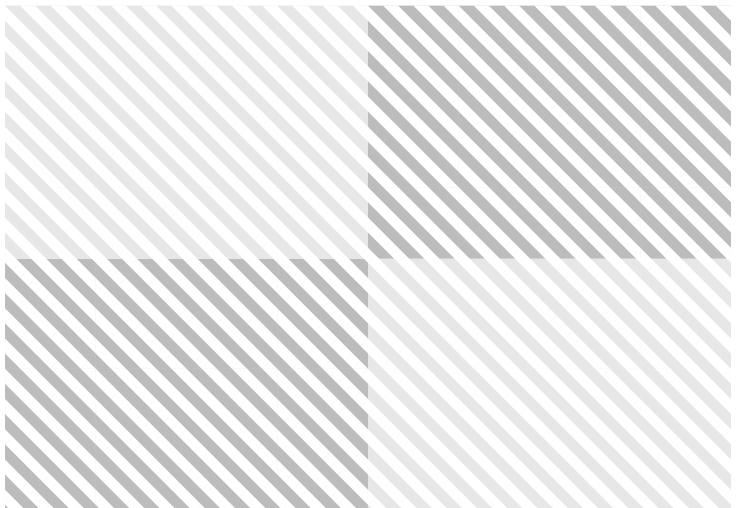


White Paper

Will the Trans-Pacific Partnership Agreement Reshape the Global Trade and Investment System? What's In and What's New: Issues and Options

Global Agenda Council on Trade & FDI

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91-93 route de la Capite CH-1223 Cologny/Geneva Switzerland Tel.: +41 (0)22 869 1212 Fax: +41 (0)22 786 2744 Email: contact@weforum.org www.weforum.org

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Preface

The Trans-Pacific Partnership (TPP) is a new mega-regional preferential trade agreement, signed but not yet ratified or brought into force by 12 nations – Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. The TPP is unprecedented in scale; its signatory economies together constitute 40% of global gross domestic product and nearly one-third of world trade for 800 million consumers. It also commands attention for the influence its strictures might have on global governance efforts, whether trade or otherwise, and for potential impacts on outsiders. TPP parties are equally as influential defining terms of engagement on trade-related issues, such as the environment and labour.

Many have hailed the agreement as a breakthrough in lowering trade barriers, writing new rules through new treaty language across a range of products and services, and addressing such new areas as electronic commerce, environment and labour.¹ Civil society groups have likewise broadly criticized the agreement because of the high level of secrecy under which it was negotiated. Some groups have also criticized it for the perception that large multinational companies exercised an inordinately high level of influence in negotiating outcomes (particularly in the US).²

The TPP's true impact is still uncertain given the ambiguity about when it will ultimately be ratified and enter into force, as well as to what extent signatory countries will enact effective tradeliberalizing legislative and regulatory changes.³ Nevertheless, most observers are cautiously optimistic that the TPP will have far-reaching benefits and set important precedents for future rulemaking in international trade and investment liberalization.

This first of two White Papers provides an assessment of major areas where the TPP text sets out rules that either build on existing frameworks of the World Trade Organization and free trade agreements, or address issues not subject to trade agreement disciplines to date. It also offers an economic analysis of the TPP's potential impact on trade, investment, labour and public welfare. Finally, the second White Paper, *Will the Trans-Pacific Partnership Agreement Reshape the Global Trade and Investment System? Regional and Systemic Implications: Issues and Options*, describes the TPP's implications for other regions and concludes by setting out some systemic consequences of its possible coming into force.

Introduction

The final text of the Trans-Pacific Partnership (TPP) agreement comprises 30 chapters on issues ranging from market access (tariffs) to customs administration and trade facilitation, trade remedies, sanitary and phytosanitary (SPS) measures, technical barriers to trade, investment, cross-border trade in services, financial services, temporary entry of business persons, telecommunications, electronic commerce, government procurement, competition, state-owned enterprises, intellectual property, labour, environment, competitiveness and business facilitation, development, small and medium-sized enterprises (SMEs), regulatory coherence and transparency, and anti-corruption.⁴ The treaty text also contains annexes on existing and future non-conforming measures on services, investment, financial services and state-owned enterprises.

TPP countries view the treaty as a strategic and economic agreement, building a framework of rules for trade and investment regulation in the future. In this process, they have significantly reduced their tariffs and established systems to help address concerns relating to non-tariff measures in each other's markets, with an eye to facilitating the operation of regional and global supply chains. While allowing flexibility to achieve important public policy objectives, some of the agreement's key objectives include:

- Emphasize environmental and labour standards in international trade and domestic production
- Promote "competitive neutrality" by curbing government support (subsidies or special privileges) to state enterprises and prohibiting local content or local presence requirements
- Provide higher protection for intellectual property rights, based on the rule of law or due process on procedures, while granting flexibility for countries to fulfil their obligations
- Facilitate internet-based trade and curb government restraints on such trade
- Build a common basis for good regulatory practice, such as improving the predictability and objective basis of technical barriers to trade and SPS measures, thereby building a regulatory framework that could become a basis for future trade agreements
- Increase transparency and availability of information, providing mechanisms for consultation and collaboration when market access conditions adversely affect exports from one TPP economy to another
- Assist SMEs to improve their opportunities from international trade

A large number of so-called "related instruments" are also included in the treaty text. They are predominantly bilateral exchanges by letter, and most are between the US and other signatories on specific topics such as tariff-rate quotas, specific sectoral goods (textiles and apparel), SPS concerns, intellectual property-related issues, services, financial services and e-commerce, as well as a number of other subjects covered by the TPP's chapters. Finally, the treaty text contains some so-called US-Japan bilateral outcomes that cover issues of heightened economic importance and political sensitivity between the block's two largest economies, particularly in the motor-vehicle sector, where the US has tried to improve market access for its exports to Japan for many decades, without much success.⁵

1. Major Areas Where the TPP Advances International Trade Rules

I. Market Access Issues

A. Tariffs and Rules of Origin

This section addresses the commitments on market access for goods: tariff bindings (in both the manufacturing and agricultural sectors), rules of origin and trade facilitation. Liberalizing the trade of goods has been at the core of multilateral, regional and bilateral agreements. Together with tariffs, the rules of origin system also directly affects real market access. Trade facilitation has not been part of trade agreements until very recently, but recognizing that the benefits of reducing and eliminating tariffs can be offset by customs-related procedures, the TPP addresses these as well.

What's New?

Tariff bindings

When implemented, the market access package in the TPP will bring about comprehensive or high-level tariff elimination in terms of its coverage and depth of tariff cuts as described here. Tariff bindings cover all goods in all member countries. A TPP nation cannot increase the tariff for goods on which it undertook elimination or reduction commitments in the TPP (except as otherwise provided in the TPP, such as countervailing or anti-dumping duties). Each member country attaches its unified tariff binding table to the agreement, which will be applied to all member countries.

Whereas all tariff bindings are horizontally applied to member countries, as in the case of Peru, New Zealand and Australia, the US and Mexico have sets of country and product exceptions. For example, regarding the automobile sector, the US introduced special tariff treatment to imports from Japan. In agriculture, various tariff quota systems were incorporated in the TPP, which will limit the horizontal nature of the tariff bindings.

After the phase-out periods come to an end, practically all trade in goods will be free of tariff barriers. Though there are certain differences among member countries, tariff elimination rates overall, in terms of tariff line coverage and value coverage, are extraordinarily high, as described in Table 1.

Table 1: Tariff Elimination Rates (%)

(Based on the announcement by the Japanese government's TPP headquarters)

| Country | United States | Japan | Canada | Australia | Mexico | Malaysia |
|-------------|---------------|-------|--------|-----------|--------|----------|
| Line Basis | 100 | 95 | 99 | 100 | 99 | 100 |
| Value Basis | 100 | 95 | 100 | 100 | 99 | 100 |

| Country | Singapore | Chile | Peru | New Zealand | Vietnam | Brunei Darus- salam |
|-------------|-----------|-------|------|-------------|---------|------------------------|
| Line Basis | 100 | 100 | 99 | 100 | 100 | 100 |
| Value Basis | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Trans-Pacific Partnership agreement

Manufacturing sector

From a business point of view, the tariff elimination rate is a very important yardstick to measure the effects of tariff liberalization. The overall figure in the manufacturing sector covering the 12 countries is more than 99% in terms of both tariff lines and trade value. The speed – or, in technical terms, the "phasing out" – of tariff elimination is also an important factor that companies take into account. From this angle as well, the TPP attained a very high degree of tariff elimination in the manufacturing sector. In fact, most tariff elimination will be implemented immediately from day one of the agreement's entry into force (see Table 2).

Table 2: Tariff Elimination Ratio in the Manufacturing Sector (%)

(Based on the announcement by the Japanese government's TPP headquarters)

| Country | Immediate Tarif | f Elimination Ratio | Tariff Elimination Ratio | |
|-------------------|-----------------|---------------------|--------------------------|-------------|
| | Line Basis | Value Basis | Line Basis | Value Basis |
| United States | 90.9 | 67.4 | 100 | 100 |
| Japan | 95.3 | 99.1 | 100 | 100 |
| Canada | 96.9 | 68.4 | 100 | 100 |
| Australia | 91.8 | 94.2 | 99.8 | 99.8 |
| Mexico | 77.0 | 94.6 | 99.6 | 99.4 |
| Malaysia | 78.8 | 77.3 | 100 | 100 |
| Singapore | 100 | 100 | 100 | 100 |
| Chile | 94.7 | 98.9 | 100 | 100 |
| Peru | 80.2 | 98.2 | 100 | 100 |
| New Zealand | 93.9 | 98.0 | 100 | 100 |
| Vietnam | 70.2 | 72.1 | 100 | 100 |
| Brunei Darussalam | 90.6 | 96.4 | 100 | 100 |

Note: Line basis calculation is based on tariff lines as of January 2010. Value basis calculation is based on Japan's exports to each country as of 2010 (Japan's value basis calculation is based on its imports from the 11 other member countries).

Source: Trans-Pacific Partnership agreement

With respect to the phasing-out period for tariff elimination/ reduction, an examination of individual items in members' tariff tables is required. No clear horizontal rule exists for such staging in the agreement. The longest phasing-out period is 30 years – for example, auto-related items, such as trucks, in the US tariff table. Textiles also have long staging time frames (e.g. 16 years in Peru's tariff table).

Agricultural sector

In this sector, the degree of liberalization is far lower than in manufacturing. The ratio of immediate tariff elimination is also low (see Table 3). The phasing-out period for tariff elimination in agriculture is substantially longer than in the manufacturing sector. The longest staging time frame is 30 years (e.g. US dairy products). Other agricultural goods will not reach total liberalization; their access is limited through quotas. Tariff quota schemes are contemplated as well.

Section C of the agreement's chapter on market access issues includes other provisions specific to the agricultural sector, such as those pertaining to export restrictions (food security) and trade of modern biotechnology products. The TPP parties also set out their desire to continue working in the World Trade Organization (WTO) towards eliminating export subsidies for agricultural goods, developing disciplines to govern the provision of export credits and guarantees, and reaching an agreement on export state trading enterprises. A committee on agricultural trade is to be created.

Table 3: Tariff Elimination in the Agricultural Sector

| Country | No. of lines | Immediate Elimination (%) | Elimination in 2-11 years (%) | Elimination in or after 12 years (%) | Not fully liberalized (restrictions will prevail) (%) |
|-------------------|--------------|------------------------------|----------------------------------|--|--|
| United States | 2,058 | 55.5 | 37.8 | 5.5 | 1.2 |
| Japan | 2,328 | 51.3 | 27.5 | 2.2 | 19.0 |
| Canada | 1,566 | 86.2 | 7.9 | 0.0 | 5.9 |
| Australia | 941 | 99.5 | 0.5 | 0.0 | 0.0 |
| Mexico | 1,387 | 74.1 | 17.2 | 5.1 | 3.6 |
| Malaysia | 3,324 | 96.7 | 1.2 | 1.7 | 0.4 |
| Singapore | 1,400 | 100 | 0.0 | 0.0 | 0.0 |
| Chile | 1,634 | 96.3 | 3.2 | 0.0 | 0.5 |
| Peru | 1,155 | 82.1 | 11.9 | 2.0 | 4.0 |
| New Zealand | 1,287 | 97.7 | 2.3 | 0.0 | 0.0 |
| Vietnam | 1,431 | 42.6 | 52.3 | 4.5 | 0.6 |
| Brunei Darussalam | 1,400 | 98.6 | 1.4 | 0.0 | 0.0 |

(Line Basis; to Japan based on Japanese government figures)

Source: Trans-Pacific Partnership agreement

The TPP market access package has provisions typically included in FTAs, such as:

- National treatment
- Duty-free treatment on certain temporary imports (e.g. sporting goods, professional equipment, samples, goods re-entered after repair or alteration)

Prohibition of WTO-inconsistent import and export restrictions⁶ and duties, as well as performance requirements

Interestingly, the TPP agreement's chapter on market access provides a mechanism for a party to request ad hoc discussions with another party on any matter arising under the chapter (e.g. specific non-tariff measures). Even though such discussions are confidential and do not prejudice the rights of any party, including dispute settlement proceedings, such discussions may imply a quicker and more efficient means of solving conflicts, particularly at an early stage. A committee on trade in goods is also to be created.

In addition, provisions cover transparency on export licensing procedures and import licensing⁷ – for example, notification procedures, and a prohibition that no party may adopt or maintain a measure that is inconsistent with the WTO Agreement on Import Licensing Procedures.

Rules of origin

Rules of origin play a fundamental role when implementing a free trade agreement (FTA). Rules of origin are requirements that a good must comply with in order to qualify as an originating good, and henceforth giving that good the right to preferential market access granted under an FTA. Having identical rules of origin among all trading partners provides certainty and simplifies the administrative and production processes, thereby decreasing companies' costs.

The balance between the strict and flexible rules of origin is always a difficult issue from a political and practical standpoint in any FTA negotiation. From a global valuechain (GVC) view, flexibility and usability come first, but from a protection perspective, a stringent origin system designed to avoid circumvention and free riding is preferred. Together with tariffs, the design of the rules of origin system directly affects real market access for the business. Rules of origin in the TPP were drafted in order to delicately balance both perspectives.

Self-declaration and verification

Self-declaration is necessary in order to confirm that a good originates under the TPP. Specifically, an importer may claim that a good is originating based on a certificate of origin issued by a producer, exporter or importer. In many of the Asian member countries including Japan, certificates of origin provided by the relevant authorities have been utilized to prove that a good complies with the rules of origin applicable in the corresponding Asian FTAs. Introducing the self-declaration system is expected to alleviate the burden of FTA users and therefore enhance the use of TPP rules of origin.

In addition, the TPP has a verification mechanism to confirm the validity of the declarations and to avoid fraudulent use of its rules of origin.

Product-specific rules of origin

Two of the basic methods applied in the TPP to prove origin are change of tariff classification (CTC) and regional value content (existing FTAs commonly use these methods). Product-specific rules of origin (PSRs) are diverse, depending on the products concerned. Where both CTC and regional value content, as well as other methods, are allowed in PSRs, users can choose the method they deem most appropriate. (This is often referred to as the co-equal method.) The foregoing helps users to alleviate their burden of proof.

As mentioned, regional value content is one of the mechanisms available in the TPP to prove the origin of goods. The TPP also provides that regional value content may be calculated using one of the following methods: 1) build up, 2) build down, 3) focused value method for certain electronic goods, and 4) net cost method (for automotive goods) with different threshold levels.

The TPP has detailed PSRs for the automotive and textile sectors, given their nature. In the automotive sector, the regional value content threshold in the build-down method is 55%. For seven components, special rules based on production processes are introduced to satisfy PSR; this is also new in TPP. In the textile sector, three processes ("yarn forward") or criteria are introduced on certain sensitive items. To alleviate applying PSRs when intra-regional supply is not available, the system of "short supply list" is introduced, which does not exist in the North America Free Trade Agreement (NAFTA). Employing this list, fabrics, yarns and fibres not commercially available in the TPP countries can "... be sourced from non-TPP countries and used in the production of apparel in the TPP region without losing duty preference".⁸

Commonly applied rules of origin

One of the TPP's most significant contributions would be in promoting the development of Asia-Pacific value chains by connecting the FTAs previously negotiated between the TPP partners. Specifically, through cumulation of origin, parties will be able to incorporate inputs supplied from TPP member countries into their final goods and export them with preferential tariffs to any of their TPP partners. The latter situation is not possible outside the agreement's framework, although many of its parties have signed FTAs with the same TPP partners.

In another major accomplishment, TPP negotiators were able to agree on a single set of rules of origin. The rules applied to the products coming from any member country are identical; this is vital for consolidating the system and enabling "full cumulation".

Full cumulation

From the viewpoint of vertical/horizontal division of labour and fragmentation of production processes, the TPP introduces full cumulation, which will be instrumental in promoting further development of GVCs in the area without tariff burdens on the movement of goods among member countries. In judging whether a good qualifies as a "TPP good", which can enjoy preferential tariffs, the TPP origin rules are not based on the concept of individual country of origin in the production process, but on an overall judgement of the PSRs, regardless of the specific TPP country in which the goods are produced. The core of the TPP rules of origin system, full cumulation is one step beyond the "partial" cumulation in place in some existing FTAs in the area. For example, the ASEAN-Japan Comprehensive Economic Partnership is based on "partial cumulation"; in the TPP, however, parts should satisfy PSRs as originating goods in applying cumulation in the downstream production of assembled products.⁹

The full cumulation system already exists in NAFTA. Its introduction in the TPP, however, may drastically change the shape of intra-regional production in the Asia-Pacific region, because the scope of production sharing that uses the preferential tariff is substantially expanded.

Trade facilitation

A trade facilitation agreement (TFA) was finalized in the WTO in 2014 and is expected to come into force once twothirds of the organization's members accept it. The TPP's chapter on trade facilitation is consistent with the TFA's objectives, and also includes three important elements that supplement it:

- Release of goods without unnecessary delay (e.g. 48 hours, to the extent possible)
- Express shipments (e.g. six hours)
- Obligatory advance rulings

These provisions are responsive to automation and risk management systems that can mitigate obstacles behind and at the border that are important inhibitors of trade. Another provision of the market access package worth highlighting is that each party shall be a participant in the WTO Ministerial Declaration on Trade in Information Technology Products (the Information Technology Agreement).

What Are the Implications?

By the beginning of the 21st century, many countries worldwide had entered into free trade agreements to improve their access to other countries' markets and to import their goods. As a result, tariffs have been reduced or eliminated considerably between trading partners; such is the case among many TPP partners. However, non-tariff barriers still remain and are significant in many countries (e.g. import permits and licences, technical regulations, sanitary measures). As discussed in more detail in subsequent parts of this white paper, a major challenge in negotiating 21st-century free trade agreements is to undertake further liberalization and rule-making related to non-tariff measures, such as services and behind-theborder measures. The TPP made progress in this direction and will hopefully serve as a point of departure to continue negotiating and implementing new rules, either regionally or, better still, multilaterally.

Notwithstanding the above, market access for goods still constitutes a major part of FTA negotiations, and the TPP is no exception. The TPP's chapter on market access was among the most difficult to conclude, given long-standing import restrictions and other concerns regarding entry of certain goods (e.g. dairy, automobiles, sugar, textiles, apparel). This was particularly true in negotiations between TPP parties that did not have prior FTAs.

Coupled with the introduction of full cumulation in rules of origin, which makes TPP goods a reality, tariff reduction/ elimination in the agreement will bring about freer flows of goods in the area and will likely change trade patterns and enhance division of labour among participating countries. It may also affect investment patterns in TPP members and non-members.

Moreover, the global fragmentation of production processes has produced rapid and sophisticated international division of labour and value chains that are based on cross-border mobility of goods, services, information, knowledge and capital. GVCs are constantly creating networks that cover wider regions day by day. From this standpoint, the TPP's chapter on market access encourages liberalization and rule-making in response to the ever-developing realities of such value chains. However, value chains have, until now, been more regional than global; it will be interesting to observe the impact of the TPP in trans-Pacific integration.

B. Government Procurement

What's New?

The TPP's chapter on government procurement enables companies of a member country to supply goods and services purchased by government entities in other TPP nations.

Only those government acquisitions pertaining to goods, services and entities listed by each TPP member in its corresponding schedule are subject to the disciplines and obligations set out in the TPP chapter on government procurement. Further, the acquisition at issue must equal or exceed specific thresholds specified by each TPP party in its schedule. Some measures and purchases are excluded from the application of the chapter (e.g. environmental measures, acquisition or rental of land). Moreover, the TPP members incorporated general notes in their schedules, setting out further limitations and exceptions to applying the chapter.

A comparison between NAFTA and the TPP shows that the latter adds provisions regarding the following topics: procuring by electronic means, facilitating the participation of small and medium-sized enterprises (SMEs), and maintaining integrity in procurement practices (e.g. to eliminate or manage conflicts of interest), among others. In fact, the TPP expressly mentions that the government procurement chapter does not apply to purchases of goods or services outside the territory of the party of the procuring entity, for consumption outside of such territory. In addition, a committee on government procurement is to be established, which shall meet at a party's request to address matters concerning the implementation or operation of the chapter on government procurement.

Developing countries may also, with the agreement of the other TPP members, adopt or maintain transitional measures for a certain period of time, provided several requirements are met.

What Are the Implications?

The government is an economy's most important consumer; in fact, approximately 12% of the gross domestic product (GDP) of the member countries of the Organisation for Economic Co-operation and Development (OECD) is spent on government procurement (GP).¹⁰ Therefore, for companies seeking to do business in other countries, an important benefit is having access to government purchases on the same terms as other competitors in the market.

The TPP's chapter on GP broadens the country coverage of provisions and commitments made in other GP agreements, notably the WTO Government Procurement Agreement (GPA). The chapter marks the first time that Brunei Darussalam, Malaysia and Vietnam have made GP commitments, and it also includes several non-GPA signatories (Australia, Chile, Mexico and Peru). Although the agreement liberalizes government procurement at the federal level, it does not address the issue at the local one.¹¹ This has been due in part to pressure in the US Congress to maintain "Buy America" policies regarding procurement.

Covered TPP government purchases must comply with several principles:

- National treatment and non-discrimination: TPP members and procuring entities may not grant less favourable treatment to goods, services and suppliers from other TPP members than the treatment provided to domestic goods, services and suppliers.
- Prohibition of offsets: No party may seek, take into account or impose offsets (e.g. conditions or undertakings requiring the use of domestic content or suppliers, or similar actions to encourage local development or to improve a party's balance of payments accounts).
- Rules of origin: Each party shall apply the same rules of origin to procuring a good that it applies in the normal course of trade of that good.
- Electronic procurement: TPP members shall seek to provide opportunities for government procurement to occur electronically.
- Technical specifications: These may not be prepared, adopted or applied with the purpose or effect of creating unnecessary obstacles to trade.
- Obligations: No procuring entity may prepare or design a procurement in order to avoid obligations set out in the government procurement chapter.

In addition, a procuring entity shall use an open tendering procedure for covered procurement unless Article 15.9 (qualification of suppliers) or Article 15.10 (limited tendering) apply. Several rules govern such procedures, for example for information that should be included in notices of intended procurement, conditions for participation that a procuring entity may require of suppliers, time periods, treatment of tenders and awarding contracts. Each party shall ensure that criminal or administrative measures exist to address corruption.

C. Investment

On average, TPP countries collectively receive more than one-third of global foreign direct investment (FDI) flows,¹² which amounted to US\$ 600 billion in 2015. Intra-TPP FDI averaged about 36% of total TPP FDI between 2010 and 2014.

1. General Content

The TPP's investment chapter is largely based on the US 2012-model bilateral investment treaty (BIT). As such, it is an international investment agreement (IIA) with high standards of investment protection, containing strong preand post-establishment commitments of the contracting parties that are enforceable through investment dispute settlement procedures.

The TPP includes an open-ended, asset-based definition of "investment". To benefit from the treaty's protection, an asset must have the characteristics of an investment, including the commitment of capital or other resources, the expectation of gain or profit, and the assumption of risk.

The TPP grants foreign investors the right of establishment. This right is subject to sector- and industry-specific exceptions lodged by each contracting party in a "negative list" (the so-called "top-down" approach to investment liberalization). Exceptions can be lodged in two countryspecific annexes: one annex for current non-conforming measures on which a party accepts an obligation not to make its measures more restrictive in the future and to bind any future liberalization; and a second annex for measures and policies on which a party retains full discretion in the future.

Regarding post-establishment treatment, the TPP includes the principle of non-discrimination, covering both national and most-favoured-nation (MFN) treatments, provided that investors are in "like circumstances". However, government procurement and subsidies are excluded from the scope of the non-discrimination principle.

The TPP accords treatment to covered investments that conforms with applicable customary principles of international law, including fair and equitable treatment and full protection and security. The TPP clarifies that this treatment refers to the customary minimum standard of treatment of aliens under international law. Accordingly, the concepts of "fair and equitable treatment" and "full protection and security" do not require treatment in addition to or beyond what is required by that standard.

Expropriation is only permitted if it is non-discriminatory, for a public purpose, subject to due process of law, and against prompt, adequate and effective compensation. Both direct and indirect expropriation is covered. A separate annex explains the concept of "indirect expropriation" in more detail. In particular, it clarifies that "normal" regulatory activities for legitimate public welfare purposes and the non-issuance, non-renewal or withdrawal of subsidies and grants as such do not constitute indirect expropriation. The chapter guarantees the free transfer of funds related to an investment, subject to certain exceptions.

The TPP prohibits certain performance requirements. These prohibitions reach beyond those included under the World Trade Organization's Agreement on Trade-Related Investment Measures, and also cover some servicerelated performance requirements, such as the transfer, purchase or use of technology; technology localization; or the amount of royalties or duration of a licence contract. Further, the TPP also prohibits performance requirements that are linked to the granting or maintenance of specific advantages. However, government procurement-related performance requirements are, to a large extent, carved out.

The TPP provides for international arbitration of investment disputes through investor-state dispute settlement (ISDS) and, at the less common level, state-state dispute settlement. In addition to alleged violations of host country obligation under the investment chapter, the TPP allows ISDS for alleged infringements of "investment agreements" between the investor and host country authorities, and "investment authorizations".

The TPP, by and large, preserves the conventional mechanism for resolving investment disputes, but also contains some important ISDS reform-oriented features (see below). While it confirms investors' right to recourse in domestic courts, it also provides access to international arbitration. Investors are free to choose between these options, and are not required to exhaust local remedies first. In addition, state-to-state dispute settlement is a third option.

2. Features beyond Traditional Investment Treaty Provisions

The TPP contains numerous novel elements that reflect and promote trends in international investment rule-making.

Preserving regulatory space of contracting parties

The TPP contains various provisions aimed at preserving such space. First, the investment chapter clarifies the meaning and content of several investment protection standards, including fair and equitable treatment, national treatment, most-favoured-nation treatment, and expropriation (see also the previous section).

Second, the TPP includes some general carveouts and exceptions. Certain policy areas, in particular taxation, are carved out from the scope of the agreement. A selfjudging national security exception allows a party to apply measures that it considers necessary to fulfil its obligations in maintaining or restoring international peace or security, or protecting its own essential security interests. The TPP's general exceptions chapter also ensures that governments retain the flexibility to manage volatile capital flows. This can be done by using non-discriminatory temporary safeguard measures, such as capital controls, for restricting investment-related transfers in the context of a balance-of-payments crisis (or the threat thereof) and certain other economic crises, or by protecting the financial system's integrity and stability.

Third, several contracting parties use side letters to clarify, "reserve" or carve out issues from the agreement's scope of application, including with respect to ISDS. For example, Australia, Canada, Mexico and New Zealand opted out of being subject to ISDS with regard to certain investmentrelated measures. These annexes and side letters allow for a "variable geometry" among the TPP parties of the megaregional agreement, i.e. they give each party the possibility to opt out individually from certain treaty provisions.

Improvement of ISDS

The TPP contains numerous features aimed at reducing host countries' exposure to ISDS and giving contracting parties a stronger role in the proceedings:

- 1. Initiating an investor claim has a time limit of three and a half years.
- 2. Procedures need to be transparent, and *amicus curiae* and non-disputing party submissions are possible.
- 3. Manifestly unfounded claims can be rejected on a fast-track basis.
- 4. A waiver is required to avoid multiple proceedings (claimants of the same corporate structure cannot bring multiple proceedings based on the same measure).
- 5. The MFN clause does not apply to dispute settlement; accordingly, an investor cannot import more favourable procedural requirements or the State's consent to arbitration from another treaty.
- 6. A denial-of-benefits clause aims to prevent corporate reconfiguration through mailbox companies.
- 7. A stipulation that the arbitration tribunal is bound by the contracting parties' authoritative interpretations of individual treaty provisions strengthens the TPP parties' influence on the outcomes of proceedings.
- A claimant is entitled to recover only losses or damages incurred in his/her capacity as an investor.
- 9. The host country can bring counterclaims in investment disputes based on investment contracts or authorizations.
- 10. If an appellate mechanism is developed (under other institutional arrangements in the future) for review awards rendered by investor-state dispute settlement tribunals, the parties shall consider whether awards rendered under TPP should be subject to such a mechanism.

Corporate social responsibility (CSR)

A CSR clause in the investment chapter affirms the importance of encouraging enterprises to voluntarily incorporate certain internationally recognized CSR standards, guidelines and principles into companies' internal policies (i.e. those that have been endorsed or are supported by the parties in question).

3. Implications

Given its economic and political importance, the TPP is likely to have significant implications for investment policy-making for both members and non-members. As a major mega-regional agreement covering a wide range of investment-related issues, the TPP could serve as a point of reference in the current debate on the reform of the investment treaty regime, and for the future direction of global investment rule-making.

The TPP investment chapter overlaps with at least 23 BITs and 29 bilateral and regional FTAs, with investment provisions already existing between the TPP parties. This approach provides investors with the possibility of "double insurance", as they can choose the provisions most favourable to them from the TPP and a network of existing bilateral treaties. Further complexity may result in the IIA network and in treaty application.

From an economic perspective, the TPP is likely to have investment creation and consolidation effects within its region. At the same time, it may divert investment of some neighbouring, non-member countries.

II. Regulatory Issues

A. Regulatory Coherence and Cooperation, Technical Barriers to Trade, and Sanitary and Phytosanitary Measures

What's New or Useful?

Coherence in regulatory matters has become a particularly innovative area of focus in regional trade agreement (RTA) negotiations; this is partially explained by the everdecreasing importance of traditional market access issues in OECD economies, whose tariffs are now relatively low. But especially in a world that trades in intermediate goods and tasks, concerns increasingly relate to standards and requirements of behind-the-border regulations, as these may affect critical parts of a supply chain or the embedding of services in the sale of manufactured goods across borders.¹³ Regulatory cooperation that harmonizes or provides mutual recognition of regulation can help to reduce costs for producers and, therefore, consumers of traded goods, and potentially improve regulatory outcomes. However, the extent to which regulation can be aligned depends on participating governments' objectives and approaches.

Increasingly, governments negotiating large RTAs have sought to work out agreements around regulatory standards or to create avenues for cooperation; they do this to reduce the burden of unclear or divergent regulations on international trade and investment in the context of advancing economic integration. They have also sought to preserve as much as possible their discretionary possibilities to regulate on societal choices and to achieve their own domestic policy objectives.¹⁴ Coherence and consultation are also important elements of WTO disciplines on sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT) that many RTAs, including the TPP, build upon.¹⁵ The goal is a move towards international standards with possible, mutual acceptance of conformity assessment procedures for product compliance with technical regulations and standards, and transparency arrangements for smoothing unnecessary regulatory divergence. The remainder of this section assesses innovation in the global trade system across three TPP chapters relevant to regulatory issues.

Regulatory coherence

The TPP's short chapter on regulatory coherence reflects a significant, if not necessarily substantial advance in this area of work. It is significant because even though regulatory coherence has been ongoing for years through soft and hard channels, the TPP establishes a specific chapter on this subject for the first time in a US RTA. Its main focus is a set of obligations to follow good regulatory practice in creating domestic regulation. These obligations are, however, relatively weak, and US stakeholder reaction suggests they are likely to have only a limited positive effect on business within the TPP.¹⁶ The TPP regulatory coherence chapter requires, mostly on non-legally binding terms ("shall endeavour to ensure", Article 25.4), that parties' domestic regulation be built with effective inter-agency coordination and good regulatory practice. This includes the use of impact assessments and technical information, and an examination of alternatives. These obligations are not only relatively weak, but also explicitly excluded in Article 25.11 from the agreement's dispute settlement system, and so cannot be legally enforced using that mechanism. Parties are required by Article 25.3 to notify the scope of applying the obligations in the chapter, and while they are encouraged to achieve "significant coverage" of their domestic regulations, the parties can determine the chapter's scope with respect to their regulations. Where these obligations are inconsistent with any other obligations in the agreement, those other obligations prevail, as found in Article 25.10, and thus further limit the chapter's scope and impact.

Even with these limitations, the chapter provides some advances on previous agreements. By establishing direct and relatively detailed (albeit soft) obligation on parties regarding their domestic regulatory processes, the TPP appears to take a more direct approach to instilling good regulatory practice than recent agreements, for example chapter 21 of the EU-Canada Comprehensive Economic and Trade Agreement (CETA) on regulatory cooperation, or the brief reference in chapter 14 of the EU-Singapore FTA, which focuses on inter-governmental cooperation to build expertise around improved domestic regulationmaking and transparent regulatory practice. It also goes beyond the common transparency provisions of FTAs – for example, chapter 21 of the US-Korea FTA (KORUS) - that often deal primarily with publication and comment periods with respect to regulations related to issues covered by the agreement. In comparison, the TPP's regulatory coherence chapter has a potentially wider scope, as each party can determine which areas of domestic regulation are covered by the chapter; these may include, at least in theory, some areas of regulation not directly related to the agreement. The TPP includes a separate transparency and anticorruption chapter (discussed in Section II.B).

Technical barriers to trade

According to the US International Trade Commission (USITC), some of the commitments in the TPP's chapter on technical barriers to trade feature in existing FTAs undertaken by the parties, while others represent an apparent innovation in the trade policy landscape that speaks to present commercial realities.¹⁷ For instance, when testifying before the USITC, multinational conglomerate GE noted that the TBT chapter could help to facilitate exports of manufactured goods in novel product areas where companies are developing new standards, such as smart electricity grids, which may also play to the advantage of SMEs and other GE parts suppliers.¹⁸

The TBT chapter's Article 8.4 expressly incorporates provisions of the WTO Agreement on Technical Barriers to Trade (TBT agreement), notably those relating to Articles 2 (preparation, adoption and application of technical regulations by central government bodies) and 5 (procedures for assessment of conformity by central government bodies), along with parts of a code of good practice for the preparation, adoption and application of standards, whether by governmental or non-governmental entities (Annex 3).¹⁹ Although this is the bread and butter of addressing technical barriers to trade, and signifying that, to a great extent, the TPP does not represent a substantive departure from multilateral rules, the TBT chapter does go beyond the TBT agreement in some aspects.

Take, for example, international standards, guides and recommendations: both the TPP and the WTO TBT agreement share a thrust towards encouraging regulators to harmonize on international standards, which can be one way to address the costs exporters would otherwise face in meeting diverse standards in countries of import. The TBT chapter goes further than Article 25 and Annex 3 of the TBT agreement (in relation to the identification of international standards, guides and recommendations) by appearing to draw on an accumulated body of decisions, discussions and best practice learning experiences that WTO members have exchanged and shared in the organization's TBT committee over the years. This is reflected in TPP Article 8.5.2 where each party is obligated to apply the Decisions and Recommendations adopted by the WTO Committee on Technical Barriers to Trade Since 1 January 1995 (G/TBT/1/Rev.12) when determining whether an international standard, guide or recommendation should be used as a basis for technical regulation or conformity assessment procedures. While the decisions and recommendations in the multilateral context are intended to ease implementing the TBT agreement, the TPP transforms this work into a binding tool, at least at the regional level. The approach is likely inspired by similar provisions in other FTAs referring to TBT committee decisions for determining international standards, as found in KORUS Article 9.3.

TPP Article 8.5.3 also obliges parties to cooperate with each other, when feasible and appropriate, to ensure that international standards, guides and recommendations that are likely to become the basis for technical regulations and conformity assessment procedures do not create unnecessary obstacles to international trade. This appears to represent a new commitment for all TPP parties, and likely also complements and adds to TBT agreement Articles 2.6 and 5.5. They respectively seek to ensure that WTO members play a full part in the preparation by appropriately standardizing bodies of international standards for products that may be subject to technical regulations, and of guides and recommendations for conformity assessment procedures, in order to aid the push towards regulatory harmonization that can be an important factor in reducing trade obstacles.

Parties agree in Article 8.4 not to use the TPP dispute settlement process for any dispute that exclusively relates to a violation of the TBT agreement provisions incorporated therein. In Article 8.10, parties agree to information exchange procedures regarding any matters arising under the chapter, which shall be confidential and without prejudice to the rights of parties under both the TPP and the WTO, unless those participating in the technical discussions agree otherwise. While this creates potential for an interesting interplay between the multilateral and regional dispute settlement systems, it ultimately suggests the former remains the apex adjudicator. The approach differs somewhat from that taken in CETA Article 4.2.3, where TBT agreement Articles 3, 4, 7, 8 and 9 can be invoked under the regional dispute settlement process,²⁰ in cases where a party considers that another party has not achieved satisfactory results under these.

Efforts are made in TPP Article 8.6 to reduce the number of times a product must be tested to ensure it complies with standards or technical regulations. While conformity assessments are a critical part of ensuring quality and reliable products that conform to given standards or regulations, testing requirements in multiple markets can raise the cost of doing business, potentially acting as a significant trade barrier. TPP parties shall provide national treatment to one another's conformity assessment bodies. In order to do so, parties will apply the same or equivalent procedures or criteria to, for example, accredit, approve or license conformity assessment bodies located in other TPP-parties. This goes beyond the TBT agreement's Article 6.4, where WTO members are encouraged to permit participation of conformity assessment bodies located in the territories of other members in their own conformity assessment procedures, and Article 6.1 that would have members assure that they accept results of conformity assessment procedures undertaken by other members, if consultations determine these are equivalent to their domestic ones. The US Industry Trade Advisory Center (ITAC) welcomed this approach as likely to reduce the cost of testing incurred by exporters, with particular relevance for SMEs.21

Further, the TPP also specifies in Article 8.6.9 that no party shall refuse to accept conformity assessment results because an accreditation body operates in a party's territory that has more than one accreditation body; is a non-governmental body; is domiciled in the territory of a body that does not maintain a procedure for recognizing accreditation bodies (provided that the accreditation body is recognized internationally); does not operate an office in the party's territory; or is a for-profit entity. The level of detail goes beyond TBT agreement Article 9.2, and essentially allows for recognizing, or not discriminating among, different types of conformity assessment actors that may not always be government-based, but are instead private services. The move to include for-profit and nongovernmental conformity assessment and standardssetting bodies within the TPP was also welcomed by ITAC. Generally speaking, these TPP provisions build on and in some cases strengthen approaches found in other recently concluded FTAs. The US FTAs with Peru and Korea represent in a less elaborate form what is probably the closest precursor to the TPP commitment to accord national treatment to accreditation of other parties' conformity assessment bodies. Meanwhile, Article 7 of the agreement establishing the ASEAN-Australia-New Zealand Free Trade Area (AANZFTA) obliges parties to positively consider accepting the results of conformity assessment procedures of other parties. To help ensure costeffectiveness of conformity assessments, parties to the AANZFTA can consider using a list of tools (ranging from

mutual recognition agreements to accreditation) also found in the TPP chapter and other US FTAs. For its part, CETA Article 4.5 obliges parties to follow a detailed protocol on the mutual acceptance of the results of conformity acceptance. In the EU-Singapore FTA Article 4.7, parties pledge to a series of information exchanges to facilitate acceptance of conformity assessment results.

Article 8.7 of the TBT chapter covers transparency and provisions for regulatory revision, including enabling stakeholders to participate in the development of technical regulations, standards and conformity assessment procedures on terms no less favourable than those for domestic constituencies. Parties are obligated to publish all proposals for new technical regulations, conformity assessment procedures, amendments to existing rules and final provisions, preferably by electronic means, and to notify these according to the relevant multilateral TBT agreement articles. Proposals should contain enough information to ensure that interested persons and other parties will be able to determine whether and how their trade interests might be affected. This should allow all those interested to vet and address trade-related concerns before finalizing new measures. The emphasis on opportunities for written comments on proposals from interested persons of the parties, as well as from the parties themselves, moves beyond the requirements found in TBT agreement Article 2.9 on technical regulations, or Article 5.6 on conformity assessment procedures that obliges the allowance of reasonable time for comments between WTO members only.

In general, such provisions should help to boost good regulatory practice across TPP parties. However, most of the TPP's provisions around transparency and regulatory revision can be sourced in some way in pre-existing FTAs,²² implying that the mega-regional pact follows and bolsters an FTA trend to build on or clarify WTO rules. For example, TPP parties should also allow 60 days for comments on draft proposals and, where possible, extend this limit to 90 days, which goes beyond the TBT agreement but is reflected in CETA Article 4.6, KORUS Article 9.6 and the US-Peru FTA Article 7.6.

TPP Article 8.8 establishes time frames for the entry into force of new or altered regulations or conformity assessment procedures, thereby clarifying TBT agreement Articles 2.12 and 5.9 where parties might have had different interpretations. Under TPP Article 8.8, a "reasonable interval" between the publication of altered requirements and entry into force should be a period of not less than six months, except when this would be ineffective in fulfilling the regulation's legitimate objectives. If feasible and appropriate, each party shall try to provide an internal period of more than six months. Parties should also allow a reasonable amount of time for suppliers to demonstrate that their goods conform with relevant requirements. This aspect of the TPP also represents an innovation compared to other recent FTAs, and should help to provide exporters with a greater degree of certainty in light of any regulatory changes that would affect their operations. Further, the TPP is unique among US trade agreements and other recent FTAs by TPP parties, such as JapanAustralia and CETA,²³ for including several sectoral annexes to the TBT chapter, with a view to developing common measures for specific products. These relate to wine and distilled spirits, information and communications technology (ICT) products, pharmaceuticals, cosmetics, medical devices, proprietary formulas for pre-packaged foods and food additives, and organic products. The annexes cover issues such as labelling, product authorization, testing, information exchange and equivalency of technical regulations in specific areas, are detailed and targeted at the technical or regulatory barriers that these sectors might face. As the TBT agreement is general rather than sectoral, the TPP may offer a useful platform for smoothing the specific hurdles that arise in these areas. The annexes should also help to encourage areater regulatory coherence in these sectors across the TPP region. For example, according to ITAC, the wine and distilled annex should make it easier for exporters to comply with various labelling requirements. The US-based Personal Care Products Council has said that the TBT provisions would help reduce costs and facilitate trade, which in practice would be meaningful for SMEs.24

Sanitary and phytosanitary measures

The population of the Asia-Pacific region includes 570 million middle-class consumers, a number anticipated to rise to 3.2 billion by 2030.²⁵ They are likely to become the world's main market for a range of food products, from grains to fruit, vegetables, dairy products and meat.²⁶ SPS regulations applicable to these products are an important part of trade among TPP parties and are covered in the agreement.

The SPS chapter goes beyond WTO provisions and previous US trade agreements in a number of areas. From the perspective of regulatory coherence, three areas two in Article 7.9 and one in Article 7.8 – appear to be particularly important. The first is the provision requiring parties to ensure their SPS measures either conform to international standards or are based on documented and objective scientific evidence that is rationally related to the measures as specified in Article 7.9.2. This provision appears to go further than the general requirement in the WTO SPS agreement that measures be based on international standards, but may be set at a higher (stricter) level if scientifically justified or, simply, if a member chooses a higher level of protection. It also appears to be an innovation on previous FTAs which, on this topic, often simply reiterate parties' obligations under the SPS agreement.²⁷ The core obligation in Article 7.9.2 could, if implemented effectively, substantially reduce the scope for SPS measures to be established for protectionist reasons, rather than reasons backed by scientific evidence of their sanitary or phytosanitary risks. However, this paragraph is carved out of the TPP dispute settlement mechanism, so its potential impact will likely be defined by how it is implemented in each TPP party.

The second area that seems to be an advance concerns the provisions referring to parties' use of risk analysis found in Article 7.9.4 through 7.9.9. These provisions appear to be designed to shape not only how parties undertake assessments of the level of risk posed by imports, but also how parties should define the risk management actions that might be necessary as a result of those assessments, and communicate about risk with stakeholders. These provisions also go beyond the WTO SPS rules in at least two other places. Article 7.9.8 obliges importing parties to provide information in response to requests about the progress of a particular analysis. Article 7.9.6 explicitly requires that parties select a risk management option that is not more trade restrictive than required to achieve their SPS objective, taking into account technical and economic feasibility.

Of the three key components of risk analysis - risk assessment, risk management and risk communication only obligations for risk assessment were included in past US trade agreements.²⁸ Obligations relating to parties' use of risk assessments have been included in recent non-US FTAs, but appear to have been referenced only briefly in the context of SPS; see, for example, CETA Article 5.14. This suggests that the TPP has established wider obligations than in previous agreements to ensure that regulatory approaches to SPS measures are more strongly evidence-based and more consultative, and therefore potentially more coherent. Commentary on the TPP's risk analysis provisions has pointed out that they effectively force an importing party to quickly explain whether it has conducted a risk assessment to back up an SPS measure and to provide the evidence on which the assessment is based, thereby making it much harder for parties to impose arbitrary measures.29

The third area related to regulatory coherence where the SPS chapter appears to have gone beyond previous agreements is in recognizing equivalence between SPS systems. The TPP's SPS chapter includes Article 7.8 which, further to Article 4 of the SPS agreement, requires parties to recognize the equivalence of SPS measures or systems of other TPP parties, "to the extent feasible and appropriate" if the exporting party requests recognition and objectively demonstrates that its measures achieve the same level of protection or have the same effect in achieving the objective as the importing party's measure. This paragraph's forward-looking wording may reflect an advance on previous agreements. CETA Article 5.6, for example, requires importing parties to accept the SPS measure of an exporting party if the latter demonstrates that its measure achieves the same level of SPS protection (as does the EU-Singapore FTA). And, while CETA includes a list of measures already deemed to be equivalent, it does not appear to provide guidance on how equivalence of further measures could be established.

TPP's method of allowing a measure to be recognized as equivalent if it not only meets the same level of protection, but also has the same *effect in achieving the objective* as the importer's measure, could allow for a more flexible and inclusive system of recognition of equivalent SPS regimes. It would also lead to greater regulatory coherence between TPP parties. Interestingly, though, this apparent advance on previous agreements is excluded from the TPP's dispute settlement mechanism, suggesting parties preferred to test the innovation rather than enforce it directly. As a consequence, the stronger the equivalence recognized between TPP parties' systems, the greater the potential detriment to non-TPP parties, if their systems are not as easily recognized as equivalent.

The TPP also expands on the WTO and on recent agreements in other areas less directly related to regulatory coherence. For example, in Article 7.10, it enables importing parties to audit the competent authorities of exporting parties. This new section builds on work undertaken in the WTO and has not been included in previous US FTAs.³⁰ It also appears to provide more detailed and perhaps more consultative requirements than similar provisions around verifications in recent EU agreements, such as Article 5.8 of CETA and Article 5.8 of the EU-Singapore FTA.

Similarly, the TPP sets out new requirements for how parties should conduct import checks, requirements linked to TPP parties' obligations under the trade facilitation agreement.³¹ These requirements have not been included in previous US FTAs and appear to demand more detailed information than has been called for in recent non-US FTAs, such as CETA Article 5.10. With some exceptions for particular provisions, the chapter is subject to the TPP's dispute settlement mechanism, but parties are first obliged to follow a cooperative technical consultation process. Finally, the agreement contains a range of side letters addressing specific bilateral SPS issues. In an interesting additional move towards regulatory coherence, the TPP's environment chapter refers in Article 20.14 to consultations between the environment committee and SPS committee to identify cooperative opportunities to address the threat of invasive alien species.

Implications for Non-TPP Parties: Potential Costs versus Public Goods

As already described, some of the TPP's provisions for regulatory coherence, consultation and cooperation may imply that non-TPP parties face higher costs than TPP parties. For example, this might be the case regarding the TPP's model of mutual recognition of conformity assessment procedures, which removes the costs of duplicated testing and certification procedures for producers in TPP countries.³² The impact of this model on producers outside such an agreement will likely depend on the rules of origin applied: if products from countries outside the agreement are not extended the benefits of the agreement's mutual recognition, they will still face the costs of certifying that their products conform in all parties' markets, and may lose competitiveness vis-àvis the parties' producers. While conformity assessment costs have not been quantified in a systematic manner, several studies indicate that business perceives these to be a relatively significant obstacle to trade. An International Trade Centre business survey of 11 developing and least developed countries, none of which are TPP nations, found that conformity assessment procedures accounted for about 31% of measures regarded as the most burdensome for exporters.33

Further, the TPP, as with other similar agreements involving large markets, leads to a degree of regulatory convergence and mutual recognition of regulatory regimes and requirements (or at least provides signals that parties will strive to do so). Thus, producers outside the agreement could be impacted by providing incentives for companies to locate production in, or source products from companies within, the parties to the agreement.³⁴ This could also affect FDI flows to non-TPP parties in a world of footloose capital and dynamic value chains that are far from static. For example, if the TPP's apparently forward-looking provisions in Article 7.8 succeed in creating stronger, equivalent SPS systems among TPP parties, the greater the potential detriment will be to non-TPP parties if their systems are not as easily recognized as equivalent.

However, given that several of the TPP regulatory elements could be considered as encouraging good regulatory practice more generally, this should confer benefits, in principle, to all trading partners. Where the TPP goes beyond WTO rules could be seen in some instances as a complement to, rather than a re-write of, multilateral provisions. Such is the case, for example, regarding the obligation in Article 8.5.3 to cooperate in formulating international standards to ensure these do not become an unnecessary obstacle to trade. The implication is that working through international standard-setting bodies would not exclude non-TPP parties. Allowing TPP stakeholders to review and comment on a risk analysis, which would reflect the core obligation in Article 7.9 on the use of international standards or scientific evidence to underpin SPS measures, could lead to more evidencebased and transparent decision-making among parties.

The transparency requirements for TPP parties' risk analysis processes could also improve even non-TPP parties' ability to participate in rule-making, depending on how they are interpreted and applied. Under Article 7.9.4, risk analysis should be undertaken "in a manner that is documented and that provides interested persons and other Parties an opportunity to comment, in a manner to be determined by that Party". In other words, parties could, at least in theory, choose to invite comments on their risk analyses from stakeholders in non-TPP parties, which could reflect a real improvement in the overall inclusiveness of TPP parties' SPS regimes.

The direct incorporation of TBT Articles 2 and 5, along with the requirement to notify proposals for technical regulations and conformity assessment procedures using WTO rules, suggest that, in some areas, the TPP usefully underscores multilateral principles aimed at enhancing transparency. Thereby, benefits are conferred on producers in parties and non-parties alike. Although the option for comment on proposals related to technical regulations or conformity assessment procedures is only available to TPP parties or their interested parties, the emphasis on publication and notification of proposals, updates and final rules would help producers in all countries evaluate regulatory provisions relevant to them. Some of the TBT's other provisions could equally be considered as containing a public goods element that adds to existing multilateral arrangements. Ensuring that countries allow a minimum period of six months, where appropriate, between the adoption of new regulations and their entry into force as required in Article 8.8 implies good regulatory practice helpful to producers and suppliers in TPP and non-TPP parties alike.

B. Transparency and Anti-Corruption

What Is It?

The TPP chapter on transparency and anti-corruption seeks to promote new and stronger rules about transparency in trade and investment. It presents new rules to avoid the effects of bribery and corruption on trade, investment and government policies. The provisions ensure that exporters, service suppliers, investors and other stakeholders in TPP have access to information related to all laws, regulations, other trade and investment norms, guarantees and due process rights. Moreover, the parties shall enforce anti-bribery laws, promote rules against conflicts of interests in government, as well as safeguard the full rights of governments to regulate for public health, environmental quality and other public policy targets.

What's New or Different?

Prompt publication and access to information about the law is not new in international trade. TPP provisions are based on the General Agreement on Tariffs and Trade (GATT) transparency principle, encompassing laws, regulations and administrative ruling related to the matters covered in the TPP agreement. Further, under the TPP, each party shall establish or maintain due process rights as judicial, quasi-judicial or administrative tribunals or procedures, for the purpose of prompt review or, if provided, the correction of a final administrative action related to any matter covered by the TPP agreement.

A new aspect of the TPP is that parties must commit to eliminate bribery and corruption in international trade and investment by adopting measures to eliminate them, with the public and private sectors responsible for maintaining integrity in this regard. To achieve these aims, the parties affirm their adherence to the Asia-Pacific Economic Cooperation (APEC) Conduct Principles for Public Officials (2007), agree to encourage the observance of the APEC Code of Conduct for Business: Business Integrity and Transparency Principles for the Private Sector (2007), and shall ratify or accede to the United Nations Convention against Corruption (2003).

For the first time in a trade agreement, each party shall adopt or maintain legislative and other measures as may be necessary to establish criminal offences for bribery and corruption under its law. This concerns matters that affect international trade and investment when committed internationally, by any person subject to its jurisdiction, including: (i) the promise, offering or giving of an undue advantage to a public official or other person entity; (ii) the solicitation or acceptance by a public official of an undue advantage for the official or another person or entity; (iii) the promise, offering or giving to a foreign public official or an official of a public international organization of an undue advantage for the official or another person or entity; and (iv) the aiding or abetting of conspiracy in the commission of any of the offences described in (i) through (iii). Moreover, each party shall adopt or maintain measures consistent with its legal principles to establish the liability of legal

persons for the offences described and ensure that legal persons are held liable for them.

Moreover, the parties shall promote a code of conduct for their public servants and measures to eliminate conflicts of interest, to engage officials against public corruption, and to promote the integrity, honesty and responsibility of public officials.

What Are the Implications?

The TPP's transparency and anti-corruption chapter is the first attempt in the international trading system to introduce measures against corruption. The chapter's provisions boost national efforts to enforce laws against corruption and bribery and encourage transparency. All the matters covered in the chapter may be submitted to dispute settlement provided in the TPP, giving special strength to the objectives foreseen.

The chapter may well serve as a precedent for future trade agreement negotiations. If, for example, similar provisions are adopted by the US and the EU in the Transatlantic Trade and Investment Partnership (TTIP), each may insist that such disciplines be included in their respective preferential agreement negotiations, providing a critical mass as well for possible future WTO discussion.

C. Environment, Fisheries and Labour

The TPP was clinched in the same year that the international community adopted a new 2030 Agenda for Sustainable Development, with an ambitious list of 17 Sustainable Development Goals. It also included a pledge to update the rules on financing for development through the Addis Ababa Action Agenda, and to hammer out a universal agreement on climate change. Stakeholders and civil society within and outside the TPP parties extensively debated and speculated on the TPP's provisions to address environmental and labour issues, both during and following the negotiations.

Such provisions, in general, go beyond narrowly defined trade- and investment-related questions to address the demands of balancing policy priorities. Therefore, the TPP offers insight into how policy-makers are approaching governance in a globalized economy characterized by new international visions for cooperation and a universally declared ambition to pursue sustainable development. Environmental issues abound, from water scarcity to biodiversity threats; the imperative to transition to a lowcarbon economy looms; and mediocre economic growth in most regions is raising anxiety. Recent electoral politics in major economies, including several TPP parties, are also driving heightened scrutiny of the impact of trade and investment agreements on economic performance, environmental concerns and quality of life.

The TPP includes five of the world's 17 "mega-diverse" countries, eight of the world's top-20 fishing nations responsible for about a quarter of global marine catch

and seafood exports, and four of the largest greenhouse gas (GHG) emitters. TPP parties are home to a number of migratory workers, and many face significant labour rights challenges. For example, the majority of Malaysia's 4 million migrant workers – around 40% of the workforce – are engaged in forced labour, while many of the 85,000 migrant workers in Brunei Darussalam are caught in cycles of labour exploitation and debt.³⁵

Broadly speaking, the TPP's environment chapter includes general commitments on promoting mutually supportive trade and environmental policies, and high levels of environmental protection. It has several binding obligations to implement select multilateral environmental agreements (MEAs), and introduces new disciplines on fisheries subsidies. Other provisions cover CSR, voluntary mechanisms to enhance environmental performance, frameworks for cooperation on biodiversity and conservation, as well as efforts on the transition to a lowcarbon economy. It establishes an environment committee to oversee implementation, and its overall obligations can be enforced through the TPP's broader state-to-state dispute settlement arrangements (once a consultation process is exhausted, an approach found in US-led trade agreements since 2007). The consultation process, without subjecting the environmental provisions to broader dispute settlement arrangements, is a common practice in RTAs, whether in chapters or side agreements, including most recently in CETA. Other parts of the TPP make references to environmental and trade obligations, notably incorporating standing exceptions to the multilateral legal norms. For instance, under a chapter on exceptions and general provisions, parties specify that Article XX of the WTO's GATT (1994) is made part of the agreement, as are paragraphs (a), (b), and (c) of Article XIV of the trade body's General Agreement on Trade in Services (GATS). Such references are commonly found in other RTAs.

TPP's labour provisions break new ground in economic integration agreements with respect to coverage and enforceability of workers' rights and employment conditions. TPP countries agree to adopt or maintain statutes, regulations and practices following the four universally recognized core labour standards contained in the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work and its Follow-up of 1998, known as the ILO Declaration. In addition, standards originating in the US 1974 Trade Act³⁶ are extended to all TPP parties as obligations to adopt and maintain law and practices that govern acceptable conditions of work with respect to minimum wages, hours and occupational safety and health. Also, parties agree that it is inappropriate to derogate from or waive these rights in order to encourage trade or investment, and that labour standards should equally not be used for protectionist trade purposes, as stated in paragraph 5 of the ILO Declaration.

A commitment is made to discourage imports linked to forced labour and compulsory child labour, and each party pledges to encourage the voluntary adoption of CSR initiatives on labour issues. Transparency obligations are featured regarding, for example, public awareness of labour laws and public submissions on labour issues; in addition, a cooperation mechanism to enhance opportunities for improving labour standards, as well as a labour dialogue, are included. Similar to the approach in the environment chapter, a labour council will be set up to oversee implementation, and labour consultations can be requested, with the possibility of activating the TPP's dispute settlement mechanism as a last resort. In addition, the US has inked bilateral "consistency plans", subject to the TPP's dispute settlement arrangements but binding for the US and participating nations only (with Vietnam, Malaysia and Brunei Darussalam), adding obligations specific to each country and establishing institutional mechanisms to ensure implementation.

The treatment of environmental and labour issues by a trade deal is by no means unique to the TPP. The 1992 Rio Declaration on Environment and Development upheld that states should promote an open international economic system that would lead to economic growth and sustainable development in all countries. Developed nations, including the US, Canada and Japan, have for decades incorporated labour provisions in their schemes under the Generalized System of Preferences. Following the 1974 Trade Act obligations, the US, in particular, made workers' rights and conditions of employment standards a permanent condition in preferential trade agreements, as in the Caribbean Basin Initiative (Caribbean and Central American countries), the Andean Trade Preference Act of 1991 (Andean countries), the Africa Growth and Opportunity Act of 2000 (African countries), and the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2006.

A similar tradition was followed by the European Commission and preference-granting countries in the OECD group. However, a more comprehensive approach on these matters in the context of RTAs between two or more partners, namely RTAs defined by the WTO, emerged in NAFTA in 1993. This saw the US, Canada and Mexico, all participants in the TPP, sign two side agreements on environmental and labour cooperation, with provisions not subject to dispute settlement. This template, with varied degrees of cooperation and approach but primarily characterized by a lack of full enforceability, remained a feature of bilateral agreements between OECD and non-OECD partners until 2007. At that time, a US bipartisan congressional-executive deal - known as the May 10th Agreement - required fundamental international labour principles and certain environmental commitments to be included in pending trade agreements with Colombia, Panama, Peru and South Korea, with recourse to dispute settlement arrangements.

Some estimates suggest that more than 90% of the TPP environmental provisions can be found in previous US trade deals. Inspiration is also evident in agreements concluded by other Pacific Rim countries and parallels with EU initiatives, which vary in substantive quality.³⁷ According to the OECD's Joint Working Party on Trade and Environment, about 30% of RTAs entering into force in 2010 had substantive environmental provisions, climbing to 50% in 2011 and nearly 70% in 2012.³⁸ To give a flavour of the existing universe, the US, among TPP participants, has a comparatively strong tradition on environmental and

labour provisions in trade deals with enforceability, with Canada and New Zealand usually including a range of provisions in some form as well. Wellington has typically included environmental and labour provisions in separate arrangements or memoranda of understanding in current deals in force, with exceptions being its trade agreement with South Korea and now the TPP. Chile's trade deal with Colombia includes separate environment and labour chapters targeting some key principles and cooperation on matters of mutual interest, while environmental rather than labour issues are targeted in a chapter on cooperation in its trade deal with Malaysia. Both environmental and labour items are included in a cooperation chapter in a trade deal with Turkey.³⁹

While the preamble to the European Free Trade Association-Chile FTA resolves to promote environmental protection and conservation, as well as sustainable development, no other reference to environmental or labour provisions is made. Japan has included some environmental provisions in its previous RTAs, but these usually feature in the preamble and/or provisions on investments, standards and economic cooperation.40 Prior to the TPP, no Japanese RTAs included separate environment or labour chapters. The Japan-Philippines FTA does allow parties to challenge each other, in the event that one appears to have weakened labour laws to encourage investment, and includes the ILO Declaration rights without specific reference to the international instrument itself. The Singapore-India trade agreement incorporates environmental but not labour statements in its preamble. The Australia-Chile FTA includes environmental protection and the promotion of sustainable development in a chapter on cooperation, along with matters of mutual interest and benefit around the concept of decent work, including principles embodied in the ILO Declaration. The more recent Australia-Korea FTA has separate environment and labour chapters, recognizing the importance of MEAs and reaffirming general principles respectively without subjecting these to the dispute settlement mechanism.

Washington and other TPP participants, which include both developed and developing nations, have nonetheless heralded the TPP as particularly "trailblazing" in its effort to tackle urgent environmental challenges, and suggest that it will help to encourage fairer wages and safer work places. According to the Office of the United States Trade Representative (USTR), labour provisions in previous trade deals are "weak in comparison to TPP". Some nongovernmental stakeholders and political actors maintain that little has concretely changed or that the environmental and labour provisions fall short, either in comparison to other RTAs or vis-à-vis governance challenges at hand. This section provides an assessment of where the TPP's environment and labour chapters appear most innovative or different compared to the existing trade rules (bilateral and multilateral based on comparison with some key examples), and considers possible systemic implications for non-members.

Fisheries Subsidies, Marine Governance

The TPP environment chapter contains the first disciplines on fisheries subsidies in any free trade agreement. Article 20.16.5 states that no party shall grant or maintain subsidies for fishing that negatively affect fish stocks that are in an overfished condition, or provide subsidies to any fishing vessel engaged in illegal, unreported and unregulated (IUU) fishing while listed by a flag state or relevant regional fisheries management organization. Parties will have three years to phase out non-conforming subsidies linked to stocks in an overfished condition after the deal's entry into force, with an additional two years permitted for Vietnam, as well as a best-endeavour commitment to refrain from introducing new or extending other fisheries subsidies that contribute to overcapacity and overfishing. Although subsidies are difficult to assess given the dearth of international data up to this point, some estimates put global fisheries subsidies at US\$ 35 billion in 2009 dollars, with capacity-enhancing subsidies that can exacerbate overfishing accounting for some US\$ 20 billion.⁴¹ Landings from IUU fishing are thought to amount to US\$ 10-24 billion per year, undermining national and regional efforts to manage fisheries sustainability and, in some instances, threatening local food supply.42

The environment chapter also includes an obligation for TPP parties to notify fisheries subsidies (within the meaning of Article 1.1 and 2 of the WTO Agreement on Subsidies and Countervailing Measures [SCM]) within one year from the deal's activation and every two years thereafter. Parties should provide specific information on these subsidies as detailed by Article 25.3 of the SCM agreement, including form, support per unit or total annual amount pledged, policy objective, duration and statistical data, to allow to assess the subsidy's trade effects. The TPP outlines additional information to be provided, to the extent possible, beyond the WTO notification template, such as the subsidy programme name, legal authority, status of fish stock, total imports and exports per species, as well as other relevant information (in particular fuel subsidies). The inclusion of the latter is especially significant, as these are considered the most harmful in contributing to overfishing and likely receive the largest amount of money compared to other activities.43

Disciplines on fisheries subsidies have been under discussion at the WTO since 2001, but despite a resurgence of interest in late 2015, no agreement has been reached to date.⁴⁴ The TPP rules could serve as inspiration for the so-far unsuccessful multilateral talks. This may be even more the case considering the group includes a number of significant fish producing and consuming nations. Several TPP parties, including the US, Peru, Japan, Chile and Vietnam, are some of the largest marinecapture fish producers in the world. Japan and the US are top importers of fish products, while the US also comes in as one of the largest exporters alongside Vietnam, Chile and Canada.⁴⁵ Japan is among the biggest subsidizers.⁴⁶ Further, by addressing subsidies among a select group of countries, the deal puts to bed the traditional trade logic that subsidies can only be addressed multilaterally. By adopting plurilateral subsidy disciplines, TPP parties have

essentially agreed to allow non-parties to free ride on any potential competitiveness effects of the parties' fisheries subsidy reform, including other large subsidizers such as China, Chinese Taipei and Russia.⁴⁷ While the multilateral option will continue to remain the most optimal avenue for tackling environmentally damaging subsidies in terms of coverage and competitiveness, the TPP demonstrates that political leeway exists for bottom-up reforms. The effectiveness of these disciplines in tackling overfishing and illegal activity will have to be assessed in due course, and implementation will be critical in this respect. Parties should have an extra incentive to see commitments through, as the obligations in the TPP environment chapter are subject to the deal's broader state-to-state dispute settlement arrangements.

In what appears to be another innovation and a complement to the subsidy efforts, TPP parties are each obliged to operate fisheries management systems according to a list of sustainable objectives. These include preventing overfishing and capacity, reducing by-catch of non-target species and promoting the recovery of overfished stocks (a selection of international instruments on which to base these management efforts are detailed in a footnote). Other trade deals that have addressed fisheries have typically focused more on international or regional cooperation or collaboration around fishing issues, without explicitly linking this back to obligations for domestic action; such deals are primarily EU-led but also involve TPP nations, such as Article 13.8 of the EU-Singapore FTA, Article 24.11 of CETA and Article 25 of the EU-Chile FTA. Additional commitments are outlined for parties to promote the long-term conservation of sharks, marine turtles, seabirds and marine mammals. A mention of these species is not found in other headline RTAs, although various levels of protection are afforded for some through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).⁴⁸ The TPP thus expands responsibility for international conservation for non-CITESlisted marine species.

The TPP also obliges each member to support efforts to tackle IUU fishing practices, including by cooperating with other parties and boosting monitoring, control, surveillance, compliance and enforcement systems, supported by a parallel obligation to improve international cooperation in this regard. This amalgamates and builds on references found in other trade deals, for example the New Zealand-Korea FTA's dedicated chapter on agriculture, forestry and fisheries that pledges cooperation in relation to IUU, and CETA Article 24.11, among others. Some assessments have suggested that requiring TPP parties to adopt "measures to deter" vessels engaged in IUU activity or transhipment at sea renders the provision weaker than if parties were directly required "to deter", because there is no guarantee the measure needs to be particularly "effective", as seen in EU-Singapore FTA Article 13.8(b).49 Further, in contrast to the EU-Singapore deal, for example, TPP parties are under no direct obligation to uphold the principles of the Food and Agriculture Organization of the United Nations' (FAO) 2009 Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing, although they do recognize its importance.⁵⁰ One novel

provision does require parties to provide other parties, to the extent possible, with the opportunity to comment on proposed measures designed to prevent trade in fisheries products stemming from illegal activities. This could prove a useful hook for TPP nations concerned about the development of a diversity of unilateral IUU measures within the group and potential trade impacts linked to difficulties complying with a variety of measures.

Meeting Environmental Commitments

The TPP includes general language seen in other RTAs acknowledging the role of MEAs in protecting the environment. As in the US-Colombia and KORUS trade deals, for example, TPP parties recognize that respective implementation of MEAs is critical to achieving the agreements' environmental objectives. The TPP adds an affirmation to commit to implement MEAs to which each country is party – a provision, some have argued, that adds teeth to global environmental governance efforts – although this is also found in CETA and the EU-Korea deal, albeit not subject to the general dispute settlement mechanisms.

Some have noted the TPP's different treatment of specific MEAs. The May 10th Agreement required seven core MEAs be included in US trade deals. The TPP, by contrast, is limited to the Montreal Protocol on Substances that Deplete the Ozone Layer, the International Convention for the Prevention of Pollution from Ships (MARPOL) and CITES. In the case of obligations to take measures regarding ozone-depleting substances in Article 20.5 and marine pollution in Article 20.6, parties are to be deemed in compliance if they simply maintain, or improve upon, existing Montreal or MARPOL implementation legislation listed in an annex to the environment chapter. On the one hand, this approach could provide parties with more certainty than previous RTAs regarding how the dispute settlement chapter would be applied to these environmental obligations. On the other hand, some critics have expressed disappointment that the TPP does not include the full quota of May 10th-mandated MEAs, and shuns others such as the Convention on Biological Diversity.51

The CITES obligation in Article 20.17.2 does not include the same compliance annex. Parties are instead required to adopt, maintain and implement laws to satisfy commitments, an approach already found in other RTAs. Interestingly, while CITES is limited to certain species,⁵² Article 20.17 contains additional provisions pledging to promote conservation and generally combat illegal trade in wild fauna and flora. With this goal in mind, parties shall exchange information on illegal wildlife trade, undertake joint activities, take appropriate conservation measures, strengthen institutional frameworks to promote forest management and work with non-governmental entities. TPP parties are also obliged in Article 20.17.5 to take measures, including sanctions, penalties or other effective measures, to combat illegal wildlife trade. These commitments appear to be stronger than those in other RTAs and could prove effective in clamping down on voracious global wildlife trafficking (in which TPP nations are implicated).⁵³ This is limited to one type of illegal trade, while other deals, such as the US-Peru FTA, include a stronger set of obligations in a detailed annex on forest sector governance, under which the US can detain Peruvian timber shipments until their legality can be verified. The EU-Singapore deal and CETA include relatively soft undertakings to facilitate the prevention of illegal trade in fish and timber.

Scaling Up Clean Energy

Some critics have lamented the absence of the words "climate change"⁵⁴ in the TPP's environment chapter as a significant setback and a shortcoming when compared to some other trade deals.⁵⁵ Notwithstanding the opportunities missed,⁵⁶ parts of the agreement can likely be relevant for clean energy growth and development. For example, Article 20.15.2 obliges parties to cooperate on areas of interest in the transition to a low-emission and resilient economy, including around market and nonmarket mechanisms. In theory, this language could be used as grounds for a regional carbon market or some form of carbon pricing club. Nothing else in the agreement appears to hinder such a development, even if it currently remains a political long shot, and much technical work would be needed.⁵⁷ At the multilateral level, the UN Framework Convention on Climate Change requires that parties using "internationally transferred mitigation outcomes" (ITMOs)⁵⁸ for the purpose of meeting national climate action plans apply robust accounting to avoid double counting, consistent with guidance developed under the deal.

Article 20.18 of the environment chapter recognizes the importance of trade and investment in environmental goods and services as a means of improving environmental and economic performance and addressing global challenges. While this alone does not appear to provide much substantive advance on agreements undertaken by the 28-nation EU with partners (with a more specific focus on clean energy goods⁵⁹), of most interest is a commitment by all TPP parties to eliminate tariffs on environmentally beneficial products and technologies, such as solar panels, wind turbines, waste water treatment systems, air pollution control equipment, and air and water quality analysers, according to USTR.⁶⁰ The elimination aspect likely extends a voluntary effort by all TPP parties under the APEC forum to facilitate trade in environmental goods and services.⁶¹ APEC members have agreed to cut applied tariffs to 5% or less on a list of environment goods contained under 54 product categories, including solar products, wind turbines and certain key parts, by the end of 2015.62 However, bound tariffs under the APEC initiative remain relatively high for some countries, underscoring the importance of trade-liberalizing commitments in the TPP. A group of 17 WTO members, including six TPP parties, are using the APEC pledge as a starting point by negotiating a binding, tariff-cutting open and plurilateral Environmental Goods Agreement (EGA) that will include items relevant to clean energy. Participants have broadly focused on some 350 potential tariff lines, with the aim of concluding negotiations ahead of the G20's Leaders Summit in Hangzhou, China, in September 2016.63 The TPP's focus on eliminating select environmental goods could potentially smooth the way for those not already participating in the EGA to join it,

namely Malaysia, Mexico, Peru, Vietnam, Chile and Brunei Darussalam.⁶⁴

Notably, the TPP treats environmental goods and services as equal priorities, in contrast to the APEC and EGA initiatives, where the sequencing has been goods now, services next, if at all. TPP parties will look to address any potential barriers to trade in environmental goods and services that may be identified by the group, through the environment committee and in conjunction with other relevant committees established by the agreement. While goods and services are knit together in other RTAs, for example Article 24.9 of CETA, Article 13.11 of the EU-Singapore FTA and Article 13.6 of the EU-Korea FTA, the TPP's size implies a significant extension of this approach. APEC members agreed to launch a multiyear Environmental Services Action Plan⁶⁵ in February 2016 to help lower associated regulatory and trade policy barriers. In the EGA context, some participants have pushed for parallel liberalizing of environmental services, while others see this best addressed through negotiating a separate plurilateral trade in services agreement. Several are considering featuring a built-in agenda on liberalizing services and on non-tariff barriers (NTBs) as part of the EGA's institutional arrangements.66

The TPP's broader commitments to reduce barriers on importing services could also provide a useful boost to the scaling-up of clean energy. This is particularly relevant given the "servicification" of the trade in environmental goods, with a number of indispensable services delivered before, after and during the delivery of a specific item.⁶⁷ For example, Malaysia has agreed to reduce trade barriers to environmental services, while Vietnam will reduce those related to engineering services, scientific and technical consulting services, construction and the environment.68 An annex on professional services in the cross-border services chapter will set up a committee to help parties look at ways to smooth equivalence requirements for gualifications and accreditations. This could facilitate expanded trade in professional services, with potential implications for environmental engineers and clean energy specialists, among others relevant to building a low-carbon economy.69

The TPP's environment committee will consider issues identified as potential NTBs to trade in environmental goods and services. In the clean energy sector, NTBs can include local content requirements, accreditation procedures for standards, or conformity assessments for minimum health and safety standards if designed or applied in a way that is unduly burdensome.⁷⁰ The TPP's chapter on TBT also includes provisions that may be relevant for clean energy products. TPP parties shall provide national treatment to one another's conformity assessment bodies; that is, testing and certification performed by another party's qualified conformity assessment body will be accepted as confirmation that its products, services or systems meet requirements of the other party. As already noted, this goes beyond the WTO's TBT agreement.

Voluntary Measures

Under Article 20.11 of the environment chapter, TPP parties commit to encouraging the use of flexible and voluntary mechanisms, including market-based incentives, to enhance environmental performance. This could cover business-to-consumer mechanisms, such as ecolabels based on environmental performance, as well as business-to-business standards. In what appears to be a step beyond these, and although this encouragement reflects provisions in other RTAs,71 TPP parties should also encourage private-sector entities, as well as nongovernmental organizations that develop voluntary mechanisms for promoting products based on their environmental qualities, to ensure those mechanisms are truthful: are based on scientific information, relevant international standards or guidelines; promote competition and innovation; and do not discriminate between products on the basis of origin. Some other RTAs would see parties refer to relevant internationally accepted principles, standards or guidelines when promoting voluntary or private efforts, but do not contain such detailed criteria for their development (although it should also be noted that the TPP pledge is not a hard obligation due to the use of "should").

The TPP provision complements the obligation in Article 4 of the TBT agreement for WTO members to ensure that non-governmental standardizing bodies follow the TBT code of good practice related to standard setting, which outlines similar principles regarding the use of international standards and non-discrimination. This TPP paragraph arguably reinforces the view that governments should exercise a supervisory role over environmental qualitybased marketing tools. It also builds on efforts by the Group of Seven (G7) around responsible supply chains. A leaders' declaration from 8 June 2015 encourages enterprises to implement due diligence procedures, and welcomes initiatives to promote appropriate, impartial social and environmental product labels. Criteria for these are again not included, but in contrast to the TPP pledges, they were made to support SMEs, which may have particular difficulties with supply chain management.72

The use of voluntary measures to improve environmental performance is likely to continue to increase in the future as new, greener business models become mainstream, complemented by growing awareness of environmental imperatives among consumers. Voluntary measures are being used to help tackle climate change, such as information campaigns, preferential placement of low-carbon products or supply chain procurement requirements, with varying degrees of effectiveness.73 While significant space exists to enact most voluntary and non-government-driven measures (as they do not generally fall foul of WTO rules), some do sit within a grey zone, depending on their formulation. How "lower-carbon products" are identified and presented may be of concern in the climate context. TPP Article 20.11.3 could be seen as an effort to minimize risks that these are misleading, trade distorting, or intentionally or unintentionally discriminating against some producers and countries. Further, promoting competition and innovation is particularly important in the

Digital-Environment Solutions

As discussed below in detail, a major innovation in the TPP overall is in digital trade. Provisions enable governments and firms in TPP countries to operate big data and cognitive systems to address negative environmental externalities and undertake collaborative environmental efforts. Major ICT firms, such as IBM, already work with governments on solutions that contribute to smarter management of health, education, trafficair quality systems, pollution and energy efficiency.⁷⁴ Effective transborder data transmission and associated infrastructure are deemed essential in green economy advances for optimizing value chains, distribution and consumption, including demand for energy and materials.⁷⁵ Such systems are also increasingly critical to building mechanisms for early warning around storms or floods, and managing climate risk through insurance services.⁷⁶

Provisions concerning data transmission in the TPP may prove useful to firms looking to undertake joint environmental programmes or reduce emissions. They may also help firms to bolster and complement the environment chapter's commitment to cooperate on moving to the low-carbon economy, instilling corporate social responsibility, and sharing information and expertise voluntarily to enhance environmental performance.⁷⁷ The OECD has recommended bridging gaps between ICT, climate, environment, energy experts and policy-makers.⁷⁸ The TPP does not explicitly address this challenge, but in making headway on digital-trade rules that go well beyond WTO provisions, the door might be opened to future collaboration around trade, the digital economy and sustainable development.

Labour Rights⁷⁹

Following NAFTA, the US negotiated RTAs with Bahrain, Central America, the Dominican Republic, Jordan, Morocco and Oman, as well as Chile, Australia and Singapore – the latter three now TPP-participating countries – that incorporated labour principles from the ILO Declaration, but only as a soft commitment. The May 10th Agreement transformed this trend into an enforceable approach, and the TPP continues the tradition in Article 19.3. Further, provisions in TPP Article 19.3.2 represent a substantive innovation compared with other US RTAs by extending obligations from the 1974 Trade Act on laws governing minimum wages, hours of work and occupational safety and health, in addition to the four core conventions covered in the ILO Declaration. The significance of the TPP's extended coverage of international obligations on working conditions is underscored by only Australia, Chile, and Japan being party to the 1970 ILO Minimum Wage Fixing Convention (No.131). This implies that the TPP may be among the only international obligations that the other nine parties have on this issue, and is certainly the most enforceable technically. A Canada-Chile trade agreement includes an annex with

"guiding principles" that parties should try to promote in their domestic laws, including minimum employment standards.⁸⁰ A new addition in the TPP is the obligation not to waive or derogate from fundamental labour rights in the context of special trade or customs areas found in Article 19.4(b).

To date, trade agreements by other TPP parties, such as Australia and New Zealand, have not made labour provisions binding through general dispute settlement processes. By comparison, EU deals take a different route towards a somewhat similar coverage, but also with no enforceability. For instance, CETA also refers explicitly to the objectives of the ILO's Decent Work Agenda, and the EU-Singapore FTA pledges to make "continued and sustained" efforts towards ratifying and effectively implementing fundamental ILO conventions.

The bilateral implementation plans between the US and Vietnam, Malaysia and Brunei Darussalam, which largely concern commitments by the latter three countries to address certain labour issues, are another important TPP innovation and could add to international aspirations of promoting decent work for all. Although the US-Colombia FTA includes an action plan on labour rights, commentators have noted that this does not appear to be linked to any enforcement mechanism, and in most cases contains time-delimited obligations.⁸¹ By contrast, the US's TPP bilateral implementation plans will be subject to the dispute settlement mechanism, and some commitments have specific time horizons. For example, Vietnam is given five years to ensure the right of workers to form and operate autonomous grass-roots unions, while other legal reforms should be in place before the TPP's entry into force. Independent experts operating legally in the country will now be allowed to carry out research studies in sectors identified as using forced or child labour and to publicly release findings. Vietnam will also take action to ensure its drug rehabilitation centres are medically consistent with international standards. From 2000 to 2010, over 300,000 people were detained in the country's drug detention centre, where compulsory labour for little or no pay serves as rehabilitation.⁸² An independent labour expert committee will also be established to monitor the plan's implementation. While the recourse to international experts for periodic assessment is common in the ILO, no RTA (until the TPP) appears to have employed ongoing independent monitoring for labour obligations.

Meanwhile, Malaysia commits to fully implement domestic provisions that will allow trafficking victims to travel, work and reside outside government facilities, including while under protection orders. Kuala Lumpur will also increase protections, including those related to the withholding of workers' passports, recruitment fees and practices, contract substitution, decent housing and freedom of movement, and will remove restrictions on union formation and strikes. Brunei Darussalam, which recently joined the ILO, commits to additional reforms preventing restrictions and interference in union activities, and strengthens protections against child and forced labour. The country will also implement a minimum wage for the first time and ensure protection against employment discrimination. A government-to-government review mechanism will oversee the implementation of its plan for at least seven years.

TPP Article 19.6 requires parties to "discourage" imports of goods made by forced labour or forced child labour, using initiatives when appropriate. These efforts must not, however, be inconsistent with obligations under other trade agreements or the WTO. Although the provision does not explicitly prohibit imports linked to forced labour, the provision offers an interesting addition compared to other RTAs.

Compared to the WTO, the inclusion of binding provisions linking labour obligations to trade commitments is a substantive innovation, particularly in light of the politically charged and discordant history of efforts on a "social clause" elsewhere in the global trade and investment architecture. For instance, WTO members decided against incorporating labour provisions into the global trade body's acquis at the 1996 Singapore ministerial meeting. Supporters of labour-trade linkages argue that adherence to core labour principles in trade deals is necessary to prevent a "race to the bottom", protecting workers from weak legislation or conditions, which is relevant as production and investment are becoming increasingly unrestricted. Those more wary of this link point to risks that labour provisions could be used for protectionist purposes, threatening comparative advantages in lower-wage labour, foreign investment and economic development. Following the Singapore disagreements and a call to the ILO from WTO members to step up its competence on these issues, the ILO Declaration identified a set of international labour principles without addressing technical requirements. Acknowledging criticisms of the labour chapter,⁸³ the TPP nonetheless appears to extend and build on these international labour principles in some core areas, with the potential for capacity building for developing-country participants.

Implications for Outsiders

The TPP's wildlife trade and conservation elements, particularly Article 20.17.5, have implications for businesses based in non-TPP nations and involved in product supply chains derived from natural resources that are at risk of illegal exploitation. TPP governments may begin to require evidence from domestic businesses that their imports, or trans-shipments, of wild fauna and flora are sourced legally. The extent of the additional burden for TPP companies and non-TPP exporters will depend on how different governments implement the obligation on top of existing regulations. Either way, the provision sends a clear signal to value chains, including those in TPP countries, that traders may be required to verify the legality of the wildlifebased resources they handle. This may prove difficult given the long and complex supply chains for some natural resources, such as timber and fish, where parts and origin are not readily identifiable. Issues of traceability and verification in combating wildlife trade are moving up on the international agenda, however, with the Seventeenth Conference of the Parties to CITES (COP17) due to consider establishing a working group on traceability systems. Potential measures taken by TPP parties, as well

as business adherence to such disciplines, may add to the learning and international conversation on this front.⁸⁴

Fisheries value chains are highly complex, heterogeneous and globalized, making forecasts on potential impacts for outsiders challenging and a topic meriting more detailed study. In general, the entire global ocean system will benefit if the TPP marine governance provisions are implemented effectively and contribute to parties' improved management of either resources within their exclusive economic zone (EEZ) or their fishing vessels' behaviour. Countries benefiting the most in this scenario would likely have EEZs most closely connected to compliant TPP parties because they are either adjacent to them or share fish stocks. Further, to the extent that the agreement could lead to TPP parties effectively adopting and enforcing much more stringent fisheries management systems, non-TPP parties with vessels licensed to fish in TPP-party waters may find their vessels subject to more stringent regulation, with perhaps greater costs. If, as part of the management system, the catch levels are effectively capped so that fishers cannot cover additional costs with additional catch (at least in the short term), they may seek to pass on these additional costs along the value chain. This may result in a more expensive final product if the value chain is highly integrated; if the value chain is more diffuse, it may result in someone losing profits along the way. If the fishers cannot pass the costs on, they may decide to move their operations to other more profitable waters and their corresponding ports and processing industries, essentially shifting parts of the value chain. Alternatively, the non-TPP fishers could decide to absorb the additional costs and stay in the TPP fishery, in the hope of being granted larger catch limits once the fisheries management system leads to healthier stocks.

Regarding the TPP's fisheries subsidies provisions, non-TPP parties could benefit competitively either at the expense of TPP fisheries or alongside them. In the case of the former, non-TPP fishers that compete with TPP fishers for access to a shared overfished stock may be at a competitive advantage if they continue to receive subsidies while a TPP government stops subsidizing its fishers of that stock, pursuant to Article 20.16.5. Thus, if they are able to fish more of the stock, they may end up with more market share at the beginning of the value chain, though this would be economically detrimental to all fishers in the long run. More broadly, non-TPP fishers that compete with the TPP vessels' catch at any point along the value chain may be at a competitive advantage if TPP party vessels see their subsidies cut, making their product more expensive. Participation in parts of some value chains for fish could thus shift from TPP fish producers to non-TPP producers. Both groups will benefit in the long run if subsidy cuts and joint fisheries management contribute to improvements in the state of over-fished fish stocks shared between TPP and non-TPP parties, and if the resource is healthier and catch levels are increased. Depending on how each industry's value chains are structured, increased catches from healthier shared stocks could contribute to more volume, and thus more value, being captured to varying degrees by processors, marketers, and wholesale or retail actors in non-TPP parties.

Legal non-TPP fishers will also benefit alongside legal TPP fishers from IUU-listed vessels being denied subsidies from TPP parties. Businesses in non-TPP countries may be undermined by illegal operations directly through flows of cheaper illegal fish to markets, and indirectly by over-exploitation of fish stocks. To the extent that this closes down IUU fishing, legal operators in both TPP and non-TPP nations would presumably benefit from greater market share. Moreover, value chains will be more "clean" of illegal fish, which could strengthen the effectiveness of traceability and systems that document catches. Legal fishers from non-TPP parties will probably also benefit if TPP parties take some of the actions listed to combat IUU fishing. From a global value chain (GVC) perspective, the most relevant elements are Article 20.16.13 on improving international cooperation on IUU. Article 20.16.14(b)(ii) on addressing trans-shipment at sea, and Article 20.16.14(c) on "port state measures". Addressing trans-shipment could help to improve the transparency and verifiability of fish supply chains, particularly from harvest to processor, while port state measures would help to ensure IUU products are not introduced into legal supply chains.

The TPP's emphasis on voluntary mechanisms to enhance environmental performance, along with encouraging CSR for the environment and labour, could be an even greater incentive for private actors to pursue high standards in these areas (with implications for non-TPP exporters). The top-ten exporters to the TPP group in 2014, in descending order, were China, the EU (far in the lead in terms of export value), South Korea, Hong Kong, Thailand, India, Indonesia, Switzerland, Brazil and Qatar.85 Business-to-business private standards can be important for market access, particularly when they are emphasized by lead firms in GVCs or by major retail operators. Voluntary standards may become de facto mandatory if they are required for links with supply chains, and if consumer retailers have to be maintained. An effort by five international organizations⁸⁶ through the nascent UN Forum on Sustainability Standards may be useful in helping non-TPP stakeholders become better informed on relevant developments. Meanwhile, the TPP's mandatory labour provisions help to make trade and investment conditional to abiding by certain international principles, along with the obligation to maintain acceptable domestic labour laws. Those looking to join the TPP will need to assess current adherence to these principles and consider requests for technical capacity building where gaps are identified.

On the other side, labour or environmental-standards businesses that export from TPP countries to TPP or third markets may lose price-based competitiveness visà-vis exporters from non-TPP parties that do not face the same standards. However, among GVCs, price loses its monopoly status for determining competition. It is increasingly replaced by countries' capability to offer rules, institutional arrangements and preferential conditions to enable information sharing, communication up and down the chain, as well as collaborative innovation and entrepreneurship.⁸⁷ In such an environment, TPP provisions could help to form or enhance competitive advantages and conditions for TPP firms to participate in GVCs inside and outside the group's aggregate jurisdiction.

III. New Rules for the Digital Economy

Given the overarching reach of digital trade, conditions affecting it can be found in several parts of the TPP, such as the services-related chapters on cross-border trade in services, financial services and temporary entry for business persons, as well as intellectual property, investment, telecommunications and electronic commerce. Of course, the provisions relating to goods, including market access and regulatory provisions, are also likely to affect internet-based commerce, since international supply chains comprise both goods and services.

Of these, the provisions relating to telecommunications are very significant because they affect the operational conditions for accessing and using the network to provide internet services. The most evident impact, however, is through the provisions relating to electronic commerce, which substantively build on and add to the digital traderelated issues covered by existing preferential trade agreements and discussions in WTO on e-commerce.⁸⁸

The TPP's e-commerce section (Chapter 14) contains a number of important new provisions intended to facilitate use of this very important sector.⁸⁹ The successful conclusion of the TPP is important in and of itself because negotiations on e-commerce at the WTO have languished, becoming practically inactive for over a decade without notable progress. In this context, the TPP has concluded negotiations on several issues that are being addressed under other negotiations, for instance the Trade in Services Agreement (TiSA), whose 23 members include eight from the TPP.⁹⁰ TPP results and TiSA e-commerce discussions overlap in several areas where higher disciplines are likely to be developed in TiSA.⁹¹ These include movement of information or cross-border information flows, online consumer protection, personal information protection, unsolicited commercial electronic communications, transfer of access to source code, interoperability, open networks, network access and use, local infrastructure/ local presence, electronic authentication and electronic signatures, customs duties on electronic deliveries, international cooperation and security exceptions. With two-thirds of TPP members at the TiSA table, the new disciplines agreed within the TPP are likely to pave the way for higher disciplines in TiSA and future negotiations.

Only those TPP e-commerce provisions that involve binding commitments from signatories are reviewed here. These provisions are anticipated to have the most farreaching impact, either in their own right or at least in terms of their setting benchmarks for future rule-making in other negotiating fora (e.g. in particular TiSA, whose members include the US and the EU; and the TTIP, which is currently being negotiated between the US and the EU), and having possible effects on other FTAs.

Much like the national treatment obligations set out in GATT Article III,⁹² TPP provisions on e-commerce do not apply to government procurement, and are addressed

in a separate chapter of the TPP agreement. In addition, specific reference and importance is given in Chapter 14 to the provisions of other TPP chapters, particularly those on investment, cross-border trade in services, and financial services, in determining the scope of the e-commerce provisions.⁹³ Notwithstanding these caveats, the TPP does extend the framework of disciplines for several issues relating to digital trade, and indicates an important possible way forward for several topics currently being discussed in various plurilateral and multilateral fora.⁹⁴ Even if the disciplines in these areas evolve and change over time, TPP has provided a basis for future discussions on digital trade.

Customs Duties

The TPP codifies a long-standing negotiating objective in the WTO e-commerce negotiations, namely a permanent ban on imposing customs duties on electronic transmissions; this includes content transmitted electronically between a person of one party and a person of another party. WTO members provisionally agreed the ban on customs duties on electronic transmissions for the first time in 1998.95 and have since re-examined and extended it at each WTO ministerial conference. The TPP will entrench this established practice at the WTO for TPP signatories, thus facilitating trade in downloadable products such as software, e-books, music, movies or other digital media (computer games). Their scope is increasing with new products emerging through advances in technology, evolving business practices and increasing tradability of several services.96 This provision is also in line with a significant market opening in the goods sector, combined with agreement on trade facilitation.

Non-Discriminatory Treatment of Digital Products

The TPP e-commerce chapter comprises comprehensive equal treatment obligations for digital products that were "created, produced, published, contracted for, commissioned or first made available on commercial terms in the territory of another Party", and for digital products "of which the author, performer, producer, developer or owner is a person of another Party". This provision does not provide legal cover for digital products that violate copyright or other intellectual property rights, and does not apply to subsidies, grants and broadcasting - a commercially important carveout, since some current and potentially future signatories have screen quotas in place. These are deliberately intended to nurture and protect domestic production of films and television content from having to compete directly with Hollywood. Nonetheless, this provision provides an important generic extension of the principle of non-discrimination to e-commerce, thus creating a strong basis for a level playing field among TPP signatories.

Protection of Personal Information

The TPP recognizes the importance of this issue and the reality that different parties have varying approaches for protecting their citizens' personal information. The agreement mandates that parties adopt data privacy legislation to protect the information of users of electronic commerce. This issue is particularly relevant in the context of other commitments discussed immediately below, namely the free flow of information. Perhaps the biggest constraint on the cross-border flow of personal information is the differing national standards for protecting personal information, and the failure of different economies to recognize the equivalence of similar but not identical data privacy regimes in other economies.⁹⁷ The e-commerce chapter contains best-endeavour obligations for signatories to apply data privacy laws in a non-discriminatory manner and promote compatibility between different parties' data privacy regimes.

This issue could potentially create obstacles for established practices of TPP non-members, many of whom rely heavily on digital trade for their international economic transactions and for developing new business opportunities. It would be worthwhile to create a broad framework of policy steps for non-members to take to ensure this requirement does not pose a major non-tariff barrier to their economic prospects. Moreover, particularly in this area as well as in efforts within the TPP for regulatory coherence among its signatories, special channels of information and communication could be created for non-signatories as well. This would help develop systems that promote the objective, as emphasized in the TPP, of achieving compatible regulatory regimes on privacy issues for all concerned.⁹⁸

Free Flow of Information

The TPP contains a binding commitment that signatories allow the cross-border flow of information by electronic means for business purposes. However, this commitment is subject to exceptions when restrictions are imposed for a "legitimate public policy objective", as long as such restrictions are (i) not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade; and (ii) not more restrictive than those required to achieve the objective being pursued (the "proportionality" principle). This provision is likely to be one of the most important in the entire e-commerce chapter. It will also have farreaching systemic implications as a principle governing international e-commerce in the future, because most businesses today, even brick-and-mortar companies such as Walmart or The Home Depot, see themselves as internet companies, given that they move a lot of product via their online sales portals.⁹⁹ Additionally, almost all industries move data as part of normal business operations and GVCs. Manufacturing enterprises, for example, move employee, customer and technical data on a regular and necessary basis. The same would apply to civil society organizations that operate across borders, among numerous other examples.

A large range of innovative developments in digital business opportunities and practices has meant a huge increase in value creation through the flow of digital information for most enterprises. Moreover, and according to the McKinsey Global Institute, three-fourths of the value created by the internet is in traditional industries;¹⁰⁰ this is, of course, in addition to "established" internet companies such as Amazon and eBay. Online retail sales are increasing rapidly worldwide, and any restriction on access to websites or the transfer of information online is seen as particularly damaging to this fast-growing segment of international commerce.¹⁰¹ Although the TPP's relevant provision does not guarantee the free flow of data internationally, it would potentially mean that measures which effectively block access to certain websites in a party would be actionable under the TPP's dispute settlement provisions.

The TPP's provision facilitates the essential requirement of free flow of information for business purposes (with a major impact on digital and other trade), while balancing it with a need to achieve legitimate public policy objectives that may require restrictions on such free flow. The important discipline on restrictions lies in the conditions that are similar to those applicable to policy restrictions allowed under the WTO framework. It would be useful to consider some examples of legitimate policy objectives; this could be seen from some key objectives emphasized in the e-commerce chapter itself, such as security (including cybersecurity and security in electronic communications), confidentiality of communications, unsolicited commercial electronic messages and online consumer protection.

This provision implies an expectation among TPP signatories on both the transparency of the public policy objective (if restrictions are imposed to achieve it) and the assessment of whether the restrictions meet the disciplines of non-discrimination and "proportionality". Further, an underlying awareness exists that the extent to which the free flow of information is allowed will determine the future development of e-commerce links, and thus links to supply chains and investment chains. This would be particularly important for non-signatories, if lead firms in global markets view them as not being in line with the provision's conditions. To that extent, it will be useful for nonsignatories to follow developments on how TPP countries act regarding this provision, in order to prepare the ground for identifying legitimate policy concerns and the types of instruments used to address them.

Localization of Computing Facilities

The TPP sets out a binding commitment requiring signatories to refrain from forcing companies from other TPP signatories to locate computing facilities domestically as a condition for doing business in their countries. This obligation is subject to the same exceptions as those for the commitment discussed earlier on the free flow of information (i.e. a legitimate public policy objective, not applied arbitrarily or in a manner that is a disguised restriction on trade and proportionate to the policy objective pursued). This provision was adopted to counter the increasingly popular trend in many countries of governments compelling companies to establish data storage and processing facilities domestically, instead of allowing them to transfer data to their existing sites overseas.¹⁰² The requirement to localize computer facilities represents an important cost burden for companies and can drastically undermine their international business models and strategies. This provision is likely to be of farreaching systemic importance for global communications companies or social/professional networking site owners (Facebook, Twitter, LinkedIn), internet hosting sites or other big players that offer cloud computing services (Dropbox, Amazon). However, as with the free flow of information for business purposes, this provision recognizes a need for meeting "legitimate policy objectives". Therefore, the points already mentioned concerning non-members are relevant in this context, too,

The reasons why governments insist on localization include a commonly cited one related to security concerns, a policy objective that is likewise recognized in the TPP. It could be worthwhile to consider the nature of the security concerns to be addressed, the possibility of achieving them through alternative means, and whether technology may make it infeasible to achieve the objective through a particular measure. A starting point in this context, of course, is the assessment of whether or not a measure is applied arbitrarily or in a manner that is "a disguised restriction on international trade".¹⁰³

Source Code

While the TPP e-commerce chapter sets out a binding commitment not to force the disclosure of source code, the commitment is subject to several important caveats: (i) it only applies to mass-market software or products containing such software; and (ii) software used for critical infrastructure is excluded from this commitment. This provision was adopted to counter increasing pressure from many governments to force companies to disclose source code as a condition for being allowed to sell or otherwise distribute software in a given market.¹⁰⁴ An important limitation of this article is likely to be that each signatory will be free to define what constitutes "critical infrastructure", and could conceivably include communications and financial services in this definition, thereby severely weakening this commitment's impact.

The provisions relating to cooperation and online consumer protection are important initiatives under the e-commerce chapter that can pave the way for having more common disciplines, understanding better how to address key issues, and building a reliable internet platform for use by consumers.

Cooperation

The TPP has many provisions specifically focusing on cooperation or helping SMEs. In the chapter on e-commerce, TPP signatories have agreed to cooperate on sharing experiences,¹⁰⁵ exchanging information, assisting SMEs to overcome obstacles, encouraging self-regulation by the private sector, and building capabilities to address cybersecurity matters. The relevance of these activities extends well beyond TPP countries because cooperating and sharing experience will be essential for all economies, particularly as new issues arise in e-commerce and the internet erodes the significance of national borders. The provision could also be considered for general approval or acceptance within the WTO.¹⁰⁶

Online Consumer Protection

With the advent of the internet, the relevance of conventional borders has been greatly diminished. Service providers can be located outside the jurisdiction of the country where the service is consumed, and can enjoy considerable anonymity. This increases the risk of fraudulent activity. The TPP provides for addressing fraud and deceptive commercial activity on the internet;¹⁰⁷ it helps establish a means for redressing consumer grievances, and is an essential part of building greater confidence among consumers across the world in using e-commerce for commercial transactions.

Other areas addressed in the context of e-commerce include avoiding any unnecessary regulatory burden on electronic transmissions; cybersecurity; facilitating the use of cloud-computing services, electronic authentication and electronic signatures; sharing interconnection charges; addressing unsolicited commercial electronic messages; and accepting a supplier's declaration of conformity with the specified standard or technical regulation for unintentional electromagnetic disturbances, with respect to any other device or system in that environment.

Overall, the TPP has made considerable advances in providing new disciplines relating to e-commerce. But even this result establishes a basis for further development or refinement of these disciplines, including through dispute settlement and the likely commercial impact on supply chains and investment of these disciplines applied differentially among TPP signatory and non-signatory countries. The TPP disciplines address some of the main non-tariff measures relating to digital trade. Several other non-tariff measures¹⁰⁸ will have to be dealt with over time through cooperative mechanisms, including trade agreements or other methods of cooperation.

Other Important Rules for Digital Trade

Services commitments

The TPP's chapter 10, on cross-border trade in services, contains 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, use, or payment for, a service",¹⁰⁹ as well as measures affecting "the access to and use of distribution, transportation or *telecommunications networks and services* in connection with the supply of a service"¹¹⁰ (emphasis added). The services chapter also imposes far-reaching due process requirements¹¹¹ and transparency obligations¹¹² related to regulating services and issuing authorization to provide any services in a signatory country, which will apply to supplying 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 it impossible to pay for them. The TPP seeks to avoid conflicts with GATS while providing for enhanced disciplines, and allows for TPP signatories to consider adopting new definitions agreed in the WTO.¹¹³

The market access for services and national treatment commitments contained in the TPP are in the form of a negative list. Thus, instead of specifically listing those sectors and modes of supply that signatories have entered into liberalization commitments (as in GATS), signatories agree to give unlimited market access and full national treatment, except for non-conforming measures specified in their schedules. The non-conforming measures are those affecting trade in services excluded from the market access and national treatment commitments set out in the chapter. On the whole, the negative list approach tends to have a considerably greater liberalizing effect on trade than the positive list approach, which is why it has been consistently favoured in free trade agreements involving the US.¹¹⁴ This approach is also more favourable for supplying many services digitally, since the supply of a service will be covered by the TPP's market access and national treatment provisions (unless the service in question is subject to an explicitly listed non-conforming measure).

In this context, new services that may evolve from widespread use of the internet and increases in technological capabilities will be subject to liberalization under a negative list approach, unless a specified provision limits such a result. Some initial studies may show that, in practice, the effective level of market liberalization agreed under the TPP may not be very significant compared to the actual market situation. However, the potential to significantly extend the agreement's impact in the future will come from future developments and the evolution of new products and technologies, greater cooperation among regulatory authorities, and some TPP provisions that extend the disciplines and promote common procedures for domestic regulation and recognition.

Standard setting and regulatory coherence

As described above, the TPP chapter on TBT¹¹⁵ not only incorporates the main substantive obligations of the WTO Agreement on Technical Barriers to Trade,¹¹⁶ but also imposes more far-reaching obligations on signatories when adopting technical regulations or applying conformity assessment procedures.¹¹⁷ With respect to information and communications technology products specifically, Annex 8-B lays out a number of obligations relating to cryptography and encryption that are intended to safeguard the owners of these technologies from having to transfer them or provide access to them, to partner with a specific (juridical or natural) person or "use or integrate a particular cryptographic algorithm or cipher".¹¹⁸ This last provision seems particularly pertinent at the time of producing this White Paper, given efforts by law enforcement agencies and other executive branch agencies in the US to force technology companies to build so-called "back doors" into their encryption technologies.¹¹⁹ In addition to the obligations on cryptography and encryption just discussed, Annex 8-B also contains obligations regarding the electromagnetic compatibility of information technology equipment (ITE). The relevant provision requires parties to accept a supplier's declaration of conformity where they demand a "positive assurance that an ITE product meets a standard or technical regulation for electromagnetic compatibility."¹²⁰ This last requirement will prove important in economies that impose their own national standards of electromagnetic compatibility, and that can inflict severe cost burdens and cause significant delays in bringing new ITE products to market.

The TPP's chapter 25 on regulatory coherence, discussed earlier, will apply to all economic sectors. Its applicability in the digital economy will be particularly welcome, especially given some of the debates witnessed recently in the US on issues such as net neutrality and the so-called "open internet",¹²¹ or the one currently raging over set-top boxes.¹²²

Intellectual property rights

Chapter 18 addresses issues of intellectual property rights, including several on internet-related transactions, and its Article 18.28 provides disciplines relating to countrycode top-level domain names. The chapter's Section J specifically addresses internet service providers (ISPs) and includes a number of provisions on legal remedies and safe harbours, including several connected with copyright infringement. Other noteworthy provisions address:

- (a) Strengthened technological protection measures, compared to earlier preferential trade agreements (but along the lines of KORUS), to avoid the circumvention of technological protection measures that authors, performers, and producers of phonograms may use in connection with exercising their rights to protect their work against unauthorized use
- (b) Incentives for ISPs to cooperate with copyright owners in deterring any unauthorized storage and transmission of copyrighted materials
- (c) Remedies, more limited in scope, that may be available against online service providers for copyright infringements that they do not control, and that occur through systems or networks controlled or operated by services providers

With respect to strengthened technological protection, the TPP addresses the criticism from civil society groups for their potentially negative effects on access to knowledge and the broad dissemination of digital information. A new provision aims to achieve an appropriate balance between protecting intellectual property via measures and disseminating knowledge and information.¹²³

Analysis

It is still too early to tell how far-reaching the TPP's implications will be in terms of levelling the playing field and acting as an effective deterrent to governments, both within and outside of the TPP, from enacting rules that run contrary to the minimum standards set out in the e-commerce chapter, or from failing to enact legislation conducive to e-commerce that the TPP mandates for its signatories. It is likewise too early to predict whether and to what extent the TPP's rules and commitments will affect the ICT industry as a whole; this means both those within the industry operating from within one or more TPP signatories, and those industry players largely left outside the agreement's geographical scope of application. Perhaps the most interesting question of all is to what extent the mere existence of these rules (assuming they eventually come into force) will be sufficient to constrain governments that are not directly subject to them, particularly in big markets like India and China. Nonetheless, to the extent that TPP provisions will form a basis for future negotiations, their influence on the likely system to emerge in the next 5 to 10 years for digital trade will remain relevant, leading to the growing circle of its impact.

Some commentators are hailing the advent of these rules as a kind of "revolution in e-commerce". Although the TPP certainly represents an important breakthrough in this area, it is too early to evaluate the potential effective impact of e-commerce rules when it comes to the sort of traderestrictive practices these commitments were intended to constrain. This is true for a number of reasons, including the relatively broad scope of the public policy exceptions to which these commitments are subject, as well as the yet untested nature of the agreement's dispute settlement provisions. Nevertheless, a broad consensus for these rules will likely spur and embolden similar initiatives at the multilateral level, starting at the WTO - either in the context of the ongoing TiSA negotiations¹²⁴ or as a separate negotiating issue to be addressed first by a smaller cohort of similarly interested WTO members. In any event, after the WTO Ministerial Conference in Nairobi, a wide level of support exists among countries with different income levels to begin discussions (without any link to negotiations) on issues relating to digital trade. This could be done, for example, within the existing WTO work programme on electronic commerce.

Again, established and well-organized industry players in Silicon Valley, such as Adobe, Apple, Dell, IBM, Microsoft, Oracle and Symantec, sought and obtained many of these provisions, and many other large multinational corporations had privileged access to both the USTR and the negotiating text during the more than seven years the TPP was being negotiated behind closed doors.

And finally, it is still unclear when the TPP will effectively enter into force.

For now, the TPP's most far-reaching implication is its role in establishing a benchmark for rules on e-commerce and other matters. These include competition, investment or new issues like state-owned enterprises, which have so far eluded broad consensus at the WTO. The rules and exceptions on e-commerce elucidated earlier can thus be considered a minimum baseline for future rule-making in this area. Currently, and most pertinently, this concerns the context of the TTIP negotiations between the EU and the US, but is also likely to figure in any future free trade agreements negotiated either bilaterally with a partner that has important export interests in the digital economy, or regionally.

As already alluded to, perhaps the most important question yet to be answered is: How will the TPP affect the behaviour of non-signatories in e-commerce matters? Some economies, such as South Korea, Thailand, Chinese Taipei, the Philippines and even Indonesia, seek to join the pact as soon as it is open for a new round of entrants, largely because of their concerns over their respective terms of trade vis-à-vis signatories. However, other Pacificarea nations - particularly China but also Russia - that are big users of the kind of restrictions on digital trade targeted in the e-commerce and other provisions of the TPP, represent the largest question marks about the future of the TPP's rules on digital trade. The questions raised here are less about the terms and conditions that nations such as China or Russia may be subject to for admission to the TPP, but more about the agreement's value, considering the absence of Asia's largest digital marketplace and one of the biggest users of these kinds of measures. It will indeed be interesting to monitor the progress of this issue in the negotiations for the Free Trade Area of the Asia-Pacific (FTAAP) under the auspices of APEC. All TPP parties, as well as China and Russia, are among APEC's 21 members, while the other huge Asian market, India, is not. The relevant TPP provisions are also expected to play an important role in the digital trade-related provisions developed within FTAAP, given the importance of TPP rules for TiSA and TTIP negotiations, the growing strength of China in digital technologies and the TPP's serving as a baseline for its members in any future negotiations. The negotiations in the 16-nation Regional Comprehensive Economic Partnership (RCEP), which includes the ASEAN countries and India, China, Japan, South Korea, Australia and New Zealand, could likewise be affected, though it has a much lower level of ambition in these areas than the TPP thus far.

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IV. Conditions of Competition

A. Competition Policy

The TPP is based on the assumption that a procompetitive environment which encourages open markets and sanctions anti-competitive behaviour is required to effectively implement trade-related commitments. Thus, TPP requires parties to establish and enforce a procedurally fair and transparent framework for competition law (chapter 16), as well as to promote pro-competitive regulatory environments in key areas of the economy, such as financial services, telecommunications, public procurement and state-owned enterprises.

The chapter on competition policy provides for each party to have an appropriate legal and institutional framework in place to promote competition. Brunei Darussalam, the only member with no competition policy legislation, is given a 10-year transition period to implement the chapter. Further, the TPP aims to embed the principles of fair competition, consumer protection and transparency in members' markets. Its main provisions include the following, as adapted from the TPP text:

- Each party commits to adopt or maintain national competition laws that proscribe anti-competitive business conduct, with the objective of promoting economic efficiency and consumer welfare, and to take appropriate actions to respect that conduct. These laws should take into account the APEC Principles to Enhance Competition and Regulatory Reform.
- Competition laws will be applied to all commercial activities in the parties' respective territories, though each party may provide for exemptions. Exemptions shall be transparent and based on grounds of public policy or public interest.
- Each party shall maintain an authority or authorities responsible for enforcing its national competition laws.
- Each party shall ensure procedural fairness in enforcing its competition laws before imposing a sanction or remedy against a person for violating such laws, including by affording to that person relevant information, the opportunity to be represented by counsel and the opportunity to be heard and present evidence in its defence. Additionally, each party shall adopt or maintain written procedures for conducting investigations, as well as rules of procedure and evidence that apply to enforcement proceedings and determination of sanctions and remedies. Each party should provide a person subject to a sanction or remedy the opportunity to seek review of the sanction or remedy, and the possibility of resolving alleged violations by consent; it should avoid naming a person in a public notice that reveals an investigation, be responsible for establishing the legal and factual basis for the alleged violations, protect confidential business information, and allow a person under investigation the opportunity to consult with the authorities with respect to significant issues during the investigation.
- Each party should provide independent private

rights of action in order for a person to seek redress from a court or other independent tribunal for injury caused by a violation of national competition laws, either independently or following a finding of violation by a national competition authority. If a party does not provide for such right of action, it shall provide a person with the right to request that the national competition authority initiate an investigation and to seek redress from a court or other independent tribunal following a finding of violation by the national competition authority. Each party shall ensure that these rights are available to persons of another party on terms no less favourable than those available to its own persons, and may establish reasonable criteria for the exercise of those rights.

- Each party commits to adopt or maintain consumer protection laws to proscribe fraudulent and deceptive commercial activity understood to mean fraudulent and deceptive commercial practices that cause actual or imminent harm to consumers.
- Each party commits to the transparency of their competition enforcement policies by updating the APEC Competition Law and Policy Database, making public information available to another party, making its decisions in writing, and publishing or making final decisions available to the public.

The chapter on competition policy provides for the cooperation and coordination between national competition authorities, as well as for undertaking technical cooperation activities. Unlike other TPP chapters, it does not provide for establishing a committee to oversee implementation. Finally, the chapter is not included in the TPP's dispute settlement mechanism. Parties agree to consult among themselves on competition policy issues that affect trade or investment, and to accord full and sympathetic consideration to the concerns of the requesting party.

A large number of preferential trade agreements include some reference to competition policy, such as adopting or maintaining competition policy frameworks and establishing competition authorities. TPP members themselves have historically collaborated in this area in the context of APEC's Competition Policy and Law Group, established in 1996, with the objective of promoting an understanding of regional competition laws and policies, examining the impact on trade and investment flows, and identifying areas for technical cooperation and capacity building.

The TPP, however, adopts a much more comprehensive approach, linked to consumer protection, to address competition issues, and includes clear commitments on due process and non-discrimination. In addition, in providing for the enforcement of legislation on competition, it spells out in detail the elements of a fair and transparent process, and grants private damage actions. Finally, the TPP offers a substantive standard requiring parties to adopt or maintain laws proscribing fraudulent and deceptive commercial activities. These are important elements in strengthening competition policy regimes in TPP members. However, oversight of the agreement is relatively limited, particularly because its provisions are excluded from dispute settlement under the agreement. It does not provide for any case-specific cooperation, neither via comity nor through the exchange of information provisions. In this way, it is not part of a "next generation" agreement and does not follow the 2014 OECD Recommendation concerning International Co-operation on Competition Investigations and Proceedings.¹²⁵

B. Exchange Rates

What's New?

After the open debate in the US on trade and exchange rates, it was expected that some rules on these issues would be introduced in the TPP. The agreement is not innovative regarding exchange rate rules and its effects on international trade. The preamble only highlights that the parties recognize the important efforts the relevant authorities are making to strengthen macroeconomic cooperation, including exchange rate issues, in appropriate fora such as the International Monetary Fund (IMF). The only relevant reference about exchange rates in the TPP context is the Joint Declaration of the Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries. In effect, the US Department of the Treasury took the lead under significant political pressure and signed a side letter, together with the departments from the other TPP parties, as the joint declaration. It was drafted to promote transparency and more dialogue between TPP parties about macroeconomic policies, and represents an effort towards cooperation in macroeconomic and exchange-rate policies.

The addition of a joint declaration on exchange rate policies in the final TPP text was the result of a long and contentious discussion among the parties on the subject. The pressure came from the US Congress, which called for negotiations on this issue. The Trade Promotion Authority (TPA), the rule that grants the President of the United States the authority to sign international trade agreements, provided some recommendations related to exchange rates, including efforts to avoid a party's manipulation of exchange rates in order to prevent effective adjustment to the balance of payments or to gain unfair competitive advantages over other parties to the agreement, such as through cooperative mechanisms, enforceable rules, reporting, monitoring, transparency or other means, as appropriate. According to the TPA, exchange-rate manipulation is one of the most important objectives of the TPP's negotiation; however, the TPP does not establish binding rights or obligations in this matter.

According to the joint declaration, all parties must avoid unfair exchange-rate practices and abstain from adopting devaluations to become more competitive (Article1). Each party must present a public report about foreign-exchange intervention and information on foreign reserves data. It establishes regular consultations among the parties regarding macroeconomics, including efforts to avoid the use of unfair exchange rates (Article 3). The issue is sensitive and demonstrates that countries hold different views regarding supervision of exchange-rate policies by the IMF. Four endnotes in the joint declaration's Article 2 highlight this and grant specific rules and time frames to Brunei Darussalam, Malaysia, Singapore and Vietnam.

What Are the Implications?

The most relevant implication for the international trade system is the strengthening of the IMF's role. The declaration refers to the parties' commitment regarding IMF reports, produced by it secretariat, on Article IV of the IMF Articles of Agreement – until now, the only document concerning exchange rate misalignments and macroeconomic policy issued by a multilateral organization. These commitments are only incentives for the TPP parties to disclose information about reserves, trade data and collaboration with the IMF to meet the recommendations and requirements of the Article IV reports. Moreover, the joint declaration provides that the commitments will be extended to all future TPP parties.

The joint declaration has no "teeth" since it has no enforcement mechanism. Pressure will come, however, from the TPP members, particularly the US, if that country's Department of the Treasury names a party as a currency manipulator. But this has never happened.

The main consequence is that the US can introduce this clause in other preferential agreements and lead the way to force the IMF to act more directly. Perhaps this action can also bring the issue up for discussion in the WTO.

C. State-Owned Enterprises and Designated Monopolies

One of the TPP's most innovative and groundbreaking aspects is its chapter on state-owned enterprises and designated monopolies, which aims to ensure that firms, regardless of ownership, can compete fairly in the market. This framework leverages the experience of Australia and the US in implementing the competitive neutrality principle, which requires that governmental business activities should not enjoy net competitive advantages over their private-sector competitors simply by virtue of their public ownership.

The chapter's main thrust is to establish a framework to govern commercial activities of state-owned enterprises (SOEs) and designated monopolies. It does not preclude a party from establishing or maintaining an SOE or a designated monopoly, or an SOE from providing goods or services exclusively to that party for the purposes of carrying out the party's governmental functions. The chapter applies to all activities of SOEs and designated monopolies of a party that affect trade or investment between parties within free trade. It also applies to SOE activities that cause adverse effects in the market of a non-party. An SOE is an enterprise principally engaged in commercial activities in which a party directly owns more than 50% of the share capital, controls the exercise of more than 50% of the voting rights through ownership interests, or holds the power to appoint a majority of the members of the board of directors or equivalent management body. Designated monopolies, on their part, refer to privately owned monopolies designated after the TPP's date of entry into force, and any government monopolies that a party designates or has designated.

Chapter 17 clarifies that a number of activities do not fall under its scope, including regulatory or supervisory activities of central banks or monetary and financial authorities. It also excludes from its coverage the activities of sovereign wealth funds or a party's independent pension funds, except as the chapter relates to the provision of non-commercial assistance in certain circumstances. Government procurement is also exempted from this chapter, as are services supplied in the exercise of governmental authority.

The main disciplines applicable to SOEs and designated monopolies covered within the scope of the chapter refer to non-discriminatory treatment and commercial considerations, as well as non-commercial assistance. A strong transparency framework is also established. The chapter's main provisions include the following, as adapted from the TPP text:

- Each party commits to ensure that its SOEs, when engaging in commercial activities, act in accordance with commercial considerations in their purchase and sale of goods and services, in particular by according no less favourable treatment than they accord to a like good or a like service with respect to the party, another party or any non-party. Similar disciplines are applied to designated monopolies. Additionally, designated monopolies shall not use their monopoly position to engage in anti-competitive practices in a nonmonopolized market in their territories that negatively affect trade or investment between the parties.
- Each party agrees to provide its courts with jurisdiction over civil claims against an enterprise owned or controlled through ownership interests by a foreign government based on a commercial activity carried on in its territory – unless it does not provide jurisdiction over similar claims against enterprises that are not owned or controlled through ownership interests by a foreign government. Additionally, administrative bodies that regulate SOEs shall exercise discretion in an impartial manner.
- Each party commits to cause no adverse effects (as defined in detail by the chapter) to the interests of another party through the use of non-commercial assistance it provides to any of its SOEs with respect to the production and sale of a good by the SOE, the supply of a service by the SOE from the territory of the party into the territory of another party, or the supply of a service of another party through an enterprise that is a covered investment in the territory of that other party or any other party. A similar obligation is applicable in providing non-commercial assistance on the part of SOEs to any of its SOEs.
- Likewise, each party commits to cause no injury (as defined in detail by the chapter) to a domestic industry

of another party through the use of non-commercial assistance it provides to any of its SOEs that is a covered investment in the territory of that other party where (i) the non-commercial assistance is provided with respect to the production and sale of a good by the SOE in the territory of the other party, and (ii) a like good is produced and sold in the territory of the other party by the domestic industry of that other party. Disciplines on non-discriminatory treatment and commercial considerations, courts and administrative bodies, non-commercial assistance and transparency shall not apply with respect to non-conforming activities of SOEs or designated monopolies listed in each party's respective schedule, or to a party's SOEs or designated monopolies as set out in the agreement. This includes broad categories of activities (e.g. by certain ministries in Vietnam) and carveouts of specific entities. Specific annexes apply in the case of Singapore and Malaysia.

Each party commits to a strong transparency framework that includes the obligation to provide or make publicly available a list of its SOEs and to keep the list updated. It shall also notify or make publicly available the designation of a monopoly or expansion of the scope of an existing monopoly and the terms of its designation. Each party, at the request of another party, agrees to provide information concerning an SOE or a government monopoly, provided the request includes an explanation of how the entity's activities may be affecting trade or investment between the parties. A similar obligation applies to providing information on any policy or programme that delivers non-commercial assistance. Brunei Darussalam, Vietnam and Malaysia have a five-year transition period for applying the transparency obligations.

The parties provide for the possibility of engaging in technical cooperation, including exchanging information, sharing best practices and organizing fora for sharing information and expertise related to SOE governance and operations.

The parties establish a committee on SOE and designated monopolies, composed of government representatives of each party, whose purposes are to oversee the chapter's operation and implementation, consult on any other matter arising under the chapter, and develop cooperative efforts to promote the principles underlying the disciplines in the agreement.

Chapter 17 includes a series of exceptions that allow parties to do the following: respond temporarily to a national or global economic emergency; supply financial services by an SOE pursuant to a government mandate, if that supply of services supports exports, imports or private investment outside the party's territory, provided these are not intended to displace commercial financial services or are offered on terms no more favourable than those that could be obtained in the commercial market; and aid an enterprise located outside a party's territory and over which an SOE of that party has assumed temporary ownership as a consequence of foreclosure or a similar action in certain circumstances, provided it does so in order to recoup the SOE's investment and ultimately divest from the enterprise. Additionally, the chapter's disciplines shall not apply to SOEs or designated monopolies with annual revenue derived from commercial activities below a certain threshold, currently set at 200 million Special Drawing Rights (SDRs), except for Brunei Darussalam, Malaysia and Vietnam, with annual revenue of SDR 500 million for each for a period of five years after the agreement's entry into force.

The parties agree to enter into negotiations, within five years of the TPP's entry into force, on extending the disciplines in the chapter to activities of SOEs or designated monopolies owned or controlled by a subcentral level of government, and to extend the provisions for non-commercial assistance and adverse effects to address effects caused by the supply of an SOE's services in a non-party's market.

Finally, though the TPP's dispute settlement mechanism does not apply to the chapter, it does apply to the process for developing information concerning SOEs and designated monopolies (Annex 17-B) as regards a party's conformity with the rules on non-discriminatory treatment and commercial considerations, and noncommercial assistance. The TPP is the first agreement to comprehensively address commercial activities of SOEs that compete with private companies in international trade and investment. Despite multiple carveouts, exemptions and exceptions to its coverage, the TPP goes significantly beyond previous agreements to try to level the playing field, particularly for countries with market economies. It broadens and strengthens non-discrimination rules applicable to all commercial purchases and sales of SOEs, and provides a strong framework to govern noncommercial assistance of SOEs, building on concepts of adverse effects and injury. The agreement's provisions on transparency are guite significant and may, in themselves, promote significant reform of the SOE sector in some TPP members. The TPP is built on the assumption that parties will collaborate on implementing its provisions and will continue to engage in further extending the chapter's coverage.

D. Competitiveness and Business Facilitation

The TPP includes a chapter on competitiveness and business facilitation that reflects the parties' will to collaborate, with a view to enhance their economies' competitiveness and to promote integration and development within the free trade area. The chapter's main thrust is to:

- Establish a committee on competitiveness and business facilitation, composed of government representatives of each party, which shall engage in dialogue and information sharing to support a competitive environment
- Explore ways to take advantage of the trade and investment opportunities created by the TPP
 Enhance competitiveness
- Encourage SMEs' participation in regional supply chains
- Promote the development and strengthening of regional supply chains in order to integrate production, facilitate trade and reduce the costs of doing business within the free trade area

The committee shall engage with stakeholders and experts to provide inputs on these matters.

Other free trade agreements have established mechanisms to encourage cooperation in similar areas among members. Moreover, in the context of APEC, TPP members already have much experience collaborating in these areas. This TPP chapter provides a vehicle for strengthening joint efforts to leverage the agreement's potential.

Finally, this chapter is excluded from the TPP's dispute settlement mechanism.

2. Assessment of Economic Impacts

I. Economic and Labour Market Impacts

This section provides a valuation of the TPP's impact on income, employment and the process of adjustment required for TPP members and non-members. Examples of this include the intense discussion in the US on these issues, the assessment leading to the announcement by some non-member countries of their plans to become TPP members, and a number of economic studies.¹²⁶

An understanding of the TPP's economic and labour impacts is useful for preparing the political support and discourse required to ease acceptance of the results of this (or any) trade agreement. It also prepares a nation to manage any adjustment needed due to implementing the new market opening and regulatory regimes from the TPP. Any large agreement has benefits and costs, with a need for structural adjustment. As Jansen and Lee (2007) note concerning a joint study by the ILO and WTO, "Trade liberalization is expected to trigger a restructuring of economic activity that takes the form of company closures and job losses in some parts of the economy and startups of new firms, investment in increased production and vacancy announcements in other parts of the economy. Trade liberalization is therefore associated with both job destruction and job creation ... In the long run, however, the efficiency gains caused by trade liberalization are expected to lead to positive overall employment effects, in terms of quantity of jobs, wages earned or a combination of both."

Important considerations for members of an agreement include its net overall benefit and a need to assist those who may face difficulties, as the structure of economic activity changes due to the agreement. When an agreement has a major scope and coverage, as with any mega-regional agreement like the TPP, such an assessment also becomes relevant for non-members. This section covers a detailed assessment of economic and labour impact conducted for the US economy, which accounts for 62% of the total GDP of the 12 TPP countries.¹²⁷ A look at the effects on TPP member and nonmember economies follows the detailed discussion of the US example.

Any assessment of the TPP's economic and labour impact must also take into account certain other linked considerations. These include the factors that have led to the TPP being negotiated in an evolving global economy, and its possibly wider systemic implications for the underlying economic and labour concerns being addressed through the agreement. This discussion also clarifies that the TPP is a formalization and extension of some of the objectives emphasized by the G7 and, in certain cases, by the global community of nations that recently concluded the international climate deal.

Economic and Labour Market Impacts of the TPP: The US Example

The most up-to-date and comprehensive study of the TPP, as undertaken by Petri and Plummer (2016), uses a computable general equilibrium model. First, the authors construct a baseline scenario of how the economy would evolve without an agreement; then, the effects on that baseline of implementing the TPP are considered. The findings show that as its provisions are implemented, the annual income gains generated by the agreement grow and, by 2030, US real income will have increased by US\$ 131 billion 2015 dollars – an amount equal to about 0.5% of baseline GDP in 2030. These gains come primarily from reallocating US capital and labour to more productive uses (by moving resources out of import-competing industries into exports), as well as from providing US importers with a greater variety of goods and services at lower prices. While the US will be the largest beneficiary of the TPP in absolute terms, the agreement will generate substantial real income gains relative to GDP for Japan (2.5%), Malaysia (7.6%) and Vietnam (8.1%), as well as solid benefits for other members.

Some have claimed that the TPP's benefits are small, given the estimated growth of real US incomes of 0.5% of GDP. Indeed, the Petri-Plummer estimate implies the benefits would grow at an average annual rate of just 0.029% of GDP between 2017 and 2030. But compared to GDP, most policy measures are small. The more relevant question is whether the TPP would benefit the nation on balance. If the Petri-Plummer estimates are correct, the answer is a resounding "yes": assuming a net annual return of 5%, ratifying the TPP today would be equivalent to permanently adding US\$ 2.62 trillion to the US capital stock in 2030.

The Petri-Plummer model also estimates trade and production in considerable industrial detail, disaggregating the economy into 19 industries. Compared with the base case, the TPP would reduce the demand for workers in some industries – for example, by 121,000 of the 12.6 million workers in manufacturing – while increasing the demand for workers in others, such as services, agriculture and mining. Their model also suggests that while skilled and unskilled labour as well as capital would gain, the TPP would especially benefit skilled labour, which in their classification contributes 60% of all labour income. All told, real wages would rise by 0.53% by 2030, while the real returns on capital would increase by 0.39%. In other words, claims that the TPP disproportionately benefits corporate profits as opposed to workers are misplaced, as are claims that the TPP reduces overall wages.

The most challenging task confronting economists who seek to model the TPP's effects is how to model its most important aspect, namely its emphasis on reducing non-tariff barriers. On the one hand, simply modelling reductions in tariffs produces very small effects; all told, Petri and Plummer estimate average tariff reductions on US imports and exports of 0.5 and 0.9 percentage points, respectively – i.e. both less than one percentage point. On the other hand, determining the tariff equivalents of nontariff barriers is really an art. Petri and Plummer estimate that the non-tariff barriers facing US exports, expressed as tariff equivalents, will be reduced from 7.9% to 5.3%, and those on US imports from 4.1% to 2.7%. These estimates seem reasonable and conservative, but must be taken as educated guesses rather than precise measures.

Sceptics have argued that such simulations are defective because they neglect important considerations that play a prominent role in the current debate over the TPP – most notably, its impact on the dislocation and wage losses of workers, as well as its impact on middle- and lower-income Americans.¹²⁸ In particular, the critics suggest that the basic assumption driving the model – of the economy remaining at the same employment level – makes it inappropriate for understanding these principal concerns raised by the TPP.¹²⁹

Actually, for analysing the *long-term* impact of TPP, it is quite reasonable for Petri and Plummer to assume that the agreement is unlikely to affect the levels of employment and the trade balance permanently. The justification for this assumption is not that changes in imports and exports have no impact on employment in the short run (obviously import growth can cause job loss, and exports can generate job growth), but that, over a period as long as a decade or more, macroeconomic policies and wage and price adjustments are likely to restore the economy to the same employment level as the baseline. Indeed, it is especially inappropriate, as in Capaldo et al. (2016), to assume that workers never find alternative employment once they are displaced, even at lower wages.

Adjustment costs

While it may be reasonable to benchmark an agreement's impact, assuming the total number of jobs remains constant, the long-term analysis needs to be supplemented with estimates of adjustment and wage costs. Since the model does estimate the impact of TPP on value-added by industry, i.e. gross profits plus wage compensation plus indirect taxes, it implicitly captures the effects on workers and capital employed. However, the model does not provide the costs that could accrue for displaced workers from spells of unemployment and erosion of their specific human capital (e.g. earnings reductions due to loss of seniority and payments for skills valued in the job they previously held).

Lawrence and Moran (forthcoming 2016) undertake such an analysis. Following this, an estimate is made of the aggregate adjustment costs likely to be imposed on workers who may be displaced. In order to avoid underestimating these costs, and based on studies of the lifetime impact on earnings of workers who lose their jobs in mass layoffs, displaced workers are assumed to lose 1.4 times their annual income (Davis and von Wachter, 2011). This accounts for losses from both unemployment and a lower trajectory of future earnings. Then, an input-output analysis estimates the number of jobs required to produce the increase in US imports, but this number is adjusted for the possibilities of reassigning workers within firms to fill growing demand from other sources (not hiring workers that would otherwise have been hired) and for voluntary attrition.

Between 2017 and 2026, when most of the adjustment to the TPP occurs, the costs for workers who will be displaced, both from unemployment and lower future wages, are found to total about 6% of the agreement's benefits. For the full 2017-2030 adjustment period considered by Petri and Plummer, the benefits are more than 100 times the costs. Moreover, using a model that relates factor incomes to household incomes, it can be concluded that the agreement's benefits will be widely shared.

Households in all quintiles will benefit by similar percentages, but once differences in spending shares are taken into account, the real gains for poor and middleclass households will be slightly larger than the gains for households at the top. Thus, the agreement will confer net benefits to households at all levels of income and will certainly not worsen income inequality. While the US as a whole would benefit from the TPP, and because its benefits appear to far outweigh its costs, a case exists for a programme that would compensate those who lose.

Economic and Labour Market Impacts of the TPP on its Members

Very few detailed studies are available on the TPP's economic and labour market impacts on other economies, and none with the labour market detail as examined by Lawrence and Moran (forthcoming 2016). Some recent studies do provide estimates of the economic and labour market impact of the TPP on its members and nonmembers, though their results are not always consistent, even in terms of the impact's qualitative nature. For example, Capaldo et al. (2016), using a global policy model, show that the US and Japan will experience a negative impact, while all other TPP economies will experience a positive result. In contrast, Ciuriak et al. (2016), using a computable general equilibrium (CGE) model, estimate a positive impact for all TPP members except Chile and Peru, two countries calculated as registering a very small decline (the real GDP decrease for these two, respectively, is estimated to be -0.002% and -0.003% in 2018, and -0.007% and -0.018% in 2035). Petri and Plummer (2016) and the World Bank (2016) estimate positive results for all TPP members.

Therefore, it helps to consider the results in a more qualitative and indicative sense¹³⁰ – that is, whether the impact will be large or small, and whether the net result of various changes is positive or negative, similar to the discussion in the US example. The general result for TPP economies is that the percentage changes for economic and labour market impacts are relatively small, with the estimates for Vietnam usually being higher than for other TPP members. The significant positive impact on GDP by 2030, as demonstrated by certain studies (e.g. World Bank [2016]), implies a strong qualitative result and indicates the TPP would provide a net benefit for its members.¹³¹

A closer look, however, is required of studies showing a negative effect on certain TPP members. Most notably, the assessment by Capaldo et al. (2016) indicates that the US and Japan, the TPP's two largest economies, will experience a decline in their GDP as a result of the TPP. The earlier discussion of the US example includes some points that question the robustness of the results of Capaldo et al.¹³² Without detailing the strengths or shortcomings of different modelling approaches, it would be useful to consider the main messages from the various studies, bearing in mind that an adjustment process over time will likely occur as the TPP agreement comes into effect.¹³³ The greater the adjustment or the longer the period of adjustment considered, the more likely the result will be closer to that of the CGE model, which allows for adjustments in various markets.¹³⁴ Also, any model's results should be considered in terms of the complimentary actions that could be taken and lead to net benefits for the nation; that would give an appropriate insight into the choices a nation should make in terms of different policy options.

The key point in this context is that, when a significant economic change takes place through a new trade agreement, the initial impact is likely to cause a need for adjustment. Therefore, structural adjustment schemes would be required to facilitate this movement across different sectors, assisting those where job losses are likely and helping others where jobs are expected to be generated. Such structural adjustments are part of government policy put in place to address negative economic developments over time, so as to mitigate the initial effect of market opening under a new trade agreement. Interestingly, the TPP itself has provided breathing space for adjustment, with long transition periods to reduce tariffs for several items. This presumably would be for more sensitive products, with their domestic production linked to significant effects on employment or sustaining livelihoods.¹³⁵ This is likely to make the agreement's benefits greater than estimated by studies that do not take such delayed adjustment into account.

Further, other mechanisms within the TPP assist with trade and investment transactions among its economies, and could thus improve the agreement's positive effects. In addition to the transition periods, the TPP contains a number of provisions for cooperation and facilitation that are likely to augment the benefits – for example, the specific chapter on SMEs, which focuses on improving their commercial opportunities in TPP markets. Likewise, the provisions that facilitate cooperation, collaboration and information sharing in a number of areas, such as SPS or TBT, will also contribute to the positive impact. These mechanisms, together with the transition periods included in the agreement, would help mitigate the very small GDP reductions for Chile and Peru as estimated by Ciuriak et al. (2016).¹³⁶

With this background, the results of the TPP for its members would likely be relatively small compared to the prevailing situation, but would be net positive in terms of economic and labour market impacts. Nonetheless, policies to assist the process of adjustment, especially in the initial period, are important to enhancing the overall positive impact.

Economic and Labour Market Impacts of the TPP on its Non-Members

In contrast to the results for TPP members, a number of studies show negative effects for several non-TPP members. For example, Petri and Plummer (2016) calculate such effects for China, India, Indonesia, South Korea, Philippines, Thailand and the other ASEAN countries. Capaldo et al. (2016) estimate significant negative results for non-TPP members. These impacts, of course, cover a range of positive to negative effects for different nonmember countries, though the range of these impacts are not likely to be large. For example, the World Bank (2016, pp. 226-227) shows the TPP having a negative average impact (-0.1% by 2030) on non-members, with the overall range spanning from a low negative impact to only minor positive effects for Russia.¹³⁷

While China and India have been assessed to be among those likely to be negatively impacted more than most others, the negative effects are also significant for some ASEAN economies, including those who look to join the TPP.¹³⁸

A special concern would be if poorer economies, particularly the least developed countries (LDCs), also face a negative impact from the TPP. An assessment conducted by Ciuriak and Xiao (2016a) prior to the final negotiation of the TPP indicated that the agreement's economic impact would be negative for the African economies, too, though the overall effect on their GDP would be relatively low.¹³⁹ These economically vulnerable economies would have much more difficulty addressing these effects than more well-off countries. This burden would be even more complicated for them because of their likely large increase in population. According to the UN (2015), the African region will experience the largest rate of growth in population between 2015 and 2030 compared to other regions, with an absolute increase of about half a billion people during this period.¹⁴⁰

Thus, these low-income economies would need assistance from others to cope with their additional economic difficulties. At a time when special focus is being given to Sustainable Development Goals, some assistance programmes could be expedited to provide the required support to the poorer economies. Particular assistance would be needed in two specific areas: one, in policies and other steps that improve competitiveness; and the other, in enhancing the capacity to meet the new standards that may emerge as important for getting access to large markets in developed economies.

In this context, the TPP's members could consider allowing the LDCs to benefit from their agreement's mechanisms that help members deal with difficulties relating to standards or regulatory provisions. This would include the possibility of also letting LDCs participate – as if they, too, were TPP members – in mechanisms aimed at facilitating, cooperating, collaborating and exchanging information among TPP members.¹⁴¹ In addition, the members could consider allowing LDCs to take part in initiatives of the TPP committee on SMEs to help smaller enterprises.¹⁴²

The TPP: An Effort to Address Larger Ongoing Economic and Labour Market Impacts

Today, the debate on the TPP covers a wide range of perspectives. One view is that the agreement is not adequate, and that additional disciplines should be part of the legal text, including redressal of certain provisions.¹⁴³ Another considers the agreement to be a negative development, with adverse effects on jobs and incomes. A view contrary to this is that the TPP would have an overall positive impact, which needs to be further consolidated through supporting policies. In line with this, but with a larger focus, is the view that the TPP is an important development and paves the way for other modern or so-called 21st-century trade agreements.

To some extent, each of these views seems to overlook the much larger developments that have affected the income and labour market conditions in different economies, and have generated a number of pressures to deal with. The TPP is part of an evolving global economy with wider systemic implications, and tries to address a number of dynamic economic and labour concerns in several economies. It is thus part of various initiatives, reflected, for instance, in the declarations by G7 economies, the joint statement by the EU and US on shared principles for international investment, and guidelines on business practices including corporate social responsibility. In this context, the TPP has been negotiated to formally establish disciplines in a number of areas.

Thus, in order to create a new economic and strategic operational framework, it is useful to consider the factors that have led to efforts such as the TPP and the TTIP. An important background is the changing geo-economic situation, as former developing economies have become significant global economic entities, with some even among the largest economies. These countries have acquired new technological capabilities and are increasing their presence in GVCs, including for several technology-intensive products. The growth experience of large developing economies has inspired other developing countries, and many of the poorer economies are now registering the highest GDP growth rates in the world. These developments have resulted in greater competition in world markets, with existing dominant firms in developed economies losing their market shares.¹⁴⁴ In this situation, they have been pursuing at least four potential strategies for some time. One strategy is to have greater access to larger developing markets by opening up their own markets. This allows them to achieve better access to those larger markets through trade, particularly as industries in large developed economies see their own tariff structures as far more permissive, and seek similar openings in other growing markets. This approach also includes a focus on coherent regulatory regimes and reducing the burden or constraints imposed by non-tariff measures in these other markets.

The second strategy uses FDI to access these markets, including developing complimentary activities for the local, regional or global markets. This implies a greater focus by FDI providers on the conditions applied to FDI by the countries where they invest, such as localization, policy certainty and appropriate dispute resolution for FDI. They also would place more focus on addressing anti-competitive policies perceived to favour domestic enterprises and facilitating domestic and global supply chains (because FDI is the primary mover of GVCs). These value chains require a whole set of reform-oriented policies in several areas, including trade facilitation, digital trade, investment, intellectual property rights, competition policy, standards, tariffs, movement of capital, business persons and other related service areas.

For the third strategy, consideration is given to any differences in operating conditions in these competing economies in order to address those considered as not "reasonable or fair". In this context, "competitive neutrality" is particularly emphasized to limit the preferential conditions provided to state enterprises, as well as the cost differentials from different environmental and labour standards in certain developing economies.

The fourth strategy advances the technological lead through new technologies, enhanced commercial opportunities based on frontier technologies,¹⁴⁵ and general purpose platforms provided, for example, by the digital economy. This has meant an emphasis on intellectual property rights and the operational conditions for the internet, including requirements which may create barriers to transferring information (particularly B2B) and constraints on localization or local content.

The TPP is the first formal mega-regional agreement that has moved ahead on the various issues just discussed; it aims to address all these concerns, in addition to strategic geopolitical ones.¹⁴⁶ In contrast, there are those concerned about the TPP's negative effects. Stakeholders in both TPP member and non-member countries would face economic and labour market difficulties from the decline in domestic production of certain producing sectors. These issues need to be brought out more clearly so that the possible relevant steps may be identified to address the economic and labour market effects. Though those adversely affected in TPP member countries and other nations may have some common concerns, their extent is likely to be much larger (and the solutions different) for non-member countries.

In the case of TPP members, the above-mentioned net positive effects will help mitigate concerns about structural adjustments; this is not possible, however, for TPP nonmembers experiencing a negative impact. Further, the impact of trade and investment diversion on them will be augmented by the costs incurred to deal with fragmented global markets, as well as the difficulty for most to accept and adopt the new set of TPP disciplines. Their strategies to mitigate the adverse economic and labour market effects will have to include seeking ways in which TPP systems could be made more inclusive and collaborative, even for trade with non-members. They would need to suggest ways for doing so, together with developing similar collaborative systems among each other, and enhancing domestic capacities to better meet the emerging requirements in large markets. To give this better focus, they need to recognize that the framework emerging in the TPP is part of a larger effort in different fora.

Private standards, often de facto mandatory for doing business, emphasize the issue of environmental and labour standards in supply chains. The G7 economies have underlined these standards in their June 2015 declaration. Under the section on "responsible supply chains", they want to establish a system for monitoring whether supply chains of enterprises from their territories meet internationally accepted environmental and labour standards. The attention given to such standards is also part of the OECD guidelines for multinational enterprises, and has been underlined by the EU and the US in their joint statement on investment agreements.¹⁴⁷ It is also significant that citizens in these economies and elsewhere are now emphasizing sustainable development and social standards as part of their value system. Therefore, the large trend is towards stressing the importance of these standards, especially for products and investments that link up with markets in developed economies.

Similarly, competitive neutrality is a major issue in discussions at the OECD, reflected both in the abovementioned EU-US joint statement and the submissions by the Business and Industry Advisory Committee to the OECD.¹⁴⁸ Notably, state-owned enterprises and designated monopolies are among the areas mentioned explicitly by the TPP where further work will be undertaken. A similar initiative is also expected in the area of standards. Likewise, the ongoing BIT negotiations between China and the US will likely also address these aspects, given the latter's emphasis on them in the changing global economic conditions.

The factors, covered earlier, that affect the strong ongoing changes in economic and labour markets have contributed to multiple informal efforts at addressing the underlying concerns. As described in previous sections, the TPP formalizes these efforts and also addresses a number of additional issues, such as market access and facilitation of the supply chain, through its provisions on tariffs, nontariff measures, data transfers and intellectual property rights. This framework's scope and coverage are likely to increase over time, as more countries join the TPP and as the agreement serves as a frame of reference for the US in its other mega-regional or even multilateral negotiations.

Thus, while the efforts of TPP members would involve structural adjustments to address economic and labour impacts, with possible rising net positive effects, the efforts of non-members may face even larger concerns. Non-members may need to take additional initiatives to mitigate both the economic and labour market impacts and the growing unequal conditions of access to certain large markets. This situation would play out as the scope of new requirements and the fragmenting of global markets is extended through formal and informal methods.

Some parts of the TPP agreement explicitly state that further negotiations will be undertaken after a specified time.¹⁴⁹ Other parts have tasked the relevant committee to look at determining the future negotiating agenda by establishing the priority areas for such work.¹⁵⁰

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II. Summary of the TPP's Economic Impact

When evaluating its impact, TPP can be thought of as three trade agreements wrapped into one: an old fashioned tariff-cutting deal, a negotiated reduction in "frictional" trade barriers, and an arrangement that establishes rules underpinning GVCs.

This section considers the economic impact of the three separately, focusing on nation-level effects. The subnation impacts (which are critical to the debate) are dealt with in the section entitled "Economic and Labour Market Impacts".

Understanding the Economic Impact of Tariff Cutting

Tariffs are nothing more than taxes on imports; they raise the price consumers pay and the price domestic firms receive, while generating some tax revenue for the government. The higher prices tend to encourage production in sectors where the tariff-imposing nation is relatively inefficient compared to foreign country producers. (It is known that they are relatively inefficient in import sectors; that, after all, is exactly why they are importing the goods in the first place.) When the TPP lowers tariffs, national production patterns shift in ways that boost productivity.

To understand the various estimates made concerning the TPP's impact, it is helpful to quickly review the effects that can be expected according to standard logic of economics.

When the TPP cuts a nation's tariffs, the country will, naturally, increase its imports. This will tend to lower prices of the imported goods and domestic goods that compete with them. Moreover, the fresh competition from imports tends to discourage production in sectors where the nation is not particularly efficient or competitive. This is the prime source of job and production losses.

The TPP, however, will also cut tariffs facing its members' exports to each other. The fresh export opportunities tend to encourage production in the nation's best sectors. This is the prime source for creating jobs and expanding production. The net effect of this reduction-cum-expansion is a boost in economic efficiency. After all, it is reducing the output of a nation's weakest sectors (those where it is an importer) and expanding output in its strongest ones (where it is an exporter). To put it differently, a key impact of a two-way trade liberalization like the TPP will be to induce each nation to shift productive resources into its most competitive sectors.

These, in a nutshell, are the efficiency-based gains from trade. These gains appear if, and only if, the agreement produces job losses in some sectors and job creation in others. The gains from trade, in other words, are inseparably bolted on to the pains from trade. Importantly, however, the TPP is not cutting fresh tracks when it comes to tariff liberalization. As Table 4 shows, 42 of the 55 bilateral trade links among TPP members have already been liberalized by standing trade deals. Many cover little more than tariffs, but the very fact that many tariffs have already been removed conditions the economic estimates of what the TPP will do.

| | Americas | | | | | Asia/Oceania | | | | | |
|-------------|----------|------|------|-------|------|--------------|--------|-------|------|-------|-------|
| | U.S. | Can. | Mex. | Chile | Peru | Aus. | Brunei | Japan | Mal. | N. Z. | Sing. |
| Canada | 1989 | | | | | | | | | | |
| Mexico | 1994 | 1994 | | | | | | | | | |
| Chile | 2004 | 1997 | 1999 | | | | | | | | |
| Peru | 2009 | 2009 | 2012 | 2009 | | | | | | | |
| Australia | 2005 | | | 2009 | | | | | | | |
| Brunei | | | | 2006 | | 2010 | | | | | |
| Japan | | | 2005 | 2007 | 2012 | 2015 | 2008 | | | | |
| Malaysia | | | | 2012 | | 2010 | 1992 | 2006 | | | |
| New Zealand | | | | 2006 | | 1983 | 2010 | | 2010 | | |
| Singapore | 2004 | | | 2006 | 2009 | 2010 | 1992 | 2002 | 1992 | 2001 | |
| Vietnam | | | | 2014 | | 2010 | 1995 | 2008 | 1995 | 2010 | 1995 |

Table 4: Bilateral Trade Links as Trade Deals among TPP Members

Source: WTO, RTA-IS database (accessed February 11, 2016); World Bank, Global Preferential Trade Agreements Library (accessed February 11, 2016)

Putting Numbers to the Effects

Most of the quantitative studies on the TPP focus exclusively, or mostly, on this sort of one-off efficiency gain. This is for practical reasons; such gains are the easiest to calculate, since economists have a very firm grasp on underlying principles and the data necessary to run the numbers.

Focusing on this type of gain from trade, however, almost inevitably produces small numbers for a very simple reason; in this case, productive resources are shuffled from one sector to another. The gain as a percentage of GDP is, roughly speaking, the product of two numbers. The first is the gap between two sectors' productivity. To be concrete, suppose productivity is 20 percentage points higher in the expanding sector than in the contracting one. Thus, for every dollar of resources shifted from the one sector to the other, the economy experiences an efficient gain of about 20 cents. The second number used in the multiplication is the share of national resources that are shifted. In short, the gain will be the result of two fractions, and this always produces a fraction – often a very small one if both of the underlying fractions are small.

Given the fairly low tariffs in world trade, the average productivity gap between the shrinking and expanding sectors does not tend to be enormous. Likewise, since the TPP economies are not extremely distorted to begin with, the TPP is not likely to shift more than, say, 10% or 20% of a nation's resources (recall that for most nations, twothirds of resources are employed in non-trade sectors). To illustrate this with a numerical example: if the productivity gap averages 20%, and the TPP shifts 10% of the resources on average, the net gain will be on the order of 0.2% of GDP. That's not a lot. The USITC study, for example, uses a computer model that only picks up this type of gain, and it finds that the total gain from the TPP is tiny. It projects US GDP to rise by only 0.15% after all the tariff cutting is phased in. Other studies that try to capture a broader range of gains from trade arrive at higher numbers (more on this below).

Creating and Diverting Trade

The efficiency-boosting logic has to be augmented for the TPP because it is a preferential tariff-cutting deal. The handmaid of this sort of gain for the TPP members is "trade diversion" for the nations standing outside the circle. Indeed, preferential tariff cutting (like that in the TPP) creates tax discrimination that can harm a third nation. The mechanism here is simplicity itself, as it rests on nothing more than plain business sense. When firms from one nation get an advantage in a market, firms from nations that don't get the advantage must struggle to stay competitive. That means cutting prices and often cutting sales. For example, if Vietnamese shoe producers can sell into the US duty free after the TPP, but China-based shoe producers must pay the US tariff, the Chinese exporters will have to cut prices to stay competitive.

Not surprisingly, the USITC studies find that such losses for non-TPP members would be modest at the national level for exactly the same reason the gains for TPP members were modest. The same multiplication-of-fractions logic suggest that these trade diversion effects may be small, but in the case of trade diversion, the shifts in resources can be huge. In shoes, for example, the US preference might shut down all Chinese shoe exports to the US (or, more precisely, displace them to Vietnam).

Dynamic Gains from Trade

The gains already discussed are called the "static" gains from trade because they take each nation's competitiveness as frozen in time. If nations have the right policies, these static gains can be amplified by "dynamic" gains, i.e. extra gains that take time to develop. One important source of these gain boosters is an increase in the scale of production that lowers average costs.

Even in today's globalized world, local market size matters. For a whole host of reasons – ranging from standards and regulations to consumer preferences – firms are frequently dominant in their home while being market marginal players in foreign markets. This very common situation is known as market fragmentation. As it turns out, market fragmentation reduces competition, raises prices and keeps too many firms in business. As a result, nations with small markets tend to have too many firms that are too small to be globally competitive, which is especially a problem in developing nations.

Having lots of firms is not the problem, of course. The problem is that the lack of competition allows domestic firms to get away with charging high prices – high enough to cover the high costs that come with their small size. Consider how trade liberalization can help in such situations. When trade opens up, the extra competition from foreign firms creates a pro-competitive effect which can, in turn, compel big changes in a nation's industrial structure. In particular, firms tend to merge in search of greater scale and thus lower costs in reaction to heightened competition and falling profits. The least efficient firms are eliminated or integrated into larger, more efficient firms. The combined firms have larger market shares and can thus realize greater economies of scale. When things go right, the end result can be a more efficient industrial structure with fewer, bigger and more efficient firms. Moreover, trade openness means that they are competing more directly with big foreign firms - so, despite the lower numbers of competitors inside each nation, firms in the industry face more effective competition.

Studies that allow for such effects – the Petri-Plummer study¹⁵¹ is one example – arrive at much higher estimates than the USITC study did, predicting that the TPP would raise US incomes by 0.5%. That is hardly a revolution, but it is four times the size of the USITC's estimate.

Note that the Petri-Plummer study also allows for a second source of efficiency gain, namely that trade liberalization helps the most efficient firms in each sector at the expense of the least efficient. This means that a productivityenhancing shift of productive resources is occurring both within and between sectors.

The Impact of Reduced "Frictional" Barriers

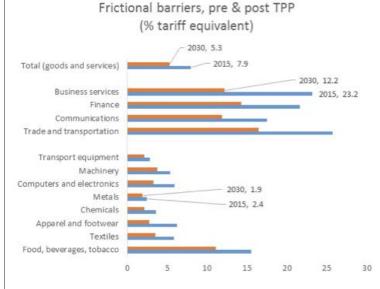
In the modern world, exports face a gamut of hindrances that are not tariffs, such as regulatory barriers, unusual customs procedures and demands for duplicative testing. One reason is that domestic politics often turn health, safety and environmental regulations into trade barriers. Consider the example of elevator standards: nations need them, but governments tend to consult their local elevator producer when writing such measures. These producers, quite naturally, will suggest regulations that favour the sales of their own elevators and/or disfavour the sales of their foreign rivals. After all, there are many ways to make elevators safe; the firms simply suggest the ways that fit with their existing products.

Such barriers can be called "frictional barriers", since they raise the costs of importing without generating any tax revenue in the way tariffs do. Indeed, it is helpful to think of them as tariffs where the tariff revenue is tossed into the sea.

How big are frictional barriers and how much will the TPP cut them? Since such barriers are not written down in the way tariffs are, it is not possible to directly observe their size; that, however, can be estimated. The estimates presented by Petri and Plummer (2016), shown in the Figure, range from quite small (2.4% for metals in 2015) to quite large, for example 23.3% for business services in 2015. These are the barriers facing US exporters selling into the TPP. The estimates are roughly the same for the barriers the US imposes on imports from the TPP.

How much will TPP lower these barriers? Again, direct observation is not possible, but the Peterson study¹⁵² estimates that the TPP would reduce the average barriers by about a third. That means the frictional barriers for US exports would fall on average from 7.9% in 2015 to 5.3% in 2030 (after all the phase-in periods have expired).

Figure: Peterson Institute Estimates of Frictional Barriers Pre- and Post-TPP



Source: Petri, P.A. and Plummer, M. G. (2016), *The Economic Effects of the Trans-Pacific Partnership: New Estimates*, Working Paper No. 16-2, Peterson Institute for International Economics

The Economic Logic of Frictional Barrier Liberalizations

The economic impact of removing this sort of barrier is very similar to that of tariff removal, but the gains tend to be bigger since liberalization reduces their wasteful, revenueinto-the-sea aspects. However, an important difference is evident regarding trade diversion

The example of the elevator standards illustrates the point. If Vietnam takes US elevator standards as part of the TPP, the result may make it easier for US exporters in the Vietnamese market, but it need not create trade diversion. German elevator makers, for instance, already have a line of lifts that meets US specifications, so Vietnam's regulatory switch from local standards to US standards may help German exporters almost as much as those from the US.

These are called "soft preferences" because they often, unintentionally, make it easier for third nations to export to TPP member states. Deep down, the reason for this is that health, safety and environmental regulations are not conceived as discriminating by country of origin; they focus on the nature of the product, not where it was made. The Peterson study assumes that 20% of all frictional-barrier reductions arising from the TPP are extended to non-TPP members. The best way to think of this is that the TPP undertakes a certain reduction in frictional barriers for all nations, but then goes four times further in cutting the barriers among its members.

A Broader View of the TPP's Impact: Global Value Chains, Knowledge Transfers and Systems Competition

The discussion hereto has focused on trade barriers, but the TPP is so much more than a liberalizing arrangement. Indeed, it is above all a rule-writing arrangement, intended to help firms establish international production networks. To put it differently, the TPP is not only an agreement that boosts trade, but also a boost to the growth of GVCs in the region.

Though the impact of GVCs is not understood well enough to produce quantifiable estimates for encouraging them, the qualitative effects are still worth mentioning. Before that, however, it is important to focus on how the international commercial flows related to GVCs are different from normal trade. While normal trade is basically goods crossing borders, GVCs, by contrast, are factories crossing borders, and for good reasons. Manufacturing processes are typically highly complex, with the tendency to bundle all stages of production into a single building (a factory) or group of buildings (an industrial district). The upside of the "micro" clustering is that it economizes on coordination costs and reduces mistakes and delays. The downside is that firms end up using high-wage workers to do low-skill activities. When the information technology revolution took form, firms could unbundle the factories and send some of the low-skill stages to low-wage nations without a big drop in reliability and timeliness. But – and this the key to the broader effects of the TPP – the advanced-nation firms had to send some of their marketing, managerial and technical know-how along with the offshored jobs. This was required to ensure that the offshored production processes fit seamlessly with those left onshore.

To put it sharply, the switch to GVC production networks meant that the flows of knowledge that used to happen only inside G7 factories had now become part of globalization. In particular, massive amounts of productive know-how flowed from advanced technology nations to nearby developing nations. Of course, this was not charity; the offshoring firms worked hard to ensure the expertise transferred stayed inside the GVCs. As a consequence, the 21st century's contours of knowledge are increasingly defined by the geography of the GVCs, which are arranged by G7 firms rather than the geography of nations.

In sum, the TPP is very much about establishing disciplines necessary to underpin GVCs. Thus, the TPP will encourage this sort of "inside-GVC" technology transfer. Since such transfers stimulate industrial development in the emerging markets that participate in GVCs, and because the TPP will promote GVC growth, it is easy to understand why developing nations were willing to accept the tough TPP provisions.

Co-Editors

Jonathan T. Fried, Ambassador and Permanent Representative of Canada to the WTO, Geneva Peter Draper, Senior Research Fellow, Economic Diplomacy Programme, South African Institute of International Affairs (SAIIA), South Africa

Contributors

Richard Baldwin, Professor of International Economics, Graduate Institute of International and Development Studies, Switzerland

Anabel Gonzalez, Senior Director, Trade and Competitiveness Global Practice, World Bank, Washington DC Robert Lawrence, Albert L. Williams Professor of Trade and Investment, Harvard Kennedy School of Government, USA Beatriz Leycegui Gardoqui, Partner, SAI Law & Economics, Mexico

James Lockett, Vice-President, Head of Trade Facilitation and Market Access, Huawei Technologies, People's Republic of China

Alex Manson, Global Head, Transaction Banking, Standard Chartered Bank, Singapore

Ricardo Meléndez-Ortiz, Chief Executive, International Centre for Trade and Sustainable Development (ICTSD), Switzerland

Michitaka Nakatomi, Special Adviser, Japan External Trade Organization (JETRO), Japan Harsha Vardhana Singh, Senior Fellow, International Centre for Trade and Sustainable Development (ICTSD), Switzerland

Vera Thorstensen, Head, Center on Global Trade and Investment, Fundação Getúlio Vargas (FGV), Brazil James X. Zhan, Director, Investment and Enterprise, United Nations Conference on Trade and Development (UNCTAD), Geneva

The Global Agenda Council on Trade & FDI would also like to thank the following contributors for their valuable input:

Kimberley Botwright, Policy and Editorial Adviser, Office of the Chief Executive, International Centre for Trade and Sustainable Development (ICTSD), Switzerland

Ingrid Jegou, Programme Manager, International Centre for Trade and Sustainable Development (ICTSD), Switzerland **Joachim Karl**, Legal Affairs Officer, Division on Investment, Technology and Enterprise Development, United Nations Conference on Trade and Development (UNCTAD), Geneva

Alice Tipping, Senior Programme Officer, International Centre for Trade and Sustainable Development (ICTSD), Switzerland

Endnotes

1 See, by way of a very accessible introductory set of explanations, Lee, T. B. (ed.), "The Trans-Pacific Partnership, explained". Available at http://www.vox.com/cards/trans-pacific-partnership. Accessed 23 June 2016.

2 See, for example, the analysis of the 2014 midterm congressional elections and campaign contributions by groups specifically motivated to achieve favourable political outcomes with respect to the TPP, in *The Political Money Behind the Trans-Pacific Partnership*, Common Cause Issue Brief, June 2015. Available at http://www.commoncause.org/ fact-sheets/the-political-money-behind-trans-pacific-partnership.pdf. Accessed 23 June 2016. See also *The Report of the Advisory Committee for Trade Policy and Negotiations (ACTPN)*, transmitted to President Obama on 3 December 2015. Available at https://ustr.gov/sites/default/ files/Advisory-Committee-on-Trade-Policy-and-Negotiations.pdf. Accessed 23 June 2016.

3 A number of preliminary studies have already been completed, with differing results, by the World Bank and the Peterson Institute. The US International Trade Commission has issued an influential report entitled Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors. Available at https://www. usitc.gov/publications/332/pub4607.pdf. Accessed 30 June 2016. See World Bank, Potential Macroeconomic Implications of the Trans-Pacific Partnership. Available at http://www.worldbank.org/content/dam/ Worldbank/GEP/GEP2016a/Global-Economic-Prospects-January-2016-Implications-Trans-Pacific-Partnership-Agreement.pdf. Accessed 23 June 2016. See also Petri, P. A. and Plummer, M. G. (2016), The Economic Effects of the Trans-Pacific Partnership: New Estimates, Working Paper No. 16-2, Peterson Institute for International Economics. Available at http://piie.com/publications/wp/wp16-2.pdf. Accessed 23 June 2016.

4 New Zealand's Ministry of Foreign Affairs and Trade is the official depository of the treaty text and has published an official version following the legal scrubbing process. Available at <u>https://www.mfat.</u> govt.nz/en/about-us/who-we-are/treaty-making-process/trans-pacificpartnership-tpp/text-of-the-trans-pacific-partnership. Accessed 23 June 2016.

5 See, for example, Katzner, D. W., *Exercises in Futility: Post-War Automobile-Trade Negotiations between Japan and the United States.* Available at http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1052&context=econ workingpaper. Accessed 23 June 2016.

6 TPP goes further in disciplining export restrictions than most regional trade agreements. In areas such as quantitative restrictions and export taxes, TPP generally binds the status quo. One exception is Vietnam, which will eliminate many of its export taxes in the next 5 to 15 years. Notably, export restrictions are not allowed on energy products originating in the US.

7 Import licensing is defined in the TPP as "an administrative procedure requiring the submission of an application or other documentation (other than that generally required for customs clearance purposes) to the relevant administrative body as a prior condition for importation into the territory of the importing Party" (Article 2.1).

8 Office of the United States Trade Representative, "Trans-Pacific Partnership: Summary of U.S. Objectives". Available at <u>https://ustr.gov/</u> <u>tpp/Summary-of-US-objectives</u>. Accessed 23 June 2016.

9 In partial cumulation, if components move in the production process from FTA member country A to B to be incorporated in a finished product exported to country C, PSR criteria as originating goods should be satisfied at country B. In full cumulation, the test for PSR criteria is done once, in country C. 10 OECD (2011), *Size of public procurement market*. Available at <u>http://www.oecd-ilibrary.org/docserver/download/4211011ec046.pdf?exp</u> ires=1458338695&id=id&accname=guest&checksum=8E5D2FEA7340E F482F35EFB00E055B37. Accessed 23 June 2016.

11 Moran, T. (2016), "Government Procurement" in *Assessing the Trans-Pacific Partnership* (pp. 76-78), Peterson Institute for International Economics.

12 United Nations Conference on Trade and Development (UNCTAD) FDI/MNE database. Available at <u>www.unctad.org/fdistatistics</u>.

13 Hoekman, B. and Mavroidis, P. C. (2015), "Regulatory Spillovers and the Trading System: From Coherence to Cooperation", *E15Initiative*, ICTSD and World Economic Forum, Geneva. Available at <u>http://</u> <u>e15initiative.org/publications/regulatory-spillovers-and-the-trading-</u> <u>system-from-coherence-to-cooperation</u>. Accessed 23 June 2016.

14 Mitchell, A. D. and Sheargold, E. (2016), *The TPP and Good Regulatory Practices: An Opportunity for Regulatory Coherence to Promote Regulatory Autonomy?* Available at <u>http://papers.srn.com/sol3/</u> <u>papers.cfm?abstract_id=2728771.</u> Accessed 31 May 2016.

15 Hoekman, B. (2016), "Behind-the-Border Policies: Regulatory Cooperation and Trade Agreements" in *The Future of the Global Trade Order*, C. A. Primo Braga and B. Hoekman (eds), IMD.

16 United States International Trade Commission (USITC) (2016), *Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors*, Publication Number: 4607 Investigation Number: TPA-105-001. Available at <u>https://www.usitc.gov/</u> publications/332/pub4607.pdf.

17 Ibid.

18 Bhatia, K. K. (2016), *Testimony of the General Electric Company Before the United States International Trade Commission Regarding the Trans-Pacific Partnership,* written submission to the USITC. Available at <u>https://www.usitc.gov/press_room/documents/</u> <u>testimony/105_001_005d2.pdf.</u> Accessed 31 May 2016.

19 The TPP differs in its relationship with the WTO TBT agreement compared to other RTAs. CETA directly incorporates a broader range of TBT agreement articles. The Australia-Japan FTA, along with KORUS and the EU-Singapore FTA, include a reaffirmation of existing rights and obligations with respect to each other under the TBT agreement.

20 It should of course be noted that this specification excludes TBT agreement Articles 2, 5 and 6 that are also fully incorporated into CETA and discussed in this section in the context of the TPP. The CETA TBT chapter provides that an ad hoc technical working group can be established if parties are unable to resolve matters related to it.

21 USITC (2016), Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors, op. cit.

For example, the obligation to allow stakeholders from other parties to comment on regulations, standards and conformity assessment procedures by central governments on terms no less favourable than those accorded to domestic constituencies, mirrors that found in US FTAs with South Korea and Peru, as well as the Australia-Japan FTA, to name a few recent ones. In the EU-Singapore FTA, parties agree to take another party's views into account without discrimination where the process is open to public consultation, and to provide reasonable opportunities for parties and interested persons to make comments. In CETA, parties should allow interested persons of the parties to participate at an early, appropriate stage, among other things. In the AANZFTA, parties would ensure information regarding proposed new or amended standards, technical regulations and conformity assessment procedures is made available according to the TBT agreement's relevant requirements. A second clause adds that this information should be published, made available in printed form and electronically, where possible.

23 Other examples in the wider universe of FTAs do exist for the inclusion of TBT sectorial annexes. This includes, for example, the EU-Singapore FTA that has an annex to its TBT chapter, focused on addressing such issues in relation to bilateral trade in electronic goods.

24 USITC (2016), op. cit.

25 Pritzker, P. (2015), "Commentary: Eyeing 570 Million middle-class consumers in the Asia-Pacific region", *Chicago Tribune*. Available at http://www.chicagotribune.com/news/nationworld/ct-pritzker-trade-garret-popcorn-penny-trans-pacific-partnership-perspec-06232-20150622-story.html. Accessed 30 June 2016.

26 United States Trade Representative (USTR) (n.d.), TPP Chapter Summary, "Sanitary and Phytosanitary Measures". Available at <u>https:// ustr.gov/sites/default/files/TPP-Chapter-Summary-Sanitary-and-Phytosanitary-Measures-1.pdf</u>. Accessed 23 June 2016.

27 See, for example, KORUS Chapter 8, EU-Singapore FTA Article 5.6, and CETA Article 5.4.

28 Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors. United States International Trade Commission.

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30 USITC (2016), op. cit.

31 Ibid.

32 World Bank Group (2016), *Global Economic Prospects: Spillovers amid Weak Growth.* Washington DC: World Bank. DOI: 10.1596/978-1-4648-0675-9 (Box 4.1.1.).

33 Sugathan, M. (2016), *Mutual Recognition Agreement on Conformity Assessment: A Deliverable on Non-Tariff Measures for the EGA?* Issue Paper No. 21, International Centre for Trade and Sustainable Development (ICTSD), Geneva. Available at <u>http://www.ictsd.org/sites/</u> <u>default/files/research/Mutual%20Recognition%20Agreement%200n%20</u> <u>Conformity%20Assessment%20A%20Deliverable%20on%20Non-</u> <u>Tariff%20Measures%20for%20the%20EGA_0.pdf</u>. Accessed 23 June 2016.

Hoekman and Mavroidis (2015), op. cit.

35 "Immigration in Malaysia: Assessment of its Economic Effects, and a Review of the Policy and System", The World Bank: Human Development Social Protection and Labor Unit East Asia and Pacific Region, 2013; US Department of State, *Brunei 2014 Human Rights Report*, 2014.

36 Trade Act of 1974 (P.L. 93-618).

37 Morin, J.-F. and Beaumier, G. (2016), "TPP environmental commitments: Combining the US legalistic and the EU sectoral approaches", *Bridges Trade BioRes Review*, 29 April, ICTSD. Available at http://www.ictsd.org/bridges-news/biores/news/tpp-environmental-commitments-combining-the-us-legalistic-and-the-eu. Accessed 30 June 2016.

38 George, C. (2014), *Environment and Regional Trade Agreements: Emerging Trends and Policy Drivers*, OECD Trade and Environment Working Papers, No. 2014/02, OECD Publishing, Paris. DOI: <u>http://dx.doi.org/10.1787/5jz0v4q45g6h-en.</u>

39 Organization of American States Foreign Trade System, Chile-Turkey Free Trade Agreement. Available at <u>http://www.sice.oas.org/</u> <u>Trade/CHL_TUR_Final/CHL_TUR_Index_e.asp</u>. Accessed 30 June 2016. 40 Yanai, A. (2014), *Environmental Provisions in Japanese Regional Trade Agreements with Developing Countries*, IDE Discussion Paper No. 467. Available at http://www.ide.go.jp/English/Publish/Download/Dp/pdf/467.pdf. Accessed 23 June 2016.

41 Sumaila, U.R., Lam V., Le Manach, F., Swartz, W. and Pauly, D. (2013), "Global Fisheries Subsidies", Note, European Parliament, Brussels. Available at <u>http://www.europarl.europa.eu/RegData/etudes/ note/join/2013/513978/IPOL-PECH_NT(2013)513978_EN.pdf</u>. Accessed 23 June 2016.

42 Sumaila, U. R., Bellmann, C. and Tipping, A. (2014), "Fishing for the Future: Trends and Issues in Global Fisheries Trade", E15Initiative. Geneva: ICTSD and World Economic Forum. Available at <u>http://</u> e15initiative.org/publications/fishing-for-the-future-trends-and-issues-inglobal-fisheries-trade/. Accessed 23 June 2016.

43 Ibid.

Note that proposals tabled in the WTO in 2015 outlined the development of a multilateral prohibition on the same two kinds of fisheries subsidies prohibited in the TPP. See in particular a joint proposal by the African, Caribbean and Pacific (ACP) Group (TN/RL/W/267) and Peru (TN/RL/W/264). For more on these, see "'Rules' outcomes on fisheries, trade remedies remain elusive ahead of Nairobi ministerial", *Bridges News*, Volume 19, Number 42. Available at <u>http://www.ictsd.</u> org/bridges-news/bridges/news/rules-outcomes-on-fisheries-traderemedies-remain-elusive-ahead-of-nairobi. Accessed 23 June 2016.

45 FAO (2014), "The State of World Fisheries and Aquaculture 2014", Food and Agriculture Organization of the United Nations, Rome. Available at <u>http://www.fao.org/3/a-i3720e.pdf</u>. Accessed 23 June 2016.

46 Sumaila, U.R., Lam V., Le Manach, F., Swartz, W. and Pauly, D. (2013), "Global Fisheries Subsidies" Note, European Parliament, Brussels. Available at <u>http://www.europarl.europa.eu/RegData/etudes/ note/join/2013/513978/IPOL-PECH_NT(2013)513978_EN.pdf</u>. Accessed 23 June 2016.

47 Sumaila, U. R. (2016), *Trade Policy Options for Sustainable Oceans and Fisheries*, E15 Expert Group on Oceans, Fisheries and the Trade System – Policy Options Paper. E15Initiative. Geneva: ICTSD and World Economic Forum.

48 In force since 1975, CITES regulates trade in more than 35,000 species of wild animals and plants, affording various levels of protection according to conservation status through listings in a series of annexes. While some species may be deemed too endangered to trade under any circumstance, others, including parts and derivatives, can be traded within certain limits, accompanied by permits and other documentation.

49 US House of Representatives, Committee on Ways and Means, Minority Staff Report (2015), "TPP Issue Analysis: Environment Chapter". Available at <u>http://democrats.waysandmeans.house.gov/sites/democrats.</u> waysandmeans.house.gov/files/documents/TPP%20Issue%20 Analysis%20-%20Environment%20Chapter.pdf. Accessed 23 June 2016.

50 The FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing will come into effect once 25 parties to the agreement ratify it (21 had done so as of February 2016).

51 This may be because the US has signed but not ratified the treaty. May 10th MEAs not included are the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR), the Convention for the Establishment of an Inter-American Tropical Tuna Commission (IATTC), the Convention on the Conservation of Antarctic Marine Living Resources (CAMLR) and the International Convention for the Regulation of Whaling (International Whaling Convention). As in other US-led trade agreements, the violation of the MEA commitments only comes into play if it is shown that it significantly affects trade or investment between the parties.

52 Roughly 5,600 species of animals and 30,000 species of plants.

53 According to the US-based Wildlife Conservation Society, wildlife trafficking is a global problem, but Asia and the Pacific Rim are areas of particular concern. There, species particularly affected include tigers and pangolins. The region is also a hub for illegal ivory, rhino horn and timber flows.

54 Politics in certain TPP parties may partly be the cause of this. The US Trade Facilitation and Enforcement Act of 2015 includes some amendments to the "trade promotion agreement", geared towards fasttracking trade deals through the US Congress, that seeks to ensure trade agreements do not establish obligations for the US on GHG emission measures, including obligations that would require changes to US laws or regulations. For a comprehensive analysis of possibilities to enable the rapid build-up of clean energy technologies using trade and investment frameworks, see Meléndez-Ortiz, R. (2016), *Enabling the Energy Transition and Scale-Up of Clean Energy Technologies: Options for the Global Trade System*, E15 Expert Group on Clean Energy Technologies and the Trade System – Policy Options Paper, E15Initiative, Geneva: ICTSD and World Economic Forum.

55 For example, the EU-Singapore FTA Article 13.11.3 identifies the progressive reduction of fossil-fuel subsidies as a shared goal between parties in tackling climate change. Article 13.6.3 reaffirms a commitment to reach objectives outlined under the UN Framework Convention on Climate Change (UNFCCC) and to strengthen the multilateral climate regime. In CETA Article 24.12.1(e), parties commit to cooperate on trade-related aspects of the current and future international climate change regime, as well as on issues relating to carbon markets, among other items. EU-Korea FTA Article 13.5.3 reaffirms a commitment to reaching the ultimate objective of the UNFCCC and its Kyoto Protocol. For further details on climate and energy provisions in existing RTAs, see Gehring, M. W., Cordonier Segger, M.-C., de Andrade Correa, F., Reynaud, P., Harrington, A. and Mella, R. (2013), Climate Change and Sustainable Energy Measures in Regional Trade Agreements (RTAs): An Overview, ICTSD Programme on Global Economic Policy and Institutions; Issue Paper No. 3; Geneva: ICTSD. Available at http://www.ictsd.org/ downloads/2013/08/climate-change-and-sustainable-energy-measuresin-regional-trade-agreements-rtas.pdf. Accessed 23 June 2016.

From a climate perspective, it would have been worthwhile to refer to an intention to refrain from using fossil-fuel subsidies, as well as to develop a list of subsidies that could be non-actionable over a certain time period in order to stimulate clean energy. Provisions could also have been included to increase the transparency of energy subsidies as a useful first step.

57 Bacchus, J. (2016), *Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes*, E15 Expert Group on Measures to Address Climate Change and the Trade System – Policy Options Paper, E15Initiative, Geneva: ICTSD and World Economic Forum; Petsonk, A. and Keohane, N. O. (2015), "Creating a Club of Carbon Markets: Implications of the Trade System", E15Initiative, Geneva: ICTSD and World Economic Forum.

58 The Paris Agreement established a new terminology for international carbon currency. Under the Kyoto Protocol, countries had the opportunity to trade spare "assigned amount units" (AAUs), with AAUs representing the amount of GHG emissions the covered parties could emit. The agreement establishes a radically different structure, whereby parties self-define carbon limits rather than receive set targets. In this context, ITMOs will replace AAUs, but the core operating system for international emissions trading is likely to look quite different. The use of ITMOs is voluntary and authorized by participating parties.

59 In this respect, the TPP appears weaker than Article 13.11.2 of the EU-Singapore FTA, where parties are obliged to pay special attention to facilitating the removal of obstacles to trade or investment concerning climate-friendly goods and services, such as sustainable renewable energy goods, related services, and energy-efficient products and services. CETA Article 24.9 offers another example of language along similar lines.

60 USTR (2015), "TPP Preserving the Environment" fact sheet. Available at <u>https://ustr.gov/sites/default/files/TPP-Preserving-the-</u> Environment-Fact-Sheet.pdf. Accessed 23 June 2016.

A full analysis of the overlaps in TPP schedules and the APEC 54 list will be required to assess the extent to which the 12-nation deal deepens and complements previous voluntary commitments.

62 Vossenaar, R. (2014), *Identifying Products with Climate and* Development Benefits for an Environmental Goods Agreement, Issue Paper No. 19, Geneva: ICTSD. Available at <u>http://www.ictsd.org/sites/</u> default/files/research/Identifying%20Products%20with%20Climate%20 and%20Development%20Benefits%20for%20an%20Environmental%20 Goods%20Agreement.pdf. Accessed 23 June 2016.

63 "Environmental Goods Agreement negotiators bargain on coverage", *Bridges Trade BioRes Review*, 30 June 2016. Available at http://www.ictsd.org/bridges-news/biores/news/environmental-goodsagreement-negotiators-bargain-on-coverage. Accessed 30 June 2016.

All 12 TPP parties are also members of the 21-nation APEC forum. Six TPP parties are participating in the EGA negotiations. The EGA also includes some major traders not participating in the TPP, including China, Chinese Taipei, the 28-nation EU and South Korea, although the latter is a member of APEC as well.

The initiative's preliminary focus will be on gathering information on services regulation and trade policy in APEC economies, including on cross-border supply, governance of commercial ownership, licensing, movement of workers, as well as preferential liberalization and regulatory regimes. APEC (2016), *APEC Lays Services Path to Green Growth* [News release]. Available at http://www.apec.org/Press/News-Releases/2016/0301_environment.aspx. Accessed 23 June 2016.

66 "Environmental goods agreement negotiators eye next steps", *Bridges Trade BioRes Review*, 10 March 2016. Available at <u>http://www.</u> ictsd.org/bridges-news/biores/news/environmental-goods-agreementnegotiators-eye-next-steps. Accessed 23 June 2016.

67 Prawitz, C. and Rentzhog, M., December 2014, *Making Green Trade Happen: Environmental Goods and Indispensable Services*, Stockholm: Kommerskollegium, National Board of Trade, Third Edition.

68 Hufbauer, G., February 2016, "Liberalization of Services Trade" in Assessing the Trans-Pacific Partnership, Volume 1: Market Access and Sectoral Issues. PIIE Briefing 16-1, Washington DC: Peterson Institute for International Economics, pp. 88-89.

69 Stephenson and Sotelo (forthcoming 2016), *Bridges Trade BioRes Review*, ICTSD.

70 ICTSD and SETI Alliance (2015), "Strengthening Global Value Chains in the Clean Energy Sector", Presentations. Available at <u>http://</u> www.ictsd.org/sites/default/files/event/Presentations%20-%20 Strengthening%20Global%20Value%20Chains%20in%20the%20 Clean%20Energy%20Sector.pdf. Accessed 23 June 2016.

71 See, by way of comparison, KORUS Article 20.5, US-Colombia TPA Article 18.5, and EU-Singapore FTA Article 13.11.4. The EU Colombia-Peru RTA Article 271.4 stipulates that voluntary mechanisms can contribute to coherence between trade and sustainable development more broadly, unlike the TPP that focuses on environmental performance, but also does not include any criteria for developing such mechanisms.

72 Leaders' Declaration, G7 Summit, 7-8 June 2015. Available at <u>https://sustainabledevelopment.un.org/content/</u> <u>documents/7320LEADERS%20STATEMENT_FINAL_CLEAN.pdf</u>. Accessed 23 June 2016. 73 Carbon-Cap (2015), "A report on the political, legal, and administrative feasibility of measures". Available at <u>http://www.carboncap.eu/images/Carbon Cap D5-2 A report on the political legal and administrative feasibility of measures - final.pdf</u>. Accessed 23 June 2016.

74 Lohr, S. (2015), "Data-ism: The Revolution Transforming Decision-Making, Consumer Behavior, and Almost Everything Else".

75 International Institute for Sustainable Development (IISD) (2010), "The Digital Economy and the Green Economy: Opportunities for strategic synergies", IISD Commentary. Available at <u>http://www.iisd.org/</u> pdf/2010/com_digital_economy.pdf. Accessed 23 June 2016.

76 Data for Climate Action. Available at <u>http://www.data4sdgs.org/</u> <u>dc-data-for-climate-action/</u>. Accessed 30 June 2016.

77 Stephenson and Sotelo (forthcoming 2016), in *Bridges Trade BioRes Review*, ICTSD.

78 OECD (2010), "Recommendation of the Council on Information and Communication Technologies and the Environment". Available at http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentI D=259&Lang=en&Book=False. Accessed 23 June 2016.

79 Bolle, M. J. (2016), *Overview of Labor Enforcement Issues in Free Trade Agreements*, Congressional Research Service.

80 Charnovitz, S. (2016), "An Appraisal of the Labor Chapter of the Trans-Pacific Partnership. Remarks Submitted to the Committee on Ways and Means Democrats". Available at <u>http://democrats.</u> waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/ files/documents/Labor%20Forum%20Remarks%20-%20Steve%20 Charnovitz.pdf. Accessed 23 June 2016.

81 Ibid.

82 Human Rights Watch, "World Report 2015: Vietnam"; Zensius, A. (2011), "Forced Labor in Vietnam: A Violation of ILO Convention 29", International Labor Rights Forum. Available at <u>http://laborrightsblog.</u> typepad.com/international_labor_right/2011/09/forced-labor-in-vietnama-violation-of-ilo-convention-29-.html. Accessed 23 June 2016.

83 ITUC (n.d.) "Trans Pacific Partnership Labour Chapter Scorecard: Fundamental Issues Remain Unaddressed", International Trade Union Confederation. Available at <u>http://www.ituc-csi.org/IMG/pdf/trans_pacific.pdf</u>. Accessed 23 June 2016.

84 "CITES committee deploys trade bans, eyes September meet", Bridges News BioRes Review, 20 January 2016. Available at <u>http://www.ictsd.org/bridges-news/biores/news/cites-committee-deploys-tradebans-eyes-september-meet</u>. Accessed 23 June 2016.

85 Data source: Comtrade.

86 These include agencies with a variety of trade, environmental, labour and development expertise, namely the FAO, USITC, UNCTAD, the United Nations Environment Programme (UNEP) and the United Nations Industrial Development Organization (UNIDO).

87 Samans, R., Meléndez-Ortiz, R., Singh, H. V. and Doherty, S., *The E15 Initiative: Strengthening the Global Trade and Investment System in the 21st Century*, E15Initiative, Geneva: ICTSD and World Economic Forum, 2016. Available at <u>http://www3.weforum.org/docs/E15/WEF_Full</u> <u>Report Strengthening Global Trade Investment System 21st Century.</u> <u>pdf.</u> Accessed 23 June 2016.

88 For a more detailed exposition of these issues, including the work within the WTO and the way forward, see Singh, H. V., Abdel-Latif, A. and Tuhill, L. (forthcoming), *Governance of International Trade and Internet: Existing and Evolving Regulatory Systems*, Paper written for the Global Commission on Internet Governance.

89 For a critical first evaluation of the limited impact of this chapter, see Lee, T. B. (2015), "How the TPP could impact regulation of everything from cars to medical devices", Vox Policy & Politics. Available at <u>http://www.vox.com/2015/11/29/9760918/tpp-ecommerce-chapter</u>. Accessed 23 June 2016.

 $90\,$ Brunei Darussalam, Malaysia, Singapore and Vietnam are not members of TiSA.

91 Though TiSA negotiations are being conducted under secrecy, its draft chapter on electronic commerce is available at <u>https://wikileaks.org/tisa/</u>.

92 However, the government procurement chapter aims to facilitate procurement operations by relying on electronic means of providing, for example, information, bidding and notification.

93 See TPP Articles 14.2.4 and 14.2.5.

94 This includes, for instance, the issues covered in a joint submission by the EU and the US on the set of principles for ICT trade. See document S/C/W/338 of 13 July 2011.

95 World Trade Organization (1998), "Declaration on Global Electronic Commerce", WT/MIN(98)/DEC/2, 25 May.

96 For a good discussion on how digital trade is expanding exponentially and new products are emerging, see Lund, S. and Manyika, J. (2016), "How Digital Trade is Transforming Globalisation", ICTSD and World Economic Forum, Geneva. Available at <u>http://</u> e15initiative.org/publications/how-digital-trade-is-transformingglobalisation/. Accessed 23 June 2016.

97 For an in-depth study on the international ramifications of this issue, see Bygrave, L. A. (2010), *Privacy and Data Protection in an International Perspective*. Available at <u>http://www.uio.no/studier/</u> <u>emner/jus/jus/JUS5630/v13/undervisningsmateriale/privacy-and-data-</u> <u>protection-in-international-perspective.pdf</u>. Accessed 23 June 2016.

98 When a limited part of the global market implements certain policies involving higher standards, the excluded countries face a dilemma: raising their standards implies higher costs, but it may be required only for limited markets and not for the bulk of their overall trade. For a discussion, see pp. 11-13 of Mattoo, A. (2015), "Services Trade and Regulatory Cooperation", ICTSD and World Economic Forum, Geneva. Available at <u>http://e15initiative.org/publications/services-trade-andregulatory-cooperation/</u>. Accessed 23 June 2016.

99 McKinsey Global Institute (2014), "Global flows in a digital age: How trade, finance, people, and data connect the world economy". Available at <u>http://www.mckinsey.com/insights/globalization/global_flows in a digital age</u>. Accessed 23 June 2016.

100 For details, see Ahmed, U. and Aldonas, G. (2015), *Addressing Barriers to Digital Trade*, ICTSD and World Economic Forum, Geneva. Available at <u>http://e15initiative.org/publications/addressing-barriers-to-digital-trade/</u>. Accessed 23 June 2016.

101 See a report prepared in 2010 by Google: *Enabling Trade in the Era of Information Technologies: Breaking Down Barriers to the Free Flow of Information.* Available at <u>https://static.googleusercontent.com/media/</u> <u>www.google.com/en//googleblogs/pdfs/trade_free_flow_of_information.</u> <u>pdf.</u> Accessed 23 June 2016.

102 See Bauer, M. et al., *The Costs of Data Localisation: Friendly Fire on Economic Recovery.* Available at <u>http://www.ecipe.org/app/uploads/2014/12/OCC32014 1.pdf</u>. Accessed 23 June 2016.

103 GATT, Article XX.

104 See Lee, T. B. (2015), "How the TPP could impact regulation of everything from cars to medical devices", particularly the section entitled "Making the world safe for Silicon Valley". Available at <u>http://www.vox.com/2015/11/29/9760918/tpp-ecommerce-chapter</u>. Accessed 23 June 2016.

105 The list of topics for exchanging information and sharing experiences is open-ended, but the TPP text specifically mentions personal information protection; online consumer protection, including means for consumer redress and building consumer confidence; unsolicited commercial electronic messages; security in electronic communications; authentication; e-government; and consumer access to products and services offered online among TPP members.

106 For the importance of regulatory cooperation for reform, and the possibility of market opening and restrictive conditions, see pp. 5-11 in Mattoo, A. (2015), op. cit. Available at <u>http://e15initiative.org/publications/</u><u>services-trade-and-regulatory-cooperation/</u>. Accessed 23 June 2016.

107 The provision makes reference to the Article on consumer protection in the chapter on competition policy, which explains that "fraudulent and deceptive commercial activities refers to those fraudulent and deceptive commercial practices that cause actual harm to consumers, or that pose an imminent threat of such harm if not prevented".

108 A forthcoming study by the European Centre for International Political Economy (ECIPE), Brussels, provides long lists of non-tariff barriers for digital trade, including many which remain to be addressed through further discussions or negotiations.

- 109 Article 10.2(b).
- 110 Article 10.2(c).
- 111 Article 10.8, particularly Paragraph 4.
- 112 Article 10.11.

113 See, for example, Article 10.2.8, which states: "If the Annex on Air Transport Services of GATS is amended, the Parties shall jointly review any new definitions with a view to aligning the definitions in this Agreement with those definitions, as appropriate."

114 See Low, P. and Mattoo, A., *Is There a Better Way? Alternative Approaches to Liberalization Under the GATS.* Available at <u>http://</u>siteresources.worldbank.org/INTRANETTRADE/Resources/BPgats.pdf. Accessed 23 June 2016.

115 See the TPP, chapter 8.

116 For example, Articles 2.1, 2.2, 2.4, 2.5, 2.9, 2.10, 2.11 and 2.12 on the preparation, adoption and application of technical regulations by central government bodies; or Articles 5.1, 5.2, 5.3, 5.4, 5.6, 5.7, 5.8 and 5.9 on conformity assessment procedures.

117 For example, Article 8.8, "Compliance Period for Technical Regulations and Conformity Assessment Procedures", specifies that for the purposes of the TPP, the "reasonable interval" referred to in Articles 2.12 and 5.9 of the TBT agreement (between the publication of technical regulations or conformity assessment procedures and their entry into force) shall not be less than six months and should, where practicable, be longer than this.

118 Section A 3.c of Annex 8B.

119 See, for example, Auerbach, D., "There Is No Good Argument for Encryption Backdoors" in *Slate*, 19 November 2015. Available at http://www.slate.com/articles/technology/bitwise/2015/11/encryption_ backdoors won t_make_us_safer_from_terrorism_john_brennan_john. html. Accessed 22 February 2016.

120 Annex 8B, Section 2, Paragraph 3.

121 See, for example, Welch, C., "Obama, AT&T, Verizon, Netflix and more react to the FCC's historic net neutrality vote" in *The Verge*, 26 February 2015. Available at <u>http://www.theverge.</u> <u>com/2015/2/26/8115953/fcc-net-neutrality-vote-reactions</u>. Accessed 22 February 2016. 122 See, for example, Snider, M., "FCC to consider new TV set-top box rules" in *USA Today*, 17 February 2016. Available at <u>http://www.</u> <u>usatoday.com/story/tech/news/2016/02/17/fcc-consider-new-tv-set-topbox-rules/80504710/.</u> Accessed 22 February 2016.

123 This is Article 18.66, which states: "Each Party shall endeavour to achieve an appropriate balance in its copyright and related rights system, among other things by means of limitations or exceptions that are consistent with Article 18.65 (Limitations and Exceptions), including those for the digital environment, giving due consideration to legitimate purposes such as, but not limited to: criticism; comment; news reporting; teaching, scholarship, research, and other similar purposes; and facilitating access to published works for persons who are blind, visually impaired or otherwise print disabled."

124 As mentioned earlier, TiSA negotiations have been ongoing in Geneva since February 2012 and are alleged to already address some of the digital trade issues covered by the TPP e-commerce chapter (such as the protection of source code and the protection of personal data).

125 The OECD Recommendation is available at <u>http://www.oecd.org/</u> competition/international-coop-competition-2014-recommendation.htm.

126 The discussion relating to the TPP has also highlighted strategic implications of the agreement concerning the medium-term evolution of geo-economics. See, for example, Williams et al. (2016).

127 $\,$ The next largest is Japan, with 16.4% of the total GDP of TPP countries.

128 For an evaluation of the methodological weaknesses of the model used in this study, see Bauer and Erixon (2015).

129 US Congressman Sander Levin criticized an approach similar to that of Petri-Plummer that was used by the World Bank (World Bank [2016]) as being "incomplete". See Inside US Trade's *World Trade Online*, 14 January 2016.

130 See Narayanan et al. (2016) for a review of different models and their conclusion that a wider perspective needs to be kept in mind to assess the quantitative and qualitative features of the likely developments of a change being introduced through a new trade agreement.

131 The World Bank (2016) estimates that the largest gains will be experienced by smaller open economies, such as Vietnam and Malaysia, with an increase in GDP of 10% and 8%, respectively, by 2030. A study by Vietnamese scholars estimated much smaller GDP increases for Vietnam, while the percentage increase in GDP was estimated to be the highest among TPP economies. See Thanh et al. (2015).

132 This includes a reference to Bauer and Erixon (2015), which examines methodological issues relating to the use of a global policy model.

133 An important part of this process is also the availability of labour supply in different countries, as a number of TPP economies may also face labour shortages. See, for example, the Boston Consulting Group report, *The Global Workforce Crisis*". Available at http://www.iberglobal.com/files/The_Global_Workforce_Crisis_bcg.pdf. Accessed 23 June 2016.

134 Capaldo et al. (2016) have incorporated a discussion on fiscal policy growth and adjustment in tax policy. They have assumptions on growth of government spending, and also state, for instance, that "we assume that policymakers will not allow labor costs to go into a free fall. We assume instead that other business costs, including direct taxes, will also be cut in order to preserve competitiveness while there will be some constraints on how far real wages will be allowed to drop" (p. 13). These assumptions cannot, however, capture the composition effects of fiscal policy expenditure, which are important to address the adverse effects. 135 For example, in the case of clothing, about 27% of the US tariff lines will not have the tariff removed on implementation. Within these tariff lines, tariff categories will be phased down over different periods for product categories, as specified in the schedule for the US. These transition periods range from 5 to 13 years for clothing. Similar exemptions are taken by other TPP members for their sensitive tariff lines as well, with varying periods of transition.

136 They estimate a percentage change in GDP volume of -0.007% for Chile and -0.018% for Peru by 2035.

137 Even for negative impacts, the World Bank (2016, p. 227) shows that the negative effect is larger than -0.3% for only South Korea, Thailand and some Asian economies, with the largest decline (-1%) estimated for Thailand.

138 See, for example, Petri and Plummer (2016) and Ciuriak et al. (2016).

139 This paper calculates the impact, taking into account the effects of some other mega-regional agreements such as the TTIP and the RCEP.

140 See Table 1 of United Nations (2015).

141 See, for example, TPP Articles 7.11.7(b), 7.15, 7.17, 8.9.2, 8.11(d, f, i) and 14.15(a).

142 See, in particular, TPP Article 24.2.2.

143 It is interesting to note that some senior US officials have indicated certain issues will be addressed during the implementation phase. See, for example, "Froman: Implementation Plans One Way To Address Lawmakers' TPP Demands", Washington Trade Online, 20 January 2016; "Vetter Signals TPP Implementation May Be Used To Address Lawmakers' Objections", Washington Trade Online, 19 January 2016.

144 An interesting forecast in this context by the McKinsey Global Institute is that, by 2025, 229 of the Fortune Global 500 companies will be from developing economies, up from 85 in 2010. See Dobbs et al. (2013).

145 The frontier technologies aim to develop new or improved products, such as those linked to miniaturization, material science, genetics or biotechnology, precision engineering and robotization.

146 For a US perspective, see the remarks by Ambassador Michael Froman at the Woodrow Wilson International Center for Scholars, 13 January 2016. For the text of the statement, see the USTR website.

147 "Statement of the European Union and the United States on Shared Principles for International Investment". Available at <u>http://trade.</u> <u>ec.europa.eu/doclib/docs/2012/april/tradoc_149331.pdf</u>. Accessed 23 June 2016.

148 Business and Industry Advisory Committee to the OECD, "A Proactive Investment Agenda for 2016". Available at <u>http://biac.org/</u> wp-content/uploads/2015/10/FIN-2015-10-proactive-investmentagenda-2016.pdf. Accessed 23 June 2016. 149 In the TPP's chapter 17 on state-owned enterprises and designated monopolies, Article 17.14 states: "Within five years of the date of entry into force of this Agreement, the Parties shall conduct further negotiations on extending the application of the disciplines in this Chapter in accordance with Annex 17-C (Further Negotiations)."

150 This includes the Committee on Technical Barriers to Trade, whose functions include "deciding on priority areas of mutual interest for future work under this Chapter and considering proposals for new sector-specific initiatives or other initiatives" (Article 8.11.3[c]).

151 Petri, P. A. and Plummer, M. G. (2016), *The Economic Effects of the Trans-Pacific Partnership: New Estimates*, Working Paper No. 16-2, Peterson Institute for International Economics. Available at https://piie.com/publications/wp/wp16-2.pdf. Accessed 23 June 2016.

152 Ibid.



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World Economic Forum

91–93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel.: +41 (0) 22 869 1212 Fax: +41 (0) 22 786 2744

contact@weforum.org www.weforum.org