

## Transatlantic Trade: Whither Partnership, Which Economic Consequences?

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### Summary

The Transatlantic Trade and Investment Partnership (TTIP) is much more than another preferential trade agreement project: it aims to link the world's two biggest economic entities. The initiative seems motivated by the stalemate in multilateral negotiations, the competition between trade agreements, and the willingness of the two partners to retain their leading positions in world trade, or at least to limit their loss of influence.

Given the limited average level of the import tariffs – 2% in the US and 3% in the EU – these duties in most cases are not the most important stake (exceptions are a few sensitive products, mainly some dairy products, some clothing and footwear, and some steel items for the US, and meat products in the EU). Much more significant at the macroeconomic level are negotiations on non-tariff measures, regulation in services, public procurement, geographical indications, and investment, all of which are contentious.

We first review the main issues at stake in each case and then use a computable general equilibrium model to assess the economic impacts of an agreement. Not all aspects of the negotiations can be incorporated in the model but it does account for the restrictive impact of non-tariff measures on trade in goods and of regulatory measures on trade in services. The corresponding levels of protection provided by the non-tariff measures are much higher on average than those provided by the tariffs, and they differ significantly across sectors, confirming their sensitivity in these negotiations. Our central scenario combines progressive but complete phasing-out of tariff protection accompanied by an across-the-board 25% cut in the trade restrictiveness of non-tariff measures, for both product and service sectors with the exception of public and audiovisual services.

We find that trade between the two signing regions in goods and services would approximately increase 50% on average, including an upsurge of 150% for agricultural products. Eighty percent of the expected trade expansion would stem from lowered non-tariff measures. Both partners to the proposed agreement would reap non-negligible GDP gains, in the long run, corresponding to an annual increase in national income of \$98bn for the EU and of \$64bn for the US.



Since 2000, more than 10 regional trade agreements have come into force annually.<sup>1</sup> However, the Transatlantic Trade and Investment Partnership (TTIP) announced in February 2013, for which negotiations began July 8, 2013, is unique. It concerns the world's two biggest economic entities entering what is presented as an ambitious and comprehensive partnership, an agreement that will have considerable economic consequences extending far beyond the economies concerned. Although political debate since the initiative was announced shows that unquestionably much more than the economy is at stake, this Policy Brief is aimed at providing an assessment of the possible economic impacts.<sup>2</sup> Figuring out what the agreement might look like is challenging – even the odds of a successful outcome are actually difficult to figure out. However, based on agreements already signed by the two parties with other countries, and on public declarations and preparatory work, we can speculate about its general features. Before doing so, we conjecture about why such a project has been proposed now.

## ■ 1 Why now?

The European Union (EU) and the United States (US) are each other's main trading partner: hence it is no surprise that they would consider about a bilateral trade deal. One might ask "why" pursue such an initiative if, in the absence of an agreement, these regions have established such important trade and investment relationships? The business community has frequently stressed how much more could be achieved were remaining (often non-tariff) barriers removed. Thus the relevant question is not "why", but rather "why now?" While early projects in this direction are almost as old as the European Community, the most recent two decades have been especially rich in initiatives to enhance transatlantic economic cooperation. Several targeted agreements have been signed, including the US-EC Mutual Recognition Agreement (MRA) and its six sector annexes in 1998, and the US-EC understanding on Safe Harbor Principles for Data Privacy Protection in 2000. A number of institutions have been built to foster dialogue and cooperation including the Transatlantic Business Dialogue (TABD), the Transatlantic Consumer Dialogue (TACD), and the Transatlantic Economic Council (TEC) set up in 2007, in the wake of what has come to be known as the "Merkel initiative" for a new transatlantic partnership. Yet, high-profile political initiatives such as Sir Leon Brittan's 1998 proposal for a New Transatlantic Marketplace,<sup>3</sup> have so far been unsuccessful.

(1) The annual figure is more than 20 if (as the World Trade Organization – WTO – does) agreements for trade in goods and trade in services are counted separately.

(2) This is not the first study quantifying the potential economic impact of a TTIP Agreement. See Baldwin and Francois (1997), for a pioneering evaluation. Assessments of the TTIP include Francois *et al.* (2013), BIS (2013), and GED (2013).

(3) The proposal included a phasing-out of all tariffs on industrial goods by 2010, free trade in services and a bilateral treaty on foreign direct investment. Agriculture and audio-visual services were excluded.

For many years, willingness to further liberalize transatlantic trade has been one of the strongest drivers of multilateral initiatives. The multilateral arena provided an appropriate space to advance the EU-US trade partnership: evolution of the trade rules called for jointly by both partners had every chance of producing a multilateral agreement, as illustrated by the Uruguay Round negotiation settlement. However, the context has changed: the economic clout of the large emerging countries, especially China, means that the success of any future important agreements will depend on their support. The resulting stalemate in multilateral negotiations is arguably one of the main reasons why an initiative such as the TTIP has emerged: the fact that multilateral negotiations are unlikely to reach completion in the near future makes bilateral talks more attractive at a time when global value chains are ubiquitous, and are promoting calls from the business community for an update of trade rules.

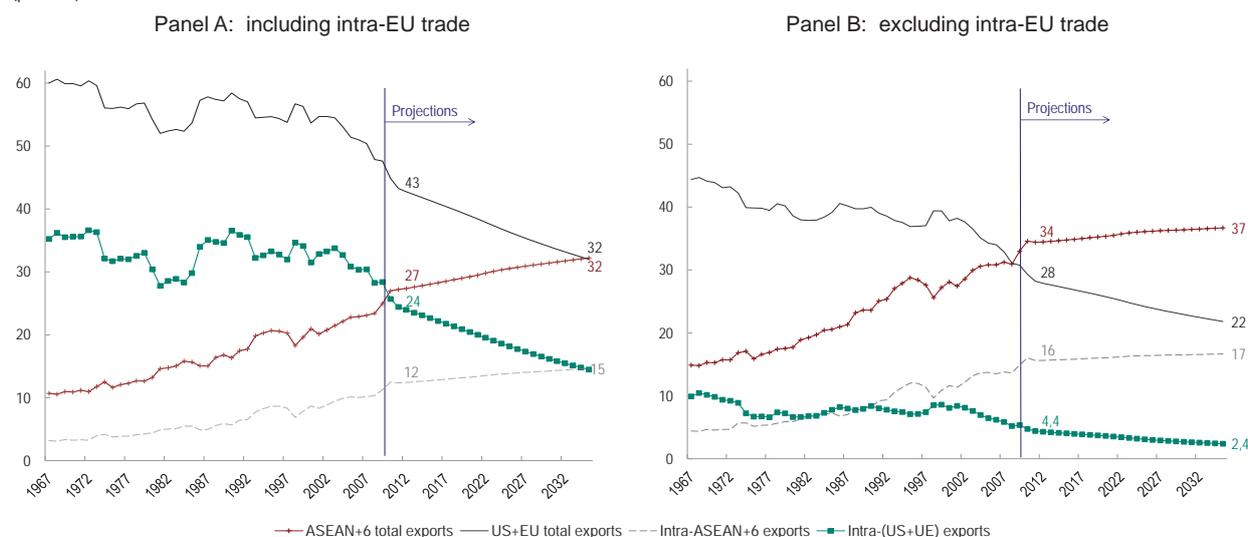
Another reason is a form of competition among agreements. While regional trade agreements (RTAs) have proliferated since the early 2000s – a move to which the EU and the US took an active part – there is now a trend towards the forging of more important agreements. The multiplicity of projects in Asia, not least those involving China, the largest being the Regional Comprehensive Economic Partnership (RCEP) project or ASEAN+6, and the increasing size of the TransPacific Partnership (TPP) and the EU-

Japan FTA are examples of this trend which seems driven at least partly by emulation. As Bergsten (1996) shows, the fear of being crowded out of the export markets as a result of trade agreements between partners – *i.e.* trade diversion effects – has proven a powerful motivation to engage in new negotiations.

Beyond these purely trade policy-related motivations, the TTIP is also an attempt by both the EU and the US to retain as much as possible their leadership in world trade. The gigantic weight of the transatlantic relationship in the world economy is frequently emphasized, based on the claim that the partners account for almost half of world GDP, and a third of world trade. These orders of magnitude should be put in perspective using ASEAN+6 as a reference even though negotiations among these members are by no means as ambitious as the TTIP (Figure 1). Strictly speaking, the TTIP would affect only trade between the EU and the US, which in 2011 represented 4.4% of world trade (excluding intra-EU trade). The corresponding figure for the ASEAN+6 countries is 16%. Gauging the importance of these trade areas based on countries' total trade flows offers a useful complementary viewpoint. In 2011, the EU (including intra-EU) and the US jointly accounted for an overwhelming 43% of world trade in goods,<sup>4</sup> significantly more than the ASEAN+6 share (27%); excluding intra-EU trade, though, it accounted for 28% compared to 34% for ASEAN+6. Thus, these leading positions are already being challenged, and the main aim of the TTIP is to reduce the parties' loss of influence in world trade.

(4) This figure is the sum of exports and imports of the US and the EU with all countries as a share of world trade (exports + imports).

Figure 1 – Shares in world trade of goods: comparing the EU-US pair to ASEAN+6, 1967-2034 (percent)



Source: CHELEM-CEPII for 1967-2011. Projections for 2012-2035 from Fontagné and Fouré (2013).

The trends in shares are quite remarkable. After hovering for 25 years around 40%, the EU-US share in world trade (excluding intra-EU trade) declined sharply in the 2000s while the ASEAN+6 share has continued to increase steeply. CEPII's long-term prospective scenarios suggest that these trends are likely to persist in the present and immediately succeeding decades, resulting in these areas accounting for similar shares of world trade in 2035 when intra-EU trade is included, around 32% (Fontagné and Fouré, 2013). Excluding intra-EU trade, though, the EU and the US would jointly account for only 22% of world trade in 2035, compared to 37% for ASEAN+6, and trade between the latter's members (17%) would dwarf that between transatlantic partners (2.4%). This reorientation of the world economy toward Asia has been acknowledged and a transatlantic partnership will not reverse it. However, it may allow the signatories to continue to play leading roles in world trade through the setting of influential norms, standards, and other rules. This is probably where the main benefits lie for the US and EU in the long run.

## 2 Whither partnership?

Defining the contours of an agreement is an important negotiation, as the recent tense discussions around the EU negotiating mandate shows. From the outset, official declarations from both sides have emphasized the need for negotiations to be comprehensive and ambitious, in line with the recommendations of the High-Level Working Group (HLWG) set up in November 2011; nevertheless contentious issues abound. Natural blueprints for the negotiations are given by the most recent and comprehensive agreements with South Korea already signed by both parties (KORUS, enforced in 2010, and KOREU, enforced in 2012; Schott and Cimino, 2013 review their respective provisions in relation to a possible TTIP agenda). Another useful comparison on the EU side can be made with the ongoing but close to completion negotiations with Canada. On the EU side, the undisclosed negotiating mandate given by

the Council of the EU to the European Commission was a first important attempt to define the scope of the negotiation. It has been made public that cultural services (the audiovisual sector) have been excluded from the negotiation mandate because of opposition from France backed by other Member States.<sup>5</sup> The remaining substantive content of the negotiation is discussed below.

### 2.1 Tariffs

According to CEPII and ITC estimates using the MAcMap-HS6 database, tariff duties on bilateral trade average 2.2% in the US and 3.3% in the EU, in *ad valorem* equivalent terms (Table 1). Therefore, this is not an area of major contention and the negotiations should aim at completing tariff liberalization for all products (upfront in most cases), with the exception of the most sensitive products, for which tariff rate quotas are likely to be proposed.

In relation to US imports of European products, average protection amounts to 1.7% for manufactured products, and 6.6% for agricultural products. Dairy produce is the most sensitive sector, with a 22% average tariff duty (including 40% on yogurts and 33% for unripened cheese), in a sector where European exports are often competitive. Protection is also significant for a number of articles of apparel, on knitted fabrics, and on shoes, with sector averages close to or above 10% in all these cases. Specific steel items are also significantly protected, and potentially sensitive.

On the European side, protection is focused mainly on agricultural products (12.8%, compared to 2.3% for manufactured products). The meat sector is the most sensitive, with average protection of

(5) A final compromise might be eventually to add these services to the negotiation mandate; according to a European Commissioner: "As regards audiovisual services, what is really at stake in this sector is the digital revolution of the media environment. ... We do not want to treat it now, but come back to the matter at a later stage" (EU website "Transatlantic Trade and Investment Partnership: Commissioner Karel De Gucht welcomes Member States' green light to start negotiations").

Table 1 – Average tariff protection on bilateral trade between the EU and the US

(*ad valorem* equivalents in percent, 2010)

	Agriculture	Industry	Overall
Tariffs applied by the US on imports from the EU	6.6	1.7	2.2
Tariffs applied by the EU on imports from the US	12.8	2.3	3.3

Source: MACMap-HS6.

Note: more details on bilateral tariff protection are given in a post on CEPII's blog (in French): <http://www.cepii.fr/BLOG/bi/post.asp?IDcommuniqu=185>.

45% in a sector where American producers are very competitive and accounted for nearly 20% of world exports in 2010. The bovine meat sector is particularly affected, with a 146% *ad valorem* equivalent duty on frozen edible bovine offal, 97% on frozen boneless meat and 75% on fresh boneless meat according to our estimates, despite non-tariff issues (especially hormones) being of the utmost importance in this case (see discussion below). Bioethanol is another potentially important sensitive sector. In several other highly protected sectors, such as dairy produce, milled products, and sugar, the competitive position of the US is not strong. In the manufacturing sector, protection is low for most products but is far from negligible for clothing (with average protection in excess of 11%) and footwear (9.4%), and for transport equipment products (7.8% on average), with a 10% duty on most individual automobiles.

## 2.2 Non-tariff measures and regulatory convergence

Non-Tariff Measures (NTMs) include import bans, certification requirements on a wide variety of products ranging from toys to cars, to pacemakers, information on the properties of chemical substances, labeling and packaging requirements, upper limits on the concentration of pesticide residues, and meat traceability requirements. In goods, these hurdles include Sanitary and Phyto-Sanitary (SPS) regulations, and Technical Barriers to Trade (TBTs). Needless to say, the consequences of these individual measures differ widely, and a complete analysis would require case-by-case examination. In most cases, the corresponding regulations have a legitimate purpose, such as ensuring consumer information, improving product safety, or preserving the environment. However, cross-country differences in such measures can, deliberately or not, impose additional costs to exporters.<sup>6</sup> Some of these costs may stem from substantial differences, others may be the result of different modalities of application, whether certification methods, labeling requirements, or ways of measuring technical characteristics (such as the volume of a vehicle's polluting emissions or requirements related to quality management in the production of medical devices).

(6) Recall that SPS and TBTs are managed under the umbrella of the WTO. In a nutshell, the general principles are scientific evidence, transparency, notification, and non-discrimination. Countries that consider that a measure unduly hampers their exports can raise their concern in a dedicated WTO committee.

Technical standards can be resolved to an extent by mutual recognition, a solution often adopted in the EU to cope with the different standards of Member States, but in some cases also for differences between the EU and a series of partners, as a follow-up to the completion of the Single Market. There are mutual recognition agreements with the US for six areas: electromagnetic compatibility, medical devices, telecommunications equipment, electrical safety, recreational craft, and pharmaceuticals.<sup>7</sup> This is not to say that all standards (*e.g.*, design of plugs for electrical appliances) are mutually recognized,<sup>8</sup> rather that certification provided on one side of the Atlantic is valid on the other side. Conformity assessment procedures and designation of accredited bodies are key issues here.<sup>9</sup> This prudent approach has not proved entirely satisfactory: the private sector considers its impact too limited (*e.g.* for medical devices).<sup>10</sup> Were an ambitious transatlantic agreement to be signed, this might open two possibilities: either extending the coverage and improving the functioning of the current EU-US mutual recognition agreement, which would be a very conservative approach, or embarking on a real mutual recognition of standards (*i.e.* extending beyond accreditation bodies) between the two parties. Examples invoked by the private sector to support the latter approach are vehicle safety belts and other automobile components.

The mutual recognition of standards is more complex in relation to SPS measures which often mirror differences in collective preferences. In fact, even the most conservative approach (mutual recognition of accreditation bodies) is not part of the existing agreement on food products. The difficulty with SPS standards is that perception of risk on the two sides of the Atlantic differs: there is huge resistance to genetically modified organisms (GMOs) in Europe, while the US has major concerns about unpasteurized cheese. Thus, the simple formula "what's good for us is good for you" does not apply. In most cases, then, for SPS, mutual recognition faces insuperable political obstacles, and this applies also to the harmonization of standards.

This leads to two possibilities. In the first, differences in perception are irreducible since the product involved raises concerns related to traceability or externalities. In the second, the product is perfectly identifiable and verifiable, and there are no externalities. Examples are GMOs in the first case, and (chlorine-rinsed) chicken in the second. Products for which differences are reconcilable will be used as strategic assets in the negotiations but it is unlikely that a contentious case such as GMOs, having already been submitted to WTO

(7) See "Agreement on mutual recognition between the European Community and the United States of America", Official Journal of the European Communities, 4.2.1999, L 31/3.

(8) "This Agreement shall not be construed to entail mutual acceptance of standards or technical regulation of the Parties and, unless otherwise specified in a Sectoral Annex, shall not entail the mutual recognition of the equivalence of standards or technical regulations", Article 4, *op.cit.*

(9) "This Agreement specifies the conditions by which each Party will accept or recognise results of conformity assessment procedures, produced by the other Party's conformity assessment bodies or authorities, in assessing conformity to the importing Party's requirements", Article 2, *op.cit.*

(10) This is due in part to the coexistence of national and Community level regulation in Europe: "a major sticking point that concerns both U.S. and EU medical device manufacturers is the French government's belief that other EU members' technical regulations for medical devices are not enough to guarantee product safety.", Johnson C, (2001).

arbitrage, will be resolved through bilateral negotiation.<sup>11</sup> Scientific evidence is controversial, traceability of products is difficult, and there are externalities (GMO crops polluting non-GMO crops).<sup>12</sup> The current situation in Europe regarding GMOs is summarized in the WTO July 2013 Trade Policy Review (see Report of the WTO Secretariat, sections 3.125 to 3.128).<sup>13</sup> An important issue related to GMOs is the fact that food, feed, and cultivation require different authorizations. Finally, individual Member States decisions on EU regulations cumulate with EU-level decisions.<sup>14</sup>

In the case of chicken, there is the possibility for a labeling solution. The rinsing of the chicken (in drinking water in Europe) could be clearly stated on the final product, and the consumer would have full information to choose. However, this might lead to requirements for even more extensive labeling to inform the consumer about how the chicken has been preserved, *e.g.* by irradiation, which producers might not welcome.<sup>15</sup>

More generally, in several cases negotiation might help to level the playing field, exemplified, before the launch of the negotiations, by the EU's authorization for lactic acid used to clean beef carcasses, and imports of live pigs. Reciprocally, there is certainly room to dispense with the remaining US import restrictions on EU bovine meat in response to the Bovine Spongiform Encephalopathy (BSE) crisis.

Other examples include the US which tests the water in which oysters are reared, and the EU testing of bivalve flesh. In so-called grade A dairy products, such as yoghurt, only two European companies have managed to accommodate all the regulations and be recorded equivalent to American producers when exporting to the US.

However, not all contentious cases can be resolved so easily. Hormone-fed beef is a product that could be labeled, with no externality. But the US and the EU disagree about the scientific evidence; the US considers that the ban imposed by the EU is protectionist.<sup>16</sup>

## 2.3 Public procurement

Public procurement is another important negotiating issue. Both the EU and the US are members of the Government Procurement Agreement (GPA), a plurilateral agreement that came into force in 1996 and was revised in April 2012. Signatories to this agreement commit to following fair and non-discriminatory public procurement procedures beyond a given threshold. For each country, the agreement lists the public entities concerned and the sector restrictions. Although a large number of case studies has been conducted, systematic, comparable information is difficult to compile. However, it is an important negotiating area for the Europeans because US commitments include a number of exceptions: only 37 US States have agreed to be bound by the GPA, and substate entities are not covered.

According to the Commission services' estimates, the share of public procurement covered by commitments under the GPA is 95% for the EU, compared to 32% for the US.<sup>17</sup> Although these numbers are difficult to crosscheck, it is clear that the limitations on the coverage of existing commitments are far more extensive on the US side. Given the strong competitive position of European producers in many related industries such as transport equipment, railways, energy distribution, and pharmaceutical products for

instance, the stakes potentially are high. Inclusion of a wide-ranging set of provisions to extend existing commitments, as has applied to all the recent agreements signed by the EU, is bound to be an important ingredient of an agreement, although assessing its effective economic impact is difficult.

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*'Negotiation might help to level the playing field (...) but it is unlikely that a contentious case such as GMOs will be resolved through bilateral negotiation.'*

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## 2.4 Geographical indications

European countries have for long been emphasizing the importance of geographical indications (GIs), reflecting their eagerness to protect and value their rich and diverse gastronomic traditions, frequently associated with the notion of *terroir*, or at least of specific geographic origin. In response mostly to their requests, the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) includes provisions to protect such indications from misuse, with especially stringent rules for wines and spirits (art. 22-24). Notwithstanding this agreement,<sup>18</sup> there continue to be disagreements between the EU and the US which reflect their fundamentally different approaches to the issue. While GIs are widely held in the EU as necessary to protect the consumer through provision of information, and to maintain authenticity of products, they are often considered in the US as unduly stifling of competition and innovation. In fact, current US law does not recognize GI

(11) The case was launched by the US in May 2003, followed by other countries such as Canada and Argentina. The panel report was circulated in September 2006. In December 2006 the EU asked for a reasonable period of time for implementation of the panel's recommendations. In January 2008, the EU and the US announced they had "reached an agreement on procedures". An economic assessment of the damage to exports suffered by EU trade partners is provided in Disdier A.-C., Fontagné L. (2010)

(12) An example of GM pollution is GM pollen in honey (above 0.9% of total pollen in honey according to the contentious EU Court of Justice decision in September 2011, which was contested by Argentina).

(13) Related EU regulations include Regulation (EC) 1829/2003 on GM food and feed, completed for externalities by Directive 2001/18/EC on the deliberate release of GMOs into the environment, and regarding traceability by Regulation (EC) 1830/2003 on the traceability and labeling of GMOs, and food and feed produced from GMOs. The latter was completed in relation to traceability by Regulation (EU) 619/2011 on the methods of sampling for control of presence of GMOs.

(14) Article 23 of the Directive 2001/18/EC states that Member States can temporarily restrict or ban the use of GM products authorized at EU level. Austria, France, Greece, Hungary, Germany, and Luxembourg are currently opposing this Article to the use or to the sale of certain GMOs.

(15) Irradiation with Cobalt 60 and cesium 137 eradicates Salmonella, Listeria, Escherichia coli and Campylobacter. See Health Canada (2013), Irradiation of Poultry, Summary of Submission Process, 24 June. The process is regulated by the Codex Alimentarius (CODEX STAN 106-1983, Rev1-2003).

(16) The situation is similar for pork fed with ractopamine, a drug used as a feed additive to promote leanness in animals raised for their meat.

(17) See COM, SWD 57, 2012.

(18) The EU and the US signed a bilateral agreement on spirits in 1996.

as either a separate category or a concept related to intellectual property. Although protection can be sought via certification or collective marks, GIs essentially are viewed in the US as a sub-set of trademarks, and protected as such, meaning that EU Protected GIs or Protected Designations of Origin and the even more restrictive European system for wine, do not exist in the US.

These different approaches have already provoked a dispute, which was arbitrated by the WTO in 2003<sup>19</sup> and led to a change in European regulation, while an agreement between both partners on trade in wine was signed subsequently. According to European standards, protection granted to GIs in the US are weak for wines and spirits, and almost non-existent for other foodstuffs. In particular, a number of names referring to European geographical areas are currently considered generic in the US, and thus cannot be protected. Obtaining better protection through recognition of an extended list of GIs is an important negotiating objective for the EU, which now routinely includes such provisions in its preferential trade agreements. The stakes are high for the EU not just for wines and spirits but also for cheeses (the example of Kraft's exports of US-made 'Parmesan' cheese is frequently cited), beers and other drinks, fruits, olive oil, and meat and meat products.

## 2.5 Services

Services are an important part of bilateral trade negotiations. Regulations are designed to protect the consumer (e.g. in the banking and insurance sectors). But they can create obstacles to trade if they discriminate against foreigners or when they vary from one country to another, especially in relation to entry in the as yet incomplete EU services market. While the principle of commitment within the General Agreement on Trade in Services (GATS) has made little progress in the multilateral arena, much can be expected from bilateral talks. Progress on this front is likely to have important consequences for the advanced economies given the prominent share of services in their value added. In the EU and US cases, the conjunction of two events is adding to the intrinsic complexity of negotiations on services. One is the current process of deregulation of Europe's postal services combined with the technological shock suffered by the sector (electronic mail). The second is the financial crisis which has led to re-regulation of the sector on bases that are not necessarily consistent on each side of the Atlantic.

In addition, negotiators will be forced to deal with more prosaic elements of protection inherited from the past. Transport will be contentious – especially in relation to maritime and air transport.

Ecorys (2009) lists the following non-tariff barriers. In postal services, there is a monopoly of the US Postal Service in the US market; the Communications Act makes it difficult for EU companies to invest in the US telecoms market; there are different licensing and patenting systems, etc. In this last Europe is not so different. However, postal

(19) EC – trademarks and Geographical indications, DS174, 290.

monopolies (though incomplete and bounded by the Postal Directive) are country specific and idiosyncratic (e.g. access to letter boxes, VAT exemptions). In financial services, use of the International Financial Reporting Standards (IFRS) in Europe and a different reporting system in the US leads to discriminatory taxation of EU companies. The Basel regulations are not implemented in the same way. More generally, there is a lack of cooperation between regulators on both sides of the Atlantic, and operating abroad might face a series of discriminatory regulations on both sides.<sup>20</sup> In the insurance sector, the obstacles include discriminatory regulation of collateral, divergent State- or Country-level regulations, Solvency II regulation in Europe.

In transportation, the case for protectionism is clearer. Air transport is highly regulated on all fronts: allocation of airline slots, public ownership of (historical) companies and restrictions on foreign ownership, public procurement of transportation services restricted to national companies, and the more recent

environmental and security-related regulations. In this sector, the two parties are not starting from scratch because the Open Skies Agreement (signed in 2007) provides a relatively level playing field. Regarding maritime transport, the main issues are the US "100% scanning" requirement (see below), certification of carriers (imposed by both sides on different grounds), and the regulation of cabotage (transport of goods or passengers between two points in the same country by a vessel or an aircraft registered in another country).<sup>21</sup>

## 2.6 Investment

With €1,200 bn invested by each country into its partner's economy in 2010 (Eurostat), investment is potentially an important part of the agreement. Both parties have expressed their willingness to follow the HLWG's recommendation that the agreement "should include investment liberalization and protection provisions based on the highest levels of liberalization and highest standards of protection that both sides have negotiated to date." This willingness is consistent with the US emphasis on the inclusion of ambitious investment chapters in their preferential agreements, and with European countries' numerous bilateral investment treaties (BITs).<sup>22</sup>

Nonetheless, the transatlantic partnership is particular in this respect, because the need for an agreement designed to grant investors "fair and equitable treatment" as it is usually described, is not obvious. The quality and impartiality of judicial systems on both sides leaves open whether an investor-state arbitration procedure is necessary to

(20) Examples are the Patriot Act (section 319) and the Sarbanes-Oxley Act in the US, and licensing requirements on both sides.

(21) In the US, the related regulation is the "Merchant Marine Act" of 1920, also known as the "Jones Act". It states that a US citizen must own 75% of the shares of the vessels. Also, vessels must have been built and registered in the US and must be manned by a US crew. In Europe, cabotage has been liberalized since 1999 (2004 for passengers) among Member States. But this does not apply to third countries. See Brooks M. (2009).

(22) Before the Lisbon Treaty, foreign investment was not a Community responsibility and investment measures could not be introduced as such in EU trade agreements.

protect investors against discriminatory measures or uncompensated expropriations of property. Such a procedure might even be a source of concern,<sup>23</sup> since it would prioritize an ad hoc system of arbitration with minimal institutional underpinnings and questionable legitimacy over national judicial systems. Paradoxically, such an arbitration system might even promote discrimination if it were to provide to foreign investors rights which domestic investors are denied. All this call for great caution in the wording of the provisions that might be included in the agreement, and great attention to avoiding overly restrictive provisions that would limit the capacity of government to implement independent policy in the areas of environment and energy in particular. In addition, while some existing rules are clearly protectionist – such as the impossibility for a foreign investor to own more than 25% of a US airline company, or the existence of a golden share in the British military aerospace industry – current regulations do not seem to be stifling investment unduly judging by the size of existing bilateral cross-investment stocks.<sup>24</sup>

### ■ 3 A quantitative assessment of the TTIP

Is it worth the negotiating pain? According to the European Commission, based on a quantitative impact assessment of an ambitious deal, the order of magnitude of the potential gain for the EU is between 0.5% and 1% of EU GDP: “this would be equivalent to at least €86 billions of added annual income for the EU economy”.<sup>25</sup> How were these figures obtained? Can we trust such quantitative evaluation? What are the main determinants of the magnitude of these gains?

While a number of the areas referred to above do not lend themselves to quantification, economic modeling can be used to evaluate what the economic consequences of an agreement might be. Here, we use MIRAGE,<sup>26</sup> a Computable General Equilibrium (CGE) model of the world economy developed by CEPII, to carry out such an assessment of tariff provisions but also of the obstacles to trade in services and Non-Tariff Measures (NTMs).<sup>27</sup>

CGE models are widely regarded to be the most appropriate tools to conduct ex-ante assessment of trade agreements. Their reliance on sound microeconomic modeling of agents' behavior makes it possible to analyze, in a consistent way, how they might react to the

new environment following a policy shock, given their respective objectives and constraints. Meanwhile, the general equilibrium framework ensures that the analysis takes due account of the feedbacks from income effects and labor or capital markets, and the interdependencies across economies.

Depending on data availability, these models can be tailored to the needs of each specific analysis. In the present case, 34 sectors (primary and energy – 5, agriculture – 6, manufacturing – 11, services – 12)<sup>28</sup> and 13 geographical areas (the US, 6 sub-areas within the EU, and 6 in the rest of the world)<sup>29</sup> are considered. MIRAGE relies on the Global Trade Policy Analysis (GTAP) database for social accounting matrices, and on MACMap-HS6 (CEPII-ITC) for *ad valorem* equivalent (AVE) tariff protection, measured at product level. NTMs modeling, based on estimates of their AVE level of protection (see Box), account for their trade restrictiveness while assuming that they do not promote any tariff receipts or rents. Before considering counterfactual scenarios, we simulate a business-as-usual growth path for the world economy up to 2025, referred to as the “baseline” simulation. The economic impact of the agreement is then computed as the difference between a growth path incorporating the agreement, and this baseline.

While the baseline simulation is supposed to reflect a status quo scenario for trade barriers, two foreseeable changes are taken into account. One is implementation in 2015 of the “100% scanning” requirement, initially due to be applied as of July 2012 and effectively delayed, imposing that any container entering the US territory must be scanned.<sup>30</sup> According to recent estimates, this requirement would entail a 10% increase in trade costs on all US imports.<sup>31</sup> The second change is the expected progress over the next 15 years in the completion of the internal European market for services, which we assume will entail a 20% cut in intra-EU protection in services.

All the scenarios considered below include progressive but full phasing out of tariff protection between the partners starting in 2015.<sup>32</sup> Based on EU-Canada negotiations, this tariff removal is assumed to be front-loaded for most products, with a transition period of three, five or seven years for the most sensitive products.<sup>33</sup> In all the scenarios

(28) Cereals, Vegetables, Fruit and Oil, Sugar, Fiber crops, Meat, Dairy in ‘agriculture’; Other Primary products, Coal, Oil, Gas, Electricity in ‘primary and energy’; Food products, Beverages and Tobacco, Textile, Wood and Paper, Coal products, Chemicals, Other manufactured products, Metals, Transport equipment, Electronic material, Machinery in ‘industry’; and finally Construction, Trade, Other Transport, Sea Transport, Air Transport, Communication, Finance, Insurance, Business, Recreational services, Public Services and Other services in ‘services’.

(29) Canada, Mexico, China, Japan and Russia are singled out in the model although we do not report the corresponding results here for lack of space.

(30) See i) European Commission, DG TAXUD, Comments on 100% Scanning, sent to US Customs and Border Protection (CNP) in April 2008; ii) Ecorys (2009), and iii) European Commission (2013). The measure has been delayed until July 2014.

(31) See European Commission (2010). This cost is the evaluated additional variable direct transport cost. It is topped by initial sunk costs (€430 million) in infrastructure, and 2,200 extra staff employed at EU ports. EU ports unable to comply with the new regulation will lose access to the US market, increasing congestion in the largest European ports.

(32) This assumption is made for simplicity and to achieve greater transparency despite our reference to the fact that some sensitive products are unlikely to be fully liberalized in the long term, at least beyond a given tariff-rate quota.

(33) Products are classified across these categories on the basis of the outcome of the negotiations between the EU and Canada, taking into account peculiarities of the agricultural negotiation.

(23) Such concerns have been raised for instance by non-governmental organizations such as the Corporate Europe Observatory.

(24) Government support of civil aircraft is regulated by the EU-US Agreement on Trade in Large Civil Aircraft (albeit this agreement has been challenged by the US in the WTO arena since 2004). However, for strategic reasons there are limits to foreign investment in the sector, *e.g.* in Europe. An example is the British Government's golden share in the privatized British Aerospace Systems (BAE). This £1 share gives the British Government the right to veto any change in the control of the company, any non-UK top appointments, and any non-UK share ownership above 15%. This idea of protecting strategic activities from hostile foreign acquisitions was revamped by France and Germany before the merger between BAE and EADS crashed in 2012.

(25) The background study is Francois *et al.* (2013).

(26) For a technical presentation of the model, see Bchir *et al.* (2002) and Decreux and Valin (2007). See also <http://www.mirage-model.eu>.

(27) See web appendix for more details on the simulation results and geographic nomenclatures.

### Box – Quantifying non-tariff measures

To evaluate the impact of NTMs on trade and economic welfare, it is necessary to devise a method that enables systematic analysis. There are two possible approaches: quantity-based and price-based. Price-based methods rely on comparing the prices in the importing country with the prices of similar products in markets free of distortions. They can involve simple comparison of averages, on a case-by-case basis, after correcting for transport costs and other observable differences, or econometric methods. Quantity-based methods generally rely on a gravity equation to estimate by how much the presence (and in some cases intensity)<sup>1</sup> of a NTM reduces trade flows. This allows estimation of an AVE protection, defined as a fictitious import tariff rate that would reduce imports by just as much as the NTM. In practice, largely due to data issues, quantity-based approaches prove more convenient for large-scale analyses such as the one conducted here.<sup>2</sup> For merchandise trade, we rely on the estimates in Kee *et al.* (2009). These are based on product-level import equations incorporating information about NTMs from the UNCTAD-TRAINS database, updated using the WTO's Trade Policy Reviews combined with the EU Standard Database (Sheperd, 2004), and information on countries' agricultural domestic support supplied to the WTO. These estimates control for *ad valorem* equivalents of specific tariffs (Bouët *et al.*, 2008) and *ad valorem* tariffs from the WTO Integrated database.<sup>3</sup>

In services, where no tariffs are applied, the capacity to access markets and to be treated equivalently with domestic competitors, by definition is only related to NTMs, including differences in regulatory environments. To quantify these, we rely on CEPII estimates of AVE protection in cross-border trade in services (mode 1, in WTO jargon). These indices of trade restrictiveness, presented in Fontagné *et al.* (2011), are computed applying a quantity-based approach to 9 service sectors and 65 countries, using the same GTAP classification used in our model.

As a robustness check, additional simulations are carried out using alternative estimates of NTMs in manufacturing and services, namely the AVEs compiled by Ecorys (2009)<sup>4</sup> for the European Commission. These AVEs are also assessed using a quantity-based method, but the resulting estimates are based on the results of a large-scale business survey that asked firm representatives to assess the level of trade restrictiveness resulting from NTMs – for services, the indices obtained as a result are combined with OECD indicators of FDI restrictiveness. This method was applied to 23 sectors involved in trade between the EU and the US.

In all cases, the estimated trade restrictiveness of NTMs is large, and generally dwarfs that of tariffs. According to our reference estimates ("Reference scenario" columns in table), AVE protection in agriculture is 48% in the EU and 51% in the US, with comparable but lower levels for manufactured products (43% in the EU, 32% in the US). For services, the trade restrictiveness of NTMs in broad terms is equivalent to 32% protection in the EU, and 47% in the US. Alternative estimates ("Ecorys NTMs scenario" columns) point to higher levels for agriculture and lower levels for in manufacturing, and significantly lower for services where the business survey approach is likely to apply a narrower meaning to the term NTM, and ignore some of the effects of different regulatory approaches.

#### Estimated *ad valorem* equivalent protection ensuing from NTMs for transatlantic trade (percent)

	Reference scenario		Ecorys NTMs scenario	
	EU	US	EU	US
Agriculture	48.2 (11.6)	51.3 (17.6)	56.8 (0.0)	73.3 (0.0)
Manufacturing	42.8 (36.8)	32.3 (13.5)	19.3 (20.9)	23.4 (27.3)
Services	32.0 (11.0)	47.3 (30.8)	8.5 (4.5)	8.9 (10.9)

Source : authors' calculations based on Kee *et al.* (2009) for manufacturing and Fontagné *et al.* (2011) for services in the reference scenario, and on Ecorys (2009) for both manufacturing and services in the other scenario.

Note: figures refer to unweighted averages across the model sectors for NTM AVE protection. Figures in parentheses refer to the standard deviations across model sectors for these AVEs. Agriculture is considered as a single sector in Ecorys estimates, hence the zero cross-sectoral standard deviation in this case.

(1) The incidence of NTMs is most often measured using a coverage rate based on official records of administrative measures but an index of the intensity of the restriction can be generated from firm surveys, and in some cases from administrative records if they include a quantitative dimension (like maximum residue limits).

(2) Price-based methods mainly suffer from problematic availability and comparability of price data.

(3) See Section 3 of Kee *et al.* (2009) for a full description of the variables.

(4) Ecorys (2009), *op. cit.* We are grateful to Joseph Francois for providing us with these data.

considered, we assume also that an agreement would free European exporters to the US from the "100% scanning requirement", thus cancelling the corresponding cost increase.

For NTMs, a complete phasing out would be neither desirable nor realistic. As mentioned above and stated repeatedly by European leaders, the objective of an agreement would be not to lower the level of regulations but to make regulations as compatible as possible across the Atlantic to reduce unnecessary additional costs for exporters. Achievement of this objective is not easy in practice, but cross-sector differences are difficult to gauge.<sup>34</sup> Accordingly, our reference scenario

(34) Ecorys (2009) proposes an assessment of the "actionability" of NTMs; however, this attempt is essentially an *ad hoc* evaluation.

("Reference") includes an across-the-board 25% cut in the level of trade restrictiveness of NTMs for both the product and service sectors with the exception of public and audiovisual services. A side effect of this liberalization would be to lower the trade restrictiveness of NTMs within the EU in service sectors, where such measures are far from fully harmonized.<sup>35</sup>

(35) In the service sectors, we assume the trade restrictiveness of NTMs initially to be 15% lower within the EU than for third countries. Thus, intra-EU AVE protection is assumed at most to be equal to US protection, meaning a bilateral cut by more than 15% will entail a cut in intra-EU AVE protection. As already mentioned, in the case of medical devices, differences in Member States' regulations (still widespread in services) are often a source of significant additional costs for importers, so it would be logical in some cases for negotiation to include reducing these differences.

We consider four different scenarios in addition to the reference case. The first ("Tariffs Only") considers only tariff liberalization. This is not meant to be understood as a realistic assumption but rather as a way to isolate the specific economic impact of bilateral liberalization in this area. The second scenario ("Targeted NTM Cuts") assumes that liberalization commitments will be progressive, *i.e.* more stringent for those NTMs that initially are more restrictive and hence target the most protected sectors. We assume for agriculture, industry and services separately that the AVE protection provided by the NTMs will be cut by 30% for the upper half of sectors (*i.e.*, those with initial protection beyond the median sector level)<sup>36</sup>, and by 15% for the lower half.

A transatlantic agreement might also render both signing parties' NTMs less restrictive for third country exporters: the greater compatibility between the standards and norms on each side of the Atlantic might make it less costly to cope with the requirements of both markets, and the standards and norms agreed upon by the EU and the US might be adopted by third countries, which would increase international compatibility beyond the agreement's signing parties. These effects are taken into account in a third scenario ("Harmonization Spillovers"), where the trade restrictiveness of NTMs with regard to third country exporters is assumed to be cut by 5% (*i.e.*, one-fifth of the cut achieved bilaterally in the reference scenario).

The fourth scenario ("Ecorys NTMs") applies the same liberalization assumptions as in the reference scenario but relies on an alternative assessment of the trade restrictiveness of NTMs (see Box). This robustness check is demanded by the complexity involved in an attempt to assess the trade restrictiveness impact of NTMs for goods, and of the regulatory barriers for services. Simulation results depend upon modeling assumptions, underlying data and scenario definition. Despite our attempt to adopt a scientific approach, any assessment remains partial and arguable. These limitations must be kept in mind when interpreting the results presented below. The impacts of the reference scenario are presented before considering variants, in order to identify the separate impacts of various hypotheses.

### 3.1 TTIP will boost bilateral trade, with no trade diversion

The first purpose of a Free Trade Agreement is to boost trade by realizing untapped trade potential. The TTIP assumed in the reference scenario would meet this requirement. Our reference scenario suggests that trade in goods and services between the two signing regions would increase by half as a result of the agreement (Table 2). In agriculture, cutting the initially sizeable tariff and non-tariff barriers is estimated to increase bilateral trade

(36) The median NTM AVE protection is defined by large sectors: in agriculture 48% for the EU and 50% for the US; in manufacturing 64% and 31%, respectively, and in services 31% and 43%.

Table 2 – Reference scenario - Long term impact on TTIP on bilateral exports (percent)

Exporter	Importer	Total	Agriculture	Industry	Services
Transatlantic trade					
USA	EU27	52.5	168.5	66.4	14.0
EU27	USA	49.0	149.5	61.8	24.0
Other trade flows					
USA	RoW	-1.4	-1.9	-1.3	-1.6
EU27	RoW	-1.4	-0.4	-1.4	-1.4
RoW	USA	-2.5	-0.8	-2.8	-0.7
RoW	EU27	0.2	-1.5	0.1	0.6
EU27	EU27	-1.2	-2.6	-2.3	2.8
RoW	RoW	0.1	-0.0	0.2	0.2

Source: authors' calculations.

Note: trade in volume, percentage deviation from baseline in 2025.

between the EU and the US by an average of 150% or more, in both directions. For non-agricultural goods, tariffs are generally very low (with some moderate peaks) and progress can only occur on the NTMs front. Assessed increases in bilateral trade accordingly are much lower than in agriculture. The most modest increase in trade takes place in the services sector (14% and 24%). This expected boost is not symmetric because of the uneven initial levels of protection on both sides of the Atlantic: US exports to the

EU increase less than reciprocal flows in services, but the reverse is true for goods and total exports.

However, the differences in export growth remain limited, with an increase of 50% in both directions compared to the baseline.

In agriculture, the biggest increases in US and EU bilateral exports are observed for dairy products, and to a lesser extent fiber crops and meat products (most of the export gains in this last being reaped by US exporters). US gains in cereals, vegetables and fruits are also expected to increase. Finally, absolute US gains in agriculture are 2.5 times larger than

European gains, due to the initial differences in trade flows and protection levels.

There is no such asymmetry in industry where US gains in absolute terms are only slightly larger than European ones. In the US, the chemical industry originates more than half of the increase in bilateral exports of industrial products. In the EU, gains are concentrated in machinery, chemicals industry, and transport equipment, while EU gains are concentrated in the electronic sector.

In services, where EU gains are at least twice as large as US gains, the most striking difference is in insurance services where the EU can expect important trade benefits (even though the fact that the regulatory system is mainly state-based will be an obstacle to commitments in this sector). Business services and finance are the next contributors to the large EU gains, but the gains from air transport are fairly modest.

One of the worries related to free trade areas is trade diversion. Participating countries develop their bilateral trade following

reductions in the trade barriers with the result that the remaining obstacles to trade with third countries become differentially higher. Part of the additional bilateral trade is due simply to substitution of trade flows detrimental to third countries. The corresponding trade diversion does not contribute to global efficiency if third country exporters would have been more competitive than exporters within the FTA were there no trade barrier differentials. The importing country switches from the lowest-price provider to a higher-price provider, inducing efficiency losses and hurting non-participating economies. Relying on a CGE framework makes it possible to assess the precise importance of these effects.

Overall, we can detect little trade diversion induced by a TTIP. The two signatory regions complement each other quite well, meaning that the additional bilateral trade is mostly replacing domestic production. US imports from the Rest of the World (RoW) decrease by only 2.5% overall, with most of this trade diversion in manufacturing. More detailed analysis shows that Mexico and Canada, and also China and Japan lose export shares in the US industrial market, in machinery and transport equipment and in chemicals. In the EU we find no trade diversion overall, since the limited trade diversion in agriculture (US exports to the EU replacing former imports from third countries) is more than compensated for by trade creation with third countries. This latter effect is due to the presence of global value chains. By exporting more to the US, European producers also import more from the US and from the RoW, thus increasing service imports from third countries.<sup>37</sup> In addition, a large share of EU and US imports from third countries already benefit from preferential treatment as a result of free trade agreements or non-reciprocal trade preferences. This makes it less likely that the EU would shift to a higher-price producer (such pre-existing effects are more likely to be reversed). Concerns about increased competition remain for third countries, but this reduces the likelihood of significant efficiency losses for the signing parties.

### 3.2 Uneven impacts on EU member states expected

Even though the negotiation is conducted at EU level, the negotiating mandate will be influenced heavily by the offensive and defensive interests of influential Member States, as exemplified by the exclusion of cultural services from the beginning. The potential divergence of British, German and French interests is real. The popular view would present France as defending its interests in relation to agricultural farm products, Germany its interests in manufactured goods, and the UK its interests in services. However, our simulation points to a much more subtle reality (Table 3). The average increase in EU exports (all destinations) is 2%, much less impressive than the 10% increase in US exports, but not fully comparable since intra-US exports are considered as domestic trade, while trade between Member States is considered to be international trade. Thus, these percentages do not refer to the same absolute values. The expected increase in British

(37) For a detailed analysis of the agreement related to global value chains, see Kommerzcollegium report (2013).

Table 3 – Reference scenario - Long term impact of TTIP on US and EU exports and imports (volume, percentage change in the long run)

	Imports	Exports			
		Total	Agriculture	Industry	Services
USA	7.5	10.1	12.6	12.2	3.2
EU27 (excluding intra EU)	7.4	7.6	7.0	8.9	4.5
EU27 (including intra EU)	2.2	2.3	0.6	1.9	3.6
Of wich:					
Germany	2.5	2.1	-2.6	2.0	2.9
UK	3.0	4.2	0.5	3.9	4.8
France	2.5	2.6	-0.3	2.6	3.1
Enlargement	1.2	1.3	4.2	0.8	3.3

Source: authors' calculations.

Note: trade in volume, percentage deviation from baseline in 2025.

exports is 4%, more than those of France and Germany which are around the EU average, reflecting the fact that the US accounts for a larger share of exports in the UK than in most other EU members. Considering the sectoral distribution of these offensive interests, as expected we observe a 5% increase in British exports of services but also a 4% increase for industry. For Germany, the gains in industry are similar to the EU average (2%), while the gains in services (3%) are below this average. German exports of agricultural goods are negatively impacted. Finally, France is not expected to have more defensive interests in agriculture than the EU average, but would have more offensive interests in industry and would gain slightly more than Germany in services. Finally, the enlargement countries would not gain much in industry, reaping most of their export gains from agriculture.

An important impact of the TTIP would be to reorient EU exports away from intra-EU trade in agriculture and industry, meaning that intra-EU trade would drop by 2% in industry and 3% in agriculture (Figure 2) while extra-EU trade would increase by 9% and 7% respectively). A similar shift would not be observed for services, where both intra- and extra-EU trade would be boosted. This specific effect is attributable to the progress made in completion of the internal market for services as a result of negotiation over the regulatory barriers to trade in services with the US. Indeed, negotiating with the US on services would help to unify the internal EU services market.

### 3.3 Similar impacts on GDP but different sectoral impacts in the EU and US

Overall, the EU and the US would achieve similar GDP gains (+0.3%), corresponding respectively to annual long run increases in national income of respectively \$98bn and of \$64bn compared to the baseline (Table 4).<sup>38</sup> These figures are more conservative than those in the European Commission study published in March 2013 (resp. 0.5% and 0.4%).

(38) All values are expressed in 2007 US dollars.

**Table 4 – Reference scenario - Impact on GDP and sectoral value added**

(volume, percentage change in the long run)

	Total (GDP)	Value added		
		Agriculture	Industry	Services
USA	0.3	1.9	0.5	0.2
EU27	0.3	-0.8	0.6	0.5
Of which:				
Germany	0.4	-1.6	0.9	0.4
UK	0.4	-2.3	0.4	0.5
France	0.2	-0.7	0.5	0.3
Enlargement	0.2	0.0	0.4	0.3

Source: authors' calculations.

Note: volume, percentage deviation from baseline in 2025.

The other side of the coin to this balanced although modest outcome, is the changes in sectoral value-added on both sides of the Atlantic. US gains in value added would be expected mostly in agriculture (+2%), while European value-added would shrink by 1%. In contrast, gains in the industry and service sectors would be larger in value-added for Europe. These contrasting changes mean that the expected inter-sectoral reallocation of resources would be more pronounced in Europe.

The differentiated impacts on income and value added among the big EU players might add to the difficulty of completing an agreement. For example, Germany and the UK could expect income gains twice as large as those likely to be reaped by France. However, this would come at a cost: inter-sectoral reallocation of resources would be wider in the first two countries, with agriculture suffering more, while in value-added terms industry and services would expand more.

### 3.4 Alternative scenarios

The results of a quantitative *ex ante* evaluation of a FTA are partially driven by the design of the scenarios and by the available data on NTMs. Simulations of the four additional scenarios described above provide some understanding of the sensitivity of these evaluations and point to the central role of NTMs from both a policy and a modeling perspective.

The scenario limited to tariff dismantling (scenario 1) illustrates the policy perspective. Exports would increase by only 2.1% (US) and 0.4% (EU), compared to, respectively, 10.1% and 2.3% in the reference scenario (Table 5). Therefore, 80% of the trade expansion in the reference scenario seem to be coming from the NTM cuts.

Then, comparing the results of our reference scenario to the one including Ecorys measures of NTM *ad valorem* equivalents (scenario 4) shows how sensitive are the results to the alternative measures of NTMs. Since our AVEs are higher on average and more dispersed across sectors, they lead to much larger assessed gains. For instance, US exports increase by 10% in the long run in the reference scenario but only by 5% using Ecorys data. This translates into larger gains in income using our data, although

smoothed compared to trade effects (resp. 0.3% and 0.2% increases in real income).

The next simulation shows that targeting NTM cuts (through progressive cuts, scenario 2 described above) would add little to the outcome of the negotiation, while increasing the sensitivity from a political economy perspective. In contrast, assuming spillovers from trade liberalization (scenario 3) would benefit third parties and boost trade and income.

The result of this exercise is that negotiating countries will reap the largest benefits from the most difficult negotiations (NTMs relate to protection behind the border, i.e. to domestic regulation) and from issues where there is less reliable quantitative information.

**Table 5 – Alternative scenarios - Exports and real income**

(volume, percentage change in the long run)

	Exports				
	Ref	Alternative scenarios			
		1	2	3	4
	Tariffs only	Targeted NTM cuts	Harmonization spillovers	Alternative NTMs	
USA	10.1	2.1	10.4	14.5	5.4
EU27	2.3	0.4	1.9	3.4	1.3
Of which:					
Germany	2.1	0.3	1.7	3.0	1.2
UK	4.2	0.6	3.6	5.5	2.4
France	2.6	0.5	2.2	3.8	1.5
Enlargement	1.3	0.3	0.8	2.5	0.7
	Real income				
USA	0.3	0.0	0.3	0.5	0.2
EU27	0.3	0.0	0.2	0.5	0.1
Of which:					
Germany	0.3	-0.0	0.3	0.5	0.2
UK	0.3	0.0	0.2	0.4	0.1
France	0.2	0.0	0.2	0.4	0.1
Enlargement	0.2	0.0	0.1	0.5	0.1

Source: authors' calculations.

Note: volume, percentage deviation from baseline in 2025.

## 4 Concluding remarks

The goal of liberalizing trade in the North-Atlantic region has been contemplated for years, with only partial progress achieved on specific issues such as standards. Confronted with the failure of the Doha Round, the surge of regional trade in Asia, and more generally the declining influence of the EU and the US on the world trade agenda, there is hope that negotiators might this time forge an ambitious deal. The (close-to) completion of the EU-Canada agreement on the one side, and the US-Korea agreement on the other can be used as examples of what can be achieved. If successful, the scope and ambition of the proposed TTIP would render it of unparalleled economic importance. However, its completion will involve long, technically complex and politically

loaded negotiation. Success remains hypothetical, and the precise content of the document to be signed is difficult to predict. Early contentions (such as disagreement over cultural industries) show that much political capital will have to be invested on both sides. So is it worth the effort? Our quantitative assessment based on a well identified but arguable set of modeling assumptions would suggest "Yes": significant economic gains could be achieved from

an agreement. Actually, the impact would go well beyond what is possible to include in this modeling framework, and the main expected benefits might result from regulatory convergence and from the enhancement of signatories' normative influence. Benefits in this area would be fully realized only if the final deal outmatches what has been achieved so far by most FTAs.

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