be particular strong in the machinery, electrical and transport equipment, and chemical industries. Although the results are not uniform across all EU Member States, in some cases, Mode 5 exports supported more jobs than exports under all four GATS modes of supply combined. In commenting on the data, some authors refer to a phenomenon of 'servicification of employment'⁵⁸.

The benefits from increased servicification of manufacturing are not limited to the EU and extend to the rest of the world. Given the increased complexity of international value chains, EU exports progressively rely on foreign inputs. This translates into a growing number of jobs outside of the EU as well⁵⁹.

3.3 The economic impact of Mode 5 trade liberalization

The existing research based on economic modelling evaluates the possible impact of multilateral liberalization of Mode 5 exports using a Computable General Equilibrium (CGE)⁶⁰. Based on the most recent Global Trade Analysis Project (GTAP) database version⁶¹ the calculations simulate two scenarios of tariff liberalization through tariff cuts on a multilateral basis. The CGE results show that GDP gains from multilateral Mode 5 liberalization could reach up to EUR 300 billion by 2025 with a gradual increase during the implementation period (2022-2024). The impact on GDP is expected to be positive for all countries, while developing countries and the Asian region stand to benefit more than others⁶².

⁵⁸ Ibid.

⁵⁹ Ibid, 65.

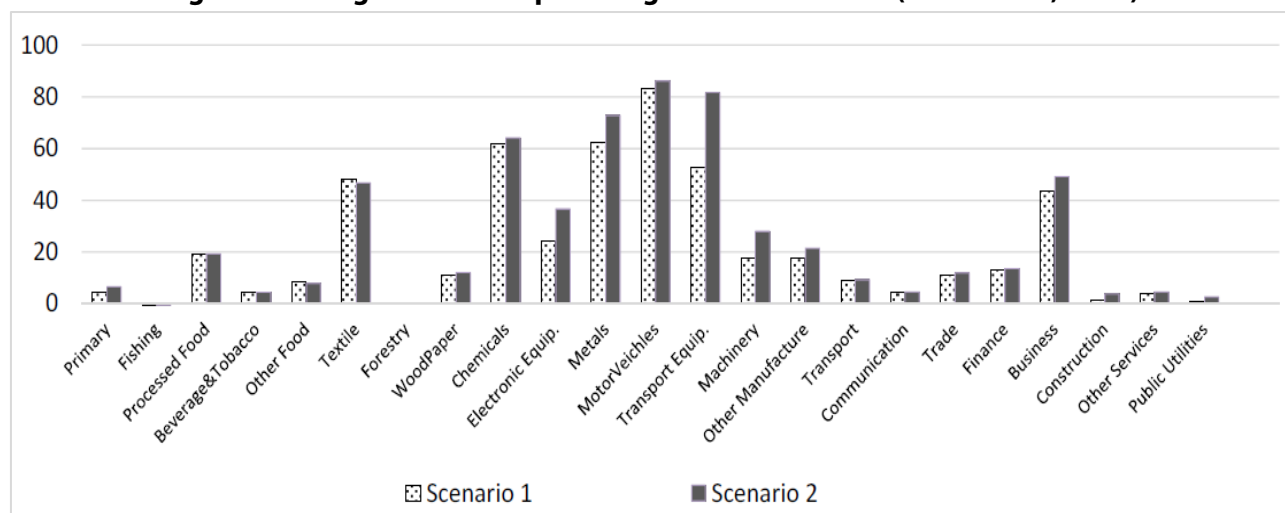
⁶⁰ Antimiani, A. and Cernat, L., *Liberalizing Global Trade in Mode 5 Services: How Much is it Worth?*, DG Trade Chief Economist Notes, Directorate General for Trade, European Commission, 4, July 2017, at 13-14.

⁶¹ GTAP version 9.2 includes data on up to 141 regions and countries, 57 industries and 8 endowments, using 2011 as a base period.

⁶² Antimiani, A. and Cernat, L., *Liberalizing Global Trade in Mode 5 Services: How Much is it Worth?*, DG Trade Chief Economist Notes, Directorate General for Trade, European Commission, 4, July 2017, at 13-14. See also Liu, X., et al, *Services Development and Comparative Advantage in Manufacturing*, May 2018, available at <https://www.k->

It is thus claimed that world trade is expected to increase by up to EUR 500 billion by multilateral liberalization of Mode 5 and, as shown in Figure 4 below, all sectors are expected to experience an increase in trade flows with peaks in goods manufacturing and business services⁶³.

Figure 4: Change in world exports of goods and services (USD billion, 2025)



Source: Antimiani and Cernat, 2017

3.4 Relevance of Mode 5 for other EU policies

The state of manufacturing has been a matter of concern for most OECD countries for over a decade. The sector has been negatively affected by offshoring to emerging economies, and has suffered from the shockwaves sent by the financial crisis of 2008. The phenomenon of servicification of manufacturing and an increase in Mode 5 exports can contribute to the strengthening and expansion of the EU industrial base⁶⁴. Both have broad implications linked to other EU policies of fundamental importance for the competitiveness of EU firms and their industrial future.

The expansion of services transforms the way goods are manufactured, and drives what many observers have referred to as the 'new industrial revolution' or 'industry 4.0'⁶⁵. Mode 5 represents one of the several dimensions of servicification, as well as the result of the increased use of services in manufacturing. It forms an integral part of the new, digitalization-driven industrial revolution, which holds the promise of increased flexibility in manufacturing, mass customization, increased speed, better quality, and improved productivity.

Efforts to facilitate Mode 5 exports would go hand in hand with the fulfilment of the Europe 2020 Strategy aimed at creating a smarter, greener, and more inclusive economy and society⁶⁶. Besides contributing

state.edu/economics/seminars/Liu_Xuepeng_Paper_Services%20Development%20and%20Comparative%20Advantage%20in%20Manufacturing.pdf.

⁶³ Ibid, at 13.

⁶⁴ European Commission, 'For a European Industrial Renaissance', Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2014.

⁶⁵ European Parliament, 'Industry 4.0, Digitalisation for productivity and growth', Briefing, September 2015, [http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/568337/EPRS_BRI\(2015\)568337_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/568337/EPRS_BRI(2015)568337_EN.pdf).

⁶⁶ European Commission, https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_en.

toward employment objectives, policies aimed at facilitating Mode 5 exports would underpin sustainable growth. Trade policy support for action on climate change is also pursued through the elimination of barriers to trade in environmental goods, thus lowering the costs of purchasing and deploying such goods by industries, governments and individuals alike⁶⁷. Environmental goods are no exception to the trend that shows an increase in services embodied into products. Measures that facilitate Mode 5 trade would therefore contribute towards achieving the goals set in this field as well. Likewise, the implementation of certain elements of the Europe 2020 Strategy is essential for firms' manufacturing and Mode 5 exports, such as the Horizon 2020 Programme and its industrial leadership pillar for research and innovation⁶⁸.

SMEs are likely to be positioned as winners in this story should policies supportive of Mode 5 exports be adopted. Industrial activities are integrated into complex value chains, linking large corporations and SMEs across sectors and countries. New opportunities may open up. SMEs' views and concerns often tend to be overshadowed by those of larger firms and therefore need to be comprehensively mapped out and reflected in trade policy agendas⁶⁹.

In conclusion, the need for further research and reflections around Mode 5 services and future disciplines on this topic should not be considered in isolation from these other EU policy objectives.

4 Liberalizing Mode 5 at different levels of trade governance

This Section assesses various possibilities of providing Mode 5-friendly trade disciplines at multilateral, plurilateral and bilateral levels. It identifies the *pros* and *cons* of each identified option and singles out workable solutions considering the general purpose of facilitating trade in Mode 5, squared with possible decision-making hurdles in various settings.

This report explores the presented options on the assumption that the data necessary for determining the value of the relevant services can be identified. This data may be provided by importers as part of their routine customs declaration processes. At a policy level, the relevant value added statistics, like that found in TiVA, should reasonably allow policy makers to understand the value of services added by sector and by country of production. The data is important in understanding the level of benefits offered by liberalizing Mode 5 services through the options examined in this report (e.g. it is important to understand what Mode 5 services are worth).

4.1 The World Trade Organization

Further to the examination in Section 2 of the relevant WTO initiatives which can accommodate Mode 5 disciplines, this Section discusses the aptness of several already existing WTO provisions for this purpose. This includes the possibility of tapping on the current WTO agreements, such as the Customs Valuation Agreement (CVA), which already provides a rather simple Mode 5-relevant mechanism (Section 4.1.1), as well as the option of expanding (or otherwise exploring) the logic provided by the WTO Carrier Medium Exception along the lines proposed by Uruguay (Section 4.1.2).

⁶⁷ European Commission, *Trade for all - Towards a more responsible trade and investment policy*, 2015, http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf. At the time of writing, eighteen participants representing 46 WTO members are engaged in the on-going negotiations for an Environmental Goods Agreement seeking to eliminate tariffs on a number of important environment-related products.

⁶⁸ European Commission, <https://ec.europa.eu/programmes/horizon2020/>.

⁶⁹ Lodefalk, M., *Tear down the trade-policy silos! Or how the servicification of manufacturing makes divides in trade policymaking irrelevant*, 16 January 2015, <https://voxeu.org/article/servicification-manufacturing-and-trade-policy>.

4.1.1 Article 8.1 (b)(iv) of the WTO Customs Valuation Agreement

Rudimentary provisions facilitating Mode 5 trade as explored in this report can be found in the WTO Customs Valuation Agreement⁷⁰ Article 8.1(b)(iv) which reads as follows in the relevant parts:

Article 8

1. In determining the customs value under the provisions of Article 1, there *shall be added* to the price actually paid or payable for the imported goods:

[...]

(b) the value, apportioned as appropriate, of the following goods and services where supplied directly or indirectly by the buyer free of charge or at reduced cost for use in connection with the production and sale for export of the imported goods, to the extent that such value has not been included in the price actually paid or payable:

[...]

(iv) engineering, development, artwork, design work, plans and sketches, *undertaken elsewhere than in the country of importation* and necessary for the production of the imported goods;

[...]

[*Emphasis added*]

Transposed into the national customs codes of WTO members, including the EU, this provision sets out the situations when *it is necessary* to include the value of certain services in the price of the goods for customs valuation at the border. According to this provision, this applies to engineering, development, artwork and design services, plans and sketches. Within the EU legal framework, this option is contemplated by Article 71.1(b)(iv) of the EU Customs Code⁷¹.

As an illustration, by virtue of Article 8.1(b)(iv) of the CVA, if an EU importer of product A supplies an EU engineering service at a market value to a Chinese producer of this product, the value of the import into the EU of product A does not have to include the price of the relevant EU services. As a consequence, the importer does not have to pay duties on the value of the services supplied to the producer of product A in China, with all the resulting trade facilitative outcomes (that is lower import duties).

The language of CVA Article 8.1(b)(iv) is not an example of clarity if considered through the lenses of Mode 5 concerns. This may have to do with the purpose of the CVA, which is to provide customs valuation guidelines to WTO Member States on how to correctly determine the transaction value of imported goods. The CVA was necessary for providing more transparency regarding expected import duties to be paid by importers at the border, while ensuring that customs valuation does not result in foregone revenue⁷². Thus, this article provides guidance on what 'shall be added to' (as opposed to what shall or can be excluded from) the 'price actually paid or payable for the imported goods' in order to determine the transaction

⁷⁰ Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994.

⁷¹ See the EU Customs Code at

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1526542424119&uri=CELEX:02013R0952-20161224>.

⁷² The Agreement emerged from a Protocol to the Agreement on Implementation of Article VII of GATT 1947. In the Uruguay Round the terms of this Protocol were incorporated into the WTO Valuation Agreement itself, where they now appear as Annex III.

value⁷³. Thus, the cost or value⁷⁴ of engineering, development, artwork, design work, plans and sketches (referred to as the CVA services list), *have to* be added to the price if:

- (i) such value has not been included in the 'price actually paid or payable';
- (ii) the service has been supplied directly or indirectly by the buyer free of charge or at a reduced cost;
- (iii) the service has been undertaken elsewhere than in the country of importation;
- (iv) the service was necessary for the production of the imported good or sale for export.

The four conditions above are exclusive, meaning that the cost or value of any other kind of goods or services that an importer may supply to a foreign seller does not have to be added to the invoice price. Thus, an inverse and Mode 5-friendly reading of this provision concerns services which *do not have to be added* to the price, as follows:

- i) those services which have been supplied at a normal/market value (i.e. not free of charge or at reduced costs under an agreement with the buyer);
- ii) which have been undertaken in the country of importation (not elsewhere) of the goods which contain the relevant services; and
- iii) which were unnecessary for the production of the imported good or sale for export, meaning that the service will not be dutiable if the manufacturer could have produced the good without that service. An example of such service is post-manufacturing engineering, like engineering consulting on where to establish an imported industrial plant⁷⁵.

The Interpretative Note to CVA Article 8 provides additional guidance on how to deal with various scenarios that may arise under this provision. For example, it provides that if only part of the service supplied by the buyer is necessary for the production of the imported good, only that part is dutiable to the extent that the respective proportion is quantifiable. Thus, where the engineering services supplied by the buyer covers both the pre-manufacturing engineering necessary to manufacture a machine, and the post-manufacturing engineering necessary to construct the machine at the premises of the buyer, only the former is dutiable. The services supplied by the buyer may be intended to advise the manufacturer on his needs, rather than to make possible the production of the imported product. In this case, their value is also not dutiable. In such a scenario, it needs to be checked whether the so-called specification of the buyer provides more than a specification, amounting in fact to a service necessary for the production of the imported good.

In sum, the above analysis suggests that the value of services undertaken in the country of importation, which have been acquired under normal (commercial) market conditions by the seller, do not have to be added to the price if the exported good could have been produced without that service. In this case,

⁷³ The General Introductory Commentary to the Agreement states that the 'primary basis for customs value under this Agreement is 'transaction value' as defined in Article 1' of the Agreement. The Agreement's Preamble further states that Members should recognize 'that the basis for valuation of goods for customs purposes should, to the greatest extent possible, be the transaction value of the goods being valued'.

⁷⁴ The terms 'cost' and 'value' are used interchangeably in this report.

⁷⁵ To clarify further, for the service to be considered unnecessary it should not be related to the production, and hence the cost of this service must not be added to the price to arrive at the transaction value of the plant. The engineering service in question is related to the imported product but not to its production. In addition, the cost or value of post-importation technical services or market research, or other such studies for the purpose of a price quotation, which are not necessary to produce the imported good, shall not be added to the price.

the value of such services can be deducted from the transaction value on the basis of the applied import duties. Indeed, it is recognized that any other position on the above would mean double-counting⁷⁶.

Although subject to a number of limitations as described below, this provision was certainly trade-facilitating for its time. Notably, it rests upon a logic similar to that applied in the customs procedure of outward processing, where negotiators decided to waive the value adjustment not only with respect to goods but also services. Under the outward processing regime, the producer may generally deduct the value of the materials exported and used in the third country on the processing/repair of the final imported good.

One WTO document points to the fact that this CVA provision can be explained by national tariff policy. Tariff rules in a number of WTO Member countries exempt from customs duties, the cost or value of national-origin materials incorporated in the imported goods. By exempting the value or cost of those services undertaken outside of the country of importation from the customs value, the WTO Members may have wished to provide equivalent tariff treatment to national-origin services, in order to incentivize the development of domestic (technical) service industries⁷⁷.

4.1.1.1. The limitations of CVA Article 8.1 (b)(iv) for liberalizing Mode 5

When applying the logic of CVA Article 8.1(b)(iv) to Mode 5 issues, a few limitations of this provision need to be considered. These limitations and their impact need to be taken into account if this option is to be further considered.

- *The CVA was not intended for services liberalization*

The CVA was drafted to provide guidance to customs officials on how to establish the price of goods paid or payable for customs valuation purposes, and did not as such aim at addressing services. Nonetheless, the negotiation history of this specific provision reveals that the GATT Contracting Parties actually introduced Article 8.1 (b) (iv) in order to consider not only the value of the originating goods components (in this limited re-import scenario), but also the value of services components of the relevant goods⁷⁸. This shows that already in the GATT times, negotiators did not believe that only goods, but also services, deserved paying lower duties in order to avoid a negative impact on services producers.

- *The provision refers only to a narrow list of (technical) services*

Article 8.1(b)(iv) of the CVA covers engineering, development, artwork and design services, plans and sketches. What is specifically excluded from the CVA services list are the costs of basic research that a buyer may supply to the seller. The GATT negotiator specifically intended to distinguish 'research' from 'development' activities, and included only 'development' in the list of CVA services⁷⁹. According to

⁷⁶ Diaz, G.P. and Guadalupe B. J., *On Article 8.1(b)(iv) of the Customs Valuation Agreement: When Is the Value of Certain Services Supplied by the Buyer Relevant for Customs Value (i.e., Engineering, Development, Artwork, Design Work, and Plans and Sketches)*, 9 Global Trade & Cust. J. 260 (2014), p. 262.

⁷⁷ WTO Committee on Customs Valuation, Minutes of the Meeting of 27 March 2002, G/VAL/M/26 (para 1.24 ff), where the economic rationale for this exclusion is subject to extended discussion. See also Rosenow, S. and O'Shea, B., *A Handbook on the WTO Customs Valuation Agreement*, Cambridge University Press, 2010, p. 51.

⁷⁸ There is need of reminding here that the Tokyo Round Customs Valuation Code (which pre-dated CVA) emerged before the WTO GATS.

⁷⁹ WTO Committee on Customs Valuation, The Term 'Development' in Article 8.1 (b) (iv) of the Agreement on Implementation of Article VII: Note by the Secretariat, VAL/W/24/Rev.1 (January 10, 1985). On the basis of that negotiating history, the GATT Valuation Committee issued decision 5.1, reflecting the GATT parties' understanding that the term 'development' excludes research.

negotiators, such distinction lays in the fact that: (i) it was virtually impossible to apportion research costs to specific imported goods, and (ii) research costs are generally charged to the accounting period in which they were incurred as a general overhead, that is, as a general expense, and not the time in which the actual manufacturing of the good may be taking place.

Given the wealth of services that may be related to Mode 5, and in light of rapidly evolving technologies, it is worth noting that the scope of the CVA services list is rather limited and captures only the logic of outward processing (a two countries scenario). One trade association has pointed out that the CVA list does not seem to capture services like cloud-based infrastructure provided as a service, digital platforms as a service, or software as a service. These services have been singled out as instrumental for coverage by potential Mode 5-friendly disciplines⁸⁰. Just as with research, further analysis is needed to assess the extent to which the costs of this type of services can be apportioned to the value of exported goods.

It is also worth noting that intellectual property rights services such as patents, trademarks and copyrights which may fall under Mode 5 receive separate treatment in customs valuation. The WTO Members have certain flexibilities in the way they determine customs valuation, depending on conditions of sale and other contractual obligations.

- *Territorial limitation*

For the value of the CVA listed services to be discounted from the customs value of the relevant goods, they have to be undertaken in the *country of importation* for use in the production of the good, at a market value, and re-imported as part of foreign manufactured products. In the EU this is covered by Article 71.1(b)(iv) of the EU Customs Code, and the listed services undertaken in the EU can be deducted from the customs value of imported products under certain conditions. Additional issues may arise in determining whether the service has been undertaken in the country of importation or elsewhere, and with reference to the modalities of such determination⁸¹.

During the GATT negotiations on this specific provision, India sought the exclusion of the part of the provision referring to 'services undertaken elsewhere', fearing duty evasion by 'unscrupulous importers'. This is because by relying on CVA Article 8.1(b)(iv) importers could declare that the services listed under that provision were 'undertaken' in the 'importing country' in order to pay fewer duties. Some WTO documents however present evidence that a number of other countries believed that this concern could be remedied by auditing the importer.

4.1.1.2. Determining the value of the services

Additional constraints may link to the determination of the value of the service as provided in CVA Article 8 Interpretative Notes⁸². Where the services meet the four CVA Article 8.1(b)(iv) conditions, the value of the service will be dutiable. This means that the value of these services has to be determined and added to the price of the imported good to arrive at the transaction value. For example, the Interpretative Notes on this state that:

⁸⁰ Comment by Patrice Chazerand, Digital Europe, March 28, 2018.

⁸¹ More details on this issue is provided in Diaz G. P. and Guadalupe B. J., *On Article 8.1(b)(iv) of the Customs Valuation Agreement: When Is the Value of Certain Services Supplied by the Buyer Relevant for Customs Value (i.e., Engineering, Development, Artwork, Design Work, and Plans and Sketches)*, Global Trade & Customs Journal, 9, 2014, 260-266 at pp. 261-262.

⁸² Customs Valuation Agreement, Annex 1, Interpretative Note to Art. 8 (Annex I below). Note that the apportionment rules are provided in the context of Art. 8.1 (b)(ii) but they apply to Art. 8.1(b)(iv) as well; see Sherman S. and Glasshoff, H., 'Customs Valuation Commentary on the GATT Customs Valuation Code', p. 118.

Where the importer acquires the service from a seller not related to him, its value is the cost of acquisition. Where the importer or a person related to the importer produces the service, its value is the cost of producing it. In cases where the service has already been previously used in other operations, its value is the original cost of acquisition or production, adjusted downward to reflect the use.

The Interpretative Notes do not explain how to establish the downward adjustment, which means that the importer can suggest how to determine the value of downward adjustment that it considers reasonable⁸³.

Once the value of the service has been determined, that value must be *apportioned* to the imported good. The basic rule is that apportionment should be made in a reasonable manner, appropriate to the circumstances, and in accordance with generally accepted accounting principles. Apportionment is simple where the imported good is one unit. The value of the engineering, plan or sketch must then be added to the price of the imported product to arrive at its transaction value. Where more units are imported, various possibilities exist. The issues that may arise in the determination of the value of services under Article 8.1(b)(iv) need to be mapped out in more detail. This aspect is essential in designing Mode 5-friendly disciplines through customs valuation.

4.1.2 The Uruguay USB drivers proposal

Another WTO initiative that partially mirrors Mode 5 is the GATT 1995 Decision on the Valuation of Carrier Media Bearing Software for Data Processing Equipment. This instrument recognizes the unique situation arising in connection with the customs valuation of carrier media. The GATT 1995 Decision (which builds on a 1984 pre-existing GATT Decision known as the Carrier Media Exception) states that it would be consistent with the CVA to value the imported *software* on the basis of either:

1. The cost or value of the *software content* and the carrier medium, or
2. The cost or value of the *carrier medium alone*, excluding the costs or value of the software content, provided that this is distinguished from the cost or the value of carrier medium.

The 1995 Decision qualifies the pre-existing 1984 GATT Decision, which prescribed GATT Contracting Parties to value software for customs purposes according to the cost of its carrier medium only (e.g. CD-ROM or magnetic tapes)⁸⁴. The 1995 Decision clarifies that CVA allows both options for determining the value of software. Put differently, it is up to the individual WTO Member to decide whether to value software content or the carrier medium⁸⁵. Those WTO Members that choose the latter method (i.e. carrier media alone) have to notify the Customs Valuation Committee (CVC) to this effect. As of November 2017, forty-two Members have notified the WTO on the use of the carrier media option, including the EU⁸⁶.

The 1995 Decision is important because it partially acknowledges the paradox that may arise when software is traded on different carrier medium from a customs valuation perspective. From the perspective of Mode 5, the Carrier Media Exception is however limited in scope. It applies only to data or instructions

⁸³ CVA Interpretative Note, para 1 (Annex I of this Report).

⁸⁴ In determining the customs value of imported carrier media bearing data or instructions, only the cost or value of the carrier medium itself shall be taken into account. The customs value shall not, therefore, include the cost or value of the data or instructions, provided that this is distinguished from the cost or the value of the carrier medium (WTO 1995, G/VAL/1, p. 3).

⁸⁵ WTO Decision 4.1, 'Valuation of Carrier Media Bearing Software for Data Processing Equipment', 1984.

⁸⁶ WTO, Committee on Customs Valuation, Information on the Application of the Decisions on the Treatment of Interest Charges in the Customs Value of Imported Goods and on Valuation of Carrier Medium Bearing Software for Data Processing Equipment: Note by the Secretariat, G/VAL/W/5/Rev. 28, 3 November, 2017.

on an imported disc or other similar carrier medium. It does not cover the importation of the vast majority of non-Information Technology Agreement (ITA) manufactured products that incorporate a growing value of software components (the operating system in a machine tool, a GPS navigation system in car, etc.). Additionally, the expression 'data or instructions' used in the 1995 Decision is also not taken to include sound, cinematic or video recordings⁸⁷.

In summary, the Decision only covers software that is contained on a disc or similar carrier medium. The carrier media covered by the exception are limited to, for example, CD-ROM, DVDs, tape cartridges or magnetic tapes. Its major limitation is that it does not support technological changes where the data and instructions in question can be increasingly traded on new media carriers like USB keys or flash drives. It is also limited in application as only some self-declared WTO Members chose to use the value the carrier medium – which is more business-friendly solution resulting in lower import duties. Moreover, the discretionary nature of the exception introduces further complications for global companies and adds to their trade compliance costs.

With these limitations in mind, Uruguay proposed that the 1984 Decision be updated⁸⁸ to include e.g. USB keys or flash drives because of their growing popularity as a software carrier medium. Under the current decision, customs may value software in a CD-ROM at USD 5, while the same software imported using a USB key could be valued at USD 1 000. Consequently, Uruguay proposed that the third subparagraph of Paragraph 2 of the Decision be worded as follows:

Current Version	Proposed Version (new text in bold)
<p>For the purpose of this Decision, the expression 'carrier medium' shall not be taken to include integrated circuits, semiconductors and similar devices or articles incorporating such circuits or devices; the expression "data or instructions" shall not be taken to include sound, cinematic or video recordings.</p>	<p>For the purpose of this Decision, the expression 'carrier medium' shall not be taken to include integrated circuits, semiconductors and similar devices or articles incorporating such circuits or devices, with the exception of those which are presented to Customs solely as a means of temporary storage for transfer of data or instructions (software) to data processing equipment in order to be used; the expression "data or instructions" shall not be taken to include sound, cinematic or video recordings.</p>

The Uruguay proposal has not been approved to-date, and the EU seems to be one of its opponents. The details of the relevant WTO discussions on this matter are not public. However, an unofficial source suggested that the EU is holding back on this proposal for a number of reasons, including the excessively open (technologically speaking) scope of the new proposal and the belief that USBs are widely superseded

⁸⁷ Another complication on how to treat software is linked to that there is no agreement amongst WTO members on whether electronically traded software is a good or a service (in the EU for example this is a service while the US considers electronically delivered software as a good).

⁸⁸ WTO, Committee on Customs Valuation, Proposal for Updating the 'Decision on the Valuation of Carrier Media Bearing Software for Data Processing Equipment' G/VAL/W/241/Rev.1 from 2 May 2014.

by other means of carrier media such as streaming. The EU position on this issue needs to be further clarified.

4.1.3 Mode 5 liberalization options under the Customs Valuation Agreement

4.1.3.1. Option 1: Expanding the scope of CVA Article 8.1 (b)(iv) services list

One Mode 5-friendly option that arises from the CVA analysis above is a possible expansion of the scope of CVA Article 8.1(b)(iv) to include a wider list of services (listed as either a positive or negative list). To give it further breadth and impact, the provision, which now applies to outward processing, could be extended to apply more widely – ideally with respect to services coming from all WTO Members or at least from a wide subset of Members. Multilateralising the CVA expanded services list may require hard forms of Member's expression of consent, like introducing an amendment to the CVA.

In deciding the scope of this provision, further economic and statistical data is needed in order to understand how much economic value would be entailed in a multilateral or plurilateral expansion of the CVA as discussed above. There is also a need to explore whether currently available datasets (e.g. TiVA) allow for responding to this question and if the existing gaps can be remedied through data obtained from the private sector or elsewhere.

Support for this idea in the WTO context will depend on the possibility of singling out the expected economic gains, given the varied level of economic development among WTO Members and differences in the Members' ability to add (services) value in global supply chains. It can be assumed that there is little likelihood of obtaining wide WTO support for an expanded CVA option, given that many developing countries may doubt their own ability to add a great value of services to their exported goods.

Moreover, the proposal to discount the value of additional services from the declared customs value for the goods will inevitably (and rightly) lead to importers paying lower import duties. This will however result in governmental loss of customs related revenue. Many developing countries rely heavily on customs duty collection as a major source of governmental revenue⁸⁹. There is thus little likelihood for these countries to agree on foregoing customs revenue, which has been a salient issue they have raised repeatedly before the WTO Customs Valuation Committee⁹⁰. Additionally, countries with poor resources and infrastructure may want to know in advance the implementation issues which may arise for their customs officers, and assess the possible need for additional training and technical assistance.

4.1.3.2. Option 2: Expanding the scope of the carrier media exception

Building on Uruguay's proposal to expand the carrier medium exception, a second Mode 5-friendly legal option would be for the WTO Members to: (i) adopt the Uruguay's proposal as it stands, or (ii) adopt a more ambitious exception.

While the scope of the proposal by Uruguay may still be limited, in a more ambitious scenario, the 'carrier medium' may also cover integrated circuits, semiconductors and similar devices or articles incorporating such circuits or devices (known as microchips) provided that they are not covered elsewhere. In addition,

⁸⁹ For detailed revenue information such as customs duties as share in tax revenue see Member Profiles in the WCO Annual Report on http://www.wcoomd.org/-/media/wco/public/global/pdf/media/annual-reports/wco_ar_2016_2017_en.pdf.

⁹⁰ Interview with Suja Rishikesh Mavroidis and Halloran Dolores, WTO Market Access Division, Geneva, Switzerland (March 15, 2018, WTO). See also GATT Working Group on MTN Agreements, *Adequacy and Effectiveness of the MTN Agreements and Arrangements and Obstacles to their Acceptance: Consolidation of the Observations Made and Conclusions Reached in the Committees and Councils*, MDF/12 (June 11, 1985).

relevant business players may be consulted regarding the economic interest in the inclusion of other software-carrying electronics in the 'carrier medium' definition.

This would be in line with the business reality where unique challenges for software vendors can exist relating to the size of the software product itself. Carrier medium capacity limitations can dictate which type of media can be used for some software packages. Also, a customer's existing hardware peripherals can determine which media can be used by the software vendor. These varying requirements result in companies still having to maintain an inventory of physical media and media production equipment to fulfil unique customer requirements. In addition, some countries restrict or prohibit import of certain types of media. These country-unique requirements will continue to be a challenge. To accommodate the different requirements, multiple fulfilment processes and manual intervention may be required, resulting in increased compliance risks for companies⁹¹.

To better calibrate the scope of this proposal, it would be necessary to obtain further data regarding its potential economic value⁹². When asked to join this proposal, developing countries in particular may want to understand the amount of possible forgone revenue arising from additional exceptions, e.g. of the USB-carried software; other new open ended or already defined carrier medium devices; microchips; and other software-carrying electronics. Each of these options will entail waiving customs duties, and would hence likely be resisted by developing countries. Before launching this proposal, it is also recommended to evaluate the economic value of each specific option from an EU perspective.

Finally, the expansion of the carrier media exception seems attractive because of the possibility of enacting it through a Decision of the Customs Valuation Committee; the process for such an enactment is less procedurally burdensome, and is more feasible compared to the amendment of the WTO agreements or negotiations on a new treaty.

4.1.3.3. Implementation of CVA options

Some additional questions need to be considered in the implementation of the CVA options. For example, which other services need to be included in the CVA services list and which issues may arise in determining if services originate in the importing country. Preliminary information received from the private sector reveals that the current use of CVA Article 8.1(b)(iv) in the EU typically follows a rather simple procedure – the value of imports for customs valuation purposes is mostly based on the value of the invoice. Companies that want to make use of this provision, need to make sure that the value of the imported EU relevant services is not included in the final invoice. If they were incidentally included, the importer would still have the right to deduct them. When EU customs officials audit these transactions, the relevant company would have to ensure that it has duly documented that the eligible Mode 5 services meet the conditions of this legal provision. There is also need to check with the relevant European Anti-Fraud Office (OLAF) units regarding the rate of fraud detection in these cases. Other possible implementation issues need to be assessed as part of this exercise as recommended in the concluding section of this report.

4.1.3.4. Option 3: Amending the Harmonized System to reflect Mode 5

An additional and promising option for penning Mode 5-friendly disciplines in the trading system is through a possible amendment to the Harmonized System (HS) administered by the World Customs Organization (WCO). The amendment may entail making horizontal or Chapter-specific rules which would make a distinction between traditional goods and high service-intensity goods ('Mode 5 goods'). This will define Mode 5 either horizontally or in each chapter. This option would allow for a precise identification of

⁹¹ Brouillard, É. and Terwilliger, L., 'Importing software: IBM's global approach to customs valuation issues and new technologies', World Customs Journal, Volume 7, Number 2, September 2013, p. 122.

⁹² Apparently the WTO has conducted a study on the Uruguay proposal, which is not publically available.

the goods in question, determination of their value, and would assure customs authorities regarding their possibility to control the outcome.

For example, HS Chapter 87 deals with cars classified on the basis of the power of engine and their state of use, and can reflect an additional possible classification criteria reflecting the value of software content incorporated into the car. A separate HS code for software content of the cars would more easily allow for implementing the desired policy options, including making import duty distinctions and designing RoO applicable to the new codes. The modification of other HS chapters should go through evaluations along the same line in consultation with the private sector. This option would require further examination with the involvement of the WCO, the WTO, and the European Commission DG TAXUD. Its success may depend on the ability of the EU to orchestrate support for this change among other HS Contracting Parties.

4.2 Free Trade Agreements

This section of the report identifies prospects for Mode 5-friendly rules being included in existing and future free trade agreements (FTAs). Specific avenues are explored like resorting to an expansion of the CVA services list in the FTA context only (Option 1) or consideration of a secondary Mode 5-friendly rule of origin (Option 2).

4.2.1 Option 1: CVA Article 8.1 (b) (iv) services list expansion as part of the EU FTAs

The WTO CVA Article 8.1(b)(iv) as mirrored in the Article 71.1(b)(iv) of the EU Customs Code can be further explored and experimented with in the context of the EU FTAs alone. This may take on board the CVA relevant options discussed above in the context of the WTO. This exercise will also prepare the relevant EU institutions for the process of exploring this (or a similar) option at the WTO level. Its advantage lies in the fact that it can be implemented together with to EU FTAs partners, without the need to go through lengthy multilateral discussions at the WTO, which may not result in any decision.

4.2.2 Option 2: Addressing Mode 5 through RoO

Each trade agreement has its own set of rules of origin (RoO) that stipulates the working or processing operations that confer 'originating' status to a given product. This applies in cases where such a product is not wholly obtained ('not born') in the country in question. In general terms, the EU rules which confer preferential origin status to a good could be based on the following: (i) a change of tariff (sub)heading; (ii) a change of tariff heading of all materials with a specific tolerance rule, other than the general tolerance rule; (iii) a maximum percentage of non-originating materials allowed in proportion to the ex-works price (also known as value added content rule); (iv) a maximum percentage of non-originating materials allowed in proportion to the ex-works price applicable to the group of materials which predominates by weight in the product; (v) a specific working or processing carried out on certain materials; or (vi) a combination of the above mentioned criteria.

All origin rules include an article on 'insufficient working or processing' that would impede goods from acquiring origin status when very simple processes have been carried out, even in cases where the criteria applicable to a particular good have been met. The provision usually includes a list of all of the activities that are considered as insufficient to confer originating status, such as preserving operations to ensure that the products remain in good condition during transport and storage, breaking-up and assembly of packages, washing and cleaning, removal of dust, or simple painting and polishing operations.

It seems that the value added rule of origin applied by the EU already captures the value of services in the determination of the origin of the goods. The EU value added rules are normally defined as a maximum of non-originating materials' value in the overall value of a product (normally, the ex-factory value). The formula reflects a division of the value of non-originating materials to the ex-factory value of goods. The

denominator, the ex-factory value, incorporates all materials, services, labour, manufacturing overheads, sales and administrative expenses, as well as profit⁹³.

Thus, it seems that the EU value added RoO is the one that comes the closest to accommodate Mode 5 concerns. What is missing is an understanding of the share of trade covered by value added rules as compared to other rules. A small proportion of goods coverage by the value added rule reinforces the case for a secondary RoO, as proposed below. This issue would require further examination and consultations with the relevant EU Institutions.

4.2.2.1. A secondary EU value added RoO

A number of products covered by complex RoO (e.g. shoes and textiles) found in the EU FTAs are not based on the value added rule, but on specific working and change in tariff heading rules. This can be a major limitation for some firms, notably those that rely on service-value added (e.g. fashion or creative start-ups). Future EU FTAs may therefore include a secondary Mode 5-friendly RoO for those products that may involve creative activities – often carried out by female entrepreneurs and new start-ups. When those products cannot generally comply with the standard RoO, a secondary Mode 5-friendly RoO would offer an additional possibility for them to benefit from increased market access. This option would provide a preferential duty treatment. The rule could be framed as a less stringent value-added rule. For example, if the value-added threshold of the standard RoO is 40 % in relation to all non-originating materials, the threshold for the secondary rule could be 30 % or less.

In order to extract more benefits from the RoO option, the operation of the cumulation system will need further consideration. Preliminarily, the secondary RoO would need to be based on full cumulation in order to achieve a meaningful impact along GVCs.

Table 1: Explanation of 'Cumulation' in Rules of Origin

<p>Cumulation is a system that allows contracting parties to use originating products from each other.</p> <p><i>Bilateral cumulation</i> operates between two countries where a free trade agreement or autonomous arrangement contains a provision allowing them to cumulate origin.</p> <p><i>Diagonal cumulation</i> operates between more than two countries provided they have Free Trade Agreements containing identical origin rules and provision for cumulation between them. As with bilateral cumulation, only originating products or materials can benefit from diagonal cumulation. Although more than two countries can be involved in the manufacture of a product, it will have the origin of the country where the last working or processing operation took place, provided that it was more than a minimal operation. Diagonal cumulation operates between the Community and the countries of the 'pan-Euro-Mediterranean cumulation zone'.</p> <p><i>Full cumulation</i> allows the parties to an agreement to carry out working or processing on non-originating products in the area formed by them. Full cumulation means that all operations carried out in the participating countries are taken into account. While other forms of cumulation require that the goods be originating before being exported from one party to another for further working or processing, this is not the case with full cumulation. Full cumulation simply demands that all of the working or processing in the list rules must be carried out on non-originating materials in order for the final product to obtain origin status. Full cumulation is in operation between the Community and e.g. the countries of the EEA, Maghreb, OCT or ACP</p>
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⁹³ Comment by Ignacio Iruarrizaga, European Commission, DG Trade, March 6, 2018.

Given the EU's thriving processing trade regime, which allows firms to outsource production abroad without paying duties on EU-value added activities⁹⁴, the EU is actually an important contributor of parts and components in global GVCs. It may well be the case that those GVCs contain EU value added but not enough for those goods to be considered 'made in Europe'. In that case, the entire component would be considered foreign and the RoO may work against the EU interests. Therefore, it may be useful for EU FTAs to build on the options of the duty drawback regime and allow consideration for the value of EU Mode 5 services that are incorporated into the value of non-originating materials (e.g. EU software incorporated in a component imported from Asia). This would then be counted in the cumulation process in future EU FTAs, taking into account the value of EU services. The full cumulation option would allow for a clear recognition that Mode 5 services are considered as 'processes or productions'.

4.2.2.2. Relevance for preference utilization rates

It is beyond doubt that FTAs are aimed at ensuring a duty-free environment for virtually all products. It may thus be argued that there is no need to act on the preferential segment in order to liberalize Mode 5. While this argument makes sense, the reality of FTA implementation suggests that the reduction or removal of tariffs under FTAs does not necessarily mean that all products can move freely across borders. For example, FTA parties have to comply with substantive and administrative requirements in order to benefit from tariff reductions⁹⁵. As a result, instead of taking advantage of the preferential tariff reduction, companies may have to pay the tariff. Thus, even if a significant part of trade between FTA partners enjoys tariff reductions, there might still be a significant number of companies (in particular SMEs) that do not take full advantage of the benefits offered by FTAs⁹⁶.

A recent UNCTAD and National Board of Sweden report finds for example that:

...although the 'preference utilization rates' and/or 'preference savings rates' are on average 75 percent and 77 percent, respectively, in the EU's free trade agreements, it is still possible to increase the utilization of preferences. Even relatively small increases in the utilization of preferences in the largest free trade agreements with regard to the values of preference eligible trade might generate substantial preferential exports and/or preferential duty savings in economic terms for both parties⁹⁷.

Importantly, the report prescribes that the 'pockets of under-utilization' must be identified on a detailed level in individual FTAs since they are likely related to product-specific provisions, such as rules of origin. It also finds that the value of exports not using FTA preferences is also considerably higher for the EU than for partner countries – the net difference being EUR 60 billion. The report argues that this amount is a lost opportunity or future potential for EU exporters⁹⁸.

In this context, any FTAs Mode 5 liberalisation option could be assessed against the EU's policy objective of raising the preference utilization rates and duty savings. One way to achieve this may be by creating a new set of rules of origin where the value of the services is given more prominence in determining the origin of the goods. The new RoO may be triggered where Mode 5 trade with an FTA partner could not comply with the currently applicable preferential RoO. It can be reasonably assumed that this RoO would

⁹⁴ See Cernat, L., and Pajot, M., 'Assembled in Europe' – The role of processing trade in EU export performance', European Commission, Chief Trade Economist Note, Issue 3, 2012 available at http://trade.ec.europa.eu/doclib/docs/2012/october/tradoc_150006.pdf.

⁹⁵ UNCTAD and National Board of Trade Sweden Report, 'The Use of the EU's Free Trade Agreements Exporter and Importer Utilization of Preferential Tariffs', January 2018, p. 2.

⁹⁶ Ibid.

⁹⁷ Ibid, at 34.

⁹⁸ Ibid, at 42.

increase preference utilization. The value of services undertaken in a FTA partner may be captured in a specific value added threshold, which may be used in building different economic scenarios.

4.2.2.3. Compatibility with WTO law

From a legal point of view, FTAs represent an exception from the MFN rule in GATT Article I, meaning that the treatment accorded to a partner country in a FTA does not have to be 'immediately and unconditionally' extended to like products of all other WTO Members. One question that may arise in the context of the WTO compatibility of the FTA options discussed in this report is understanding whether any of them entail extending benefits to non-FTAs parties. To the extent that they do extend benefits to non-parties, other WTO Members could in principle argue a violation of the GATT Article XXIV, which sets out the boundaries of FTAs legality under WTO Law. Given however that the FTAs option prescribes an additional RoO, which are well-recognised trade policy instruments used in FTAs, there are no reasons of major concerns over the compatibility of this proposal with the WTO law.

4.2.2.4. Implementation

In order to duly implement the proposed FTA Mode 5 options discussed in this report, the buyer may be expected to hold a solid commercial record system that would allow establishing the value of the relevant services. Preliminarily, from the perspective of implementation, the normal customs valuation and verification procedures may apply to products originating from a Party to an EU FTA without the need to put in place additional mechanisms. This however needs to be verified with customs authorities and importers. The RoO option will also need to be assessed separately, as discussed in the concluding part of this report.

5 Conclusion and recommendations

While a clearer picture will emerge with additional research and stakeholder consultations, this report explores some possible legal outlets for tuning existing trade rules to a Mode 5-friendly style. As discussed above in Section 3, this is based on the assumption that liberalising trade in services-intensive goods will bring about additional economic benefits and enhance global and European trade. The options under any chosen outlet will however need to be quantified in economic terms before making further inferences.

A brief consideration of the possible options for liberalising Mode 5 trade covers both WTO and free trade agreements. The report thoroughly examines and gives higher prominence to options entailing changes to already existing rules as compared to producing a new stand-alone agreement. At the WTO level, this prioritisation is linked to rule-making complexities. This approach is not intended however to discard the suitability of a stand-alone comprehensive WTO treaty on this subject where other GVC questions may be addressed (e.g. questions linking to the movement of persons and capital). It is also assumed that soft law options, like WTO Committee Decisions, are more likely to deliver an outcome as compared to proposing a formal WTO amendment. While a multilateral initiative is highly likely to be derailed by the WTO consensus rule, preliminary research suggest that a WTO *plurilateral* agreement option remains viable enough for such to be examined in a separate study.

The issue addressed in this report is not an easy one and the challenge mostly stems from the fact that – apart from its novelty – the WTO regards goods and services as separate universes. Another limitation is posed by the need to more precisely define Mode 5, and the desired policy objectives. Additional testing of the technical feasibility of the options proposed in this report will need to be undertaken.

5.1 Acting on Mode 5 at WTO

For pursuing a multilateral WTO track, it is important to identify in advance the possible gains from Mode 5-friendly provisions for the entire WTO membership. It may be worth further exploring whether these disciplines may also be attached (technically and politically) to other on-going WTO negotiation proposals (e.g. the WTO E-commerce programme, India's Services Trade Facilitation Agreement proposal or the Environmental Good Agreement proposal). Solutions independent from these initiatives would need to be accompanied by a scope differentiation exercise among these different initiatives, including an estimation of relevant Mode 5 trade values.

At the multilateral level, the question of designing effective Mode 5-friendly rules cannot be examined in isolation from the rule-making process at the WTO and the diversity of its membership. While the options may be generally welfare enhancing, the advantages may be perceived as skewed in favour of developed countries. In this scenario, a multilateral initiative in either legal configuration may not see much success. The chances for Mode 5-friendly rules to succeed at the WTO will definitely depend on the EU's ability to show gains across the board. The first steps in this direction would entail proper preparation and thorough analysis of the topic. This would need to be followed by dedicating efforts and resources to raising awareness among developing countries on the value of the new disciplines. One example that can be cited is an UNCTAD project in Brazil that examines best practices on services value added data collection among developing countries⁹⁹.

Provided that more work is conducted as recommended below, the initiative can be followed by launching *informal consultations* with WTO Members in order to explore interest in a multilateral (or plurilateral) approach, e.g. the creation of the 'friends of Mode 5 initiative'. This can start with conducting open

⁹⁹ Comment by Bruno Antunes (UNCTAD), April 11, 2018.

seminars or roundtable discussions with Geneva-based delegates, in order to raise awareness and assess interests around the issue.

One additional multilateral option that deserves further attention is the *HS amendment* option, which needs to be further explored in close consultation with the WCO and the relevant EU institutions.

5.2 Reflecting Mode 5 in the EU FTAs

It is assumed that the FTAs options discussed in this report will deliver quicker results compared to the WTO route, especially given that the proposed options do not preclude the EU from exploring the multilateral (or plurilateral) track in parallel. Moreover, the FTA-related options may provide guidance on how the matter could be pursued at the WTO (including the identification of possible implementation issues). A secondary RoO in FTAs that accounts for higher service value can be experimented at the EU level, although the sensitivity of the RoO issue may also spur significant debates among EU Member States as well. The success of the proposal will depend on the ability to reveal additional economic gains for the EU Member States as compared to the status quo, its technical feasibility, and the burden of possible additional costs to businesses arising from each specific proposal.

5.3 Recommendations on future work

It is appropriate to regard this exercise as a first step in understanding the substance and procedure behind the possible options for designing Mode 5-friendly rules in international trade agreements. This report aims to not only map out these legal options, but also to suggest additional areas that need to be further explored. Prominently, a better definition of Mode 5 remains a key issue. Furthermore, monitoring the economic impact of Mode 5 on European exporters should become an on-going exercise. It is therefore recommended to regularly update this report and produce additional studies as appropriate taking into account the points below.

Additional economic analysis. Although the economic intuition behind Mode 5 gains is clear, before launching any negotiations over Mode 5-friendly rules, it is important that further economic analyses be conducted on each specific option. For example, the task of identifying additional services to be covered by CVA Article 8.1(b)(iv) needs to go hand in hand with establishing the value of trade created under specific bilateral or multilateral options. This is also true with regards to the HS amendment option where for example, the creation of new Mode 5 HS headings should be pre-empted by economic figures to assess the international trade at stake.

Setting up a Mode 5 Experts Group. Given the novelty and technicality of the topic, the specific design and validation of Mode 5-friendly disciplines should be necessarily guided by an EU Mode 5 Expert Group (the Group) set up for this purpose. One may also consider assigning this task to already existing relevant EU institutions if feasible. It is also recommended that the Group be entrusted with producing further work and analyses and engaging in consultations with relevant stakeholders and experts. Given the duality of Mode 5 (i.e. as it touches upon both goods and services), the Group should include experts in both areas, as well as experts in the field of WTO law, FTAs, customs valuation, and rules of origin. One example of the Group's possible initiatives is to explore, in consultation with customs authorities and the private sector, the extent to which a possible extension of the CVA Article 8.1(b)(iv) list of services may generate difficulties in establishing the customs value of the relevant goods entering into the EU.

This report could facilitate the definition of the mandate of the Group – a mandate that can be revisited as more analysis and data emerges. An important point in choosing suitable Mode 5 options is carefully assessing the technical feasibility of each specific proposal. Political considerations are also not trivial; while wider product coverage by the value-added rule of origin may seem logical at face value, the private sector

(in particular some sensitive EU sectors) may oppose the idea and give preference to preserving product specific rules. The Group would be entrusted with identifying such limitations.

Raising private sector awareness in the EU. Given the lack of understanding of Mode 5 among the private sector, it is recommended that the Group (or other relevant European institutions) launch a series of roundtable discussions in order to: (i) raise companies' awareness about Mode 5 and further gauge their interest in the matter; (ii) assess the economic relevance of the various options by sector where possible (the work of the OECD needs to be monitored in this regard); and (iii) consult the private sector in assessing the scope of liberalization, implementation mechanisms, and technical feasibility of the proposed options.

Carrying out further research. The idea of creating Mode 5-friendly trade rules or GVC-friendly rules more generally is in its early days. Additional research and policy analysis should be encouraged, and funds should be made available in order to further stimulate debate and research on this topic. In this process, the data, resources, academia and experts of the relevant international organisations should be consulted, namely the OECD, WTO, WCO, UNCTAD and ITC.

Annex: Interpretative Notes - Note to Article 8 of the WTO Customs Valuation Agreement

Paragraph 1(a)(i)

The term 'buying commissions' means fees paid by an importer to the importer's agent for the service of representing the importer abroad in the purchase of the goods being valued.

Paragraph 1(b)(ii)

1. There are two factors involved in the apportionment of the elements specified in paragraph 1(b)(ii) of Article 8 to the imported goods — the value of the element itself and the way in which that value is to be apportioned to the imported goods. The apportionment of these elements should be made in a reasonable manner appropriate to the circumstances and in accordance with generally accepted accounting principles.

2. Concerning the value of the element, if the importer acquires the element from a seller not related to the importer at a given cost, the value of the element is that cost. If the element was produced by the importer or by a person related to the importer, its value would be the cost of producing it. If the element had been previously used by the importer, regardless of whether it had been acquired or produced by such importer, the original cost of acquisition or production would have to be adjusted downward to reflect its use in order to arrive at the value of the element.

3. Once a value has been determined for the element, it is necessary to apportion that value to the imported goods. Various possibilities exist. For example, the value might be apportioned to the first shipment if the importer wishes to pay duty on the entire value at one time. As another example, the importer may request that the value be apportioned over the number of units produced up to the time of the first shipment. As a further example, the importer may request that the value be apportioned over the entire anticipated production where contracts or firm commitments exist for that production. The method of apportionment used will depend upon the documentation provided by the importer.

4. As an illustration of the above, an importer provides the producer with a mould to be used in the production of the imported goods and contracts with the producer to buy 10 000 units. By the time of arrival of the first shipment of 1,000 units, the producer has already produced 4 000 units. The importer may request the customs administration to apportion the value of the mould over 1 000 units, 4 000 units or 10 000 units.

Paragraph 1(b)(iv)

1. Additions for the elements specified in paragraph 1(b)(iv) of Article 8 should be based on objective and quantifiable data. In order to minimize the burden for both the importer and customs administration in determining the values to be added, data readily available in the buyer's commercial record system should be used in so far as possible.

2. For those elements supplied by the buyer which were purchased or leased by the buyer, the addition would be the cost of the purchase or the lease. No addition shall be made for those elements available in the public domain, other than the cost of obtaining copies of them.

3. The ease with which it may be possible to calculate the values to be added will depend on a particular firm's structure and management practice, as well as its accounting methods.

4. For example, it is possible that a firm which imports a variety of products from several countries maintains the records of its design centre outside the country of importation in such a way as to show

accurately the costs attributable to a given product. In such cases, a direct adjustment may appropriately be made under the provisions of Article 8.

5. In another case, a firm may carry the cost of the design centre outside the country of importation as a general overhead expense without allocation to specific products. In this instance, an appropriate adjustment could be made under the provisions of Article 8 with respect to the imported goods by apportioning total design centre costs over total production benefiting from the design centre and adding such apportioned cost on a unit basis to imports.

6. Variations in the above circumstances will, of course, require different factors to be considered in determining the proper method of allocation.

7. In cases where the production of the element in question involves a number of countries and over a period of time, the adjustment should be limited to the value actually added to that element outside the country of importation.

Paragraph 1(c)

1. The royalties and licence fees referred to in paragraph 1(c) of Article 8 may include, among other things, payments in respect to patents, trademarks and copyrights. However, the charges for the right to reproduce the imported goods in the country of importation shall not be added to the price actually paid or payable for the imported goods in determining the customs value.

2. Payments made by the buyer for the right to distribute or resell the imported goods shall not be added to the price actually paid or payable for the imported goods if such payments are not a condition of the sale for export to the country of importation of the imported goods.

Paragraph 3

Where objective and quantifiable data do not exist with regard to the additions required to be made under the provisions of Article 8, the transaction value cannot be determined under the provisions of Article 1. As an illustration of this, a royalty is paid on the basis of the price in a sale in the importing country of a litre of a particular product that was imported by the kilogram and made up into a solution after importation. If the royalty is based partially on the imported goods and partially on other factors which have nothing to do with the imported goods (such as when the imported goods are mixed with domestic ingredients and are no longer separately identifiable, or when the royalty cannot be distinguished from special financial arrangements between the buyer and the seller), it would be inappropriate to attempt to make an addition for the royalty. However, if the amount of this royalty is based only on the imported goods and can be readily quantified, an addition to the price actually paid or payable can be made.

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