CEPS SPECIAL REPORT CEPS Thinking ahead for Europe

Economic Incentives for Indirect TTIP Spillovers

Arjan Lejour, Federica Mustilli, Jacques Pelkmans and Jacopo Timini

> No. 94 / October 2014 [TTIP Series No. 2]

Abstract

A deep, comprehensive and ambitious TTIP should not undermine or otherwise negatively affect the WTO and its signatories. Among other things, this means that trade diversion ought to be minimised and positive spillovers stimulated. The present CEPS Special Report provides some elementary quantification, which helps to understand the economic incentives for third countries to seek regulatory alignment with TTIP results, where relevant, and for which TTIP should be 'open'. It focuses on 'indirect' spillovers and employs a rather aggregate economic approach. We find that, of three groups of countries that are important for trade with the EU and the US, the 'closest' neighbours (NAFTA, EEA, Switzerland and Turkey) exhibit powerful incentives to align so as to benefit from positive spillovers. This is less clear for two other groups. Of the (seven) 'biggest traders' (in manufactured goods, for which spillovers matter most), China turns out to have the greatest interest in alignment in selected sectors, followed by Israel, Japan and South Korea. Whereas the latter three either have or are negotiating FTAs with the US and the EU, precisely China has none and remains outside TPP as well. In terms of sectors, the chemical sector followed by electronic equipment are by far the most important, with agro-products and fish as a good third (SPS issues). However, in chemicals and electrical equipment, the TTIP negotiations so far, and recent US/EU regulatory cooperation, do not indicate an ambitious approach, which could reduce regulatory barriers to market access drastically.



This paper is the second in a special series of CEPS reports on the Transatlantic Trade and Investment Partnership (TTIP).

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ISBN 978-94-6138-424-9

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Selected Highlights

- Of the 13 countries studied, whether they are 'biggest traders' or 'small developed countries' (outside Europe), only four exhibit a strong economic interest in regulatory alignment; one of these [China] currently has no established channels or trade agreements (with the US and/or the EU) to stimulate alignment.
- Of ten goods sectors, the leading sectors are chemicals (with no less than nine countries of these 13 countries interested, in different but strong enough degrees), electronic equipment (five countries), followed by agro-fish, mining and quarrying (where export restrictions matter) and transport equipment.
- For the 'closest neighbours', the dominance of TTIP as a destination market for goods exports is overwhelming across the board, indicating strong incentives for alignment.

1. Introduction

The Transatlantic Trade and Investment Partnership (TTIP) negotiations take place between two of the three biggest economies in the world and over a very wide spectrum of regulatory and trade policy domains. They cannot therefore be seen in isolation. One major issue is whether TTIP engenders spillovers to third countries. This CEPS Special Report represents a first attempt to understand the underlying economics of such spillovers. The idea is that TTIP, in setting regulatory practices for the North Atlantic, which reduce costly regulatory divergence, may apply on a MFN (most-favoured-nation) basis, or even that new TTIP regulatory 'standards' might be adopted by third countries, which thereby can reduce the nontariff barriers (NTBs) for their exports to TTIP economies. Both imply positive spillovers. Whilst there is some talk about spillovers from the regulatory accomplishments of TTIP to third countries, there seems to be no economic theory or analysis helping negotiators or observers to appreciate the drivers behind such spillovers. The only simulation of the impact of TTIP that has incorporated positive spillovers (Francois et al. 2013) does not offer any further insight in this respect; all it does is to stipulate an arbitrary 'size' of spillovers without any further explanation. Therefore, the present authors seek to provide some simple empirical economics to appreciate the incentives for spillovers.

Even if the relative economic significance of the EU and the US together in the world economy is shrinking steadily, in many respects they undoubtedly remain preponderant economic powers: their joint size of world goods trade is impressive (in 2013, the EU imported €196 billion in goods from the US and exported €288 billion to the US), similarly in services trade (in 2012, the EU imported €149 billion and exported €160 billion) and their dominance in

foreign direct investment (FDI) stocks is overwhelming (in 2012, EU inward stocks from the US amounted to \notin 1.65 trillion while outward stocks to the US amounted to \notin 1.65 trillion).¹

This preponderance and their former leadership in the World Trade Organization (WTO) bring with it a special responsibility when embarking upon TTIP. A deep, comprehensive and ambitious FTA-plus over the North Atlantic should not undermine or otherwise negatively affect the WTO and its signatories. This is not so much a question of violating the rules (as the EU and the US can be expected to stick to WTO rules) but rather of the 'regionalisation' of new, especially regulatory, frameworks and the risks of generating new forms of trade diversion that disadvantages third countries. Beyond a general but vague awareness, expressed in trade diplomacy, the debate on the possible economic impact on third countries has hardly taken off. In particular, positive spillovers remain at best speculative. Countries such as Turkey and Mexico have understood the danger and both the US and the EU have opened or intensified their bilateral trade policy channels to keep these governments posted and reflect on further initiatives. Given the preponderance of the US and the EU together, it is therefore crucial that efforts are undertaken to reduce or pre-empt any such negative effects and stimulate positive spillovers.

This report has a modest purpose. It seeks to complement the empirical economic study underlying the Commission's Impact Assessment of TTIP (Francois et al., 2013), which rightly - introduces the possibility of TTIP generating (positive) spillovers for third countries, both direct and indirect. The simulation by Francois et al. (op. cit.) without these spillovers results in small but non-trivial negative effects on trade and GDP for the third countries included. These negative effects disappear or become positive once the spillovers are included. However, Francois et al. (2013) do not explain or model these spillovers; their size is merely (and arbitrarily) postulated as respectively 20% of the NTB reduction for direct spillovers and 10% for indirect ones. In our report on the Francois et al. (2013) study for the European Parliament Committee on International Trade (INTA) (Pelkmans et al., 2014),² we have already pointed out that spillovers should be far better understood and that the incentives for third countries to align with TTIP and hence enjoy indirect spillovers ought to be analysed. The present Special Report provides some elementary quantification, which helps understand the incentives for third countries to seek either individual or (perhaps) plurilateral alignment with TTIP's regulatory aspects where relevant, and for which TTIP should be 'open'. The regulatory options and mechanisms which would facilitate both direct and indirect spillovers to third countries have to be treated in another study. The following focuses merely on rather aggregate economic incentives, not on the various modalities of regulatory cooperation in TTIP.

The structure of the present report is as follows: Section 2 defines spillovers more precisely and sets out how spillovers have been quantified in Francois et al. (2013). Sections 3 and 4 propose a possible way to identify potential spillovers for a specific country. In particular, Section 3 analyses which countries, divided into three distinct groups, are most likely to be influenced by the negotiations according to the geographical trade pattern. Section 4 sheds light on which are the most sensitive sectors in each country to this influence. Both sections take advantage of the adoption of the global value chain approach. Section 5 concludes.

² To see the full report, see J. Pelkmans et al. (2014), CEPS Special Report No. 93, 13 October, or <u>www.europarl.europa.eu/RegData/etudes/etudes/join/2014/528798/IPOL-</u>JOIN_ET%282014%29528798_EN.pdf.



¹ Data from DG Trade Statistics. Please notice that, in 2012, EU plus US total merchandise as a share of total trade was about 40% and 44% for exports and imports, respectively (UNCTAD Statistics).

2. Spillovers from TTIP to third countries

Because bilateral tariff elimination in TTIP is expected to have minor effects, except in some specific subsectors, the main issue is about the reduction of the costs of NTBs over the North Atlantic. NTBs between the US and the EU are mainly about 'regulation' of goods and services markets, that is, reducing NTBs or their costs via regulatory convergence, mutual recognition or equivalence, or 'alignment' or harmonisation, and future continuation of regulatory cooperation as a 'living agreement'. Ideally, the eventual accomplishments in this large and complex area of negotiations should be 'open' to third countries if they express an interest bilaterally, and/or be extended in plurilateral or multilateral forms. Moreover, since regulatory ambition is frequently a function of the level of development, there is the additional risk that developing countries might not be capable of matching ambitions of the emerging transatlantic regulatory regime, even when third developed countries can somehow 'align' themselves if they want to.

Compared to many FTAs in the past, TTIP will be atypical because the main gains are foreseen as a consequence of the reduction of many NTBs, largely regulatory barriers. TTIP accentuates a new trend of recent FTAs concluded with either the EU or the US, including several WTOplus regulatory chapters on technical barriers (TBTs) and food and feed barriers (SPS, sanitary and phytosanitary issues), including sectoral chapters or annexes going into great detail, plus wider provisions on regulatory cooperation. For both the EU and the US, the agreements with Korea are an example; but recent FTAs of the EU with Singapore, Peru, Colombia and Canada also have extensive regulatory coverage. For the US, regulatory cooperation in NAFTA (or bilateral cooperation with the NAFTA partners separately) has recently been intensified, and its Trans-Pacific Partnership (TPP) with Asia-Pacific countries will include regulatory chapters. In TTIP, tariffs are on average already low (although considerable on certain products), so analysts do not expect major gains from their total removal. According to Francois et al. (2013) tariffs cuts to zero would lead to a 0.10% increase in EU GDP by 2027. Instead, an ambitious agreement, including a considerable degree of NTBs reduction, would lead to an increase in EU GDP ranging from 0.27% to 0.48% by 2027. For the US, tariff cuts would bring an additional 0.04% of GDP while a more ambitious agreement including NTBs removal would bring a 0.21% to 0.39% GDP increase by 2027.

Due to the economic importance of the two partners, the parallel negotiations of TTIP and of the TPP,³ and their regulatory core, have opened up a debate over the possible spillover effects that the former agreement could create for third countries by setting a new regulatory framework or simply establishing new standards.

Francois et al. (2013) includes spillover effects to third countries. These spillover effects would not emerge if two small countries form an FTA, but this is different once two very large economies in the world closely cooperate on regulatory issues. Direct and indirect spillover effects are positive for third countries and may be incorporated in the Global Trade Analysis Project (GTAP) model. Direct spillovers improve the trade possibilities of third countries with the EU and the US *without* any further action on the part of third countries – they are automatic. If the EU and the US streamline their regulatory procedures, this is subject to MFN treatment under the WTO, hence, it becomes also easier for firms from other countries to export to the US or the EU. In fact, due to MFN, third countries might sometimes be free riders. Take harmonisation of TTIP rules in some areas (which cannot be discriminatory) or an instance of

³ The Trans-Pacific Partnership (TPP) is a proposed regional free trade agreement that is currently being negotiated by 12 countries throughout the Asia-Pacific region (Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam).



straightforward 'regulatory' liberalisation of market access, say, by dropping certain requirements: both would exemplify direct spillovers to third countries. This effect may well be non-trivial for third countries in the case of an FTA between large economies, but the authors are not aware of any attempt to estimate this effect. While spillover effects are foreseen to be positive for mature or emerging economies in the orbits of the US and the EU, there is an increasing concern that the possibility of setting a regional regulatory framework involving, for instance, common standards or harmonisation processes may increase intra-regional exchange of goods and services also by excluding developing economies that are not able to comply with the agreed level (Mattoo, 2013). It is worth noticing, however, that evaluating spillover effects on different sets of countries is a rather speculative exercise, before knowing what the negotiating chapters will exactly achieve. The 20% spillover, conjectured in the Francois et al. study, could be seen as a kind of middle ground between irrelevance (0%) and incredibly large (50%), but it seems arbitrary to postulate it like this. The study does not contain any reasoning or background that could even remotely explain such a figure. Moreover, spillovers are neither differentiated according to sector (which is almost certainly needed) nor is there any variation as to what countries or groups might benefit from spillovers. Also, the regulatory options or mechanisms are neither stylised (of course, one should remember that the study preceded the negotiations) nor even mentioned. We acknowledge that direct (positive) spillovers may well be engendered by TTIP, but it is not the subject of this CEPS Special Report, for the simple reason that it would require careful regulatory scrutiny of the options in TTIP for such MFN-based deals.

Indirect spillovers could be present as well, when third countries purposefully adopt the (TTIP) regulatory standards or procedures of the EU and US. It makes sense that firms in other countries adopt the regulatory standards of large countries, when the former are closely linked to the EU, the US or both. This would also improve market opportunities for American and European firms in these third countries. Such 'policy-induced spillovers' occur when agreed harmonisation or mutual recognition in TTIP (perhaps with a minimum of regulation, say, of objectives only) would also be adopted by third countries. This (domestic) act of re-regulation by third countries will of course have to be incentivised, otherwise, it will not - or in any case not easily – happen. One can stretch this to standards, be they common US-EU standards, or, more likely, world standards, or declarations of some legal validity that (these) US and EU standards (though somewhat different) are 'equivalent'. In the case of compatibility or interoperability standards they need to be identical. This second form may not require any explicit act between the TTIP partners and a third country, or, presumably no more than an informal agreement. Third countries might also want to negotiate the equivalence of rules based on TTIP results. Given the complexity of some regulatory regimes, this would not be surprising. However, the outcome of such efforts is uncertain; once agreed, the spillovers are similar in nature.

Indirect spillover action would only be set into motion once there are sufficient incentives for third countries. These incentives can be subtle, sector-specific and may depend as well on the regulatory modes or mechanisms employed.⁴

In Francois et al., these indirect spillovers are half of the direct spillovers, thus 10% of the original decrease of the costs of NTBs. Also here empirical material on indirect spillovers is missing – it is a mere conjecture. One better be prudent not to overestimate the effect, but this requires, if not a theory, at least some qualitative reasoning about what drives such spillovers, in particular the indirect ones. It is also unclear why the direct spillovers are double the indirect

⁴ These details matter but can be discussed elsewhere.



ones; this suggests that TTIP would have considerable opportunities to generate MFN-based regulatory initiatives, which is far from obvious.

3. Aggregate economic incentives for indirect spillovers

For present purposes, we focus solely on a more *aggregate* approach for trade policy-makers and regulators of any country X having important economic intercourse with the TTIP twins. The most obvious and important incentive is found in mutual trade relations, possibly in combination with FDI stocks both ways. In the following, we assume that the relative importance of aggregate goods trade with the TTIP partners is a reasonable first proxy of a third country's incentive to consider 'alignment' of its rules and regulatory practices on goods with TTIP. We focus on goods trade, not services, because much of the regulatory cooperation in the High Level Group Report⁵ is about goods trade.

Before moving to the analysis of each sector, we first provide a general picture where we select candidates potentially interested in joining TTIP at a later stage or that can be influenced by its outcome. The main variable underlying trade incentives is the "domestic value added embodied in the foreign final demand" as a percentage of the total value added produced by the exporting country. The reason why we prefer this variable to the classical gross exports figures is explained in Box 1.

Box 1. Why are global value chains crucial to understanding trade relations?

Recent trade literature focuses on the prominent role of (global) value chains (GVCs) when analysing trade relations between countries. Although statistics are not yet fully elaborated, the new data represents a first attempt to quantify the 'value added' of each country in the different sectors; value-added figures do not necessarily correspond with conventional trade flow data. By 'value added' one refers to "the value that is added in producing goods and services for export", reflecting the real activity of one location in the value chain and shedding light on the percentage of intermediate inputs embodied in the exports of other countries, inputs which were first imported.⁶ In many cases it has been noted that conventional trade balances or indeed trade flows have been misrepresented by implicitly expecting that trade flow data reflect the value added in a country.

In order to better understand and eventually quantify the sectoral incentives of each country to negotiate post-TTIP market access via an alignment of rules, it is interesting to adopt the trade-in-value-added approach.

According to the definition provided by the OECD-WTO Trade in Value Added (TiVA) database, this variable shows how industries export value both through direct final exports and via indirect exports of intermediates through other countries to foreign final consumers (households, charities, government, and as investment). The aim is to quantify how upstream industries are connected to final consumption in other countries, especially when the trade relationship is not identified by the classical trade flow statistics. The variable illustrates therefore the full upstream impact of final demand in foreign markets to domestic output. It can best be interpreted as 'exports of value added' (OECD, 2013).

Countries have been clustered in three groups: first, we considered the so-called 'closest neighbours', including those countries already linked to the TTIP twin through legal and deep commercial trade relations, namely NAFTA for the US, and Switzerland, Iceland, Norway and Turkey for the EU. Before inspecting the data, we expect a strong interest from those countries

⁶ <u>www.oecd.org/sti/ind/whatistradeinvalueadded.htm</u>.



⁵ United States-European Union High Level Working Group on Jobs and Growth (HLWG) (2013).

in the negotiations induced by the existing deep trade relations. A second group includes important commercial players according to their relative contribution to global trade, namely: Brazil, China, India, Indonesia, Japan, Republic of Korea, South Africa (defined as the seven 'biggest traders', other than TTIP itself).⁷ A third group consists of 'other developed open economies', namely, Australia, New Zealand, Singapore, Hong Kong, Israel and Chile, which, in the WTO, can never hope to be 'principal traders' that assume leadership on regulatory regimes, but are keen to benefit from effective market access to TTIP.⁸ The following simple exercise shows that spillovers – quite apart from their specific regulatory substance – are incentivised far more in NAFTA and in Europe with the EU's closest economic neighbours (Switzerland, Iceland, Norway and Turkey) than in the second and third groups of world traders. Specifically, with Turkey, Switzerland, Iceland and Norway the EU already has credible channels for regulatory convergence and a lot of harmonisation and standardisation has already taken place.⁹ In NAFTA, regulatory convergence used to be no more than marginal, but both Mexico and Canada now have active Regulatory Councils with the US.

Table 1 shows that 'closest neighbours' have export shares in terms of domestic value added embodied in the foreign final demand for TTIP (in their world goods exports) ranging from 56% to 74%, which would seem to reflect powerful incentives to seek effective forms of regulatory accommodation with TTIP.

There is no obvious basis to define a critical aggregate threshold beyond which a third country would be incentivised or not; it is probably not a binary issue anyway. Indeed, an aggregate threshold might be inappropriate as the practical approach for alignment will likely be sectoral, in combination with some broader regulatory cooperation principles and some institutional arrangements. But 56% to 74% shares are so high that one may speak of TTIP dominance in trade relations.

If these trade shares are combined with the overall merchandise trade openness of countries, the TTIP openness share is about 37%; only for Turkey is it much lower (22%).¹⁰ The latter result is not surprising, because Turkey is also orientating itself towards the Middle East and former Soviet Union countries. Often, trade openness is combined with strong relations in markets via FDI stocks that further strengthen the impetus. This TTIP 'dominance' is, in part, the result of accomplished, 'deep' market integration, underpinned by strong obligations of 'negative integration' and, depending on the case, some or even far-reaching agreements on positive integration, especially regulatory ones (more in Europe than in North America). In other words, regulatory and institutional relations inside NAFTA are developing and, inside Europe, are already advanced, which should make it feasible to find acceptable accommodation sooner or later, or even renders it conceivable that TTIP would be extended in some chapters to the 'closest neighbours'.

¹⁰ The 'TTIP openness' is reported in Table 1 and calculated as the 'country trade openness' multiplied by the TTIP share of domestic value added.



⁷ Note that Russia is not included because it does not export more than a very minor share in manufacturers; all traders are measured in goods trade only.

⁸ There is yet another group of smaller trading countries that could also be influenced by the negotiations: EU neighbourhood countries and EU candidate countries; for the US, Central American and Caribbean countries. However, we shall not deal with this additional group.

⁹ For example, in the EU-Turkey customs union, see World Bank (2014) and Boehler, Pelkmans and Selcuki (2012); for the EU-Swiss bilaterals, see Vahl and Grolimund (2006) and in the EEA see, e.g. Pelkmans and Boehler (2013).

The global debate on spillovers might well be more focused on the second and third groups, which do not have anywhere near the same depth in regulatory convergence in goods trade. Table 1 shows that the 'other developed countries' score TTIP shares of between 24% (Australia) and 57% (Israel). The overall TTIP openness varies from 8% (for Australia) to 138% (for Hong Kong). Concerning the group of the seven biggest commercial partners, TTIP shares vary from 31% (Indonesia) to 49% (China), while the TTIP openness of Korea and South Africa more or less matches that of Turkey. In particular for Brazil, India, Indonesia and Japan, it does not seem likely that their shares would give enough incentive to initiate a process of domestic re-regulation for the purpose of effective market access only to TTIP. This is also the case for Australia and New Zealand.

						Trade
		US/Total	EU/T otal	TTIP/ Total	Trade Openess	Openess
		007101				*TTIP/
						Total
NAFTA	Canada	61%	12%	73%	47.1	34%
	Mexico	66%	8%	74%	52.6	39%
Unweighted Average Trade Openess					49.9	37%
	Turkey	11%	45%	56%	39.6	22%
FFTA + Turkey	Switzerland	14%	47%	61%	64.4	39%
EFTA FTURCy	Iœland	15%	47%	62%	63.2	39%
	Norway	14%	54%	68%	49.0	33%
Unweighted Average Trade Openess					54.0	34%
	Australia	11%	13%	24%	34.5	8%
	New Zealand	13%	20%	33%	42.5	14%
Other Developed Countries	Singapore	15%	21%	36%	268.0	97%
Other Developed Countries	Hong Kong	17%	26%	43%	318.5	138%
	Israel	31%	26%	57%	47.2	27%
	Chile	16%	21%	36%	57.0	21%
Unweighted Average Trade Openess					127.9	51%
	Brazil	15%	23%	38%	17.7	7%
	China	24%	25%	49%	44.2	22%
B iograph tradema	India	16%	23%	39%	30.9	12%
biggest traders	Indonesia	14%	17%	31%	39.6	12%
	Japan	21%	19%	41%	22.5	9%
	Korea, Rep.	19%	18%	37%	76.1	28%
	South Africa	11%	31%	42%	47.8	20%
Unweighted Average Trade Openess					39.8	16%

Table 1. Domestic value added embodied in the final demand by partner country [% of total exports of sending country, trade openness (2009)]

Note: (a) and (b) represent the percentages of the domestic value added exported by the country towards the US and the EU compared to the total value added exported; (d) is calculated as merchandise exports and imports divided by GDP.

Source: TiVA database, OECD (2014), World Bank Development Indicators.

One might, however, consider the possibility of 'domino effects'. As shown by Baldwin and Jaimovich (2012), defensive FTAs can be signed by third countries to reduce the effects induced by third FTAs. Thus it is reasonable to assume that once the 'closest neighbours' would also have adopted TTIP rules, third countries might reconsider if they have a much higher export share to TTIP plus TTIP-neighbour- countries. It is worth noticing, however, that it is very difficult to apply the methodology adopted by Baldwin and Jaimovich, for two reasons: first, they applied an ex post evaluation that does not fit the purpose of this report and, second, the

nature of TTIP shows so many details in the regulatory cooperation process that it is difficult to compare it with more traditional free trade agreements. A possible exercise is presented in Table 2.

		NAFTA/Total (%)	EFTA+Turkey/Total (%)
	Australia	2%	1%
	New Zealand	3%	2%
Other Developed Countries	Singapore	3%	2%
Other Developed Countries	Hong Kong	4%	2%
	Israel	3%	3%
	Chile	5%	2%
	Brazil	4%	2%
	China	5%	2%
	India	2%	2%
Biggest Traders	Indonesia	2%	2%
	Japan	4%	2%
	Korea, Rep.	4%	2%
	South Africa	2%	4%

Table 2. Share of domestic value added of the 'Other developed countries' and 'Biggest traders' embodied in the foreign final demand of NAFTA (except US), EFTA countries and Turkey (2009)

Note: Percentages are calculated with respect to the total domestic value added embodied in the world final demand. EFTA is considered without Liechtenstein.

Source: Authors' elaborations on TiVA databse (OECD, 2014).

It shows that such domino effects seem to be at best very weak if we look at the same variable as analysed in Table 1 – indeed, the 'exported value added' of 'biggest traders' and 'other developed countries' to 'closest neighbours' is on average very small.

Besides the results shown on the basis of the value added approach, there may well be other reasons to align with TTIP norms and rules than current trade relations of goods, such as geopolitical strategies, for instance. However, insofar as this simple exercise would reflect a proxy for incentives to engineer (indirect) spillovers, one is led to conclude that:

- i. The 'closest neighbours', already very important to the EU and the US, and locked into 'deep' agreements, are the countries for which one would expect indirect spillovers to be interesting.
- ii. This is far less the case for the seven 'biggest trading countries' and 'other developed countries' (of industrial goods) outside TTIP; although the incentives based on TTIP openness differ significantly between these countries.
- iii. It is unlikely that a domino effect would emerge, once the 'closest neighbours' also adopt TTIP rules.

4. Sectoral proxy of incentives to align with TTIP

Trade relations between third countries and the TTIP twin can give an idea of possible spillover effects, both direct and indirect, which might motivate the choice of joining the TTIP at a later stage, but they cannot provide a clear overview of the economic interdependence between them. A sectoral approach is needed to better understand specific trade connections. A sector approach recommends itself because reaching a TTIP regulatory agreement on all sectors is not going to be feasible and, moreover, sectoral NTBs are not always high enough to



deserve a special chapter of negotiations. Measures will be different according to the different sectors, so the degree of NTBs removal will also vary accordingly. After the last TTIP rounds, it seems clear that mutual offers are concentrated in a few sectors (pharmaceuticals, chemicals, pesticides, medical devices, automotive, engineering, textile and clothes, cosmetics, ICT), leaving out some others that are considered of importance for generating growth, e.g. financial services. However, it should be kept in mind that substantial outcomes are foreseen in non-industrial sectors as well, such as agricultural and food products, energy and raw materials and, especially, some services.

It is worth understanding which third countries can have an interest in further negotiations with the TTIP twin. Starting from the Balassa index of revealed comparative advantages (Balassa, 1965),¹¹ we suggest a twofold approach for improving our understanding of the incentives of a third country to align or start trade negotiations with TTIP partners. The two steps are interrelated and their analysis should be parallel. We suppose that incentives to 'dialogue' and enter negotiations for a third country may depend on:

- i. the sectoral importance of its total exports, that is, the share of sector-specific exports of its total exports; and
- ii. the importance of the geographical destinations of its sectoral exports, that is, the share of sectoral exports to the TTIP twin of its world sectoral exports (see Table 3).

In a political economy context, it is plausible that, if a specific sector holds a prominent position in the overall exports of a country, the institutions, i.e. government, trade associations, etc., are likely to ensure or improve market access to 'principal traders' for that sector, for example, by initiating (regulatory) trade policy negotiations with partners importing a significant share of those exports. For example, since Mexican exports of 'electrical and optical equipment' make up as much as 26% of overall goods exports, Mexico is likely to be more interested in discussing a trade agreement with those countries that import a significant amount of products from this sector, rather than with importers of goods of less important export sectors.

Table 3 combines data on the sectoral and geographical importance of ten goods sectors in the exports for the two groups of countries. For each sector, the table shows two columns reflecting the two steps as described above. The first column shows whether or not that sector is a relatively important export sector. The second column then answers the question of whether that relatively important export sector is strongly or at least appreciably oriented towards the TTIP economy. The two indicators together may be considered as signalling an economic incentive for possible alignment with TTIP in one form or another in that sector. We shall no longer focus on the 'closest neighbours': Table 3 confirms how strongly these countries are interlinked with TTIP economies, irrespective of whether a sector is a relatively strong export sector. The less intuitive issue is whether and in what sectors the 13 other third countries might generate incentives for a possible alignment with TTIP later.

¹¹ The Revealed Comparative Advantage Index (RCA) is normally used in economics to understand the quantitative relative advantage/disadvantage of a specific country to export/import a specific good or service. The economic theory is based on comparative advantage.



		Agriculture, hunting, forestry and fishing		Mining and qua	Food products, beverages and tobacco		
		Sectorial Valued added/Total value added	TTIP/ Total	Sectorial Valued added/Total value added	TTIP/ Total	Sectorial Valued added/Total value added	TTIP/ Total
	Canada	4%	61%	25%	74%	2%	69%
NAFIA	Mexico	4%	73%	20%	75%	3%	77%
	Turkey	6%	41%	3%	42%	2%	49%
EFTA +	Switzerland	2%	61%	0%	59%	2%	63%
Turkey	Iceland	10%	67%	2%	64%	1%	57%
	Norway	2%	56%	49%	75%	1%	55%
	Australia	5%	23%	35%	16%	4%	29%
Other	New Zealand	16%	34%	3%	16%	11%	37%
Developed	Singapore	0%	38%	0%	0%	1%	14%
Developed	Hong Kong	0%	39%	0%	0%	0%	26%
Countried	Israel	3%	57%	1%	46%	1%	59%
	Chile	7%	47%	46%	28%	4%	40%
	Brazil	15%	39%	10%	37%	6%	36%
	China	8%	49%	4%	47%	2%	43%
Diamont	India	9%	30%	6%	25%	1%	22%
Diggest	Indonesia	10%	39%	30%	20%	8%	34%
Traders	Japan	0%	34%	0%	33%	1%	33%
	Korea, Rep.	1%	18%	0%	35%	1%	18%
	South Africa	4%	36%	32%	40%	2%	41%
		T. 19. 1	. *1	1177 1		-	
		I extiles, te	extile	Wood, paper, j	paper	Chemicals an	d non-
		products, leat	her and	Wood, paper, j products, printi	paper ng and	Chemicals an metallic mi	id non- neral
		products, leat	her and	Wood, paper, j products, printi publishin	paper ng and g	Chemicals an metallic mi product	id non- neral ts
		products, leat footwea	her and	Wood, paper, j products, printi publishin	paper ng and g	Chemicals an metallic mi product	id non- neral ts
		fextures, te products, leat footwea Sectorial	her and	Wood, paper, j products, printi publishin	paper ng and g	Chemicals an metallic mi product	id non- neral ts
		fextures, te products, leat footwea Sectorial Valued	TTIP/	Wood, paper, j products, printi publishin; Sectorial Valued	paper ng and g TTIP/	Chemicals an metallic mi product Sectorial Valued	neral ts TTIP/
		fextiles, te products, leat footwes Sectorial Valued added/Total	TTIP/ Total	Wood, paper, j products, printi publishin; Sectorial Valued added/Total	paper ng and g TTIP/ Total	Chemicals an metallic mi product Sectorial Valued added/Total	id non- neral ts TTIP/ Total
		Sectorial valued value added	extile her and ar TTIP/ Total	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added	paper ng and g TTIP/ Total	Chemicals an metallic mi product Sectorial Valued added/Total value added	neral ts TTIP/ Total
		Sectorial valued value added	extile her and ar TTIP/ Total	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added	paper ng and g TTIP/ Total	Chemicals an metallic mi product Sectorial Valued added/Total value added	neral ts TTIP/ Total
NAETA	Canada	Sectorial Valued added/Total value added	xtile her and ar TTIP/ Total 86%	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added	paper ng and g TTIP/ Total 71%	Chemicals an metallic mi product Sectorial Valued added/Total value added	ad non- neral ts TTIP/ Total 81%
NAFTA	Canada Mexico	Sectorial Valued added/Total value added	TTIP/ Total	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2%	paper ng and g TTIP/ Total 71% 77%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7%	TTIP/ Total
NAFTA	Canada Mexico Turkey	Sectorial Valued added/Total value added	TTIP/ Total	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1%	paper ng and g TTIP/ Total 71% 77% 57%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8%	10 non- neral 15 TTIP/ Total 81% 76% 57%
NAFTA EFTA +	Canada Mexi∞ Turkey Switzerland	Sectorial Valued added/Total value added	xtile her and ar TTIP/ Total 86% 85% 62% 66%	Wood, paper, j products, printi publishin, Sectorial Valued added/Total value added 4% 2% 1% 3%	paper ng and g TTIP/ Total 71% 77% 57% 68%	Chemicals ar metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12%	dd non- neral is TTIP/ Total 81% 76% 57% 61%
NAFTA EFTA + Turkey	Canada Mexi∞ Turkey Switzerland Iœland	1extries, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 1%	xtile her and ar TTIP/ Total 86% 85% 62% 66% 60%	Wood, paper, j products, printi publishin, Sectorial Valued added/Total value added 4% 2% 1% 3% 4%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 12% 17%	dd non- neral is TTIP/ Total 81% 76% 57% 61% 56%
NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iceland Norway	Sectorial Valued added/Total value added 1% 3% 10% 1% 1% 0%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69%	Chemicals ar metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2%	Image: dd non-neral ts TTIP/ Total 81% 76% 57% 61% 56% 62%
NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iœland Norway Australia	rextries, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 1% 0%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3%	dd non- neral is TTIP/ Total 81% 76% 57% 61% 56% 62% 26%
NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand	rextries, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 1% 0% 0% 0% 2%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 1% 7%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5%	dd non- neral is TTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30%
NAFTA EFTA + Turkey Other	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore	1extries, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 1% 0% 0% 0% 2% 0%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 1% 7% 1%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23% 22%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16%	Image: second system TTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34%
NAFTA EFTA + Turkey Other Developed	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong	1extries, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 1% 0% 0% 0% 0% 0%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 1% 1% 7% 1% 0%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23% 22% 41%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 12% 17% 2% 3% 5% 16% 2%	Image: second system TTTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34% 34%
NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong Israel	rextries, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 1% 0% 0% 0% 0% 0% 0% 0% 0%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 1% 1% 1% 1% 0% 1%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23% 23% 22% 41% 62%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 11%	Image: second system TTTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34% 34% 60%
NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong Israel Chile	Itextiles, ite products, leat footwest Sectorial Valued added/Total value added 1% 3% 10% 1% 0%	**************************************	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 1% 1% 1% 1% 0% 1% 6%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 68% 57% 69% 23% 23% 23% 22% 41% 62% 39%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 11% 5%	dd non-neral neral ts TTTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34% 34% 60% 41%
NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong Israel Israel Chile Brazil	Itextiles, ite products, leat footwest Sectorial Valued added/Total value added 1% 3% 10% 1% 0% <	xtile her and ar TTIP/ Total 86% 85% 62% 66% 60% 66% 60% 60% 34% 36% 32% 37% 75% 57% 51%	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 1% 1% 1% 0% 1% 6% 3%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 68% 23% 23% 23% 23% 23% 23% 23% 39% 41%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 11% 5% 8%	dd non-neral neral ts TTTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34% 34% 60% 41%
NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong Israel Israel Chile Brazil China	Itextiles, ite products, leat footwest Sectorial Valued added/Total value added 1% 3% 10% 1% 0% <	xtile her and ar TTIP/ Total 86% 85% 62% 66% 66% 60% 66% 60% 34% 36% 32% 37% 75% 57% 51% 53%	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 7% 1% 7% 1% 0% 1% 6% 3% 3%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 68% 23% 23% 23% 23% 23% 23% 23% 39% 41% 62% 39%	Chemicals an metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 11% 5% 8% 11%	dd non- neral is T'TIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34% 60% 41% 50%
NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia Norway Australia New Zealand Singapore Hong Kong Israel Israel Chile Brazil China India	Itextnes, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 0%	Extile her and ar TTIP/ Total 86% 85% 62% 66% 66% 60% 66% 60% 34% 36% 32% 37% 75% 57% 51% 53% 54%	Wood, paper, j products, printi- publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 7% 1% 7% 1% 0% 1% 0% 1% 6% 3% 3% 3% 3%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 68% 23% 23% 23% 23% 23% 23% 23% 39% 41% 62% 39% 47% 52% 49%	Chemicals ar metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 11% 5% 8% 11% 5% 8%	dd non-neral neral is TTIP/ Total 81% 76% 57% 61% 56% 62% 26% 30% 34% 60% 41% 50% 40%
NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Iceland Norway Australia Norway Australia Norway Isingapore Hong Kong Israel Israel Chile Brazil China India Indonesia	Itextiles, term products, leat footwest Sectorial Valued added/Total value added 1% 3% 10% 1% 0% 2% 10% 4% 5%	Extile her and ar TTIP/ Total 86% 85% 62% 66% 60% 60% 60% 34% 36% 32% 37% 75% 57% 51% 53% 54% 64%	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 7% 1% 1% 0% 1% 6% 3% 3% 3% 3% 1% 4%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23% 23% 22% 41% 62% 39% 47% 52% 49% 32%	Chemicals ar metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 16% 2% 11% 5% 8% 11% 5% 8% 11% 7% 13%	dd non- neral is TTTIP/ Total 81% 76% 57% 61% 55% 61% 56% 62% 26% 30% 34% 34% 60% 41% 50% 41% 50% 40% 27%
NAFTA EFTA + Turkey Other Developed Countried Biggest traders	Canada Mexico Turkey Switzerland Iceland Iceland Norway Australia Norway Australia New Zealand Singapore Hong Kong Israel Israel Chile Brazil Chile Brazil China India Indonesia Japan	Textnes, te products, leat footwes Sectorial Valued added/Total value added 1% 3% 10% 1% 0% 2% 10% 4% 5% 1%	Extile her and ar TTIP/ Total 86% 85% 62% 66% 60% 60% 60% 34% 36% 32% 37% 75% 57% 51% 53% 54% 64% 44%	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 7% 1% 0% 1% 6% 3% 3% 3% 3% 3% 1% 4% 2%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23% 22% 41% 62% 39% 47% 52% 49% 32% 41%	Chemicals ar metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 16% 2% 11% 5% 8% 11% 5% 8% 11% 7% 13% 9%	dd non- neral is TTTIP/ Total 81% 76% 57% 61% 55% 61% 62% 26% 30% 34% 62% 26% 30% 34% 60% 41% 50% 41% 50% 40% 27% 36%
NAFTA EFTA + Turkey Other Developed Countried Biggest traders	Canada Mexico Turkey Switzerland Iceland Iceland Norway Australia Norway Australia New Zealand Singapore Hong Kong Israel Chile Brazil Chile Brazil Chila India India Indonesia Japan Korea, Rep.	Textnes, teat footwest Sectorial Valued added/Total value added 1% 3% 10% 1% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 2% 10% 4% 5% 1% 2%	Extile her and ar TTIP/ Total 86% 85% 62% 66% 60% 60% 60% 34% 36% 32% 37% 75% 57% 51% 53% 51% 53% 64% 64% 44% 43%	Wood, paper, j products, printi publishin; Sectorial Valued added/Total value added 4% 2% 1% 3% 4% 1% 1% 7% 1% 0% 1% 6% 3% 3% 3% 3% 3% 1% 4% 2% 2%	paper ng and g TTIP/ Total 71% 77% 57% 68% 57% 68% 57% 69% 23% 23% 22% 41% 62% 39% 41% 52% 49% 32% 41% 32% 41% 36%	Chemicals ar metallic mi product Sectorial Valued added/Total value added 6% 7% 8% 12% 17% 2% 3% 5% 16% 2% 16% 2% 11% 5% 8% 11% 7% 13% 9% 11%	dd non- neral is TTTIP/ Total 81% 76% 57% 61% 57% 61% 56% 62% 26% 30% 34% 34% 60% 41% 50% 41% 50% 40% 27% 36% 35%

Table 3. Domestic value added embodied in foreign final demand (selected sectors and trade openness(in% share, 2009

F			Basic metals and fabricated metal products		Machinery and equipment		Electrical and optical equipment	
			Sectorial Valued added/Total value added	TTIP/ Total	Sectorial Valued added/Total value added	TTIP/ Total	Sectorial Valued added/Total value added	TTIP/ Total
Ĩ	NAFTA	Canada	5%	67%	2%	66%	3%	78%
		Mexico	7%	65%	2%	73%	8%	78%
		Turkey	7%	49%	3%	5/%	2%	82%
	EFIA +	Switzerland	5%	56%	6%	57%	10%	56%
	Iurkey	Iceland	1%	64%	1%	62%	11%	56%
ł		Norway	2%	58%	3%	46%	1%	5/%
		Australia	/%	21%	1%	2/%	1%	53%
	Other	New Zealand	4%	28%	1%	41%	1%	42%
	Developed	Singapore	2%	22%	4%	19%	13%	39%
	Countried	Hong Kong	0%	44%	0%	29%	2%	36%
		Israel	3%	64%	1%	60%	16%	59%
		Chile	2%	36%	1%	42%	0%	49%
		Brazil	8%	31%	2%	33%	2%	49%
		China	8%	48%	4%	44%	14%	52%
	Biggest	India	4%	41%	2%	42%	4%	61%
	Traders	Indonesia	2%	22%	2%	18%	4%	37%
		Japan	9%	34%	6%	29%	13%	49%
		Korea, Rep.	8%	35%	5%	36%	16%	43%
_		South Africa	7%	40%	0%	n.a	1%	44%
			Transport equ	uipment				
ſ								
			Sectorial					
			Sectorial					
			Valued	TTIP/				
			Valued added/Total	TTIP/ Total				
			Valued added/Total value added	TTIP/ Total				
	NIA 1777 A	Canada	Valued added/Total value added	TTIP/ Total 85%				
	NAFTA	Canada Mexico	Valued added/Total value added 6% 11%	TTIP/ Total 85% 83%				
	NAFTA	Canada Mexico Turkey	Valued added/Total value added 6% 11% 6%	TTIP/ Total 85% 83% 75%				
	NAFTA EFTA +	Canada Mexico Turkey Switzerland	Valued added/Total value added 6% 11% 6% 1%	TTIP/ Total 85% 83% 75% 67%				
	NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iceland	Valued added/Total value added 6% 11% 6% 1% 1%	TTIP/ Total 85% 83% 75% 67% 50%				
	NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iœland Norway	Valued added/Total value added 6% 11% 6% 1% 1% 1%	TTIP/ Total 85% 83% 75% 67% 50% 50% 58%				
	NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iœland Norway Australia	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55%				
	NAFTA EFTA + Turkey	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1%	TTIP/ Total 85% 83% 75% 67% 50% 55% 40%				
	NAFTA EFTA + Turkey Other	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27%				
	NAFTA EFTA + Turkey Other Developed	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27% 35%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong Israel	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0% 4%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27% 35% 68%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iceland Norway Australia New Zealand Singapore Hong Kong Israel Chile	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 3% 0% 4% 1%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27% 35% 68% 55%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iœland Iœland Norway Australia New Zealand Singapore Hong Kong Israel Chile Brazil	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0% 4% 1%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27% 35% 68% 55% 68% 56%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iœland Iœland Norway Australia New Zealand Singapore Hong Kong Israel Israel Chile Brazil China	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0% 4% 1%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27% 35% 68% 55% 68% 56% 29% 51%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iœland Iœland Iœland Norway Australia New Zealand Singapore Hong Kong Israel Israel Chile Brazil China India	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0% 4% 1% 1% 2% 2%	TTIP/ Total 85% 83% 75% 67% 50% 58% 55% 40% 27% 35% 68% 55% 68% 56% 29% 51% 51% 54%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iœland Norway Australia New Zealand Singapore Hong Kong Israel Chile Brazil Chile Brazil China India	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0% 4% 1% 4% 2% 2% 2% 3%	TTIP/ Total 85% 83% 75% 67% 50% 50% 20% 51% 22% 55% 40% 27% 35% 68% 50% 51% 54% 48%				
	NAFTA EFTA + Turkey Other Developed Countried	Canada Mexico Turkey Switzerland Iœland Norway Australia New Zealand Singapore Hong Kong Israel Chile Brazil Chile Brazil China India Indonesia Japan	Valued added/Total value added 6% 11% 6% 1% 1% 1% 1% 1% 1% 3% 0% 4% 1% 4% 2% 2% 2% 3% 12%	TTIP/ Total 85% 83% 75% 67% 50% 55% 40% 27% 35% 68% 56% 29% 51% 54% 48% 39%				

70%

3%

South Africa

Note: (i) The percentages reflect the ratio between the sectoral exports to the specified countries with respect to total exports of that sector to the world; (ii) NAFTA here reflects only Canada and Mexico; and (iii) Liechtenstein is an EFTA member but is not included in the table.

Source: TiVA database, OECD (2014).

In the following we shall focus on these 10 sectors for the 13 countries involved and attempt to filter out sectors that (i) are relatively important export sectors and (ii) have a relatively high exposure to TTIP economies (as their destination). We have identified 32 sectors fulfilling both criteria for 11 of these countries; Australia and Hong Kong have no export sectors of some importance to them with high enough exposure to TTIP.¹² The filtering of the TTIP-relevant sectors has been done in two steps. Step 1 is to focus on the first column in Table 3 in order to identify export sectors of relative importance to the country. The authors have set reasonable but inevitably somewhat arbitrary thresholds for relative importance as follows: below 3% is 'insignificant'; 3% to 5% is 'modest'; 6% to 10 % is 'medium'; above 10% is 'strong'. When moving to step 2, sectors that are either insignificant or modest are ignored. Step 2 is based on the second column of Table 3, the TTIP orientation of sectoral exports. The thresholds for this TTIP orientation are (inevitably somewhat arbitrarily) set as follows: below 10%, 'insignificant'; 11% to 25%, 'weak'; 26% to 40%, 'appreciable'; above 40%, 'important'.

Table 4 reports the results for all 13 countries (that is, 'biggest traders' and 'other developed countries').

The four columns in Table 4 can be seen as reflecting economic incentives to align in one way or another with TTIP. However, these incentives are the greatest in the first sector column (strong export sectors in terms of value added, with important TTIP orientation). The potential incentives decline somewhat with the second column (strong export sectors, with appreciable orientation towards TTIP) and should be lower still for medium export sectors with 'appreciable' orientation towards TTIP. We have added a column for medium export sectors, with appreciable orientation towards TTIP, because there is no way to establish a threshold or cut-off point for identifying incentives to align with TTIP. It might well be that the predominance of TTIP for these slightly less performing export sectors is lower, but there might be regulatory or other reasons that might magnify these incentives in some cases.

Table 4 shows that:

i) Critical sectors for expecting positive indirect spillovers are electrical equipment (for no fewer than four countries) and chemicals (for two countries); textiles and leather goods (for one country, China) seems an exception.

ii) Adding the second column, chemicals shows up three more times and electrical equipment once more; transport equipment appears twice; in addition, several other, though not mainstream industrial, sectors, appear to be relevant, such as agro-fish (which appears three times), mining and quarrying (also three times), and food and beverages.

iii) Spreading the spectrum of potential incentives still wider to the third column, chemicals and agro-fish each show up two more times; furthermore, metals and metal products appear twice as well.

¹² For Hong Kong the value added of manufacturing sectors in trade is negligible because it is nearly all re-exports. The value added generated by Hong Kong consists of value added in wholesale, transport, financial intermediation and business services. These are exactly the business services important for re-exports. Very similar (low) shares of sectorial goods exports are found if one employs the traditional trade flow statistics.



iv) The most inclusive approach would include the fourth column, too; chemicals appear another two times and so does metals and metal products; other sectors include agro-fish, food and beverages, and wood/paper and printing.

v) Since the first two columns reflect the greatest likelihood of incentives for alignment, two sectors really stand out: chemicals and electronic equipment, each with five appearances.

vi) Over all columns, chemicals stand out, with nine countries having considerable interests, followed by electrical equipment (five countries?) and agro-fish (six, but never in the first column); metals and metal products (four instances, but only in the last two columns); sectors such as mining and quarrying (three, all in column 2), transport equipment (twice in column 2), and food and beverages (twice) may also witness some interest in alignment with TTIP.

vii) In terms of countries exporting to the TTIP 'economy', China comes out as the leading export country potentially interested in aligning with TTIP so as to lower the regulatory barriers to its TTIP- market access, with three sectors in the first column (no other country has three): chemicals, textiles/leather and electronic equipment (plus two sectors in the third column: agro-fish, and metals and metal products). Three other countries also exhibit powerful potential incentives to align with TTIP: Israel (having FTAs already with both the EU and the US) in chemicals and electronic equipment; Japan (negotiating already both with the EU and - in TPP – with the US) in electronic equipment and transport equipment; and South Korea (already having FTAs-plus with both the EU and the US) in electronic equipment and the US) in electronic equipment, transport equipment and chemicals.

	'Strong' export sector; TTIP 'important'	'Strong' export sector; TTIP 'appreciable'	Medium export sector; TTIP 'important'	Medium export sector; TTIP 'appreciable'
Australia	-	-	-	-
New Zealand		Agro-fish; food & beverages		
Singapore		Chemicals; electronic equipment		
Hong Kong	(See footnote 13)			
Israel	Chemicals; electronic equipment			
Chile		Mining & quarrying	Agro-fish;	Wood, paper, printing
Brazil		Agro-fish; mining & quarrying ¹³	Chemicals	

Table 4. TTIP-relevant export sectors: in 'biggest traders' and 'other developed countries'

¹³ In mining, Brazil finds itself on the borderline between a 'strong' export sector and a 'medium' one; Table 4 takes this as a 'strong' one.



China	Textiles/leather; chemicals; electronic equipment		Agro-fish; metals & metal products	
India				Agro-fish; chemicals
Indonesia		Agro-fish; chemicals		Food & beverages
Japan	Electronic equipment	Transport equipment		Chemicals; metals & metal products
S. Korea	Electronic equipment	Chemicals; transport equipment ¹⁴	Metals & metal products	
S. Africa		Mining & quarrying	Chemicals	Metals & metal products

These conclusions throw an interesting light on the debate on (indirect) spillovers of TTIP. First, most of the countries listed in Table 4 are likely to be affected by regulatory convergence in TTIP, but whether such effects would be of sufficient importance to pursue 'alignment' with that regulatory convergence, seems doubtful for many sectors. Second, one sector stands out as heavily traded with TTIP: chemicals, with no less than nine countries potentially interested in alignment with TTIP, if ever a regime of lower regulatory barriers or 'equivalence' would emerge. However, given the present state of the negotiations (after round seven), such an aligned TTIP regime is unlikely in the short to medium run. Third, electronic equipment is critical for Israel, China, Japan and South Korea, but again there are deep-seated difficulties between the US (where such equipment is frequently regulated for use at the workplace by the Occupational Safety and Health Administration, OSHA, and - in addition - some deviations from world standards create incompatibilities) and the EU, which relies heavily on International Electrotechnical Commission (IEC) world standards and allows self-certification (under conditions) via a suppliers declaration of conformity.¹⁵ Fourth, some other prominent sectors from Table 4 include agro-fish (the SPS aspects are key here), transport equipment (where a new attempt is being made to pursue alignment in TTIP via the recognition of equivalence based on numerous test data for cars, currently being scrutinised in extreme detail by two engineering schools in the US and the EU, before negotiations start in earnest), food and beverages (with high regulatory barriers in TTIP so far¹⁶), mining and quarrying (where the US and the EU might agree on a prohibition of export taxes and of quantitative export restrictions, which goes against the recent practice of multiplying such instruments precisely by exporting countries), and metal products (with relatively few regulatory barriers, but some stubborn specific ones).

¹⁶ Francois et al. (2013, p. 18, Table 1) shows a 'perceived NTBs index' of 45% for EU exports to the US and 34% for US exports to the EU.



¹⁴ In fact, South Korean exports of transport equipment are exactly on the borderline between 'medium' and 'strong'; we have taken this as 'strong' in Table 4.

¹⁵ For a detailed technical explanation, see Orgalime (2014, Annex). It should also be noted that the 1998 US/EU MRA on electronic goods is in fact not operational; for details and history, see Pelkmans and Correia de Brito (forthcoming).

5. Conclusions

When it comes to the impact of TTIP on third countries, perhaps in combination with TPP, the possibility of positive spillovers from regulatory convergence between the US and the EU has been alluded to. However, these assertions suffer from vague generalities, without any detail as to the nature of such spillovers, their probability and/or incentives for third countries to benefit from them. This CEPS Special Report is a first attempt to shed some light on these aspects, without pretending to offer more than a fairly aggregate economic approach, complemented by a sectoral perspective. In this report we do not examine the regulatory options in TTIP, even though they matter a great deal, but such research requires a very different type of analysis.

We first explained the distinction between direct spillovers (generated by MFN-based regulatory convergence) and indirect ones (where domestic re-regulation by third countries can form the basis of 'alignment', with presumably lower regulatory barriers for their exports to TTIP countries). We focused on indirect spillovers and the potential economic incentives of third countries to align eventually. The main variable underlying incentives is assumed to be the 'domestic value-added embodied in the foreign final demand', with respect to TTIP countries as the destination for goods exports. We also assume that incentives to align must be above some threshold (as re-regulation for the sake of TTIP export markets will not easily be done by WTO partners), but it is impossible to identify such a threshold, given the lack of economic theory or experience, other than in closely knit economic groupings. As a proxy we have identified three groups of countries that might perhaps find it worthwhile to consider (selective) alignment: 'closest neighbours' (NAFTA partners, EEA countries, Switzerland and Turkey), the seven 'biggest traders' in the world (other than TTIP and Russia; they are China, India, Japan, South Korea, Brazil, Indonesia and South Africa) and a group of 'other developed economies' (Australia, New Zealand, Singapore, Hong Kong, Israel and Chile).

A first conclusion is that the 'closest neighbours' exhibit strong to very strong incentives for eventual alignment because the TTIP share of their goods exports (in terms of 'domestic valueadded embodied in foreign final demand') ranges from 56% to 74%. Of course, all these countries already have regional economic agreements with the TTIP twin, be it a FTA-plus or customs union. In the European situation, the EEA boils down to the EU single market regime (excluding agriculture and fisheries), including its regulatory regime; the Swiss-EU bilaterals have strong regulatory content (basically, an alignment with the EU single market, with some exceptions¹⁷); and Turkey's customs union with the EU has extensive regulatory (and European standards) annexes that ensure gradual alignment with the EU's goods regimes. For NAFTA partners, the regulatory alignment is much less developed than in Europe, but the newly established Canadian-US and Mexican-US regulatory councils pursue a voluntary regulatory cooperation approach; moreover, one should not ignore that Canadian and Mexican industrial goods standards are often similar to US standards. In short, for the 'closest neighbours', the incentives are powerful, regional economic agreements have already existed for a while, and well-tested mechanisms are in place to build toward regulatory convergence with TTIP.

However, for the other two country groups identified, the spectrum of TTIP shares in (valueadded) exports is wider and the shares are usually lower than for the closest neighbours: 24% to 57% for 'other developed countries' and 31% to 49% for 'biggest traders'. It is unclear whether such aggregate economic measures reflect sufficient incentives to pursue a process of

¹⁷ Set out in detail in Vahl and Grolimund (2006) and in Pelkmans and Boehler (2013).



'alignment' with TTIP. The authors also found a 'domino effect' unlikely once the 'closest neighbours' aligned with TTIP.

Second, and more likely to be relevant for the practical incentives to consider alignment with TTIP, the authors have assumed a sectoral perspective. We have selected 10 fairly aggregate goods sectors where TTIP regulatory barriers reduction could be of interest to the 13 third countries as 'biggest traders' or as 'other developed countries'. In filtering out the relevant sectors for each of these countries, we set (somewhat arbitrary) thresholds for the importance of an export sector to that country, and for their sectoral export-to-TTIP shares in these 'important' export sectors. The main conclusions in terms of sectors are as follows: i) chemicals stand out with no less than nine countries having a considerable interest in eventual alignment; ii) followed by electronic equipment (five countries) and agro and fish products (six countries but with somewhat lower shares); iii) with mining and quarrying as well as transport equipment (mainly automotive) of lesser importance (three resp. two countries), and metal products (four countries, but with lower shares). In terms of countries, China comes out as the leading export country potentially interested in aligning with TTIP so as to lower the regulatory barriers to its TTIP-market-access, in particular chemicals and electronic equipment (as well as textiles and leather), besides lower shares for agro and fish products, and metal products. The following three countries with an appreciable interest in aligning with TTIP all already have regional economic agreements with TTIP countries or are negotiating a FTAplus: Israel in chemicals and electronic equipment, Japan in electronic equipment and transport equipment, and South Korea in electronic equipment, transport equipment and chemicals. Compared to China or some other countries, it should be easier for these three countries to find ways, in close cooperation with the EU and the US, to utilise their agreements or current negotiations for suitable options of alignment. If that works, it might increase the incentives for other countries, thereby engendering domino effects. Such developments might perhaps lead TTIP to propose plurilateral approaches in the WTO. Before jumping to such conclusions, however, we wish to emphasise that current TTIP negotiations do not look very ambitious specifically for regulatory convergence in chemicals and electronic goods.

A final word on the limitations of our empirical analysis. One can argue that TTIP effects on the EU 'neighbourhood countries', which are often rather dependent on their exports to the EU, should also be considered, but we have not done so. Neither have we analysed the impact of TTIP on developing countries, other than four BRICs. Developing countries might be hit by some trade diversion and, at the same time, it might be unwise to raise their regulatory requirements to TTIP levels, as this might hurt trade with 'South' countries.¹⁸ Another limitation might be that it is difficult to recognise from the above analysis the relevance of horizontal (as opposed to sectoral) regulatory convergence. One example is mining and quarrying: it is possible that TTIP might incorporate a horizontal prohibition of export taxes and quantitative export restrictions, which goes against a recent tendency in export countries to accentuate the use of such instruments. Lastly, when sectoral TTIP shares are low (and hence not considered in the filter), it cannot a priori be excluded that the low share is caused by high NTBs in the EU and the US. It is therefore indispensable that our first attempt is followed up by detailed case studies.

¹⁸ Disdier, Fontagne and Cadot (2012) have empirically tested this – what they call – costly 'premature harmonisation' and they find that it hurts their South-South trade considerably.



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