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THE TPP AND THE DIGITAL ECONOMY:

The Agreement's Potential as a Benchmark for Future Rule-Making

Abstract

This paper looks at different elements within the negotiated text of the Trans-Pacific Partnership (TPP) Agreement that govern various aspects of the digital economy and seeks to appraise the possibility for these rules to serve as a set of generally applicable benchmarks for future trade rules in this area, even among non-signatories.

The paper concludes that given the very different approaches to economic governance and internet regulation taken by what are twelve very different countries who were parties to these negotiations, the TPP is likely to represent a relatively sound indicator of possible landing zones for these rules when negotiated by other big players in the digital economy who did not participate in the TPP for various geographic or other reasons.

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I. INTRODUCTORY REMARKS

The way things are quickly changing in the internet economy is important from the standpoint of regulation (and thus government actors and policymakers) since legislative and regulatory frameworks that are too restrictive may tend to inhibit the emergence of new business models or may impede the adoption of innovative products and solutions that have the potential to disrupt established business models and those interests that are behind them. This is in fact the very problem we continue to encounter today and that confront a range of recent innovations, but is particularly visible in the battles being waged over different platforms and services that have emerged in the so-called “sharing economy”.¹ This paper examines some of the negotiating outcomes achieved in the Trans-Pacific Partnership and other negotiating fora on rules for the digital economy. This paper also discusses whether or not the tentative negotiating outcomes achieved in the TPP can be considered the starting point for an emerging international consensus on these rules. Although now very probably defunct as an economic integration project, the TPP still constitutes a helpful starting point given that it nevertheless constitutes an agreed body of rules concluded between a very diverse set of developing and advanced economies with a distinctly divergent set of objectives and approaches when it comes to regulating certain aspects of the internet economy.

The Trans Pacific Partnership is many different things to many different people. To those who have developed an unabashed and profound hostility to the agreement, it is yet another example of how trade policy in many countries has become captured by big multinational corporations with little concern for workers or the environment and represents a victory for the interests of a few over the needs of the many, while further negating the social contract in the indelible onward march towards greater and more acute income inequality.² To others, the TPP represents real progress in breaking down barriers to trade and promoting a more level playing field for exporters big and small.³ Most of the analysis that has been performed with respect to the agreement’s likely economic impact projects relatively modest gains for the larger economies party to the negotiations, with United States GDP estimated to increase by around 0.5% by 2030, although considerably larger gains are projected for some of the smaller economies, such as Vietnam and Malaysia.⁴ There is therefore clearly a diverse set of views on whether the TPP is good or bad for the world and particularly for the people living and working in the economies that have signed the agreement.

¹ For more on the sharing economy see Rudy Telles Jr., Digital Matching Firms: A New Definition in the ‘Sharing Economy’ Space, “ESA Issue Brief #01-16”, June 2016, available at: <http://www.esa.gov/sites/default/files/digital-matching-firms-new-definition-sharing-economy-space.pdf> (visited on 3 June 2016).

²² Some interesting analysis on the capture of the US trade regime can be found in: Margot E. Kaminski, *The Capture of International Intellectual Property Law through the U.S. Trade Regime*, Southern California Law Review, Vol. 87 (2014), pp. 977-1052, also available at SSRN: <http://ssrn.com/abstract=2354324> (visited 15 August 2016). For one of the many critical albeit more intellectually honest and analytical voices on the TPP see: Paul Krugman, *No Big Deal*, in: “The New York Times Op-Ed”, 27 February 2014, available at http://www.nytimes.com/2014/02/28/opinion/krugman-no-big-deal.html?_r=0 (visited 15 August 2016).

³ This is at least what USTR would have you believe: <https://ustr.gov/tpp/>.

⁴ According to analysis done by the Peterson Institute for International Economics, the US is likely to be the largest beneficiary in absolute terms but Japan, Malaysia and Vietnam are also likely to see significant gains: Peter A. Petri and Michael G. Plummer, *The Economic Effects of the Trans-Pacific Partnership: New Estimates*, WP 16-2, January 2016, available at <https://piie.com/publications/wp/wp16-2.pdf> (visited on 15 August 2016).

For those of us who follow the negotiation, ratification, implementation and litigation of trade agreements for a living, the conclusion of the TPP raises a different set of equally interesting questions. In this paper one of the questions I take up is whether the TPP represents the beginning or the end of an ongoing process to enact binding international treaty rules for the internet economy, as well as whether it has taken us any closer to this objective. The issue of binding rules for the internet would seem anathema to many, given that the internet has largely been allowed to flourish in the absence of such rules since it was opened up to commercial use in the 1990s. But as the saying goes, “nature abhors a vacuum” and in the absence of rules some actors - mainly governments - have moved to regulate certain aspects of the internet economy which other actors – mostly corporations – have viewed as restricting the very freedom that they claim underpins the internet as a platform for communicating, interacting and doing business. In an effort to impose some sense of order and predictability, these same corporations have been lobbying their own governments to negotiate binding treaty rules that would constrain the ability of signatory governments to intervene in the internet economy in a way that could be detrimental to international trade in general and to the interests of internet companies in particular. In this paper I examine how the TPP fits into this overarching paradigm and just how successful it is likely to have been in achieving this goal.

Another question that the conclusion of the TPP raises is whether the agreement lives up to the ambitions originally touted for it, namely that it would be the “gold standard”⁵ against which future trade agreements would be measured. In the context of the digital economy – the focus of this paper – this question asks whether the negotiating compromises reached on those provisions that most directly impact the digital economy can likely be considered a benchmark for future rule-making in this area, or are we likely to see an international consensus emerge that differs from that which has resulted from the TPP?

Finally, this paper addresses the apparent tensions between developed and developing countries over these newly emerging rules, as well as the desirability of having these rules in FTAs as opposed to the WTO, before discussing the need for a new approach to the national security exception that is increasingly being used as a blank check by countries to keep out undesired foreign investment in the ICT sector.

II. EXISTING TRADE RULES AND THE DIGITAL ECONOMY

1. Transcending Traditional Trade-Policy Silos

When academics and policymakers discuss the digital economy they often mean e-commerce. E-commerce is certainly an important and perhaps the most visible aspect of the digital or internet economy (I tend to use these two terms interchangeably). But in reality the current ambit of global trade rules and the future set of trade rules either being actively negotiated now or on which negotiations are currently envisaged, span not just e-commerce *per se* but a whole range of issues, policy interventions and trade measures that transcend the traditional silos of trade in goods, trade in services, and trade-related intellectual property rights. In this section we explore the existing rules

⁵ This is in fact how former Secretary of State Hillary Clinton referred to the TPP during a 2012 visit to Australia; see: Lauren Carroll, *What Hillary Clinton really said about TPP and the 'gold standard'*, published by "Politifact" at <http://www.politifact.com/truth-o-meter/statements/2015/oct/13/hillary-clinton/what-hillary-clinton-really-said-about-tpp-and-gol/> (visited 15 August 2016).

that have a significant bearing on how governments regulate international trade in the digital economy. What may be surprising to some is that an awful lot of the economic activity that takes place in the internet economy today is already captured by trade rules that predate the current internet era to one extent or another. However this reality is tempered by the fact that nobody can credibly and authoritatively claim to have much certainty as to just how relevant these rules are to digital trade today since their applicability to the internet economy has only been tested in a limited number of WTO disputes⁶.

The WTO Work Program on Electronic Commerce⁷, adopted in 1998 and on which little progress has been achieved since, recognizes the transcendent nature of the issue, but also seems to reinforce the existing “silofication” of the way work is to be carried out in elaborating a set of rules to govern e-commerce at the multilateral level.⁸ This is likewise true of what we have seen in the negotiation of FTAs, where provisions with varying degrees of relevance to the internet economy can be found strewn throughout these agreements in the different parts (or chapters) that relate to the body of underlying rules in which such provisions are inevitably housed given their historical and institutional pedigree (i.e. rules on goods, rules on services, rules on trade-related intellectual property, rules on technical barriers to trade, rules on investment, etc.).

If you take the TPP for example (discussed in more detail below), you find rules of direct relevance to the digital economy in the following chapters (non-exclusive list): Chapter 8 on Technical Barriers to Trade, Chapter 10 on Cross Border Trade in Services, Chapter 13 on Telecommunications, Chapter 14 on Electronic Commerce, Chapter 18 on Intellectual Property, and Chapter 25 on Regulatory

⁶ Some observers have argued very forcefully that the GATS and accompanying commitments on market access and national treatment already constrain the regulatory autonomy of WTO Member governments to the extent that the majority of the restrictions being enacted or contemplated in the digital economy would run afoul of WTO obligations, particularly domestic data localization requirements; See for example Claude Barfield, *When Trade and Tech Collide: Digital Policy Challenges and Solutions for 2016 and Beyond*, American Enterprise Institute, October 2015, as well as Daniel Crosby, *Analysis of Data Localization Measures under WTO Services Trade Rules and Commitments*, E15 Initiative Policy Brief, ICTSD and World Economic Forum, March 2016. Barfield and Crosby clearly have their own motives for arguing that the case for a violation is clear-cut. However my view is that if the case for a violation of WTO disciplines was so clear then a case would have been brought against Turkey or China several years ago. Even a non-violation case is something no rationally thinking and acting WTO Member is willing to consider today following the US’s embarrassing (and somewhat surprising) loss in the famous Kodak-Fuji dispute (*Japan - Measures Affecting Consumer Photographic Film and Paper* [WT/DS44/R]; See James P. Durling, *Anatomy of a Trade Dispute: A Documentary History of the Kodak-Fujifilm Dispute*, Cameron May, 2000).

⁷ WT/L/274; See also Sacha Wunsch-Vincent and Joanna McIntosh, *WTO, E-commerce, and Information Technologies: From the Uruguay Round through the Doha Development Agenda*; published by the Markle Foundation for the UN ICT Task Force, 2005, available at: https://www.wto.org/english/tratop_e/serv_e/sym_april05_e/wunschvincent_e.pdf (visited on 1 November 2016).

⁸ To try and summarize it succinctly, the 1998 Declaration on Global Electronic Commerce and the Work Program on Electronic Commerce that followed it essentially establish a time-limited commitment to abide by a moratorium on imposing customs duties on cross-border flows of electronic downloads while otherwise tasking different working bodies within the WTO to study and discuss what action (if any) should be taken by Members to elaborate rules conducive to the further flourishing of e-commerce and ensuring its benefits are shared equitably among them.

Coherence. In fact given the very real nature of the dual trends of convergence and complementarity⁹ that characterize the digital economy, the number of chapters with provisions that affect the digital economy is likely to be much larger. The larger point is that work culminating in these provisions (and the negotiating teams that labored over them) transpired across a range of different “silos”, with each group comprising regulators and experts from very different backgrounds and with very different regulatory objectives than simply achieving a maximum level of trade and investment liberalization in line with the country’s offensive export interests in exchange for the minimum number of ancillary commitments with respect to its defensive import interests. This is the reality of all FTA negotiations today that discuss tariff cuts under the same overarching framework as achieving reductions in non-tariff barriers, and this is equally true (and ultimately equally problematic) for trade negotiations on rules for the digital economy.

2. Existing WTO Rules and the Digital Economy

This section seeks to summarize very briefly – without going into excruciating detail since these rules have been adequately covered by other authors in ample detail – the rules that already apply at the multilateral level to various aspects of the digital economy. This is necessary in order to dispel the notion that the digital economy operates in some kind of legislative and regulatory vacuum as far as trade law is concerned. The internet is of course subject to rules – very many rules in fact – and the same is true of international trade rules. It is also important in order to give context to the current wave of rule-making in this area so the reader may understand that the relevant provisions that have emerged in the TPP and that are being discussed elsewhere are really little more than clarifications, authoritative interpretations and in some cases extensions of the existing rules for the global trading system that trade negotiators have spent countless hours deliberating over the course of more than sixty years of trade and investment liberalization starting in 1947 (and many would say earlier with the Reciprocal Trade Agreements Act of 1934). We start our brief analysis with goods.

Trade in goods at the WTO is of course covered by the General Agreement on Tariffs and Trade (GATT) and the other so-called Annex 1A Agreements. Because they claim general application to trade in goods, many if not all of the substantive provisions found in GATT are likewise relevant to trade in ICT products and thus for the digital economy. This is true for the Most-Favored-Nation and National Treatment obligations (Art. I and III respectively), as well as the rules on tariff bindings (Article II), the ban on quantitative restrictions (Art. XI), the rules governing the use of antidumping, countervailing duties and safeguard measures (GATT Articles VI and XIX), as well as the general exceptions clause (GATT Art. XX) and the national security exception (GATT Art. XXI). As far as the Annex 1A Agreements are concerned, the Agreement on Technical Barriers to Trade, the Antidumping Agreement, the Agreement on Subsidies and Countervailing Measures and the Safeguards Agreement are arguably of the greatest practical relevance to the ICT sector, although with respect to these last three agreements, the ICT sector has not typically been as prone to that many contingency protection measures (antidumping, countervailing duties and safeguards) as more traditional sectors of the

⁹ See OECD, *Digital Convergence and Beyond: Innovation, Investment and Competition in Communication Policy and Regulation for the 21st Century*, March 2016, available at: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/ICCP/CISP\(2015\)2/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/ICCP/CISP(2015)2/FINAL&docLanguage=En) (visited on 1 November 2016).

economy tend to be.¹⁰ Perhaps two other WTO agreements are worth mentioning in this context, namely the Information Technology Agreement (ITA), which was recently updated, and the Government Procurement Agreement (GPA), the former providing duty free (zero tariff) treatment to several hundred tariff lines of ICT products among the world's most significant importers and exporters of these products, and the latter setting out the terms and conditions by which access will be granted to the public procurement markets for a designated (scheduled) number of goods and services in a relatively small (but economically significant) number of signatories.

On the services side, the General Agreement on Trade in Services (GATS) is of very far-reaching significance for the digital economy, particularly for the billions of dollars of services that are bought and sold, traded and consumed online and for electronic commerce more generally.¹¹ In addition to the GATS, both the so-called "overtime" agreements on financial services and telecoms are of relevance to the digital economy generally.¹² The specific commitments that individual WTO Members made in the framework of the GATS, and particularly their so-called "mode 1" commitments (on the cross-border supply of a service) are those that could potentially have the largest impact on e-commerce and on the provision of services in other sectors that lend themselves well to this mode of supply (telemedicine is a commonly cited example).¹³

III. DIFFERENT NEGOTIATING FORA

This section briefly introduces the different negotiating fora and treaty frameworks that have emerged recently or are currently being negotiated and which include rules governing the digital economy, either directly or tangentially. Many of these initiatives now face an uncertain future given the recent apparently seismic shift in US trade policy priorities, but they have nevertheless succeeded (at the time of writing) in establishing a set of very tentative substantive negotiating texts that sooner or later are likely to become international treaty obligations. We begin with the TPP.

1. Mega-Regional One: The Trans-Pacific Partnership

The Trans-Pacific Partnership is a so-called mega-regional agreement, so-named because it spans two or more regions but also because of the relatively large scale of the economic activity it captures. In the case of the TPP, 12 economies are parties so far (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States and Vietnam), with several more large Asian economies (notably South Korea, Philippines, Thailand among others) having already expressed a very real interest in joining as soon as it is opened for new signatories.¹⁴ The TPP is unprecedented as a preferential trade agreement in terms of its economic importance, since combined, the economies

¹⁰ This is of course only true to a limited extent, with investigations in past years either threatened or launched in the EU against mobile base stations and in Turkey against smart phones. Nevertheless the ICT sector is not as prone to contingency protection as other sectors, such as in particular steel.

¹¹ Wunsch-Vincent and McIntosh (op cit), at pp. 204-218.

¹² For financial services because of the central role that ICT has for many decades played in international financial services and for telecoms because of their preeminent importance as providers of the underlying services which support the cross-border flow of data and thus the digital economy *per se*.

¹³ See Rolf H. Weber and Mira Burri, *Classification of Services in the Digital Economy*, 2012, Springer for an in-depth analysis of how GATS rules apply to services in the digital economy.

¹⁴ Copies of the treaty text have been made available at both the USTR's website and that of the New Zealand Ministry of Foreign Affairs and Trade, which also serves as the depositary of the Agreement.

party to it comprise some 40% of global GDP. The TPP is seen as setting a new standard in international trade and investment rule-making, because it contains treaty provisions on many issues where consensus at the multilateral level has long eluded WTO Members, including but not limited to investment, competition, e-commerce, environment, and labor. The TPP also contains chapters on policy areas that up to now have not been seriously considered for inclusion in any multilateral trade agreement but which for the most part have figured in one form or another in FTAs negotiated and concluded by the United States, including rules on state owned enterprises, competitiveness and business facilitation, regulatory coherence, as well as on transparency and corruption.

At the time of writing, the future of the TPP remains uncertain since its approval by the United States Congress seems to have become subject to the vagaries of US presidential election-year politics. Nevertheless, its ratification is proceeding in a more orderly fashion in many of the other signatory countries.¹⁵ Given the hostility expressed by Donald Trump towards the TPP most commentators now doubt that the treaty has much hope of actually coming into force, but nevertheless agree that the substantive compromises embodied in the final negotiated text will serve as a starting point for all future trade negotiations on these issues. The relevant provisions of the TPP as they pertain to the digital economy are discussed in more detail below, since the agreement's conclusion constitutes an important watershed event in terms of treaty rule-making in this and other areas.

2. Mega-Regional Two: Trans-Atlantic Trade and Investment Partnership

The Trans-Atlantic Trade and Investment Partnership is another so-called mega-regional agreement, since it covers the two economic regions of Europe and North America, with the 28-member EU and the United States as negotiating parties. TTIP also captures a very significant share of the global GDP and trade flows (almost half of world GDP and nearly a third of world trade flows). Currently under negotiation but also on hold at the time of writing, TTIP has been touted by the political leadership of both negotiating parties as another ambitious agreement that seeks to achieve trade and investment liberalization far beyond that which has been envisaged or attempted at the multilateral level under the auspices of the WTO. Because tariffs are already low between these two trading partners, the emphasis has from the outset been on tackling the very high number of non-tariff barriers (NTBs) that still impede trade between the US and the EU¹⁶, as well as a number of issues that have caused trade frictions in the past, such as geographical indications and government procurement. The TTIP is also seen as an important opportunity to achieve much greater integration of the two trading partners' services markets. Although the TTIP was originally scheduled to have been concluded by the end of 2014, some commentators are of the view that this is more likely to be 2019 or 2020, whereby at the

¹⁵ See, for example, Catherine Putz, TPP: *The Ratification Race is On*, published in: "The Diplomat", 5 February 2016, available at: <http://thediplomat.com/2016/02/tpp-the-ratification-race-is-on/> (visited 1 May 2016).

¹⁶ See, David Putz and Anabelle Couleau *Transatlantic Trade and Investment Partnership (TTIP), Part 2: TTIP, Regulatory Harmonization, and Non-tariff Barriers to Trade*, 8 July 2014, available at: <http://policymatters.illinois.edu/transatlantic-trade-and-investment-partnership-ttip-part-2-ttip-regulatory-harmonization-and-non-tariff-barriers-to-trade/> (visited on 1 May 2016); See also Koen Berden and Joseph Francois, *Quantifying Non-Tariff Measures for TTIP, Paper No. 12 in the CEPS-CTR project 'TTIP in the Balance' and CEPS Special Report No. 116*, July 2015, available at: <https://www.ceps.eu/system/files/SR116%20Barden%20and%20Francois%20NTMs.pdf> (visited on 1 May 2016).

time of writing it seems certain that the negotiations will not conclude during the administration of the current US President Barack Obama.¹⁷

In terms of treaty commitments affecting the digital economy it is likely that the resulting negotiating outcomes will to a large degree reflect those already obtained in the TPP, whereby more robust provisions on privacy and the protection of personal data can likely be expected given the level of attention this issue has enjoyed in Europe, particularly since the 2013 Edward Snowden revelations and the subsequent invalidation of the hitherto long-prevailing **Safe Harbor** arrangements in 2015 (this is discussed in more detail below).

3. The Trade in Services Agreement

The Trade in Services Agreement is another agreement currently under negotiation at the time of writing, although also largely suspended due to lack of progress on a range of tricky issues. Although these talks are primarily taking place in Geneva and are so-far being conducted only among a relatively restricted circle of 23 WTO Members comprising both high-income and upper middle-income countries, as well as one lower middle-income country (Pakistan), the TiSA negotiations are not officially taking place under the auspices of the WTO and have in fact drawn criticism from some WTO Members that feel these talks should be taking place within the context of the Doha Round market access negotiations. Negotiations on TiSA were started informally in February 2012 by the United States, who, together with the European Union, is the main protagonist of the talks. Initial offers were presented at the end of 2013. Thanks to Wikileaks, a number of leaked drafts have been published online which offer some initial insights into how the talks are progressing and the different positions participating WTO Members are taking on various issues.¹⁸ For the purposes of the present analysis, one of the most interesting aspects of the TiSA negotiations is a draft annex on e-commerce that has also been published by Wikileaks and is discussed in more detail below.

TiSA represents an important development for international trade in services since it was ultimately embarked upon due to the frustrating lack of progress experienced in achieving greater liberalization of services markets under the auspices of the now largely defunct Doha Round of multilateral trade negotiations.¹⁹ Although the WTO General Agreement on Trade in Services (GATS) and the accompanying schedules of specific commitments of WTO Members were for the most part enacted in 1995, very little services liberalization has taken place at the WTO since then besides that achieved in the context of WTO accession (acceding countries have for the most part been asked to make far-reaching and all-encompassing liberalization commitments as the price of WTO accession).²⁰

¹⁷ See Alexandre Barry, TTIP is unlikely to happen anytime soon and here's why, published in: "Vocal Europe", 20 June 2015, available at: <http://www.vocaleurope.eu/2015/06/20/ttip-is-unlikely-to-happen-anytime-soon-and-heres-why/> (visited on 1 May 2016).

¹⁸ The leaked texts and analysis by Wikileaks is available at: <https://wikileaks.org/tisa/> (visited on 1 May 2016).

¹⁹ See Shin Yi Peng, *Is the Trade in Services Agreement (TiSA) a Stepping Stone for the Next Version of GATS?*, published in: Hong Kong Law Journal, Vol. 43, Part 2 (2013), pp. 611-632.

²⁰ See Rudolf Adlung, *Services Negotiations in the Doha Round: Lost in Flexibility?*, published in: "Journal of International Economic Law", Volume 9, Issue 4 (October 2006), pp. 865-893.

The same is true for efforts to agree on a set of rules for electronic commerce.²¹ The Work Program on Electronic Commerce that was set up to this effect in 1998 has made only limited progress since then. Although the Doha Ministerial Declaration of 2001 instructed Members to continue this work, e-commerce was never made part of the Doha negotiating agenda, and the Work Program has remained a forum for discussion rather than negotiation, hostage to the same lack of consensus that has stalled the Doha Round more generally. TiSA is one response to this failure by a concerted group of WTO Members committed to the goal of achieving ambitious and meaningful liberalization of services markets in smaller groups of countries that recognize the need to achieve progress where it is possible. The negotiating outcomes that eventually result from TiSA are likely to establish precedents and benchmarks that the rest of the WTO Membership will be increasingly required to follow to one extent or another.

4. The Regional Comprehensive Economic Partnership

The Regional Comprehensive Economic Partnership is currently under negotiation between the ten member states of ASEAN and its six FTA partners (Australia, China, India, Japan, Korea, and New Zealand).²² Negotiations were launched in November 2012 but progress has been slow given the very different levels of ambition and approaches taken to trade and investment liberalization by the various negotiating parties. At the time of writing, some sources have confirmed that a number of so-called “non-papers” have been tabled by Japan and Korea on the subject of e-commerce. It seems clear that the notion that RCEP should include commitments on e-commerce is one that enjoys broad consensus among most if not all negotiating parties, although it is still too early to tell how far-reaching the obligations being envisaged by different parties may turn out to be. As more details become available or perhaps even a leaked version of the e-commerce text emerges, it will be possible to provide more robust analysis on where these negotiations are likely to be heading. Given the presence of both India and China in these negotiations, neither of which are parties to the TPP or have actively taken up a role in the ongoing TiSA negotiations, it is likely that the obligations envisaged by this draft chapter will be limited to extending or making permanent the moratorium on customs duties on electronically transmitted products as well as to other largely uncontroversial issues such as adopting a domestic legislative framework conducive to e-commerce along the lines of that set out in the UNCITRAL Model Law on Electronic Commerce (discussed in more detail below). It is currently unclear whether some of the “hard” obligations found in the TPP on issues such as cross-border flow of information, data-localization and source-code disclosure (all of which are likewise discussed in more detail below) are likely to find any corollaries in what eventually emerges as the RCEP e-commerce text.

5. The Information Technology Agreement and 2015 Update

The original Information Technology Agreement was concluded in December 1996 and involved a commitment to eliminate tariffs on several hundred tariff lines of information technology products.²³

²¹ See Sacha Wunsch-Vincent, *The WTO, The Internet and Trade in Digital Products EC – US Perspectives*, 2006, Hart Publishing, pp. 13 - 32.

²² See Meredith Kolsky Lewis, *The TPP and the RCEP (ASEAN +6) as Potential Paths Toward Deeper Asian Economic Integration*, Asian Journal of WTO & International Health Law and Policy, Vol. 8, No. 2, September 2013, pp. 359-378.

²³ See Barbara A. Fliess and Pierre Sauvé, *Of Chips, Floppy Disks and Great Timing: Assessing the WTO Information Technology Agreement*, 1997, available at:

Starting with 29 signatories, the ITA ultimately came to comprise some 81 WTO Members and covered a reported 97 percent of world trade in information technology products.

In 2015, the original ITA was updated (ITA 2) to more accurately reflect the technological advancements that had taken place in this sector since 1996, whereby an additional 201 products were added to the list of duty-free traded IT products. Some fifty-three WTO Members (24 participants if the EU is counted as one) are participating so far in ITA 2, including China and other big exporters of IT hardware products.²⁴

IV. SUBSTANTIVE TREATY OBLIGATIONS

A number of different international treaty rules have recently emerged in an effort to safeguard the interests of some of the biggest and most influential players in the digital economy and are discussed in the next section. What is clear from the analysis provided below is that the formulation of these rules is being driven by export interests in response to legislative and regulatory barriers they are increasingly having to face. Some of these barriers are likewise discussed in the next section in the context of the individual obligations.²⁵

1. Permanent Elimination of Customs Duties on Digitally Traded Products

The non-imposition of customs duties on electronic transmissions was first agreed on a provisional basis at the WTO in 1998 and has since been continually extended.²⁶ For the United States in particular, this has been a long-standing negotiating objective and has figured in every trade agreement concluded by the US since the one it concluded with Jordan in 2000.²⁷ The newly completed Trans-Pacific Partnership Agreement likewise contains a provision that requires signatories to do precisely this (Article 14.3) and it is almost certain that the Trans-Atlantic Trade and Investment Partnership currently being negotiated between the United States and the European Union will contain a similar ban. If the Regional Comprehensive Economic Partnership (RCEP) currently being negotiated between the 10 member states of ASEAN and its FTA partners Australia, China, Japan, India, New Zealand and South Korea, contains obligations on e-commerce when it is eventually concluded, it is very likely that it will also contain a provision banning the imposition of customs duties on digitally traded goods. This kind of obligation is important for consumers and providers of electronic media, such as music downloads, e-books, audiovisual content (such as films and television

http://www.nomurafoundation.or.jp/en/wordpress/wp-content/uploads/2014/09/19971011_Barbara_Fliess_-_Pierre_Sauve.pdf (visited on 1 May 2016).

²⁴ See Stephan Nolte *et al*, *The Expansion of the Information Technology Agreement: An Economic Assessment*, published by the European Commission, 2016, available at http://trade.ec.europa.eu/doclib/docs/2016/april/tradoc_154430.pdf (visited on 1 May 2016).

²⁵ See Claude Barfield, *When Trade and Tech Collide: Digital Policy Challenges and Solutions for 2016 and Beyond*, American Enterprise Institute, October 2015, available at: <http://www.aei.org/publication/when-trade-and-tech-collide/> (visited on 1 May 2016).

²⁶ Most recently at the 10th WTO Ministerial Conference held in Nairobi, Kenya from 15 to 19 December 2015, see Work Program on Electronic Commerce, Ministerial Declaration of 19 December 2015 (WT/MIN(15)/42 and WT/L/977), para. 3, available at: https://www.wto.org/english/thewto_e/minist_e/mc10_e/nairobipackage_e.htm (visited 1 May 2016).

²⁷ See Anupam Chander, *The Electronic Silk Road: How the Web Binds the World Together in Commerce*, Yale University Press, 2013, at p. 39 f.

shows consumed electronically on digital TVs, computers, tablets and smart phones), as well as for downloadable software and computer games.

This is an obligation that will only become increasingly important as time goes by and technological innovation increases the number of products that can be traded by electronic means. So far, this has largely been confined to products (media) that can be consumed electronically, such as music, books, films and video games. But with the advent of 3D printing (a technology admittedly still in its infancy), we will soon live in a world where many goods can be “purchased” online, and a printing key or blueprint sent to a 3D printer in the purchaser’s home or just down the street from the purchaser, therefore obviating the need for the goods to physically travel or cross an international border.²⁸ The implications for global logistics, supply chains, consumers, and customs/border control agencies, as well as for national treasuries (which rely on customs revenue) have not yet been fully understood. But the world is certainly moving steadily towards a reality where more and more products and services will be tradable (and thus traded) online so that the potential welfare effects of a permanent moratorium on customs duties for these products are bound to only increase over time.

2. Free Flow of Information

Another important obligation that features strongly in any discussion on trade rules for the digital economy is the free flow of information. This was a debate that was essentially sparked off by Google in 2010 when it published a white paper entitled “Enabling Trade in the Era of Information Technologies: Breaking Down Barriers to the Free Flow of Information”.²⁹ At the time, the phenomenon that Google was decrying was fragmentation of the internet by governments arbitrarily deciding to block access to websites such as itself, Facebook and Twitter. However, today, in treaty-making frameworks like the TPP, the focus of this obligation seems to have been narrowed somewhat to include only the cross-border flow of information by electronic means that is instrumental to or facilitative of e-commerce or the execution of business transactions. Article 14.10 of the TPP elucidates a number of principles with respect to “Access to and Use of the Internet for Electronic Commerce”, whereas Article 14.11 contains substantive obligations in this respect.

The most important application of this obligation is arguably in the context of retail services and online payments, where users (buyers) have to be able to exchange their personal information with providers (sellers) in other countries, and providers likewise must be able to disseminate information on the products and services they are supplying, without onerous restrictions impeding such transactions thereby compelling or inducing users to source such purchases domestically. This obligation has become increasingly important as any company active in the retail space has established an online presence and relies on this presence to reach and engage with current and future customers. Even traditional brick and mortar retailers like Ikea or Home Depot rely to a very large degree on their

²⁸ For more on the trade-regulatory implications of 3D printing, see: Kommerskollegium (Swedish National Board of Trade), *Trade Regulation in a 3D Printed World – A Primer*, April 2016, available at: http://unctad.org/meetings/en/Contribution/dtl_eweek2016_Kommerskollegium_en.pdf (visited on 3 June 2016).

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https://static.googleusercontent.com/media/www.google.com/en//googleblogs/pdfs/trade_free_flow_of_information.pdf, (visited 1 May 2016).

internet websites and suffer tangible monetary downsides when these sites are blocked by governments.

The relevant TPP provision on the free flow of information (Art. 14.11 as alluded to above) contains language that sets out this obligation but subjects it firstly to the narrow scope of application mentioned above (cross-border information flows for the sake of conducting business), while simultaneously subjecting it to a fairly broadly formulated exception. The exception included in this provision is worded in such a way so that it would allow governments to restrict this right in pursuit of what is described as a “legitimate public policy objective”, provided any government imposing such restrictions does not do so in a manner that is either a) clearly protectionist and/or b) disproportionate to the objective being pursued. I shall talk more about this and other exceptions below, and lay out what in my view is the principal problem with exceptions in FTAs.

The leaked draft of what may one day become the TISA e-commerce annex likewise contains tentative language on free flow of information, although different parties to the negotiations are taking different approaches in the draft language that has been tabled. Some parties to the negotiations see the role of such a provision as to protect the information of users from being transferred across international borders without their consent, whereas other parties to the negotiations see the role of this provision as being to protect the interests of service providers engaging in e-commerce to transfer information across borders where this is done in connection with the provision of their respective services. The latter approach would be more consistent with that taken in the TPP as well as with the original approach taken by the WTO General Agreement on Trade in Services, which seeks to protect services suppliers from unsanctioned market access barriers or discriminatory treatment by service market regulators.

3. Compulsory Data Localization

Data localization - or the obligation to set up and operate computing facilities in a country as a condition for doing business there - has been an ongoing issue for several years now but really started to gain traction since the revelations of extensive US government surveillance of private user data revealed by former NSA security contractor Edward Snowden in 2013.³⁰ The USTR's 2016 National Trade Estimate Report on Foreign Trade Barriers cites an increasing tendency of governments to invoke these kinds of measures in countries like China,³¹ India,³² Indonesia,³³ Russia,³⁴ and Turkey.³⁵ This is something that is addressed specifically in the TPP and is likely to also figure in TTIP. The e-commerce chapter of the draft text of the Trade in Services Agreement that was leaked in June 2015 by Wikileaks contains similar draft language in various proposed forms, although as yet no consensus seems apparent.

³⁰ See Jocelyn Dong, *Silicon Valley tech execs: Surveillance threatens digital economy*, published in Palo Alto Online, 9 Oct. 2014, available at: <http://www.paloaltoonline.com/news/2014/10/09/tech-execs-surveillance-is-harming-digital-economy> (visited 1 May 2016).

³¹ See USTR, 2016 National Trade Estimate Report on Foreign Trade Barriers, available at: <https://ustr.gov/sites/default/files/2016-NTE-Report-FINAL.pdf> (visited on 5 May 2016), at p. 85.

³² Ibid, p. 213.

³³ Ibid, p. 231

³⁴ Ibid. p. 376.

³⁵ Ibid, p. 429.

This is an issue for stakeholders from the cloud computing industry, such as companies like Dropbox and Amazon, as well as for service suppliers that make extensive use of remote servers for the storage and processing of their user data. It is also of major importance for global providers of email and instant messaging services, such as Apple, Google, WhatsApp (owned by Facebook) and WeChat (owned by Tencent), as well as being an issue for network sites like Facebook and LinkedIn that store large amounts of personal data on servers located in countries far removed from data subjects, but who also offer messaging platforms that can be accessed by computer or mobile devices. Many of the biggest companies in cloud computing have not waited for governments to legislate but have moved to set up data storage and processing facilities in countries closer to customers, such as Germany, which has emerged as the preferred location for data storage of EU user information by international companies.³⁶ Other companies have taken a more principled stand when confronted with such requirements: PayPal recently ceased operations in Turkey as a result of data localization requirements, which says a lot since PayPal is one of the few really global online payment platforms operating today.³⁷

The relevant provision in the TPP (Art. 14.13), entitled "Localization of Computing Facilities" imposes a ban on signatories requiring "a covered person to use or locate computing facilities" in their territories "as a condition for conducting business" there. This obligation is however subject to a public policy exception which – similar to the chapeau of the General Exceptions clause of the GATT – requires that any measures for which the public policy exception is invoked are imposed in a manner that is proportionate to achieving the objective in question and not applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade. The corresponding TiSA clause seems to be very much a work in progress, with different parties tabling differing language on such a ban. Nevertheless, many of the proposals seem to recognize the validity of a core ban on data localization while subjecting it to largely the same exceptions language that has been agreed in the TPP.

4. Mandatory Disclosure of Source Code

Microsoft was one of the first technology industry giants to grant very limited access to some governments (Russia, China, as well as NATO to name just three) to its source code in the early 2000s, partly in order to counter the threat it perceived was emerging from the open-source movement (spearheaded at the time by Linux), and partly to assuage fears that its operating system *Windows* had been compromised following a hacking incident in late 2000 in which intruders reportedly gained access to parts of its source code.³⁸ Today, in the post-Snowden era, the debate over source code is characterized by the fears of many governments that foreign intelligence agencies may be using so-called backdoors in messaging platforms, business processing software or in fact any other digital medium. Thus the requirement to disclose source code is increasingly framed in national security

³⁶ See Katharine Kendrick, *Risky Business: Data Localization*, published as an op-ed in "Forbes Capital Flows", 19 February 2015, available at: <http://www.forbes.com/sites/realspin/2015/02/19/risky-business-data-localization/#2b988fae8c8b> (visited on 5 May 2016).

³⁷ See: Lance Whitney, *PayPal to shutter operations in Turkey over licensing hurdle*, published in "C|Net", 31 May 2016, available at: <http://www.cnet.com/news/paypal-to-close-operations-in-turkey-over-licensing-hurdle/> (visited on 3 June 2016).

³⁸ See David Bank, *Microsoft to Let Governments See Source Code for Windows*, published in "The Wall Street Journal", 15 January 2003, available at: <http://www.wsj.com/articles/SB1042592554169993184> (visited on 1 May 2016).

terms and many governments are demanding that technology firms disclose their source code as a prerequisite for doing business in their markets.

Industry trade groups such as Digital Europe or the Business Software Alliance consistently list obligations to disclose source code as among a slew of regulatory interventions they wish to see binding international treaty language prohibiting, and in the TPP they have achieved some degree of success in this longstanding policy objective.³⁹ Article 14.17 of the Agreement's e-commerce chapter contains a provision that constrains signatories' freedom of action in this respect, proscribing them from requiring the "transfer of, or access to, source code of software owned by a person of another Party, as a condition for the import, distribution, sale or use of such software, or of products containing such software, in its territory." Interestingly, this obligation is not qualified by a provision-specific public policy exception like those attached to the free flow of information and data localization obligations discussed above, although the general exceptions in Chapter 29 of the TPP (which incorporate GATS Article XIV for the purposes of the e-commerce chapter) and its security exception still apply. The main limitations to which this obligation is subject in the TPP are that it applies solely to mass-market software and does not apply to software used for critical infrastructure (something that signatories are admittedly free to define themselves and which is likely to include important economic sectors like the financial and telecommunications sectors). The draft TiSA annex on electronic commerce contains proposed treaty language that very much resembles that contained in the TPP which would seem to indicate that the TPP language on this obligation will be something of a benchmark for future rule-making in this area.

The issue of mandatory source-code disclosure could prove divisive in future, as big markets such as China seem to be moving towards introducing broadly formulated and sweeping disclosure obligations in new national security and cyber security legislation that - if implemented and enforced - could potentially put China on the wrong side of a growing international consensus on this issue.⁴⁰ However, some big names in the technology industry have already opted in favor of such disclosure on a voluntary basis when dealing with the Chinese authorities, which means that the divide over whether or not companies can be compelled to disclose source code as a precondition for doing business may ultimately prove to be something of a non-issue as companies seek to minimize conflict with and assuage the suspicions of host country governments by voluntarily choosing to disclose source code in part or in full.⁴¹

³⁹ See Business Software Alliance, *Lockout: How a New Wave of Trade Protectionism is Spreading through the World's Fastest-Growing IT Markets – And What to Do about It*, 2012, available at: <http://www.bsa.org/~media/Files/Policy/Trade/BSALockout2012.pdf> (visited May 2016).

⁴⁰ See Josh Chin and Eva Dou, *China's New Cybersecurity Law Rattles Foreign Tech Firms*, in: "Wall Street Journal", 7 November 2016, available at: <http://www.wsj.com/articles/china-approves-cybersecurity-law-1478491064> (visited on 10 November 2016).

⁴¹ See Eva Dou, *IBM Allows Chinese Government to Review Source Code*, in: "Wall Street Journal", 16 October 2015, available at: <http://www.wsj.com/articles/ibm-allows-chinese-government-to-review-source-code-1444989039> (visited on 10 November 2016).

5. Recognition of Different Privacy Regimes

Privacy and protection of personal data is a very important issue in the digital economy, especially given the demonstrated value of data in the new economy.⁴² Two of the largest companies in the internet economy (Facebook and Google) are arguably also the companies that hold the most information on their respective users. Personal data is the lubricant that greases the wheels of commerce in the digital economy and so rules governing or constraining the movement of such data across borders or the uses to which such data can be put (processing limitations), are likely to play an inordinately important role in the future. Both the TPP and the still nascent TiSA contain broadly similar rules on the protection of private users' data. These rules are characterized by a set of best-effort obligations, and a certain degree of flexibility that recognizes the different approaches that various sovereign governments have taken on this issue. These rules seek to achieve the necessary level of consumer confidence in electronic commerce while also ensuring that the more rigorous standards imposed on personal privacy in liberal democracies governed by the rule of law can also be upheld in the context of international trade.

For all intents and purposes these rules have largely been framed by the requirements underpinning the largest digital trade relationship in the world, namely that between the European Union and the United States. In the context of this relationship, which sees a lot of personal user data transferred between corporates on both sides of the Atlantic, it is the heightened requirements placed on the protection of privacy in the European Union vis-à-vis the more flexible, patchwork and *laissez-faire* approach taken in the US, that has been the driving dynamic in the formation of mutual recognition agreements for different rules governing the protection of user privacy in light of the multitude of commercial transactions that take place every day between the two trading partners and the massive data flows that these transactions generate. The relatively stringent criteria that were recently enacted under the **EU-US Privacy Shield** framework govern transfers of personal data from the 28 Member States of the EU and the three countries of the European Economic Area (Iceland, Norway and Liechtenstein) to the United States, and a parallel arrangement is likely to be concluded between the United States and Switzerland, which previously operated its own Swiss-US Safe Harbor framework.⁴³ Although the modalities foreseen under EU-US Privacy Shield go much further than the corresponding rules agreed in the TPP, or those being contemplated under TiSA, they are likely to set the benchmark that countries wishing to engage in international trade (B2C or B2B) with the two largest players in the digital economy will inevitably be required to follow in one form or another.

Under both Article 14.8 of the TPP e-commerce chapter and Article 4 of the currently available leaked drafts of the TiSA e-commerce annex, signatories recognize - in hortatory language – "The economic

⁴² See: McKinsey Global Institute, *Big data: The next frontier for innovation, competition, and productivity*, May 2011, available at: <http://www.mckinsey.com/business-functions/business-technology/our-insights/big-data-the-next-frontier-for-innovation> (visited on 3 June 2016); for a more nuanced and even slightly contrarian view on the inherent value of data, see: Kristian J. Hammond, *The Value of Big Data isn't the Data*, published in "Harvard Business Review", 1 May 2013, available at: <https://hbr.org/2013/05/the-value-of-big-data-isnt-the> (visited on 3 June 2016).

⁴³ See Hogan Lovells, *Legal Analysis of the EU-US Privacy Shield: An adequacy assessment by reference to the jurisprudence of the Court of Justice of the European Union*, April 2016, available at: <http://www.hldataprotection.com/2016/03/articles/international-eu-privacy/hogan-lovells-issues-authoritative-legal-analysis-of-the-eu-u-s-privacy-shield/> (visited on 1 May 2016).

and social benefits" inherent to the protection of users' personal information and the contribution that such protection can invariably have to "enhancing consumer confidence in electronic commerce". Both these texts also require (by use of "shall") signatories to adopt or maintain domestic legal frameworks that ensure the protection of personal information of those engaged in electronic commerce. Both texts also call for non-discriminatory practices in the application of privacy protection frameworks (in the case of the TPP on a best-endeavor basis), as well as exhorting (by use of "should" rather than "shall") parties to embrace transparency by publishing information on the protection afforded by data privacy frameworks.

The TPP goes slightly further in this particular context by mandating that any such information published must include information on how individuals can pursue remedies (in the case of a violation of their privacy or a data breach), as well as on how businesses can comply with the legal requirements set forth in these privacy frameworks. Finally the TPP e-commerce chapter contains a provision that explicitly recognizes the fact that different parties to the agreement may take different legal approaches while also encouraging (again through use of "should") signatories to develop mechanisms by means of which different data privacy regimes would be rendered compatible with one another (similar to the approach first taken under Safe Harbor and now replaced by EU-US Privacy Shield), whereby the treaty text explicitly mentions "recognition of regulatory outcomes" or what it refers to as "broader international frameworks". The same provision also mandates information exchanges and the pursuit of "suitable arrangements to promote compatibility" between different data protection frameworks.

The EU-US Privacy Shield regime recently concluded between the US and the EU goes considerably further than the basic outlines provided under TPP and contemplated by TiSA. This is relevant because the standard of "essential equivalence" that the Court of Justice of the European Union set out in its 2015 Schrems judgment, and which Privacy Shield was designed to meet, is likely to be the benchmark against which the EU will henceforth hand down so-called "adequacy decisions" on whether or not its trading partners' data privacy regimes are comparable to its own. As such, it is not the TPP but rather EU-US Privacy Shield which becomes the benchmark, but the approach outlined in the TPP (mechanisms to promote compatibility between different regimes, including through recognition) is likely to be the *modus operandi* between non-EU trading partners going forward.

The EU-US Privacy Shield aspires to be a robust and binding set of legal principles that are effectively enforced and that give data subjects in the European Union (for whose benefit the framework has largely been drafted) actionable remedies in the event they feel their right to privacy has been violated by a US business or government agency. It also imposes enforceable obligations on businesses that self-declare their adherence to the scheme and holds the US government agencies charged with implementing the scheme (primarily the Department of Commerce, the Federal Trade Commission and the Department of Transportation) accountable for ensuring that US businesses comply with their obligations under the agreement.

It is not unreasonable to say that EU-US Privacy Shield or similar and substantively equivalent mechanisms that provide a compatibility interface between different national data privacy regimes are likely to ultimately represent the emerging international consensus on data privacy protection

over time more than the rules adopted in the context of the TPP or currently being contemplated in the context of the TiSA negotiations.

6. Enacting Domestic Laws to Support Electronic Commerce

The e-commerce chapter of the TPP contains a number of provisions that require or encourage signatory governments to act in order to set up or maintain a set of legal frameworks, the purpose of which would be to support e-commerce. In addition to those I have already discussed above in the context of data privacy, a number of different legislative action obligations have been included in the TPP. One such obligation is that signatories are required to enact legislation on electronic transactions that is consistent with the principles of the 1996 UNCITRAL Model Law on Electronic Commerce (MLEC) or the 2005 United Nations Convention on the Use of Electronic Communications in International Contracts (otherwise referred to as the Electronic Communications Convention or ECC). The same article of the TPP e-commerce chapter exhorts signatories in hortatory language ("shall endeavor to") to "avoid any unnecessary regulatory burden on electronic transactions" as well as to afford an opportunity for interested stakeholders to provide input in the development of legal frameworks for electronic transactions.

Both the 1996 MLEC and the 2005 ECC were drafted by the United Nations Commission on International Trade Law (UNCITRAL) (the same body that drafted the United Nations Convention on Contracts for the International Sale of Goods or CISG) and are substantively very similar. Although the UN Convention entered into force in 2013, it has only been ratified by a handful of signatories, whereby that number is expected to increase over time. In terms of their substantive scope, the main purpose of both the 1996 Model Law and the 2005 Convention is to give legally binding effect to the many forms of communication that take place digitally. Whereas many contemporary national commercial codes contain provisions that presuppose the exchange of paper or even voice communications in the formation and execution of contracts, the UNCITRAL e-commerce instruments merely seek to update many of the customary rules and give them equivalents for the digital age where so much communication takes place via what are referred to by these instruments as data messages or electronic communications.

In addition to the obligation to enact or maintain legislative frameworks governing electronic transactions, Article 14.7 of the TPP also requires signatories to "adopt or maintain consumer protection laws" for the benefit of "consumers engaged in online commercial activities". A similar provision is being considered in the context of TiSA. Likewise, a feature of both texts is an obligation on the part of signatories to adopt or maintain measures that would allow for electronic authentication in business transactions and would not deny the validity of signatures provided in electronic form.

Finally both the TPP and the leaked draft of the TiSA e-commerce annex set out an obligation on the part of signatories to adopt or maintain measures to combat unsolicited commercial electronic messages (spam). Here the emphasis is on requiring the producers of spam emails to comply with a number of obligations that empower recipients to minimize the incidence of such email, while at the same time equipping recipients of these unsolicited messages with effective legal remedies against producers of spam that fail to abide by these minimization obligations. The presence of this provision in a trade agreement is somewhat curious given the fact that spam emails - a real problem in the

earlier years of email and e-commerce – seem to have largely been brought to heel as a problem by effective email inbox filtering by the major email platforms such as Google, Yahoo, and Microsoft.

7. Technical Barriers to Trade in ICT Equipment

The TPP contains a chapter on technical barriers to trade which itself provides annexes dedicated to standards and conformity assessment issues impacting different goods sectors (for example wine and distilled spirits, pharmaceuticals, cosmetics and others). Of potential interest to the digital economy in this context is a short annex on information and communication technology (ICT) products, which contains a number of substantive obligations particularly with regard to ICT products that use cryptography and with regard to the electromagnetic compatibility of information technology equipment (ITE). The provisions in the TPP chapter essentially incorporate the substantive provisions of the WTO TBT Agreement into the TPP pertaining to technical regulations, conformity assessment procedures and standards, particularly those that seek to constrain WTO Members from using these measures to create unnecessary barriers to international trade, as well as those provisions that aim to promote the use of relevant international standards. The TPP chapter on technical barriers to trade goes slightly further than the WTO TBT Agreement in a number of ways, particularly in how it seeks to limit the ability of signatory governments to insist on the use of their own conformity assessment procedures and bodies, thereby easing the burden on manufacturers of products subject to mandatory testing to confirm compliance with technical regulations and standards. The Agreement does this by introducing a national treatment obligation for conformity assessment bodies, pursuant to which signatories must treat conformity assessment bodies located in the territory of other signatories no less favorably than their own when accrediting, approving or otherwise recognizing such bodies. The TPP also adds a number of transparency obligations in the hope that signatories will allow future technical regulations and product standards to be developed in a manner which invites and takes into account input from both domestic and foreign industry stakeholders, thereby making the formulation of such regulations and standards less liable to capture by domestic industry.

8. Cross Border Trade in Services

Chapter 10 of the TPP entitled "Cross-Border Trade in Services" contains a number of provisions of immediate interest and relevance to the digital economy. The first is that the chapter's scope extends to any measures that affect "the purchase or use of, or payment for, a service", as well as measures affecting "the access to and use of distribution, transport, or telecommunications networks and services in connection with the supply of a service". The services chapter also imposes far-reaching due process requirements and transparency obligations in connection with the regulation of services and the issuing of permits to provide any services in a signatory country, which will apply to the supply of digital services as it will to any other services. Finally, Chapter 10 contains a provision entitled "Payments and Transfers" which circumscribes the ability of signatories to impose a *de facto* restriction on cross-border trade in services by simply making payment for them impossible.

It is likewise worth noting that in the context of the TPP - given services liberalization will take place on a negative-list basis - new services that may evolve due to widespread use of the internet and technological advancement will automatically fall within the liberalization envisaged under the TPP, unless a signatory has reserved the right to regulate them in its schedule of non-conforming measures. Therefore, even if some initial studies may show that in practice the effective level of market

liberalization agreed under the TPP may not be very significant in comparison to the actual market situation, future developments and the evolution of new products and technologies, greater co-operation amongst regulatory authorities, and some TPP provisions which extend the disciplines and promote common procedures for domestic regulation and recognition have the potential to significantly expand the impact of the agreement in the future.

The ongoing negotiations in the context of TiSA, although based on a hybrid approach (positive listing for market access and negative listing for national treatment), nevertheless promise to achieve an important step forward in locking in much of the services liberalization that individual WTO Members involved in these negotiations have embarked upon unilaterally in the more than 20 years since the General Agreement on Trade in Services entered into force. The request/offer dynamic under which the TiSA negotiations are being conducted may even produce some important new liberalization between those Members participating in the talks, which admittedly make up a significant critical mass of global trade in services. This is likely to include sectors which are of the greatest significance for the digital economy.

9. Trade-Related Intellectual Property Rights

Intellectual property rights play an inordinately important role in the digital economy. Technology companies rely heavily on patents and the protection they provide for breakthroughs and technological innovations. Although the importance of IP rights such as patents and trademarks is not to be underestimated, the real battleground for this issue in the context of the digital economy is undoubtedly over the importance of and the role played by copyright in the modern internet era. The TPP represents a useful benchmark in this regard, since negotiators had to balance the desire of traditional content creators such as the motion picture and record label industries (invariably seeking longer protection periods and easier enforcement of copyright) against the needs of more recently emerged technology behemoths such as Google and Facebook (seeking exactly the opposite). The negotiating outcomes that ultimately resulted in the TPP are likely to represent the broader international consensus and will probably be restated (to one degree or another) in the context of ongoing negotiations such as TTIP and possible future negotiations on the digital economy in *fora* like RCEP and possibly even the WTO.

The TPP provisions on copyright begin with hortatory language exhorting signatories to "achieve an appropriate balance" in their respective copyright regimes by using limitations and exceptions where appropriate for "legitimate purposes" of which the TPP names several, in particular criticism, comment, news reporting, teaching, scholarship and research. There are also provisions in the TPP IP chapter that require signatories to put in place and enforce civil remedies and, in the case of wilful conduct for purposes of commercial advantage, criminal procedures against persons that knowingly circumvent any technical protection measures or knowingly remove any rights management information intended to protect the rights of copyright holders (authors, performers and producers of phonograms). The TPP IP Chapter also contains a dedicated section for internet service providers (ISPs) and requires signatories to provide them with so-called "safe harbors" by means of which ISPs are shielded from legal liability for copyright infringements provided that they cooperate with content owners in trying to minimize the incidence of such infringement (by say removing or disabling access to copyright-infringing material from websites at the request of rights-holders).

10. The Emerging International Trade Law Regime for the Digital Economy

As discussed above, a new set of rules is coming into being that are designed to articulate a rapidly evolving consensus on the kinds of policies governments can enact to regulate international trade and investment in the digital economy. These rules have so far largely been driven by the interests of a small group of well-organized technology companies from the United States. The next section discusses a number of cross-cutting issues that will continue to be relevant as we gradually move towards some kind of international consensus on the substantive rules discussed above.

V. INTERNATIONAL CONSENSUS AND BENCHMARKING

1. The Interests of Developed Countries versus those of Emerging Markets

Some commentators may be tempted to frame this as yet another divisive set of North-South issues where the export interests of firms predominantly hailing from the rich industrialized world clash with the industrialization policies of a few large emerging markets, where policymakers have explicitly endorsed and legislated in favor of encouraging the emergence of domestic competitors.⁴⁴ Although there is some truth to this perspective, it is likewise true that developing countries and emerging markets are both exporters of goods and services in the digital economy, and also stand to continue reaping considerable economic benefits from an open internet and from policies that promote free trade for the digital economy. The formation of regional and global supply chains over the last twenty years has happened thanks to declining trade costs, the reduction and elimination of tariffs, trade and investment liberalization and trade facilitation initiatives. The remarkable economic growth that has taken place all over the world over the last 20 years thanks to the growth of the digital economy has arguably been achieved thanks to the fact that digital commerce was considerably less regulated and subject to fewer restrictions than trade in goods and services from the conventional economy.⁴⁵

The continually integrating nature of global trade flows and the increasing convergence between the digital and the real world means that policymakers who discriminate between suppliers on the basis of nationality or who impose regulatory barriers that are more restrictive than necessary will ultimately end up hurting consumers in their own economies as well as placing businesses, especially SMEs, at a competitive disadvantage since such measures invariably cause business costs to rise. The arguments in favor of enacting policies that favor domestic competitors may seem enticing at first but they show a fundamental failure to learn the lessons of recent development history. Producing winners in the digital economy is about skills and about stable, predictable and well-functioning institutions like markets for labor and capital, and legal systems for the protection of intellectual property rights and investment. Policy initiatives that promote universal high-quality education, that increase broadband penetration rates, and that promote the rule of law will always have more far-

⁴⁴ See James McGregor, China's Drive for 'Indigenous Innovation' A Web of Industrial Policies, 2010, available at: https://www.uschamber.com/sites/default/files/legacy/international/asia/files/100728chinareport_0.pdf (visited on 1 May 2016).

⁴⁵ This is the argument that economists at the World Bank like Aaditya Mattoo make with respect to India and the country's software and business process outsourcing industries, see: Arti Grover Goswami, Aaditya Mattoo and Sebastian Saez, *Exporting Services: A Developing Country Perspective*, World Bank, 2011, available at: <http://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-8816-7> (visited on 3 June 2016).

reaching and longer-term development benefits than a few short-sighted policies designed to restrict access to domestic markets thereby shutting out efficient and experienced global competitors.

2. The Importance of Getting Language on Exceptions Right

Although final treaty texts for TiSA, TTIP and possibly even RCEP are still some way off, a number of standards do seem to be emerging around a set of core obligations for the digital economy, such as free flow of information, data localization, source code, compatibility of privacy regimes, the need to minimize the burden of conformity assessment procedures for ICT products, and the need to limit the liability of internet service providers with respect to copyright infringement. The policy compromises that ultimately result from RCEP, in which China, India and Indonesia are negotiating parties, will test whether an emerging consensus exists on these obligations or not. My sense is that the tentative language that we have seen emerge in the TPP and which seems to have been validated in the context of TiSA, will largely prevail in similar formulations in TTIP and even RCEP. This is arguably because the corresponding exceptions clauses have been formulated in a way that still gives signatory governments a great deal of policy space to legislate and regulate so as to meet their own political-economy and national security imperatives.

The question that this leaves open is what happens when an exceptions clause is invoked by a signatory to justify a measure that results in global competitors being excluded from its markets? Disagreements about the legality of market-access denying measures under exceptions clauses may ultimately have to be resolved through dispute settlement. This is something that has worked relatively well in the context of the WTO, with a very rich body of case-law emerging on the General Exceptions clause contained in GATT Article XX, but whether this will be equally effective in the context of what is essentially a regional trade agreement in the case of the TPP, or a plurilateral agreement in the case of the TiSA, is far from certain. In fact one could be excused for having serious doubts whether or not the dispute settlement provisions of a regional trade agreement are going to be robust enough to effectively constrain governments when they seek to subvert the rules for protectionist purposes.

3. A National Security Exception for the Digital Era

Finally a word on the national security exception. In the context of the digital economy, where cybersecurity threats and data privacy breaches are becoming increasingly prevalent, much of the regulatory activism we have seen in countries like China, India, Brazil and indeed even some big exporters in the digital economy such as the United States have shown a tendency to resort to a very broad interpretation of national security interest when justifying measures that exclude foreign suppliers from some of their most important ICT markets.⁴⁶ The question is essentially how to argue with a sovereign government over the proportionality and reasonableness of a measure that it justifies by invoking the national security exception.

The national security exception contained in the GATT (Art. XXI) is arguably formulated in relatively narrow terms, since beyond measures relating to fissionable materials and to traffic in arms and military supplies, it covers only measures taken in time of war or other emergency in international relations, although the provision is framed in self-judging terms, allowing a Member to take any action

⁴⁶ See Shin-Yi Peng, *Cybersecurity Threats and the WTO National Security Exceptions*, published in: "Journal of International Economic Law", 2015, vol. 18, issue 2, pp. 449–478.

"which it considers necessary". The first of these objectives was seen as a pressing imperative in the immediate aftermath of the Second World War, which in the Pacific in any event had been brought to a relatively sudden conclusion by the use of two atomic bombs against Japan by the United States. The security exception set forth in the GATS (Art. XIVbis) contains very similar language to that found in the GATT. Both clauses also mention measures that governments need to enact in order to comply with their obligations under the United Nations Charter with a view to maintaining international peace and security. In light of this fact, it is not immediately clear that the many restrictive measures taken against internet companies over the last few years in invocation of national security would be automatically covered under either the GATT or GATS security exceptions.

The corresponding clause in the TPP (Article 29.2) is somewhat similar to the GATT and GATS provisions described above but deviates significantly from them in that it drops any reference to trade in arms or fissionable material. However it does explicitly furnish signatory governments with the necessary policy space to take any measure they deem necessary in order to protect their own essential security interests, which arguably would provide sufficient cover for any of the restrictive measures governments have contemplated and imposed over the last several years against internet companies in invocation of their national security interests. The problem with the article as formulated is that it makes no reference to any kind of mitigating language such as that found in the GATT or GATS general exceptions clauses, namely that it shall not be used to justify discrimination between countries where the same conditions prevail, or a disguised restriction on international trade. Nor is there any reference to any kind of proportionality test in the sense that it requires governments to abstain from imposing restrictions in excess of that which is required to achieve the relevant national security objective. This is a lacuna that should arguably be addressed in future trade agreements, since qualifying treaty language on security exceptions with chapeau-like language and a proportionality test would clearly be in everybody's interest in the post 9/11 and Snowden world.

4. Concluding Remarks

The TPP is far from a perfect agreement, as the many hurdles it has faced in the course of ratification have arguably demonstrated. It does however represent significant progress in addressing the shortcomings of analog trade rules in a digital age. As such it should be ratified by all signatories and brought into force as soon as possible, so that it can provide the necessary impetus for negotiating and enacting similar rules at the multilateral level. This is something that is tentatively being attempted in the WTO committee that oversees the Information Technology Agreement, which has a work program on non-tariff measures and which, apart from TiSA, probably represents the most promising venue for bringing the WTO's 20th century trade rules a step closer to the digital reality of the present day.

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