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The Impact of the Transatlantic Trade and Investment Partnership (TTIP) on the Spanish Regions

A Preliminary Analysis

Abstract

The EU and the US are very open towards each other in terms of trade, being involved currently in discussions of what is called the Transatlantic Trade and Investment Partnership (TTIP). Up to now, there have been several attempts to assess the economic impact of the TTIP, both at the EU-wide level and for some of the EU countries. None of these studies, however, pays any attention to the potential impact of the TTIP on the EU regions. For this reason, the present report attempts to shed some light on the potential economic effects of the TTIP at regional level. To accomplish this aim, it follows the findings of an ex-ante evaluation devoted, because of data availability, to the Spanish case.

On the basis of the results found, this report also tries to show how the TTIP could affect regional disparities. In a nutshell, the main findings of the report indicate that the effects of the TTIP agreement are going to be small, albeit positive, and not equally distributed among regions. More specifically, the most developed regions tend to be those that, potentially, will undergo a higher increase in their trade with the US, so they are more likely to benefit than less developed regions. This being so, the TTIP will have negative effects on regional disparities, something that the EU regional policy should take into account.

1 Introduction: Why a TTIP agreement?

The EU and the US are currently involved in the discussion of what is called the Transatlantic Trade and Investment Partnership (TTIP). Although its specifics are not yet well defined, the TTIP is meant as a free trade agreement between both parties. As with any free trade agreement, its essence lies in the reduction of tariff and non-tariff barriers to trade and investment,¹ while its attractiveness is due to the potentially beneficial effects on trade and, above all, economic welfare.

But, why a TTIP agreement between the EU and the US? There are, in principle, two closely related reasons. First, the EU-US trade is the largest bilateral trade in the world (Erixon and Bauer, 2010). Taken together, the EU and the US represent nearly 45% of world trade.² Second, the trade links between them are very strong. The US is, according to 2013 data, the most important trade partner of the EU, accounting for roughly 20% of extra-EU exports (12% of total exports) and 15% of extra-EU imports (9% of total imports). From the point of view of the US, the EU is also a

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¹ Here, however, we give attention solely to the trade side of the agreement.

² This figure includes intra-EU trade.

very relevant partner, as it is the destination of around 17% of both exports and imports.

The intensity of the trade relations between the EU and the US is, probably, the main structural feature behind the TTIP. The economic rationale for this agreement is, however, intensified by three other developments: first, by the urgent need to boost the rate of economic growth (both in the EU and in the US) after the 2008 crisis, because, as is well known, the link between free trade and economic growth tends to be agile and sustained; second, by the failure of the Doha round of multilateral trade talks; and third, by the necessity for both parties to regain some of the competitive advantages lost to the emerging economies (Felbermayr and Larch, 2013). To a higher or lower extent, depending on the perspective adopted, it is thought that an improvement in the three aforementioned developments could potentially be achieved through the implementation of the TTIP agreement.³

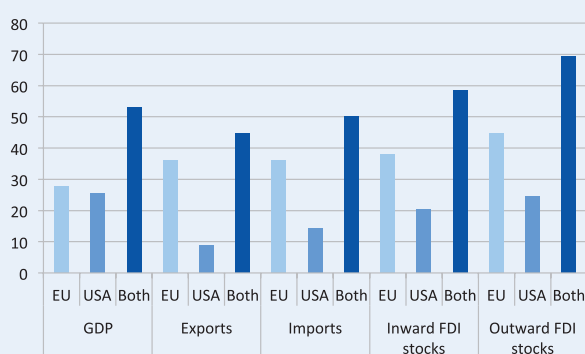
The aim of this paper is to provide some empirical preliminary evidence on the likely impact, at the regional level, of the implementation of the TTIP. To accomplish this aim, and because of data availability, we employ the Spanish regions as a case study, for which we take data from the Datacomex and Comtrade databanks.⁴ The paper is structured as follows. First, a brief review of EU-US trade relations is conducted. Next, the controversy about the impact of the TTIP at the European-wide level is reviewed. Afterwards, an ex-ante analysis of the potential directions⁵ of TTIP effects on the Spanish regions is carried out. Finally, some concluding remarks are offered.

2 EU-US trade relations

In order to get an idea of the relevance of the potential economic gains from the TTIP, we agree with Erixon and Bauer (2010) that there are at least three aspects that should be taken into consideration (Figure 1). The first one relates to size, and it is that size matters. Because we are referring to two of the largest economies in the world (taken together, they account, on average for the period 2000-2013, for more than 50% of world GDP), it is expected that the effects of the TTIP agreement will be bigger than those of similar

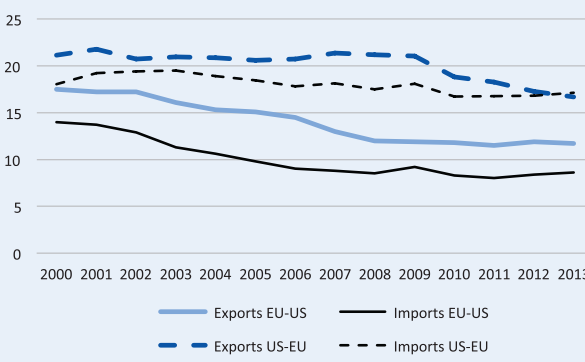
agreements between smaller economies: therefore, the interest in unveiling its potential economic consequences. The importance of size is not only related to the share of the two parties in the GDP, but also, as previously mentioned, in world trade; this share is also very high, as it represents, once again, on average for the period 2000-2013, around 45 and 50% of, respectively, of global exports and imports.⁶ Although, as mentioned, we are not going to consider it, it is also convenient to point out that something similar

FIGURE 1 SHARE (%) OF EU & US ON WORLD TOTAL



Source: World Development Indicators (World Bank) and UNCTAD.

FIGURE 2 EU-US BILATERAL MERCHANDISE TRADE (% OF TOTAL)



Source: Datacomex.

³ In a nutshell, it is thought that the TTIP agreement will help to increase the volume of trade among the partners, and therefore, their economic welfare (Lloyd and Maclaren, 2004). Namely, it will “contribute to the development of global rules that can strengthen the multilateral trading system” (Schott and Cimino, 2013, p. 1), and will give an important boost to the role played by the EU and the US in the world.

⁴ Datacomex webpage: <http://datacomex.comercio.es/>. Comtrade webpage: <http://comtrade.un.org/>

⁵ Because the numerical results obtained in the computation of all models depend critically on their assumptions, it is considered that the qualitative results (direction of changes) given by them are much more reliable than the quantitative ones.

⁶ If the intra-EU trade were excluded, the EU-US trade would account for about a third of world trade.

occurs, at an even higher level, from the point of view of FDI; when taken together, the inward FDI in the EU and the US represents around 60% of the world FDI, while the outward FDI is around 70%.

The second aspect relates to the amount of the bilateral trade between the two parties. As mentioned before, EU-US trade is the largest bilateral trade in the world. This being the case, it is also true that, in 2000, the share of this bilateral trade was much larger than in 2013. In addition, as shown in Figure 2, its evolution presents a rather stable declining pattern over time, most probably linked to the increase in the role played by the emerging economies in global trade. There is no doubt that this is one of the main reasons behind the TTIP.

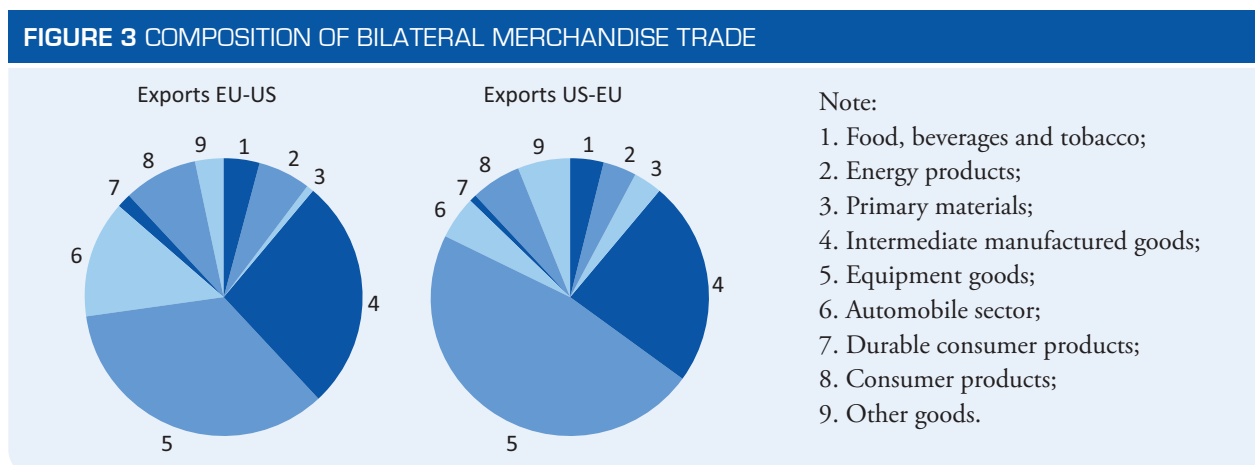
The third aspect that should be considered refers to the composition of trade between the EU and the US. Although at a highly aggregated level, Figure 3 shows that the trade profile is very similar, as should be expected, considering the high level of development of both parties. As can be seen, intermediate manufactured goods, equipment goods and automobiles are the most important sectors. In any case, it is noteworthy that the grouping in Figure 3 masks the relevance of some industries playing a crucial role in EU-US trade; among them, medicaments, organic chemicals, electrical machinery and apparatus, precision instrument manufactures, industrial machinery, road motor vehicles, petroleum products, and aircraft and associated equipment stand out.

3 The controversy over the assessments of the economic impact of the TTIP⁷

As is well known, a free trade area is an agreement between two or more economies that implies the reduction/elimination of tariffs, as well as quantitative restrictions and preferences on most (if not all) goods and services traded between them. At the same time, these economies keep their own regime for the rest of the world. A free trade area can cause both positive and negative effects through, respectively, trade creation and trade deviation, the final result, from a welfare point of view, depending (for each member country of the area and for the rest of the world) on the relative strength of these two effects. The final economic impact of a free trade area remains, therefore, an empirical issue.

From this empirical perspective, there are both ex-ante and ex-post methods to try to evaluate the impact of free trade agreements (Plummer et al. 2010). Regarding the ex-ante evaluation, i.e. the potential impact, there are three main approaches: two of them, namely the use of trade indicators and the estimation of computable general equilibrium models, focus on the effects at the macro level, while the other, based on the estimation of the so-called SMART model,⁸ focuses on the impacts at the industry level. As for the ex-post evaluation, i.e. the actual impact, the use of gravity models is the most common approach.

Because we are still in the initial stages of creating a free trade area between the EU and the US, and the TTIP has not yet



Source: Datacomex.

⁷ Although the criticism of the TTIP stems from different angles, here, we give attention only to the economic perspective. For a mostly political and very critical review of the TTIP, see Hilary (2014).

⁸ Contrary to the other models, the SMART (Software for Market Analysis and Restrictions on Trade) is a partial equilibrium model, in that it focuses on just a single good.

been approved and implemented, the various analyses of its impact that have been carried out are, out of necessity, ex-ante evaluations. According to Raza et al. (2014), four major reports have been produced: Berden et al. (2009) for ECORYS, Fontagné et al. (2013) for CEPII, Francois et al. (2013) for CEPR, and Felbermayr et al. (2013a) for Bertelsmann/Ifo. Interestingly enough, all four of these reports apply, basically, the same methodology, namely different versions of a rather similar general equilibrium model.

The assessments in these four reports proceed via a simple mechanism: price changes. The idea behind them is that the removal of trade barriers brings about a reduction of trade costs, and therefore, a decrease in input costs, production costs and domestic prices, with the corresponding productivity gains (through enabling further specialisation and exploitation of scale economics) and mark-up reductions. This implies higher output, higher incomes, and higher real wages. More specifically, the main findings and

assumptions of the four abovementioned reports, which should be “best understood as a ballpark indication of the economic effects rather than precise predictions of exactly what will happen” (European Commission, 2013, p. 3), are as indicated in Table 1.

Generally speaking, the conclusion is that the impact of the TTIP agreement on the EU – the bulk of it (around 80% of the total) stemming from lowered non-tariff barriers –⁹ is positive and non-negligible, but rather limited and very distributed over time. As stated by Raza et al. (2014, p. 4), the changes are long-term, that is, they “will accrue only over a transition period of 10 to 20 years”. Even so, these results are mostly considered to be a bit overoptimistic, as they are based on some assumptions that are not fully realistic – e.g. the CEPII and CPR studies consider free labour and capital mobility (full employment) – and are obtained without paying due attention to either (macro and social) costs (Dieter, 2014) or negative third-country effects.¹⁰ Put another way, it is generally expected that the positive

TABLE 1 ASSUMPTIONS AND IMPACT OF TTIP AGREEMENT

	Berden et al. (2009)*	Fontagné et al. (2013)	Francois et al. (2013)	Felbermayr et al. (2013a)
Basic Assumptions				
Forecast period	2008 - 2018	2015 - 2025	2017 - 2027	10-20 years
No. of Scenarios	7	5	5	3
Tariffs reduction	100 % of goods 75 % of services	100%	98 - 100 %	100%
NTM reduction in reference scenario	25%	25%	25%	Reduction corresponding to trade creation effect
Main Findings (different scenarios, percentage changes compared to baseline scenario within forecasting period)				
EU GDP	0.32 - 0.72	0.0 - 0.5	0.02 - 0.48	0.52 - 1.31++
US GDP	0.13 - 0.28	0.0 - 0.5	0.01 - 0.39	0.35 - 4.82++
EU bilateral exports	not specified	49.0+	0.69 - 28.0	5.7 - 68.8++
EU total exports	0.91 - 2.07	7.6+	0.16 - 5.91 (extra-EU only)	not specified
EU real wages	0.34 - 0.78	N/A	0.29 - 0.51	not specified
Unemployment rate in EU-OECD countries (average % points)	unchanged (assumption)	unchanged (assumption)	unchanged (assumption)	- 0.42 (deep liberalisation)

Notes: (*) Findings for ambitious and limited scenarios only; (+) Reference scenario only; (++) Derived from Felbermayr et al. (2013b), aggregated to EU27 level.

Source: Raza et al. (2014)

⁹ This is because the current level of tariffs on bilateral trade is very low: on average, around 2.2% and 3.3% in the US and the EU, respectively (Fontagné et al., 2013).

¹⁰ To a certain extent, the controversy about the size and distribution of the TTIP's impact arises from the fact that “its nature is more like a wide-ranging regulatory agreement, with some elements of classical trade agreements as well” (Pelkmans et al., 2013, p. 1). On this same issue, see also Richter and Schäffer (2014).

effects of static and dynamic trade creation will outweigh the corresponding negative effects of static and dynamic trade diversion, but most probably, only by a small margin.

As with most free trade agreements, the TTIP might also pose some additional problems, as its geographic and sectoral distribution is likely to be very unequal. According to the BMWT/Ifo report,¹¹ the range of the GDP improvement goes from a maximum of 3.22% for the UK to a minimum close to 0% for France (0.06%) and Austria (0.10%). There are, for instance, countries with potential effects higher than the EU average, like Sweden (2.15%), Ireland (1.99%) and Spain (1.83%), whereas countries with effects below the average can be found, such as Italy (1.10) and Germany (0.99%), among others.¹²

By adopting a sectoral perspective, the CEPR report, which obtains similar conclusions to the ECORYS report, shows that, from the EU point of view, the most benefited sectors would be those of Motor Vehicles,¹³ Water Transport and Insurance, whereas those with the worst results would be Electronic Machinery, Metals and Metal Products and Other Transport Equipment. As suggested by Raza et al. (2014), these potential sectoral effects will also vary greatly from country to country, which, at best, means that they are not very informative at the country level and even less informative at the regional level.

4 The potential effects of the TTIP on the Spanish regions: a preliminary analysis based on trade indicators

As indicated in the previous section, and even though they are subjected to much criticism, the computation of general equilibrium models has become the standard approach to evaluate the potential impact of the TTIP agreement, both at the EU-wide level and for some of the EU countries, such as Germany, Sweden, the Netherlands and the United Kingdom.¹⁴ When it comes to the assessment of the TTIP's

impact at the regional level, however, things are much more difficult, due above all, to the lack of availability of the necessary data to perform the analysis. This is, indeed, the case for the EU regions, but not only in order to perform simulations with general equilibrium models, but also to even carry out indirect ways (trade indicators) to assess the impact of the TTIP.

Although much less data demanding than general equilibrium models, it is absolutely necessary to have information about the external trade (exports and imports) of each region, disclosed both by sectors and trading partners, in order to calculate some of the most relevant trade indicators measuring the level of the region's interdependence. Unfortunately, even this type of information does not exist for most of the EU NUTS2 regions, which implies that we have to significantly restrict our regional assessment of the TTIP. To the best of our knowledge, one of the few EU countries for which there are enough foreign trade data publicly available at the regional level is Spain. Therefore, we confine the analysis to the computation of some trade indicators just for the Spanish regions; in the Conclusions section, and within reason, we try to extrapolate them at the EU regional level.

But, before proceeding further, we think it is compulsory to provide a word of caution. Although all of these indices are quantitative indicators, they do not allow one to obtain any quantitative approximation to the impact of the TTIP, either on trade flows, GDP rates of growth, employment evolution, or say, welfare changes. They only allow one to reach a qualitative assessment of the TTIP.¹⁵

Bearing these considerations in mind, the indicators computed here are an adaptation, to the regional level, of some of those typically employed in empirical studies of international trade performance at the country level; they are, in essence, related to intraregional trade and trade orientation.

¹¹ This report, published in German, is referred to here as Felbermayr et al. (2013b).

¹² As suggested in the Introduction, all of these numerical values should be taken with due caution. Just to give an example, the computation of the GDP change for Sweden performed by Kinnman and Hagberg (2012) for the *Kommerskollegium* (National Board of Trade) gives a much lower impact than that of the BMWT/Ifo report. Kinnman and Hagberg's study estimates that the increase in GDP would be just between 0.1% and 0.2%, this result depending on which scenario (less ambitious, more ambitious) is considered with relation to the reduction of non-trade barriers. A likely reason the results of both reports differ is that Kinnman and Hagberg's study "does not include direct foreign investments or consider any dynamic effects" (Kinnman and Hagberg, 2012, p. 3).

¹³ Even being the most positive change for the EU, the total impact would be very small, as it would be the result of a 1.5% increase in output times 2.2 (the share of the sector in EU27 output).

¹⁴ The corresponding reports are: Felbermayr and Aichele (2014) for Germany, Kinnman and Hagberg (2012) for Sweden, Plaisier et al. (2012) for The Netherlands, and CEPR (2013) for the UK.

¹⁵ By borrowing from Michaely (1996), it can be said that these indicators just evaluate the relevance and desirability of multilateral trade agreements, such as the TTIP.

Because of the relatively high volatility of exports and imports for most of the Spanish regions, we compute all our indicators for the average of the period 2000-2013 and for two sub-periods: the pre-crisis period (2000-2008) and the crisis period (2008-2013). All indicators referring to the whole period, as well as some dispersion statistics, are shown in Table 2, while those referring to sub-periods are reported in the Appendix (Table A.1).

To begin with, it is important to know how much each region trades with the rest of the world, that is, how well the region is integrated in world trade. The indicator measuring this is the **Trade Openness (TO)** index, given by the sum of total exports and imports of the region to its GDP; obviously, the higher the index, the more open the region under study. The expression for the index is as follows:

$$TO_i = 100 * \left[\frac{(X_i + M_i)}{GDP_i} \right]$$

where X and M denote, respectively, exports and imports, and i refers to the region. The values of TO for the

Spanish regions are shown in the first column of Table 2. According to them, three main conclusions can be drawn: 1. The degree of openness varies greatly among regions; 2. On average, the degree of openness is not very high; and 3. Generally speaking, it has not changed very much over the crisis period (Table A.1); in any case, five regions report changes over 10%, with Balears standing out on one side (degree of openness has increased by 50%, comparing pre-crisis and crisis periods) and Murcia on the other side (a decrease by almost 20%). Now, because the more open a region is, the more prone to gain from regional trade agreements it will be, the inference that can be obtained from these results is that, potentially, there is much room for increasing the degree of openness of the Spanish regions.

Being too general, the previous conclusion has to be somewhat extended and qualified. This is so because the final impact of the TTIP will depend, among other things, on the relative extent of the total foreign trade that each region conducts with the US and on its sectoral composition;

TABLE 2 TRADE INDICATORS (AVERAGE 2000-2013)

Regions	TO	TS	(TO*TS) /100	TD (X)	TD (M)	IIT	TC (X)	TC (M)
Andalucía	29.09	3.96	1.15	12.49	3.88	27.74	32.93	34.47
Aragón	49.38	1.06	0.52	5.89	1.83	23.29	39.63	48.07
Asturias	30.58	7.37	2.25	2.25	23.38	13.23	24.69	32.29
Balears	12.31	16.36	2.01	2.01	72.33	26.55	26.87	27.20
Canarias	16.10	2.20	0.35	13.39	8.35	8.88	21.38	36.19
Cantabria	34.75	3.61	1.25	9.38	19.96	9.19	27.52	40.00
Castilla y León	38.49	1.20	0.46	0.46	7.03	25.88	33.64	43.74
Castilla - La Mancha	25.22	2.57	0.65	0.65	5.15	16.58	39.81	53.01
Cataluña	63.70	3.12	1.99	2.03	2.72	51.51	55.71	64.51
C. Valenciana	40.74	4.46	1.82	1.82	5.71	33.76	41.42	52.92
Extremadura	13.31	1.39	0.19	0.19	4.40	8.76	20.24	39.61
Galicia	54.23	2.82	1.53	14.97	7.55	23.78	38.09	36.95
Madrid	42.58	6.20	2.64	2.64	7.26	37.72	58.02	60.28
Murcia	53.35	2.60	1.39	1.39	11.99	18.58	24.06	27.41
Navarra	65.74	2.68	1.76	1.76	3.47	17.65	33.31	43.76
País Vasco	53.93	4.79	2.58	19.41	5.67	32.06	41.53	45.27
Rioja, La	28.33	3.55	1.01	43.55	13.34	8.87	20.83	32.54
Dispersion Statistics								
D9	58.02	6.67	2.39	38.31	21.32	35.34	47.20	55.92
D1	14.98	1.31	0.42	6.01	3.17	8.88	21.16	30.34
Ratio D9/D1	3.87	5.08	5.70	6.38	6.72	3.98	2.23	1.84
CV	0.44	0.87	0.56	0.88	1.39	0.52	0.33	0.26

Note: D1 and D9 denote first and last deciles, respectively. CV refers to the coefficient of variation.

Source: Datacomex, Comtrade, and own elaboration

therefore, as stated by Michaely (1996, p. 11), “the share of trade with a partner is thus an important consideration in pre-judging the likelihood of a beneficial agreement”.¹⁶ As for the extent of this trade, we calculate a very simple **Trade Share (TS)** index:

$$TS_i = 100 * \left[\frac{(X_i^{US} + M_i^{US})}{(X_i + M_i)} \right];$$

where X , M , and i have the aforementioned meanings. This index ranges from 0 to 100, and according to Plummer et al. (2010), the closer to 100, the higher the positive potential trade impact of an agreement, in this case, the TTIP. Table 2, column 2, shows at least two interesting results. First, the importance of the US as a trade partner also varies a lot for the Spanish regions; as can be seen, both the ratio between deciles and the coefficient of variation (CV) are even higher than with the TO index. Second, as a whole, the index tends to be quite low. Another important result is that, although the index has not experienced dramatic changes over the sample period (Table A.1), the crisis has nevertheless affected different regions in different ways; some of them (6 out of 17) have increased their relative trade with the US, some others (7) have moved in the opposite direction, and the rest (4) have roughly maintained it. The relatively low TS for most Spanish regions and its relative stability over time implies that, to a high extent, they do not consider the US as a potential market, perhaps because there are still some important barriers to trade. Although some of them will disappear or be lowered within the TTIP agreement, some others (mainly the costs associated with distance) will not change very much, if any, with the implementation of the agreement. The tentative implication of the previous results is that the potential impact of the TTIP on most Spanish regions will be rather low, because the US cannot be considered as a natural trading partner for most of them.

If we consider the results obtained for the TO and TS indices together, we can have a more accurate idea of the likely effects of the TTIP on the Spanish regions. By simply multiplying both indices, we conclude (third column of Table 2) that, as a general rule, the most developed regions (Madrid, País Vasco, Cataluña, Baleares, Navarra, ...) will potentially be the more benefited ones, while the less developed (Extremadura, Aragón, Canarias, Castilla y León

and Castilla-La Mancha) will gain proportionally fewer benefits from the TTIP agreement.

In addition to the two previous indicators, and in order to better assess –although still at a very general level– the potential effects of the TTIP on the Spanish regions, it can be useful to compute some other trade indicators by using information at the sectoral level. Therefore, all of the remaining indicators have been constructed by using data on bilateral trade between each one of the Spanish regions and the US, disaggregated at the STIC 3-digit (Revision 3).

The first one is the **Trade Diversification (TD)** index, computed, in our case, as the well-known Herfindahl-Hirschman index. The rationale behind the use of this indicator is that the more diversified the exports and imports of an economy, the higher the potential impact of the TTIP. The index, computed for both exports and imports, is the following:

$$TD_i = 100 * \left[\sum_{j=1}^N s_{ij}^2 \right]$$

where s_{ij} is the share of sector j in region i exports (or imports) with the US, and N is the number of sectors. The index is bounded between 0 (exports/imports are fully diversified) and 100 (exports/imports are fully concentrated on just one product). The computation of this index for all Spanish regions yields the results shown in the fourth and fifth columns of Table 2. According to them, some remarkable conclusions can be obtained. First, it happens once again that there are large differences across regions, in terms of both exports and imports diversification; in this case, the deciles ratio and the CV are still greater than for the two previous indicators. Second, the values of the indices tend to be rather low, which implies that the degree of diversification is high; put in another way, the gains from the TTIP could be, at least from this perspective, rather important. Third, and although the pattern here is less obvious than with the TS index, it still happens that some of the most developed regions (e.g. Madrid and Cataluña) will be among the most benefited by the trade agreement; the opposite is not true, however, for some of the less developed regions (e.g. Castilla y León, and Castilla-La Mancha). Fourth, Table A.1 also shows that, in this case, there have been significant changes over the two time sub-periods considered; in most cases, the degree of diversification has decreased throughout the crisis.

¹⁶ “This is so because a trade-preferential agreement is likely to be more relevant and lead to less trade diversion and more trade creation the higher is the share of” imports from the potential partner and the exports to it (Michaely, 1996, p. 11).

The calculation of the degree of intra-industry trade is also helpful in our task, as it provides information about how much trade between our economies occurs within the same industry. The rationale behind this index is that the higher its value, the more inclined an economy is to sign a free trade agreement with another economy (the US, in this case), and this will foster the level of intra-industry trade even more. The **Intra-industry Trade (IIT)** index computed here, and adaptation of the famous Grubel and Lloyd index, is given by the expression:

$$IIT_i = 100 * \left[\frac{\sum_{j=1}^N [(X_{ij}^{US} + M_{ij}^{US}) - |X_{ij}^{US} - M_{ij}^{US}|]}{\sum_{j=1}^N (X_{ij}^{US} + M_{ij}^{US})} \right]$$

where all variables have the already known meanings. The index is between 0 and 100, and as in previous cases, the higher its value, the higher the degree of intra-industry trade. The results obtained for this index for the bilateral trade between each Spanish region and the US are displayed in the sixth column of Table 2. These results allow us to conclude that disparities across the Spanish regions are not very high. On average, the degree of intra-industry trade is quite low; in fact, there are only four regions (Cataluña, Madrid, Valencia and País Vasco) for which the index is above 30. In addition, it is also evident that changes between the pre-crisis and crisis sub-periods have been almost negligible (Table A.1).

Finally, another interesting trade indicator designed to evaluate the relevance of preferential trade agreements is the so-called **Trade Complementarity (TC)** index, which measures the degree of complementarity of the economic structures among the areas involved in the analysis.¹⁷ To fully evaluate the degree of complementarity, this index should be calculated for both exports and imports of the reporting region. As for the exports, this index measures “to what extent the export profile of the reporter matches, or complements, the import profile of the partner” (World Bank, 2013, p. 19). Formally, it is given by the expression:

$$TC(X)_i = 100 * \left[1 - \left(\frac{\sum_j \left| \frac{m_{kj}}{M_k} - \frac{x_{ij}}{X_i} \right|}{2} \right) \right]$$

where x_{ij} is the value of the exports of sector j from reporter region i , and X_i is region i 's total exports, while partner country k 's (in this case, the US) value of the imports of product j is given by m_{kj} , and its total imports value is denoted by M_k .

For imports, the index is given by:

$$TC(M)_i = 100 * \left[1 - \left(\frac{\sum_j \left| \frac{x_{kj}}{X_k} - \frac{m_{ij}}{M_i} \right|}{2} \right) \right]$$

where m_{ij} is the value of the imports of sector j from reporter region i , and M_i is region i 's total imports, while partner country k 's (in this case, the US) value of the exports of product j is given by x_{kj} , and its total exports value is denoted by X_k .

In both cases, the index ranges from 0 to 100, with 0 being the case of perfect negative correlation (the two areas are perfect competitors) and 100 that of perfect positive correlation between sectoral shares (the two areas are ideal trading partners). Therefore, the closer the index to 100, the higher the potential gains from a bilateral or regional trade agreement like the TTIP. The critical value of the index is 40, meaning that an index greater than 40 indicates that the economies are highly complementary (Davis et al., 2009). When the TC indices are computed for each one of the Spanish regions and the US, the results (the last two columns of Table 2) show that: 1. Although regional disparities are still evident, they are much lower than with all of the previous indicators; 2. The degree of complementarity is very high for only a few cases (Madrid and Cataluña clearly standing out); in any case, it can also be seen that complementarity is much higher on the Spanish regional import side than on the export one; 3. Regarding the evolution of the TC index over time (Table A.1), our findings reveal that the changes have been quite significant in only a few cases; the bottom line is that the crisis has not had a substantial effect on the complementary degree of bilateral trade between the Spanish regions and the US.

The computation of the trade indicators performed so far gives us an idea of what the Spanish regions could reasonably expect after the implementation of the TTIP. Accordingly, it seems that the TTIP is going to be especially beneficial to the most developed regions. Although still within the qualitative realm mentioned above, we consider that this idea could have a more quantitative support by performing a rather simple analysis, made up of three steps. First, by using the battery of indices already computed, we calculate a trade composite indicator as the average of the following partial indicators (Table 3): 1. The product of the TO and TS indices, duly normalised;¹⁸ 2. The average

¹⁷ This index has been widely used in empirical studies on preferential-trade agreements. See, for instance, Michaely (1996) and Ng and Yeats (2003).

¹⁸ This index has been normalised in order to prevent it from having an inappropriate weight in the composite indicator.

of the TD(X) and TD(M) indices;¹⁹ 3. The ITT index; 4. The average of the TC(X) and TC(M) indices. Second, we collect per capita GDP data for all of the Spanish regions from the Spanish Statistical Institute (INE) and use it as a proxy for the level of development of the regions (see also Table 3). Finally, we calculate the correlation coefficient between the composite indicator and per capita GDP. The result obtained reveals that there is a strong and statistically significant positive correlation between our trade composite indicator and the degree of development (the coefficient is 0.69, with a p-value = 0.01). This result reinforces our previous statement: The TTIP agreement is, most probably, going to enlarge regional disparities in Spain.

5 Conclusions and policy considerations

The negotiations of a free trade agreement between the EU and the US, the so-called TTIP, have prompted a heated debate about its impact on both sides of the Atlantic. Although much praised at the highest official levels for its expected positive effects on both economies, there is an

ongoing debate about not only their magnitude, but also their distribution. After revising some of the most relevant reports on the issue, our conclusion is that, at least from the European side, the global impact of the TTIP seems to be rather limited, but positive, as well as unevenly distributed among sectors.

However, neither the reports assessing the TTIP for the whole EU nor those devoted to the same analysis at the country level pay any attention to the potential impact of the TTIP at the EU regional level. This is, indeed, a serious limitation of these reports, as it is highly likely that this impact will vary greatly across the EU regions. This paper constitutes a preliminary attempt to ex-ante assess, admittedly at a very general qualitative level, the regional impact of the TTIP agreement. Due to the lack of statistically relevant information for most of the EU regions, the paper has been confined to the study of the Spanish regions, in the hope that the results obtained could be somewhat extrapolated to the EU.

TABLE 3 TRADE INDICATORS AND PER CAPITA GDP (AVERAGE 2000-2013)

Regions	TO*TS Normalised	Mean TD	ITT	Mean TC	Trade Composite Indicator*	Per capita GDP+
Andalucía	44.59	8.19	27.74	33.70	28.55	17.14
Aragón	20.26	3.86	23.29	43.85	22.82	24.52
Asturias	87.24	18.83	13.23	28.49	36.95	20.30
Baleares	77.96	61.67	26.55	27.04	48.30	25.81
Canarias	13.71	10.87	8.88	28.79	15.56	20.67
Cantabria	48.56	14.67	9.19	33.76	26.55	21.71
Castilla y León	17.88	6.82	25.88	38.69	22.32	20.95
Castilla - La Mancha	25.09	6.69	16.58	46.41	23.69	17.82
Cataluña	76.94	2.38	51.51	60.11	47.73	26.62
C. Valenciana	70.34	5.90	33.76	47.17	39.29	20.90
Extremadura	7.16	19.61	8.76	29.93	16.36	14.85
Galicia	59.20	11.26	23.78	37.52	32.94	19.15
Madrid	102.20	6.72	37.72	59.15	51.45	29.54
Murcia	53.70	10.46	18.58	25.74	27.12	19.22
Navarra	68.20	8.22	17.65	38.54	33.15	28.07
País Vasco	100.00	12.54	32.06	43.40	47.00	28.65
Rioja, La	38.93	28.45	8.87	26.69	25.73	24.68

Note: (*) Trade Composite Indicator is calculated as the simple average of the first four columns; (+) In thousand constant euros 2008.

Source: Datacomex, Comtrade, INE and own elaboration.

¹⁹ In this case, as well as in the TC case, we have calculated an average in order to avoid double counting.

In our view, two main conclusions emerge from the analysis. First, the extent and composition of the bilateral trade between each one of the Spanish regions and the US varies substantially; accordingly, the impact of the TTIP on the Spanish regions (both on the extent and the composition of their foreign trade with the US) will differ. Secondly, the most developed regions tend to be those that, potentially, will undergo a higher increase in their trade with the US. Taking these two conclusions together, and assuming a positive relationship between trade openness and economic growth, a third conclusion emerges: There is a high likelihood that the TTIP will provoke an increase in regional disparities in Spain.

Considering that these conclusions could also be valid for all EU regions,²⁰ it seems likely to us that the implementation of the TTIP will affect the different EU regions in quite different ways, with the final result of a widening in the EU's regional disparities. Whether this negative effect will be more than offset by the expected positive effect of the TTIP at the EU-wide level is unknown. In any case, the conventional trade-off between efficiency (EU-wide GDP growth) and equity (regional distribution of GDP growth) is, once again, at stake. Therefore, and to prevent the expected negative effects on regional disparities, we think that a deepening of the EU regional policy should be pursued, hand in hand, with the implementation of the TTIP.

²⁰ Although it is true that a statement like this one would need to be thoroughly researched, the lack of information at the EU-wide regional level prevents us from doing so. However, the statement seems to be very logical if, as is generally assumed, it is considered that: 1) the larger the share of trade conducted with the US, the larger the impact of the TTIP on regions' trade and their economy; and 2) the most developed regions tend to be specialised in the most advanced sectors, which also tend to be the more open ones.

There could, however, be some exceptions to this general rule. If we take, for instance, the Swedish case, things could go the other way around. This is because, as shown in Kinnman and Hagberg's (2013) study, the sectors that would contribute the most to the increase of GDP with the TTIP agreement would be Food and Beverages, and Motor Vehicles and Parts, while the one with the most negative results, albeit marginally, would be Business Services. Now, as it happens that Business Services are mainly located in the richest regions (Stockholm), whereas, on the contrary, regions specialising in the two most positively affected sectors are some of the less developed regions—Norra Mellansverige and Mellersta Norrland, in Foods and Beverages, and Småland med öarna and Norra Mellansverige in Motor Vehicles and Parts—, it seems that the TTIP could help to reduce regional disparities in Sweden, although to a very low extent.

References

- Berden, K., Francois, J., Thelle, M., Wymenga, P. & Teamminen, S. (2009), "Non-tariff measures in EU-US trade and investment. An economic analysis", ECORYS report commissioned by the European Commission, Directorate-General for Trade. Available at http://trade.ec.europa.eu/doclib/docs/2009/december/tradoc_145613.pdf (visited on 10 January, 2015).
- CEPR (2013), "Estimating the economic impact on the UK of a Transatlantic Trade and Investment Partnership (TTIP) agreement between the European Union and the United States", CEPR report commissioned by The Department for Business, Innovation and Skills (BIS), reference P2BIS120020. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/198115/bis-13-869-economic-impact-on-uk-of-transatlantic-trade-and-investment-partnership-between-eu-and-us.pdf (visited on 15 January, 2015).
- Davis, L., Hanslow, K. & Saunders, C. (2009), "Estimating the impact of an Australia-Indonesia trade and investment agreement", CIE report commissioned by the Department of Foreign Affairs and Trade, Australia. Available at http://www.dfat.gov.au/trade/agreements/iacepa/Documents/aus-indon_fta_cie.pdf (visited on 1 February, 2015).
- Dieter, H. (2014), "The structural weaknesses of TTIP: Transatlantic partnership threatens more than just consumer protection", SWP Comments, n. 32. Available at http://www.ssoar.info/ssoar/bitstream/handle/document/39654/ssoar-2014-dieter-The_structural_weaknesses_of_TTIP.pdf?sequence=1 (visited on 15 February, 2015).
- Erixon, F. & Bauer, M. (2010), "A transatlantic zero agreement: Estimating the gains from transatlantic free trade in goods", ECIPE occasional paper, n. 4. Available at <http://www.ecipe.org/app/uploads/2014/12/a-transatlantic-zero-agreement-estimating-the-gains-from-transatlantic-free-trade-in-goods.pdf> (visited on 10 January, 2015).
- European Commission (2013), "Transatlantic trade and investment partnership. The economic analysis explained". Available at http://trade.ec.europa.eu/doclib/docs/2013/september/tradoc_151787.pdf (visited on 1 February, 2015).
- Felbermayr, G. & Aichele, R. (2014), "Transatlantic free trade: The view point of Germany", CESifo Working Paper, n. 5151. Available at http://www.cesifo-group.de/ifoHome/publications/working-papers/CESifoWP/CESifoWPdetails?wp_id=19148234 (visited on 15 January, 2015).
- Felbermayr, G., Heid, B. & Lehwald, S. (2013a), "Transatlantic trade and investment partnership (TTIP). Who benefits from a free trade deal", Bertelsmann Stiftung report. Available at <http://www.bfna.org/publication/transatlantic-trade-and-investment-partnership-ttip-who-benefits-from-a-free-trade-deal> (visited on 15 January, 2015).
- Felbermayr, G. & Larch, M. (2013), "The transatlantic trade and investment partnership (TTIP): Potentials, problems and perspectives", CESifo Forum, n. 2. Available at http://www.cesifo-group.de/portal/page/portal/DocBase_Content/ZS/ZS-CESifo_Forum/zs-for-2013/zs-for-2013-2/forum2-13-special3.pdf (visited on 1 January, 2015).
- Felbermayr, G., Larch, M., Flach, L., Yalcin, E. & Benz, S. (2013b), "Dimensionen und Auswirkungen eines Freihandelsabkommens zwischen der EU und den USA", Ifo Institute report commissioned by the (former) German Federal Ministry for Economic Affairs and Technology. Available at <http://www.bmwi.de/BMWi/Redaktion/PDF/Publikationen/Studien/dimensionen-auswirkungen-freihandelsabkommens-zwischen-eu-usa-summary,property=pdf,bereich=bmwi2012,sprache=de,rwb=true.pdf> (visited on 1 February, 2015). There is a short version of this report published in English ("Dimensions and Effects of a Transatlantic Free Trade Agreement between the EU and US"), which can be downloaded at <http://www.bmwi.de/English/Redaktion/Pdf/dimensions-and-effects-of-a-transatlantic-free-trade-agreement-between-the-eu-and-usa,property=pdf,bereich=bmwi2012,sprache=en,rwb=true.pdf> (visited on 1 February, 2015).
- Fontagné, L., Gourdon, J. & Jean, S. (2013), "Transatlantic trade: Whither partnership, which economic consequences?", CEPII Policy Brief, n. 1. Available at <http://www.cepii.fr/CEPII/fr/publications/pb/abstract.asp?NoDoc=6113> (visited on 10 January, 2015).
- Francois, J., Manchin, M., Norberg, H., Pindyuk, O. & Tomberger, P. (2013), "Reducing transatlantic barriers to trade and investment. An economic assessment", CEPR report commissioned by the European Commission. Available at http://trade.ec.europa.eu/doclib/docs/2013/march/tradoc_150737.pdf (visited on 10 January, 2015).
- Hilary, J. (2014), "The transatlantic trade and investment partnership. A charter for deregulation, and attack on jobs, an end to democracy". Rosa Luxembourg Stiftung, Brussels Office. Available at http://rosalux.gr/sites/default/files/publications/ttip_web.pdf (visited on 1 February, 2015).

- Kinnman, S. & Hagberg, T. (2012), "Potential effects from an EU-US free trade agreement –Sweden in focus". Available at <http://www.kommers.se/documents/dokumentarkiv/publikationer/2012/rapporter/potential-effects-from-an-eu-us%20-free-trade-agreement.pdf> (visited on 15 January, 2015).
- Lloyd, P.J. & Maclaren, D. (2004), "Gains and losses from regional trade agreements: A survey", *The Economic Record*, 80(251), 445-467.
- Michaely, M. (1996), "Trade preferential agreements in Latin America", The World Bank, Policy Research working paper, n. 1583.
- Ng, F. & Yeats, A. (2003), "Major trade trends in East Asia: What are their implications for regional cooperation and growth?", The World Bank, Policy Research working paper, n. 3084.
- Pelkmans, J., Lejour, A., Schrefler, L., Mustilli, F. & Timini, J. (2013), "EU-US transatlantic trade and investment partnership", European Parliamentary Research Service, APDET-2013-1. Available at [http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/528798/IPOL-JOIN_ET\(2014\)528798_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/528798/IPOL-JOIN_ET(2014)528798_EN.pdf) (visited on 1 February, 2015).
- Plaisier, N., Mulder, A., Vermeulen, J. & Berden, K. (2012), "Study on EU-US high level working group", ECORYS report commissioned by the Ministry of Economic Affairs, Agriculture and Innovation. Available at http://www.europa-nu.nl/9353000/1/j4nvih7l3kb91rw_j9vvj9idsj04xr6/vjr6pb75l0qh/f=/ttip_onderzoek.pdf (visited on 10 January, 2015).
- Plummer, M.G., Cheong, D. & Hamanaka, S. (2010), "Methodology for impact assessment of free trade agreements", Asian Development Bank, RPT102843. Available at http://aric.adb.org/pdf/FTA_Impact_Assessment.pdf (visited on 10 January, 2015).
- Raza, W., Grumiller, J., Taylor, L., Tröster, B. & von Arnin, R. (2014), "ASSESS_TTIP: Assessing the claimed benefits of the transatlantic trade and investment partnership (TTIP)", ÖFSE – Austrian Foundation for Development Research report commissioned by The Confederation of the European United Left/Nordic Green Left political group in the European Parliament. Available at http://www.guengl.eu/uploads/plenary-focus-pdf/ASSESS_TTIP.pdf (visited on 15 January, 2015).
- Richter, P.M. & Schäffer, G. F. (2014), "The controversy over the free trade agreement TTIP", DIW Roundup, Politik in Fokus, n. 42. Available at http://www.diw.de/documents/publikationen/73/diw_01.c.486060.de/diw_roundup_42_en.pdf (visited on 1 February, 2015).
- Schott, J.J. & Cimino, C. (2013), "Crafting a transatlantic trade and investment partnership: What can be done", Peterson Institute for International Economics, n. PB13-8. Available at <http://www.iie.com/publications/pb/pb13-8.pdf> (visited on 1 February, 2015).
- World Bank (2013), "Online trade outcomes indicators. User's Manual", Version 1.0. Available at <http://wits.worldbank.org/WITS/docs/TradeOutcomes-UserManual.pdf> (visited on 10 January 2015).

Appendix

TABLE A1 TRADE INDICATORS (PRE-CRISIS AND CRISIS)

Regions	TO		TS		TD /X		TD (M)		IIT		TC (X)		TC (M)	
	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis
Andalucía	33.41	25.01	4.04	3.89	9.68	19.24	4.09	6.57	78.09	72.27	33.58	31.65	34.30	33.14
Aragón	47.16	51.52	1.02	1.11	4.70	8.63	2.25	2.47	77.44	82.52	38.05	38.38	46.15	48.31
Asturias	32.33	28.94	6.29	8.40	6.26	27.09	21.78	26.23	88.07	89.95	22.91	24.23	29.57	33.13
Baleares	9.65	14.82	19.95	10.55	46.05	62.12	82.11	45.21	77.43	62.04	24.88	26.79	26.00	29.41
Canarias	16.87	15.39	2.63	1.78	16.41	16.99	7.68	17.34	89.86	93.89	17.06	22.91	35.81	34.14
Cantabria	33.97	35.49	3.23	4.04	13.27	12.22	21.75	20.07	90.64	92.35	27.00	26.06	37.44	40.70
Castilla y León	37.44	39.48	1.06	1.37	7.79	8.02	12.60	7.55	80.02	74.17	32.48	33.78	43.16	43.00
Castilla - La Mancha	24.73	25.69	2.73	2.39	9.74	10.01	8.18	7.93	84.67	85.05	37.26	38.32	51.01	53.86
Cataluña	62.03	65.28	3.11	3.14	1.94	2.72	2.20	3.84	50.78	51.29	55.62	54.29	64.08	63.22
C. Valenciana	39.72	41.69	5.03	3.81	8.18	5.28	4.85	7.60	69.19	64.68	40.30	42.35	52.06	51.83
Extremadura	14.60	12.09	1.77	1.05	47.36	21.59	5.49	8.51	91.12	94.67	20.30	18.04	35.70	38.16
Galicia	54.52	53.95	3.05	2.60	10.79	21.60	10.46	8.82	79.08	74.00	38.06	37.32	33.88	38.79
Madrid	40.74	44.35	5.70	6.77	5.15	7.61	3.26	15.66	64.01	62.86	59.27	54.60	61.87	57.40
Murcia	58.84	47.99	2.94	2.31	12.57	6.26	7.12	17.56	86.08	87.22	20.94	23.04	25.79	27.45
Navarra	64.12	67.29	2.67	2.68	12.10	15.99	5.10	5.45	84.20	83.24	34.12	31.81	41.70	44.71
País Vasco	55.08	52.84	4.44	5.15	13.97	25.53	2.16	14.51	77.22	64.25	42.62	40.13	44.68	44.16
Rioja, La	29.39	27.32	3.92	3.20	48.08	39.82	18.99	9.65	91.65	92.21	20.44	19.30	32.88	30.02
D9	60.12	58.48	5.93	7.43	46.57	32.18	21.76	22.53	90.83	92.97	47.82	47.13	55.99	55.28
D1	15.96	15.16	1.49	1.26	4.97	5.87	2.23	4.80	67.12	62.53	20.38	21.47	28.14	29.77
ratio D9/D1	3.77	3.86	3.99	5.87	9.37	5.48	9.74	4.69	1.35	1.49	2.35	2.20	1.99	1.86
CV	0.43	0.45	0.99	0.69	0.95	0.81	1.47	0.79	0.13	0.17	0.36	0.33	0.28	0.25

Note: D1 and D9 denote first and last deciles, respectively. CV refers to the coefficient of variation.

Source: Datacomex, Comtrade, and own elaboration

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