
Impact of the Transatlantic Trade and Investment Partnership (TTIP) on the Small, Island, Regional Economy of the Azores



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Executive Summary

To evaluate the potential impact, on the economy of the Azores, of the Transatlantic Trade and Investment Partnership (TTIP), the regional Government of the Azores and the Luso American Development Foundation (FLAD) sponsored a study to be undertaken by the Center for Applied Economic Studies of the Atlantic (CEEApIAA) of the School of Business and Economics of the University of the Azores. The current report presents the results obtained which are compared with those of a similar study undertaken at the request of the Government of Portugal.

In fact, in 2014, to assess the potential impact of the TTIP agreement for Portugal, the Portuguese central government and FLAD contracted a study undertaken by the Centre for Economic Policy Research (London), under the supervision of Joseph François and Miriam Manchin (2014).

That study uses a CGE model to conclude that the potential impact for Portugal is 0,66% of GDP in a moderate scenario and 0,78% in an ambitious scenario. The moderate scenario assumes full elimination of tariffs and 20% elimination of non-tariff barriers, while in the ambitious scenario it is assumed that non-tariff barriers are reduced by 50%.

With the conclusions for Portugal, the study extrapolates the expected impact on the Azorean economy to be about 0,19% of GDP, in the moderate scenario and 0,35% in the optimistic scenario. It also concludes that employment would fall by 0,19% in the moderate scenario and by 0,08% in the ambitious scenario.

The study lists the limitations of the conclusions referring that given limitations on availability of detailed data on Azores, simplifying assumption had to be made in

estimating the impact on the Azores. It was assumed that the same % changes would occur at a sectoral level in the Azores as in the corresponding sectors in Portugal as a whole.

These caveats pointed out by the study of François and Manchin (2014) and the negative impact estimated for crucial sectors of the Azorean economy suggested that further detailed studies would be recommendable.

The current study contributes to this effect by using a dynamic CGE model of the Azores to assess the detailed impact of the TTIP agreement on the Azores. The study is based on an adaptation of AZORMOD, a CGE model developed for the Azores (see Bayar, et al. (2010)).

The adaptations of the model involved developing new specifications of the dynamics (investment) equation, the trade equation and closure rules. It also involved the use of a social accounting matrix (SAM) updated from 2001 to 2005.

To analyze the potential impacts of the TTIP, three major scenarios were set up, with two variants each. The scenarios were distinguished as a function of the degree of contemplation of indirect effects: scenario 1 has no indirect effects; scenario 2 contemplates partial indirect effects for the mainland, the US and the EU and; scenario 3 contemplates only indirect effects for the mainland. The other variation factor simulates the intensity of reduction of the non-tariff barriers and gives rise to versions A (moderate -20% reduction) and B (ambitious – 50% reduction).

The evaluation of the impacts was done by analysis of macro variables such as GDP, private consumption, foreign balance, exports, imports, employment and unemployment and government revenues.

It was concluded that, by 2030, depending on the scenario that is chosen, and always relative to the BAU (business as usual scenario): GDP will rise between 0,4%, in a modest scenario and a higher limit of 0,77%, obtained in an ambitious scenario; All scenarios, for all periods, point to positive GDP impacts that become larger with time; Private consumption will be higher between 3,70% and 5,92%; foreign balances will be improved in the presence of intensified trade both in imports and exports; Employment will rise between 1,05% and 1,67%, meaning additional jobs; The unemployment rate can fall as much as 1,56 percent; Government revenues can rise by as much as 5,5%.

Another evaluation takes into account the impact that the policy has on household welfare. This is done relative to the BAU scenario in percentage changes or in absolute euro variation equivalents.

It was concluded that the overall impact will amount to a value equivalent to between 75 and 119 million euros per year by 2030. The income group that will gain, relatively, the least is the lowest one. The second lowest gainer, in relative terms, is the highest income group.

A final evaluation looked at the impacts of the policy on each of the 45 economic sectors of the SAM matrix. This was done for: value added; total exports and exports to the US, to the EU, to the mainland and to the rest of the world; total imports and imports from the US, from the EU, from the mainland and from the rest of the world.

It was concluded that the overall positive impact was unevenly distributed with some sectors gaining and some losing. Of the main sectors, losses, even if small, are registered in fisheries and fish processing. The results for agriculture are ambiguous with positive impacts in some scenarios and negative in others. None of the major economic activities

in the Azores are significantly affected on the negative side. The negative impact of public administration results from the assumptions made with respect to closure rules which restrict public expenditure. Public policy might eventually determine otherwise. Excluding marginal activities, the main gainers are the dairy industry, and all the activities associated to tourism.

Finally, aggregate trade impacts are broken down by sectors. Imports, it turns out, as expected, will tend to increase in all sectors, for all trading partners. Exports, however, will have a differentiated impact depending on the sector. Many will gain exports but some will fall, affecting demand. In this case the main export gainers are the dairy industry, hotels and restaurants and air traffic. The main export losers are fisheries and fish processing and agriculture.

Given the overall results of the simulations undertaken, support is provided for the decision to subscribe to the TTIP agreement, as far as this region is concerned. Care and adequate policies, however, should be designed to mitigate the potential negative impacts in some sectors such as fisheries and agriculture. On the other hand, working on the positive side, sectors with potential positive effects could be a good area of policy incidence to promote growth.

Even though we have tried to carefully identify the shortcomings of the current study one should still refer the main areas of future improvement. The foremost one would be the preparation of a new, more up to date, Social Accounting Matrix. The current matrix was originally compiled with 2001 data now updated to 2005. More recent data would provide a better point of reference for the projections. Otherwise modeling reality is a never ending task and other specifications could be tried to relax some of the assumptions made such as perfect competition.

Sumário Executivo

Para avaliar o impacto potencial, na economia dos Açores, da Parceria Transatlântica de Comércio e Investimento entre a União Europeia e os Estados Unidos da América (TTIP), o Governo Regional dos Açores e a Fundação Luso-Americana para o Desenvolvimento solicitaram ao Centro de Estudos de Economia Aplicada do Atlântico (CEEApLAA), da Faculdade de Economia e Gestão, da Universidade dos Açores, a realização de um estudo específico para o caso desta Região. O presente relatório apresenta os resultados obtidos, que são enquadrados com estudo similar realizado a pedido do Governo da República.

Já em 2014, para avaliar o impacto potencial do acordo TTIP para Portugal o Governo Central de Portugal e a Fundação Luso-Americana para o Desenvolvimento (FLAD) contrataram um estudo ao Centro de Investigação de Políticas Económicas (Londres), sobre a orientação de Joseph François e Miriam Manchin (2014).

Naquele estudo foi utilizado o modelo de Equilíbrio Geral Computável (EGC) que concluiu que o impacto potencial para Portugal é de 0,66% do PIB num cenário moderado e 0,78% num cenário ambicioso. No cenário moderado assume-se uma eliminação total tarifária e 20% de eliminação de barreiras não-tarifárias. No cenário ambicioso é assumido que as barreiras não-tarifárias são reduzidas em 50%.

Nas conclusões, o mesmo estudo prevê um impacto na economia Açoriana de cerca de 0,19% do PIB no cenário moderado e 0,35% no cenário otimista. Também concluiu que o emprego cai 0,19% no cenário moderado e 0,08% no cenário ambicioso.

O estudo enumera as limitações das conclusões referindo que, dadas as restrições na disponibilidade de dados detalhados sobre os Açores, foi necessário simplificar as

estimativas de impacto nesta região. Em geral, os autores assumiram que iriam ocorrer alterações percentuais ao nível sectorial nos Açores idênticas às de Portugal Continental.

As ressalvas apontadas no estudo de François e Manchin (2014) e o impacto negativo estimado nos sectores cruciais para a economia dos Açores sugeriram que era necessário a elaboração de estudos mais detalhados.

O presente estudo contribui para esse fim na medida em que utiliza um modelo dinâmico de EGC para avaliar o impacto do acordo TTIP nos Açores. O estudo é baseado na adaptação do AZORMOD, um modelo de EGC desenvolvido para os Açores (Bayar, et al., 2010).

As adaptações deste modelo implicaram desenvolver novas especificações das equações dinâmicas (investimento), equações de comércio e regras de encerramento do modelo. Também implicou a utilização de uma matriz de contabilidade social (SAM) atualizada de 2001 para 2005.

De forma a analisar os potenciais impactos do TTIP, foram definidos três grandes cenários, cada um dos quais com duas variantes. Os cenários distinguem-se em função do nível de contemplação de efeitos indiretos: o cenário 1 não tem efeitos indiretos; o cenário 2 contempla efeitos indiretos parciais para Portugal Continental, EUA e EU e; o cenário 3 contempla apenas efeitos indiretos para Portugal Continental. Os restantes fatores de variação simulam a intensidade da redução de barreiras não-tarifárias e dão origem às versões A (moderado – 20% de redução) e B (ambicioso – 50% de redução).

A avaliação dos impactos foi efetuada através da análise de variáveis macroeconómicas como o PIB, consumo privado, saldo do comércio externo, exportações, importações, emprego e desemprego e receitas governamentais.

Conclui-se que, em 2030, dependendo do cenário escolhido e sempre por referencia ao cenário base (BAU): o crescimento do PIB será superior entre 0,4% num cenário modesto (2A) e 0,77% num cenário ambicioso (3B); Todos os cenários, em todos os períodos, apontam para impactos positivos do PIB que aumentam com o tempo; O consumo privado será mais elevado entre cerca de 3,70% e 5,92%; O saldo com o comércio externo terá uma melhoria face à intensificação do comércio quer das importações quer das exportações; O emprego aumentará entre cerca de 1,05% e 1,67%, o que se traduz em mais criação de postos de trabalho; A taxa de desemprego poderá cair cerca de 1,56%; As receitas governamentais podem crescer em cerca de 5,5%.

Uma outra avaliação considera o impacto que as medidas têm no rendimento familiar. Para o efeito, foi utilizada a medida de variação equivalente que pode ser observada em variações percentuais ou em variações absolutas, em euros, relativamente ao cenário base. Conclui-se que o impacto em geral terá um valor equivalente a cerca de 75 a 119 milhões de euros por ano, em 2030. O grupo de rendimentos que irá ganhar relativamente menos é o grupo com rendimentos mais baixos. O segundo mais baixo em ganhos, em termos relativos, é o grupo com rendimentos mais elevados.

Foi feita uma última avaliação aos impactos da medida em cada um dos 45 sectores económicos da matriz SAM. Isto foi feito para: O valor acrescentado; Total de exportações e importações para os EUA, para a UE, para Portugal Continental e para o resto do mundo; Total de importações e exportações dos EUA, da EU, de Portugal Continental e do resto do mundo.

Conclui-se que o impacto positivo em geral não estava distribuído de forma homogénea, com alguns sectores a ganharem e outros a perderem. Dos principais setores de atividade, os que registam perdas, mesmo que modestas, são os que estão incluídos na

cadeia de valor das pescas. Os resultados para a agricultura são ambíguos, com impactos positivos em alguns cenários e negativos noutros. Nenhum dos principais setores de atividade regista impactos negativos significativos. O impacto negativo da administração pública resulta das hipóteses relativas às regras de encerramento do modelo que restringem a despesa pública. As políticas públicas podem, eventualmente, determinar o contrário. Os principais beneficiados são a indústria do leite e todas as atividades associadas ao turismo.

Por fim, os impactos agregados no comércio são discriminados por sectores. As importações, como esperado, tenderão a aumentar em todos os sectores, com todos os parceiros comerciais. As exportações, no entanto, irão ter um impacto diferenciado dependendo do sector. Muitos irão evidenciar mais exportações, mas em outros as exportações irão cair, afetando a procura. Excluindo casos de peso marginal, os principais beneficiários das exportações são a indústria dos laticínios, hotéis, restaurantes e as atividades associadas ao transporte aéreo. Os mais prejudicados são as pescas e indústria transformadora de pescado e a agricultura.

No geral, e em síntese, os resultados das simulações efetuadas, suportam a decisão de apoiar o acordo TTIP, no que diz respeito aos Açores. No entanto, devem ser tomadas precauções e implementadas medidas adequadas de forma a mitigar os potenciais impactos negativos em alguns sectores como as pescas e a agricultura. Por outro lado, considerando os aspetos positivos, os sectores com potenciais impactos positivos podem ser uma boa área de incidência de medidas para promover o crescimento.

Ainda que tenhamos tentado identificar cuidadosamente as limitações do presente estudo, devem-se referir quais as áreas a melhorar no futuro. A área primordial será a preparação de uma nova e mais atualizada matriz de contabilidade social. A atual matriz

foi originalmente compilada com dados de 2001 e posteriormente atualizada para 2005. Dados mais recentes permitiriam melhores pontos de referência para as projeções. De resto, representar a realidade através de um modelo é uma tarefa que nunca termina podendo ser testadas outras especificações, relaxando algumas das suposições como, por exemplo, a da concorrência perfeita.

Abstract

The current study analyses the impact on the Azores, a small island regional economy, of the TTIP agreement between the EU and the US. To this effect a dynamic CGE model detailing six household categories, forty-five sectors and four trading partners is used. Previous studies used aggregate variables and were largely based on the structure of the national economy. For a small integrated economy, looking at foreign trade statistics comprises an underestimation given that a good part, if not most, of the trade is channeled through bigger national logistic centers. This limitation is overcome contemplating direct and indirect trade impacts.

It is found that the potential impact on this small island economy is similar to what was found for the mainland, contrary to what had previously been estimated, pointing to a much lower impact.

Relative to the business as usual (BAU) scenario, GDP is estimated to be 0,4 to 0,77 percent higher by 2030. Based on a similar model, a previous estimate of François and Manchin (2014) had pointed to an increase between 0,19 and 0,35 percent. Using equivalent variation, the estimated welfare impact is positive for all six household categories with relatively higher gains for the middle income categories. The lowest relative impact is in the lowest and in the highest income categories. Using the change in value added, the primary production sectors are all negatively impacted. Except for fish processing, the main industrial activities are not hurt. For the case of the economy under study, there is a positive impact on the very important dairy industry as well as in retail activities and services associated to tourism and air transportation.

Suggesting an overall positive impact, the model also points to negative, even if small, impacts on the primary production sectors of agriculture and fisheries, which might warrant specific policy attention.

1. Introduction

The EU has initiated negotiations with the USA to arrive at an agreement for free trade and investment in the two economic blocks. This agreement rests on the elimination of custom duties and on the harmonization of product specification to eliminate regulatory barriers.

To assess the potential impact of the agreement for Portugal, the Portuguese central government and FLAD contracted a study undertaken by the Centre for Economic Policy Research (London), under the supervision of Joseph François and Miriam Manchin.

The study uses a CGE model of the world economy to conclude that, in a moderate scenario, the potential impact for Portugal is 0,66% of GDP, with specific sector impacts imputed using partial equilibrium analysis.

With the conclusions for Portugal, the study extrapolates, using indicators, the expected impact on the Azorean economy to be about 0,19% of GDP, in a moderate scenario (0,66 for Portugal) and 0,35% in an optimistic scenario (0,76 for Portugal). To arrive at these estimates for the Azores the study analyses the direct trade of the Azores with the USA, concluding that the exports of the islands with the US are greater than those with the rest of Europe.

In the analysis focusing on the Azores, the study concludes that the benefits are derived from a sector designated as “other services”. For important local sectors such as agriculture and agro-industries, losses are estimated both for value added and employment. The sectors with greater changes in exports and imports are the primary

production and agro industry, with very significant changes. The risk of negative net impacts is, for this reason, very high.

This conclusion is, in fact, what can be drawn if we use, as the study does, foreign trade statistics from the Azores. However, these statistics are, necessarily, a biased representation of the external trade of the Azores given that a considerable amount of trade is done with and through mainland Portugal where we can find the main trade channels for the Azorean production.

The study lists the limitations of the conclusions referring that “Given data limitations on availability of detailed data on Azores, we had to make a simplifying assumption in estimating the impact on Azores. We assumed that the same % changes will occur at a sectoral level in Azores as in the corresponding sectors in Portugal as a whole. In other words, for example, if the estimated impact on the output in primary products in Portugal is 0.6% reduction, the same is assumed for Azores. In addition, data was available at a different aggregation for Azores, thus this was mapped into the sectors available for Portugal” (Francois and Manchin, 2014, pg53).

These caveats pointed out by the study and the negative impact estimated for crucial sectors of the Azorean economy suggest that further detailed studies are recommended.

The current study does exactly that by using a dynamic CGE model of the Azores to assess the detailed impact of the TTIP agreement on the Azores. To this effect the study will be based on an adaptation of AZORMOD, a CGE model developed for the Azores with the support of the Regional Government of the Azores, the US government and FLAD.

This study was supported by a grant of the Luso-American Development Foundation and of the Regional Government of the Azores.

The purpose of the grant was to update and adapt the modeling platform – AzorMod – and to use it to specifically study the impacts on the Azores of trade liberalization between the US and the European Union. Two deliverables were expected: The development of a new version of the platform, expanded with new functionalities to address the impacts of liberalization of external trade that might also be used for a multitude of simulations in other policy areas; The elaboration of a study of the impacts of TTIP on the Azores considering not only the impacts derived from trade with third countries but also trade with the rest of the country, with sector impacts (for the 45 sectors of the model) and social impacts (for 6 socioeconomic groups).

The new version of the platform, with the expanded capabilities should also be useful for other simulations of the impact of policies such as European development funds or regional and national investment programs. The platform should, in addition, support academic work, enhancing the capabilities of the University of the Azores in this area.

An up to date detailed study of the impacts of TTIP could contribute to assess the size of the problems that might arise from the new policy, suggesting the intensity of the necessary corrective or compensating measures.

In sum, the final results of this study will not only provide an estimate of impacts of TTIP but also a tool of analysis for other simulations of interest within the trade issues, with evident interest for the production of scientific papers.

It should also be recalled that in 2014 the Azores were already under the external effects of the Russian embargo and is, as of 2015, dealing with the impact of the

elimination of milk quotas in Europe. These are all external effects akin to those of market liberalization.

An even more detailed study, beyond the targets of the current exercise, would contemplate the development of a similarly detailed model for the national economy.

In the sections that follow we start, in 2, by reviewing the previous studies of TTIP and in particular the one that focused on Portugal and the Azores. Section 3 presents the model to be used. Section 4 lays out the scenarios for the analysis of impacts of the TTIP. Section 5 presents the main results and their discussion. The Azorean economy and particularly its foreign component are characterized in some detail in annex to help understand the set-up of the scenarios and the interpretation of the results.

2. Literature Review of TTIP studies

Official TTIP websites have been set up by both the USA (<https://ustr.gov/ttip>) and the EU (<http://ec.europa.eu/trade/policy/in-focus/ttip/>) to make public information about objectives and targets of benefits as well as about the negotiation process.

For the USA, the initiative is “an ambitious, comprehensive, and high-standard trade and investment agreement being negotiated between the United States and the European Union (EU). T-TIP will help unlock opportunity for American families, workers, businesses, farmers and ranchers through increased access to European markets for Made-in-America goods and services. This will help to promote U.S. international competitiveness, jobs and growth”. It is further maintained that “The U.S. and EU economies are two of the most modern, most developed, and most committed to high standards of consumer protection in the world. T-TIP aims to bolster that already strong relationship in a way that will help boost economic growth and add to the more than 13 million American and EU jobs already supported by transatlantic trade and investment. T-TIP will be a cutting edge agreement aimed at providing greater compatibility and transparency in trade and investment regulation, while maintaining high levels of health, safety, and environmental protection. T-TIP presents an extraordinary opportunity to strengthen the bond between vital strategic and economic partners.”

For the EU, “The aim of the agreement is to create growth and jobs on both sides of the Atlantic by removing trade barriers. Removing trade barriers would boost and facilitate the buying and selling of goods and services, as well as investment in each of the economies. The agreement has three main elements: Market access, removing customs duties on goods and restrictions on services, gaining better access to public markets, and

making it easier to invest; Improved regulatory coherence and cooperation by dismantling unnecessary regulatory barriers such as bureaucratic duplication of effort; Improved cooperation, when it comes to setting international standards”.

It is further expected that “... Making trade easier and removing barriers to trade through the planned agreement could result in a significant boost to growth for the EU. Some facts about the potential economic effects of the planned agreement: The EU economy could grow by €119 billion per year, equivalent to about €500 for an average household. The TTIP could be seen as a sort of growth package without using tax payers' money; European companies are particularly efficient in the areas of services. Better access to the US market, for example in the area of management consultancy or environmental services, would be good news for them ...; EU countries are major investors in the US. Their combined investments in the US top €1.6 trillion, making the EU the biggest investor in the US. So EU countries have a major interest in ensuring that their investments abroad receive the best possible protection – as is the aim in the TTIP; The planned trade agreement will not just benefit big firms: it will bring many advantages for small and medium-sized companies too. The EU and US have already agreed to include specific measures in the agreement so that smaller firms will be able to benefit from it in the same way as larger ones”.

A review of the most relevant studies for TTIP identifies the Ecorys (2009), an extensive study on the potential economic impact of further trade liberalization focusing on the existence of non-tariff measures (NTMs) and regulatory divergence at a sectoral level, the magnitude of this divergence and the potential economic impact of a reduction or harmonization of these measures.

Another reference study of TTIP was done by Francois et.al. (2013) to assess the economic impact of reducing transatlantic barriers to trade and investment. According to the authors, "This study reviews the importance of the bilateral economic relationship and provides computable general equilibrium (CGE)-based estimates for the economy-wide impact of reducing both tariff and non-tariff barriers (NTBs)". Estimates are provided with regards to expected changes in GDP, sector output, aggregate and bilateral trade flows, wages, and labor displacement, among other issues".

The authors summarize the main findings as follows: An ambitious and comprehensive transatlantic trade and investment agreement could bring significant economic gains as a whole for the EU (€119 billion a year) and US (€95 billion a year). This translates to an extra €545 in disposable income each year for a family of 4 in the EU, on average, and €655 per family in the US.; The benefits for the EU and US would not be at the expense of the rest of the world. On the contrary, liberalizing trade between the EU and the US would have a positive impact on worldwide trade and incomes, increasing global income by almost €100 billion; Income gains are a result of increased trade. EU exports to the US would go up by 28%, equivalent to an additional €187 billion worth of exports of EU goods and services. Overall, total exports would increase 6% in the EU and 8% in the US; Reducing non-tariff barriers will be a key part of transatlantic liberalization. As much as 80% of the total potential gains come from cutting costs imposed by bureaucracy and regulations, as well as from liberalizing trade in services and public procurement; The increased level of economic activity and productivity gains created by the agreement will benefit the EU and US labor markets, both in terms of overall wages and new job opportunities for high and low skilled workers. Labor displacement will be well within normal labor market movements and economic trends.

This means a relatively small number of people would have to change jobs and move from one sector to another (0.2 to 0.5 per cent of the EU labor force.); The agreement would have negligible effects on CO2 emissions and on the sustainable use of natural resources

The policy scenarios considered were the following:

Baseline:

- All FTAs (free trade agreements) concluded by the EU and the US
- Future EU FTAs: Canada and Singapore
- Entry into force 2017, estimation up to 2027

Policy option A:

- Status quo

Policy option B:

- B.1: Tariff-only agreement (98% tariff elimination)
- B.2: Services-only agreement (10% reduction of barriers)
- B.3: Government procurement-only agreement (25% reduction of barriers)

Policy option C:

- Comprehensive FTA (2 scenarios – higher/lower level of ambition)

C.1: Conservative estimate:

Tariffs: 98% duty elimination

NTMs goods: 10% reduction of barriers

Services: 10% reduction of barriers

Public Procurement: 25% reduction of barriers

C.2: Ambitious estimate:

Tariffs: 100% duty elimination

NTMs goods: 25% reduction of barriers

Services: 25% reduction of barriers

Public Procurement: 50% reduction of barriers

A discussion of the models used for assessing TTIP is provided in Pelkmans et. al. (2014). According to the authors, “The GTAP Computable General Equilibrium (CGE model), which was run to assess the potential impacts of the agreement, represents the ‘state-of-the-art’ in economics. The present authors are not aware of any better tool with which to estimate the long-term impacts of such a complicated trade agreement. This approach also has several advantages. First, CGE allows modelling the behavior of different actors in several markets in the entire economy, including many sectors. Second, the GTAP-8 database (which has been used) provides a powerful and reliable set of data. This matters a lot because the data requirements for many countries (in this case, 40), many sectors (20), several types of markets and the baseline scenario are extremely demanding.”

The EU, in the form of a COMMISSION STAFF WORKING DOCUMENT, also produced an analysis of the “Impact Assessment Report on the future of EU-US trade

relations” (http://trade.ec.europa.eu/doclib/docs/2013/march/tradoc_150759.pdf), which reviews the work done on this issue.

More recently Francois and Manchin (2014) develop a CGE analysis focused on Portugal, entitled “Quantifying the Impact of a Transatlantic Trade and Investment Partnership (T-TIP) Agreement on Portugal”.

Given the proximity to the purpose of the current study this work will be reviewed in greater detail.

Francois and Manchin (2014) apply the main approach that was followed in Francois et.al. (2013). Given the uncertainty about the final outcomes of the negotiations various scenarios are analyzed.

The scenarios are the following:

<p>Full Implementation (long-run effects):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Focuses on year 2030, with full effects of implementation <input type="checkbox"/> Includes longer run investment changes and reallocation of capital across sectors. <input type="checkbox"/> Labor markets in Portugal have further recovered from the impact of recession. 	<p>Long-run effects of an agreement that has been fully implemented.</p>
<p>Modest Scenario</p>	<p>98 % of tariffs eliminated, 10 % of NTBs (20 % of actionable NTBs) are eliminated</p>

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Ambitious Scenario	100 % of tariffs and 25 % of NTBs (50 % of actionable NTBs) are eliminated
<p>Initial Stages of Implementation (short run effects):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Excludes longer run investment changes and reallocation of capital across sectors. <input type="checkbox"/> Labor markets in Portugal reflect current conditions with high unemployment (soft labor market) 	<p>Assuming that the modest scenario represents the first stages of an</p> <p style="text-align: center;">ambitious agreement -- 98 % of tariffs eliminated, 10 % of NTBs (20 % of actionable NTBS) are eliminated.</p>

The main findings of the authors are the following: In contrast to the EU as a whole, where NTBs are the most important element of a T-TIP, for Portugal tariffs are just as important as NTB cost reductions; Because Portugal benefits proportionately more from tariff reductions than the EU as a whole, Portugal is likely to benefit earlier, and to a greater extent, from the initial stages of T-TIP implementation; Over the short-run, in case of the initial stages of the implementation assuming a modest scenario, the estimated impact for Portugal is 0.66% of GDP. Long-run impacts for Portugal under core scenarios in the study range from 0.57% of GDP under a shallow agreement to 0.76% of GDP under a deep agreement.

The study also identifies macroeconomic, sector, export and employment effects.

The macroeconomic estimates suggest that Portugal would benefit under both the ambitious and modest scenario over the long-run with important gains coming from tariff liberalization, which contrasts with the EU as a whole (Francois et. al. (2013)) where

tariffs are less important. Under an ambitious scenario, national income is higher by €1.6 billion annually. Of this, roughly half comes from tariffs and half from NTBs. Aggregate exports and imports are estimated to increase by around 1,5-1,7% under the ambitious scenario.

Sector effects are mixed with gains in sectors such as textiles and losses in electrical equipment.

Export effects are expected to be concentrated on manufacturing with substantial growth in exports to the US and to third countries by 2030.

Employment growth is estimated at 40,5 thousand jobs in the first stages of implementation and 23 thousand in the longer term with full implementation (2030).

For the Azores, gross value added in million Euros would increase from about €3279 million to €3289 million under the ambitious with a 0,35% increase in Azores' GDP. Parallel to these changes, there would be a substantial increase in bilateral trade in manufacturing with the US, mainly attributable to increased trade in processed food and primary products.

Given the composition of the regional economy, the macro impacts are reproduced in the following table, as presented in the study.

GDP rises between 0,19% and 0,35% while employment falls between 0,19% and 0,08%. Manufacturing exports to the US increase but fall to the UE. Imports from the US increase but can either fall or increase marginally in the case of the EU depending on the scenario.

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The model thus predicts that lower income sectors will be hurt while higher income activities might gain.

These results were obtained from a methodology that takes the current external trade structure of the Azores as a given for the projections ignoring that a considerable amount of trade of the region is done through the mainland.

Given that the Azores economy is highly integrated with the Portuguese mainland, most of the trade takes place through national intermediaries or might be registered as trade out of the mainland, given that the goods circulate freely within the country.

The main conclusions are summarized in the following table from that study (Francois and Manchin (2014)).

Table 1 - Macro changes in Azores' economy (in %)

Changes in %	Modest scenario				Ambitious scenario				
	Total	Tariffs	NTBs	NTBs	Total	Tariffs	NTBs	NTBs	Spillovers
			Goods	Services			Goods	Services	
GDP	0.19	0.11	0.06	0.11	0.35	0.14	0.15	0.05	0.22
Employment	-0.19	-0.14	-0.05	0.00	-0.08	-0.14	0.01	0.01	0.04
Manufac. exports to EU	-0.51	-0.52	0.00	0.01	-0.32	-0.50	0.30	0.02	-0.12
Manufac. exports to US	36.15	5.28	30.86	0.01	75.92	6.03	71.40	0.02	-0.77
Manufac. imports from EU	0.21	0.34	-0.13	0.00	-0.39	0.32	-0.59	0.00	-0.09
Manufac. imports from US	44.92	24.93	19.97	0.02	67.97	26.56	41.11	0.05	-0.07

Source: François and Manchin (2014)

It is important to recall footnote 16 of the study which was already mentioned and that states “Given data limitations on availability of detailed data on Azores, we had to make a simplifying assumption in estimating the impact on Azores. We assumed that the

same % changes will occur at a sectoral level in Azores as in the corresponding sectors in Portugal as a whole. In other words, for example, if the estimated impact on the output in primary products in Portugal is 0,6% reduction, the same is assumed for Azores. In addition, data was available at a different aggregation for Azores, thus this was mapped into the sectors available for Portugal.”

Bearing in mind the recognition of this limitation we proceed to recall some of the more detailed conclusions of the study.

One of the main results pertains to value added impacts. According to the results reported, value added increases significantly for “Other services” (up to 8 million euros) and “utilities and construction (about 1 million euros) but decreases for two main productive economic activities of the Azores – primary production (up to 2 million euros) and food processing (up to one million euros). This result is in line with what would be expected from the transposition to the Azores of the national economic structure.

Similar results are obtained when we look at the impacts on employment. There are increases in services and construction but decreases in all other sectors considered.

With respect to trade, increases in exports occur only in primary products and food processing, with modest impacts. Imports, on the other hand, are generalized in the goods sectors. There are no registers of imports and exports in the services sectors.

These results shed a considerable amount of doubts over the final impacts of TTIP in the Azores. Particularly worrisome might be the fact that there is a very small increase in GDP, a fall in employment and a lot of turbulence in the main economic activities of the islands.

The nature of these results clearly recommends further study.

3. AZORMOD

The first part of the terms of reference involved the implementation of a new version of the platform which may be used in a multitude of impact studies of fiscal and budget policies and of sector impacts. The update was meant to, basically, review closure assumptions of the model and update simulations.

As it turned out more profound changes were introduced, namely:

Update of the database to 2005;

Review of the investment dynamics of the model;

Review of the closure rules;

Review of the trade assumptions;

Review of mechanisms for scenario setups.

Given the importance of the changes introduced in the model, it will be reviewed so as to make clear which characteristics were changed.

The present study uses the dynamic general equilibrium model for the Azores – AzorMod, developed by Ali et al. (2010) as a starting point. AzorMod offers a modeling platform of the Azores economy, represented by a dynamic, multi-sector CGE model that incorporates the behavior of six economic agents: enterprises, families, the regional government, the central government, the European Commission and the rest of the world.

In this model, the goods-producing sectors, consisting of both public and private enterprises, are disaggregated into 45 branches of activity. Households are divided into six income groups, to analyze the distributional effects of various policy measures. Special attention is paid to the economic links between the regional government, the Mainland government and the European Commission. With regard to the rest of the world, the economy is treated as a small open economy with no influence on world market prices. Trade relations are differentiated according to four main trade partners: Mainland, EU, US and the rest of the world. The behavior of each agent in the model is described in detail below.

The equations of the revised model are provided in annex I. The model is solved using the general algebraic modeling system GAMS (Rosenthal, 2006).

Firms

CGE models do not take into account the behavior of individual firms, but of groups of similar ones aggregated into branches. Forty-five production sectors are considered in AzorMod. The specific impacts on each sector will not be an objective of the current analysis.

The usual assumption for such a model is that producers operate in perfectly competitive markets and maximize profits (or minimize costs for each level of output) to determine the optimal levels of inputs and output. Furthermore, production prices equal average and marginal costs, a condition implied by profit maximization for constant returns to scale technology.

The level of production for each branch of activity is determined from a nested production structure (see Figure 1). In the first stage, producers are assumed to choose

between intermediate inputs and value-added according to a Leontief production function. In the second stage, the optimal mix between capital and labor is given by another optimization process, where substitution possibilities between capital and labor are represented by a constant elasticity of substitution (CES) function. Firms' costs related to corporate income tax and social security contributions are also taken into account in the optimization process.

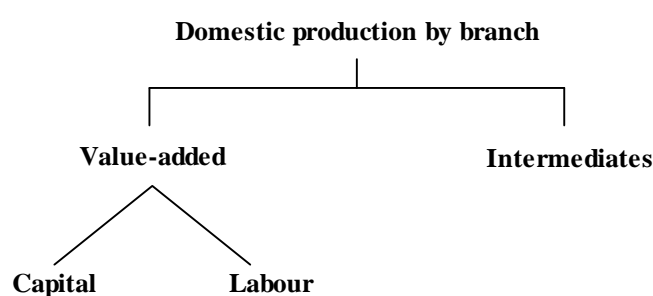


Figure 1. The nested Leontief and CES production technology for the domestic production by branch of activity

Value-added is related to domestic production by branch through a Leontief production function, which assumes an optimal allocation of inputs. Domestic production is valued at basic prices net of taxes but including direct subsidies on production from the regional government and direct subsidies on production from the European Agricultural Guidance and Guarantee Fund (EAGGF), from the Financial Instrument for Fisheries Guidance (FIFG), from the European Regional Development Fund (ERDF), from the European Social Fund (ESF) and from US.

The trade and transport margins are valued at the price of the corresponding service (trade services or transport services).

Value-added is a CES aggregation of capital and labor.

Capital is industry specific, introducing rigidities in the capital market. The inter-sector wage differential is a parameter derived as the ratio between the wage by

branch and the national average wage (Dervis, De Melo and Robinson, 1982). Holding the inter-sector wage differentials constant in counterfactual policy simulations introduces rigidities in the labor market.

Each branch of activity produces several types of goods and services. The optimal allocation of domestic production between the different types of commodities is given by a Leontief function.

Treated at an aggregate level, firms' savings are given by a share of the net operating surplus.

Households

Households are split into six income groups, the first group being the poorest one. The representative household in each income group receives a part of the capital income (net operating surplus), a part of the labor income, unemployment benefits from the Mainland government and other net transfers from the regional and Mainland governments. The representative household in each income group pays income taxes and saves a share of the net income.

The disposable budget for consumption is allocated between different goods and services according to a Stone-Geary utility function.

Consumption of each commodity by income group is valued at purchaser's prices, which include trade and transport margins, excise duties, value-added taxes and other taxes on consumption. The trade and transport margins on private consumption are valued at the prices corresponding to the trade and transport services.

In the allocation process, the consumer first decides on the minimum (subsistence) level of consumption of each commodity. Then, the marginal income is allocated between different types of commodities according to the marginal budget shares. A schematic representation of households' decisions, by income group, is given in Figure 2.

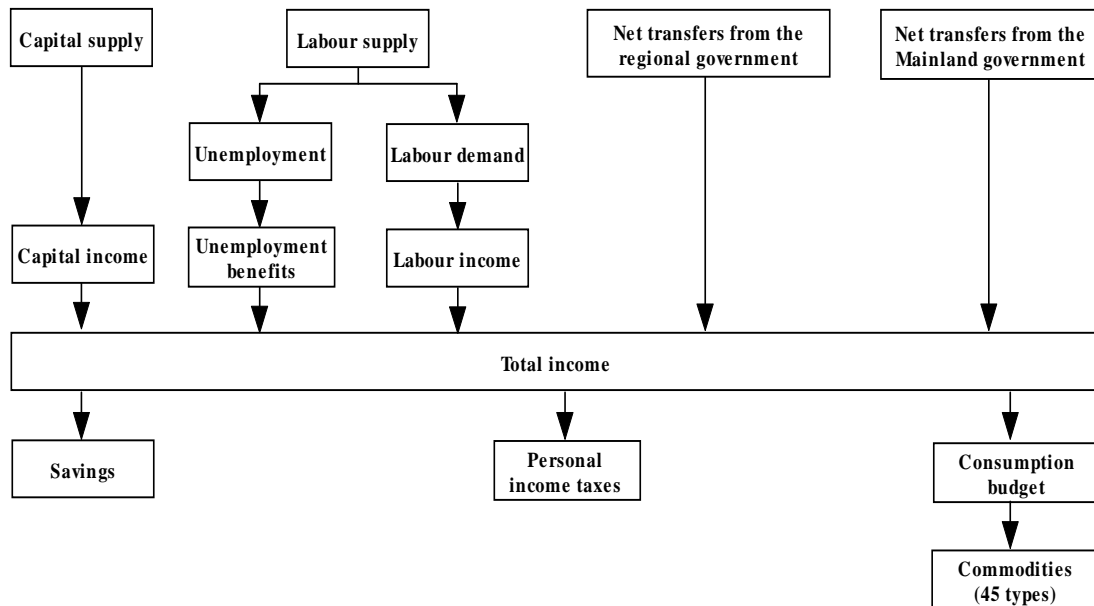


Figure 2. Decision structure of the representative household by income group

Household welfare gains/losses are valued using the equivalent variation in income, which is based on the concept of a money metric indirect utility function (Varian, 1992).

Equivalent variation measures the income needed to make the household as well off as she is in the new counter-factual equilibrium (policy scenario) evaluated at benchmark prices. Thus, the equivalent variation is positive for welfare gains from the policy scenario and negative for losses.

Regional Government

Regional government collects all the taxes, such as: taxes on income and wealth and taxes on products and on production and receives transfers from the Mainland government, EU funds and transfers from the external sector (see Figure 3).

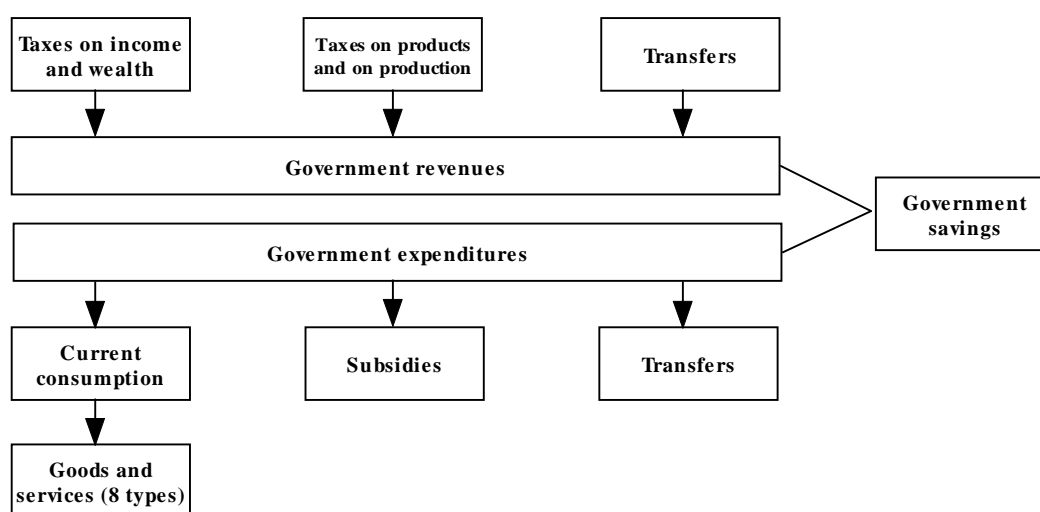


Figure 3. Structure of the regional government budget

Taxes on products are differentiated in the model according to the category of consumption on which they apply: intermediate consumption, private consumption, and gross capital formation.

The total transfers received by the regional government are given by transfers from the Mainland government, transfers from EU as direct subsidies on production and other transfers from EU, transfers from US and transfers from the rest of the world.

Regional government expenditures comprise the public current consumption, total transfers by the government and subsidies on products and on production.

The optimal allocation of the public current consumption between different types of goods and services is given by the maximization of a Cobb-Douglas function.

The EU funds as direct subsidies on production are transferred to the regional government budget which allocates them between different branches of activity

The difference between the regional government revenues and the government expenditures yields the government savings.

Mainland Government

Mainland government collects all the social security contributions, provides unemployment benefits and makes transfers to the households and to the regional government.

Social security contributions are derived by applying the social contributions rate to gross wages. Unemployment benefits received by each household income group are determined by the combination of the replacement rate, the national average wage, the total number of unemployed, and the share of unemployed subject to unemployment benefits in each household income group.

European Commission

European Commission provides EU funds as direct subsidies to the production sectors and other EU funds to the regional government.

Foreign Trade

The nesting on trade is modified in the current version of the model. The domestic producer decides on the optimal allocation of domestic production between domestic production delivered to the home market and exports using the CET function. In the next nest, the optimal mix between exports to the Mainland, exports to the European Union, exports to the US and exports to the ROW is given by the CET function.

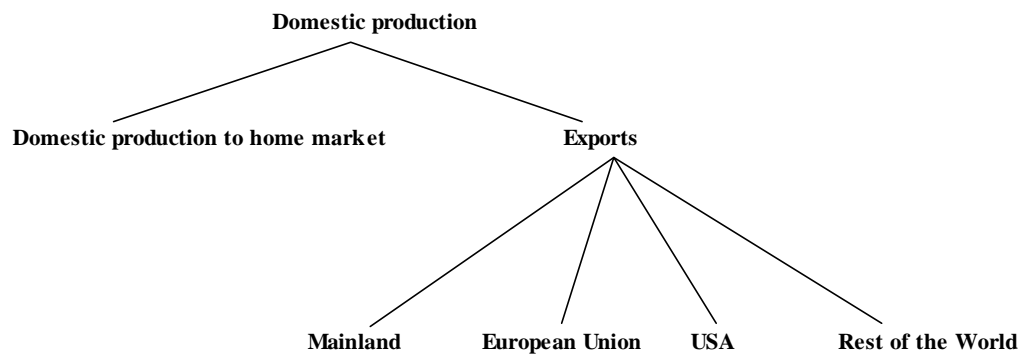


Figure 4. Exports specification

The same nesting is applied on imports. The optimal allocation of domestic sales between domestic production delivered to the home market and imports is given by the Armington function. In the next nest, the optimal mix between imports from the Mainland, imports from the European Union, imports from the US and imports from the ROW is given by the another Armington function.

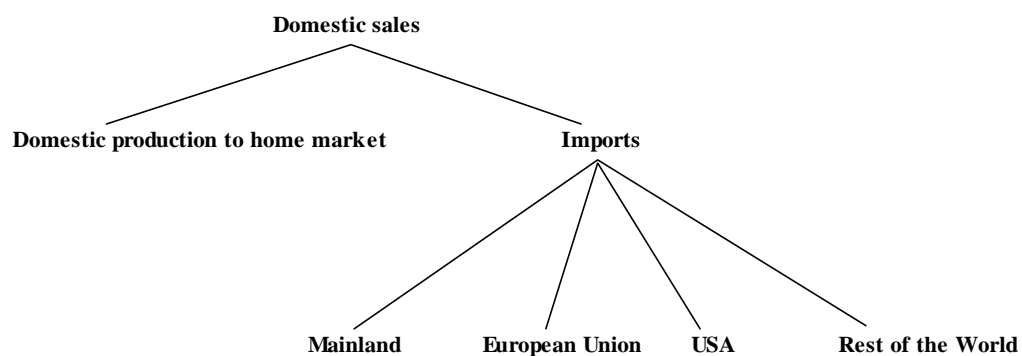


Figure 5. Imports specification

The specification of the foreign trade is still based on the small-country assumption, which means that the country is a price taker in both its import and its export markets.

Four different trade partners are still distinguished in the model: Mainland, EU, US and the rest of the world.

In the previous model, on the import side, imperfect substitution was assumed between domestically produced and imported goods, according to the Armington function (see Figure 6). Thus, domestic consumers use composite goods of imported and domestically produced goods, according to a CES function.

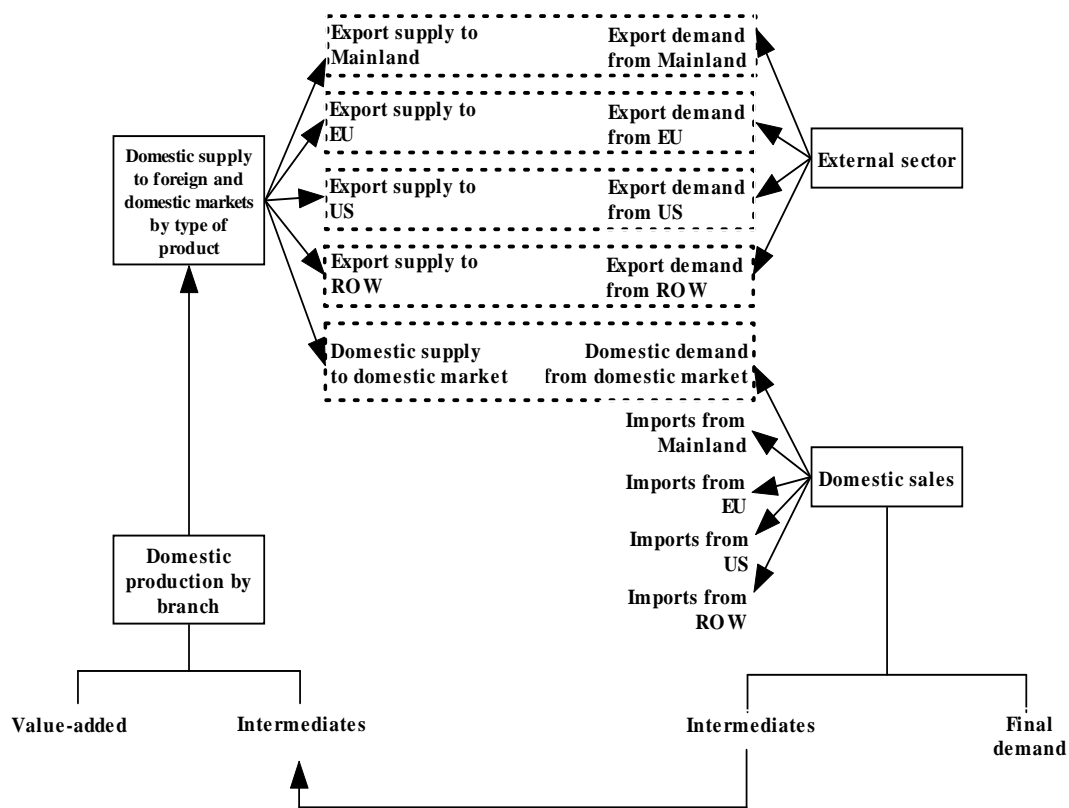


Figure 6. Foreign trade specification

Balance of payments expressed in foreign currency, takes into account all the trade and capital flows and is differentiated according to each trade partner.

Investment Demand

Total savings used to buy investment goods are the sum of household's savings, firms' savings and regional government savings.

The optimal allocation of total investments between different types of investment commodities is given by a Leontief function.

The composite price (unit cost) of investments is defined as the weighted average of the price of investment goods.

Price Equations

A common assumption for CGE models, which has also been adopted here, is that the economy is initially in equilibrium with the quantities normalized in such a way that prices of commodities equal unity. Due to the homogeneity of degree zero in prices, the model only determines the relative prices. Therefore, a particular price is selected to provide the *numeraire* against which all relative prices in the model will be measured. We choose the GDP deflator as the *numeraire*.

Different prices are defined for all the branches, exports and imports. As already explained, trade and transport margins are paid on all categories of demand except the government consumption (on intermediate consumption, on private consumption and on investment goods).

The domestic price of imports from Mainland is determined by the price of imports from Mainland expressed in foreign currency and the exchange rate.

Similarly, the domestic price of imports from EU is given by the price of imports from EU expressed in foreign currency and the corresponding exchange rate.

The domestic price of imports from US and from ROW, further include the tariff rate on commodity c for imports from US and the tariff rate on imports from ROW.

Labor Market

In the labor market the number of employees is the sum of all sectors which equals the active population minus the unemployed.

The responsiveness of real wage to the labor market conditions is surprised by a wage curve (Sanz-de-Galdeano & Turunen, 2006).

Market Clearing Equations

The equilibrium in the product, capital and labor markets requires that demand equals supply at prevailing prices (taking into account unemployment for the labor market). Labor market clearing equation has already been presented above. Capital stock is sector specific, such that the equality between capital demand and supply determines the return to capital by branch of activity.

Separate market clearing equations are distinguished in the model for each commodity. For the trade and transport services, the sum of demand for intermediate consumption of each commodity, the private demand for each commodity, the public demand for each commodity, the demand for investment goods, the demand for inventories and the demand for trade and transport services which are invoiced separately

(trade and transport margins) should be equal to the total supply of commodity from imports and domestic production.

The demand for trade and transport services, invoiced separately (Löfgren, Harris and Robinson, 2002), is further derived as the sum of demand for trade and transport services on private consumption, of demand for trade and transport services on investment goods and of demand for trade and transport services on intermediate consumption.

Incorporation of Dynamics

AzorMod has a recursive dynamic structure composed of a sequence of several temporary equilibria. The first equilibrium in the sequence is given by the benchmark year. In each time period, the model is solved for an equilibrium given the exogenous conditions assumed for that particular period. The equilibria are connected to each other through capital accumulation. Thus, the endogenous determination of investment behavior is essential for the dynamic part of the model. Investment and capital accumulation in year t depend on expected rates of return for year $t+1$, which are determined by actual returns on capital in year t .

In the previous specification, the normal rate of return to capital in each branch was specified as an inverse logistic function (see Figure 7) of the proportionate growth in sector's s capital stock (Dixon and Rimmer, 2002).

The minimum possible growth rate was set at the negative of the rate of depreciation in branch s . This condition implies that investments in each branch of activity have positive values, such that once installed, capital cannot be shifted from one sector to another except for the gradual process of depreciation. The maximum possible growth

rate of capital stock in industry s is set at plus in order to avoid unrealistically large simulated growth rates (Dixon and Rimmer, 2002). In the current version the minimum rate is taken equal to 6 per cent for all the branches. For example, if the historically normal growth rate in an industry is 4 per cent, the upper limit in any year t would not exceed 10 per cent.

Under static expectations, investors are assumed to anticipate that the asset prices (the cost of buying a unit of capital) and the net rental rates will increase by the current rate of inflation.

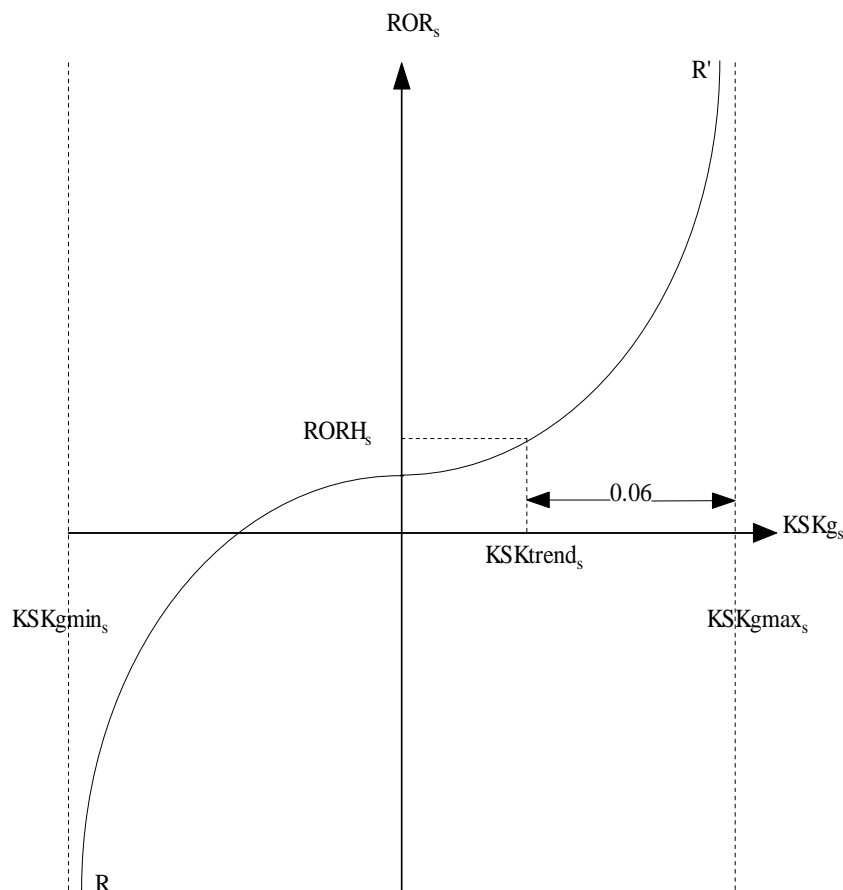


Figure 7. The expected rate of return for industries

The weighted average real return to capital was taken as a proxy for the real interest rate in AzorMod.

The new specification of the total investments (ITT) of Azores is given by the following equation:

$$ITT = \sum_s (KSKLAG_s) \cdot \{ \alpha \cdot [(GDPCLAG / GDPDEF) - (GDPCLAG / GDPDEF)] / (GDPCLAG / GDPDEF) - \beta \cdot PRATIOGR - \gamma \cdot [\log(\sum_s KSKLAG_s) - \log(GDPCLAG / GDPDEF)] + \phi \cdot \log(\sum_s (KSKLAG_s \cdot (1 + tk_s) + d_s) / GDPDEF) \} + erk_{sk}$$

where:

GDPCLAG	nominal GDP at the previous year (t-1)
GDPDEF	GDP deflator at the previous year (t-1)
PRATIOGR	capital usage cost to GDPDEF ratio (growth rate)
KSKLAG _s	capital stock at the previous year (t-1)
PKLAG _s	return on capital at the previous year (t-1)
ITTLAG	total investment for the previous year (t-1)
α, β, γ, φ	coefficients ¹

The total investments are allocated among branches of activity according to the sectoral share (shINV):

$$shINV_s = [((PK_s / RINT - PKZ_s / RINTZ) + 1)^{\sigma_s} \cdot (INVZ_s / \sum_{ss} (INVZ_{ss}))] / \sum_{ss} [((PK_{ss} / RINT - PKZ_{ss} / RINTZ) + 1)^{\sigma_{ss}} \cdot (INVZ_{ss} / \sum_{sss} (INVZ_{sss}))]$$

where:

PK _s	return to capital by branch of activity
RINT	average return to capital corresponding to firms
INV _s	investments carried out in different branches of activity

¹ α, β, γ, φ are equal to 0.039, 0.0048, 0.02 and 0.4, respectively. Values are collected from a CGE model of Luxembourg.

PKZ _s	return to capital by branch of activity – initial value
RINTZ	average return to capital corresponding to firms – initial value
INVZ _s	investments carried out in different branches of – initial value
σI_s	CES investment substitution elasticity by branch of activity ²
s	a subscript for one of the production activities (45 branches of activity)
ss	the same as ‘s’ (used for exposition purposes)
sss	the same as ‘s’ (used for exposition purposes)

Closure Rules

The closure rules refer to the manner in which demand and supply of commodities, the macroeconomic identities and the factor markets are equilibrated ex-post. Due to the complexity of the model, a combination of closure rules is needed. The particular set of closure rules should also be consistent, to the largest extent possible, with the institutional structure of the economy and with the purpose of the model.

In mathematical terms, the model should consist of an equal number of independent equations and endogenous variables. The closure rules reflect the choice of the model builder of which variables are exogenous and which variables are endogenous, so as to achieve ex-post equality.

Three macro balances are usually identified in CGE models that can be a potential source of ex-ante disequilibria and must be reconciled ex-post (Adelman and Robinson, 1989):

² σI_s are set to 1.2

- The savings-investment balance;
- The government balance;
- The external balance.

The most widely used macro closure rule for CGE models is based on the investment and savings balance. In the previous model, the investment was assumed to adjust to the available domestic and foreign savings. This reflected an economy in which savings form a binding constraint.

Additional assumptions were needed with regard to regional government behavior. First, regional government savings were fixed in real terms while regional government total current consumption adjusted to achieve the target set with respect to the government savings. The allocation between the consumption of different goods and services was provided by a Cobb-Douglas function. Secondly, the transfers received by the regional government from the Mainland government, from the EU, from the US and from the ROW were fixed in real terms. On the expenditure side, the regional government transfers to the households were also fixed in real terms.

For the external balance, the exchange rates were kept unchanged in the simulations, while the balances of the current accounts adjusted.

The setup of the closure rules is important in determining the mechanisms governing the model. Therefore, the closure rules should be established also taking into account the policy scenario in question.

According to Walras' law if $(n-1)$ markets are cleared the n^{th} one is cleared as well. Therefore, in order to avoid over-determination of the model, the current account balance with respect to ROW has been dropped. However, the system of equations guarantees,

through Walras' law, that the total imports from ROW less the total exports to ROW and the transfers from ROW equals the current account balance.

This model was particularly fitted to analyzing the impact of external transfers given its capacity not only to determine relative impacts of macro variables but also to decompose these impacts and, very importantly, to determine the differentiated impacts by income group.

Transfers, both from the EU and from the central government are an important source of budgeted revenue (together they represent in some years around 50% of the regional budget), particularly when we consider that since 2002 the regional government has been bound by the national budget law to run a balanced budget, which to some extent it has achieved even during the peak of the financial crisis.

EU transfers, in particular, have been the main driver of public investment distorting, to some extent, resource allocation and, in fact, crowding out private investments. The public sector, directly and mostly indirectly has absorbed a high percentage of all credit and the use of EU funds. With a mandatory balanced budget this has been achieved through off-budget activities undertaken by public or quasi-public institutions.

EU transfers have accounted for around 15 to 20% of the regional budget in the period under analysis.

These closure rules of the previous version of AzorMod were modified since results from the previous specification needed to be improved.

The current closure of the model is defined as follows:

ERML.FX Fixed exchange rate for Mainland (ERML)

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EREU.FX	Fixed exchange rate for EU (EREU)
ERUS.FX	Fixed exchange rate for US (ERUS)
ERROW.FX	Fixed exchange rate for ROW (ERROW)
SUSEXO.FX	Fixed exogenous component of the US savings (SUSEXO)
SG.FX	Fixed Local Government savings (SG)

The elasticities on trade were collected for the new nests and updated and tested

4. Scenarios

The main purpose of this study was to measure the impacts of TTIP on the Azorean economy considering not only the impacts derived from trade with third countries but also trade with the rest of the country, with sector impacts (for the 45 sectors of the model) and social impacts (for 6 socioeconomic groups).

We present below three simulation scenarios (setups) that achieve the stated objective.

4.1. Scenario 1

The first scenario considers setting tariffs with the US to zero. It also considers the impact of reducing non-tariff restrictions, assuming two sub-scenarios: one for the modest case (1A) and one for the ambitious case (1B), as specified in Ecorys (2009).

The scenario was defined as follows:

$\text{expgr} = 0.017$ for ambitious case (0.0135 for modest case)

$\text{tmusc} = 0$

$\text{EDIMLc.FX} = \text{EDIMBAc} * (1 + \text{expgr});$

$\text{EDIUSc.FX} = \text{EDIUSBAc} * (1 + \text{expgr});$

Where

Expgr : growth rate of total exports from Ecorys study (modest and ambitious cases)

tmusc : tariffs on commodities from the USA

EDIMLc : export demand from Mainland

EDIUS_c: export demand from the USA

EDIMLBAc : export demand from Mainland in the baseline

EDIUSBAc : export demand from the USA in the baseline

4.2. Scenario 2

The second scenario assumes TTIP having direct effect on exports (same increase for all commodities) to Mainland and USA, and indirect effect on exports (different growth rates for commodities) to Mainland, USA and European Union (EU). The indirect effect is partially added on the direct effect for Mainland and USA while EU only accounts for full indirect effect.

expgr = 0.017 for ambitious case (0.0135 for modest case)

tmusc = 0

EDIMLc.FX = EDIMBAc *(1+expgr+0.8*EXMLgrc)

EDIUSc.FX = EDIUSBAc *(1+expgr +0.2*EXUSgrc)

EDIEUc.FX = EDIEUBAc *(1+EXEUgrc)

Where:

Expgr : growth rate of total exports from Ecorys study (modest and ambitious cases)

tmusc : tariffs on commodities from the USA

EDIMLc : export demand from Mainland

EDIUSc : export demand from the USA

EDIEUc : export demand from the EU

EDIMLBAc : export demand from Mainland in the baseline

EDIUSBac : export demand from the USA in the baseline

EDIEUBac : export demand from the EU in the baseline

EXMLgrc : growth rate of export demand from Mainland by commodity (Ecorys)

EXUSgrc : growth rate of export demand from the USA by commodity (Ecorys)

EXEUgrc : growth rate of export demand from the EU by commodity (Ecorys)

In this scenario, we assume TTIP increases exports demand from the USA. Given that exports from Azores to Mainland are also composed of exports which have the rest of the world as the final destination and especially the USA, we also increase the exports to Mainland by the growth rate of total exports. Moreover since the increase of exports to the USA will boost demand for Portuguese products, we assume output of Portugal (Mainland) will increase and boost demand of Portugal for Azorean products. Therefore the initial effect on exports from Azores to the USA and to the Mainland will be amplified but a bit limited for first group of exports (Azores to the USA). This scenario assumes, for the indirect effect, that exports from Azores to Mainland will increase by 80% since exports from Azores to Mainland represent around 85% of the total exports of Azores (see SAM 2005). Since the increase of exports of Azores to the USA will be captured mainly by the direct effect, we assume only 20% of the increase of exports demand from the USA by commodity will be added as the indirect effect to reduce the double-counting effect. The increase, from the indirect effect, is given by the growth rate of exports demand by commodity and by origin from the Ecorys report.

4.3. Scenario 3

The third scenario assumes TTIP having direct effect on exports (same increase for all commodities) to Mainland and the US, and indirect effect on exports (different growth rates for commodities) to Mainland and European Union (EU). The indirect effect is fully added on the direct effect.

$$\text{expgr} = 0.017 \text{ for ambitious case (0.0135 for modest case)}$$

$$\text{tmusc} = 0$$

$$\text{EDIMLc.FX} = \text{EDIMLBAc} * (1 + \text{expgr} + \text{EXMLgrc})$$

$$\text{EDIUSc.FX} = \text{EDIUSBAc} * (1 + \text{expgr})$$

$$\text{EDIEUc.FX} = \text{EDIEUBAc} * (1 + \text{EXEUgrc})$$

Compared to the previous case, we assume for this scenario that indirect effects are only accounted for exports demand from Mainland and the EU. The direct effect (increase of total exports) is as the previous case i.e. exports demands from Mainland and the USA increase following the growth rate of total exports. The indirect effect is given by 100% of the exports demand increase by commodity from Ecorys study.

5. Results and Discussion

In this section we present the results of the simulations in accordance with the scenarios that were set up. The results are presented for three major scenarios broken up in two sub scenarios (moderate and ambitious) depending on the intensity of reduction of the non-tariff barriers.

The resulting scenarios can be described as follows:

Table 2 - Scenario Set-up

Scenario		Reductions		export growth	Indirect Effects		
Designation	Intensity	Tarif	Non tariff	Factors	Mainland	US	EU
Scenario 1A	Modest	100%	20%	0,0135	None	None	None
Scenario 1B	Ambitious	100%	50%	0,0170	None	None	None
Scenario 2A	Modest	100%	20%	0,0135	0.8*EXMLgr	0.2*EXUSgr	EXEUgr
Scenario 2B	Ambitious	100%	50%	0,0170	0.8*EXMLgr	0.2*EXUSgr	EXEUgr
Scenario 3A	Modest	100%	20%	0,0135	EXMLgr	None	EXEUgr
Scenario 3b	Ambitious	100%	50%	0,0170	EXMLgr	None	EXEUgr

5.1. Macroeconomic Indicators

For comparison, we recall that François and Manchin (2014) estimated an increase of GDP between 0,57% and 0,76% for the modest and ambitious scenarios for Portugal and between 0,19% and 0,35% for the Azores.

The results obtained in the current study vary with the various scenarios. The lowest value that is found, for 2030, is an impact of 0,4% relative to BAU, in a modest scenario (2A) and the highest is 0,77%, obtained in an ambitious scenario (3B). All scenarios, for

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all periods, point to positive impacts that become larger with time. The results are presented in the following table.

Table 3 - Impacts on GDP

GDP (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	0,22	0,24	0,27	0,29	0,32	0,34	0,37	0,39	0,42	0,45	0,47	0,50	0,53	0,56	0,58
Scenario 1B	0,27	0,30	0,33	0,36	0,39	0,42	0,45	0,48	0,51	0,55	0,58	0,61	0,64	0,68	0,71
Scenario 2A	0,18	0,20	0,21	0,23	0,25	0,27	0,29	0,30	0,32	0,34	0,35	0,36	0,38	0,39	0,40
Scenario 2B	0,28	0,31	0,33	0,36	0,39	0,42	0,44	0,47	0,50	0,52	0,55	0,57	0,59	0,61	0,63
Scenario 3A	0,17	0,19	0,21	0,23	0,25	0,27	0,29	0,31	0,33	0,35	0,38	0,40	0,42	0,45	0,47
Scenario 3B	0,29	0,32	0,35	0,39	0,42	0,45	0,49	0,52	0,56	0,59	0,63	0,66	0,70	0,73	0,77

Comparing these results with those of François and Manchin (2014), they suggest a much higher positive impact, as would be expected given the incorporation of more relevant information to obtain the current results.

Another aggregate variable provides the estimated growth of private consumption, as reported in the next table. The model predicts higher growth rates when compared to GDP because the government budget is restricted and growth is expected to occur through the private sector.

Table 4 - Impacts on Private Consumption

Private Consumption (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,58	1,73	1,88	2,04	2,19	2,34	2,49	2,65	2,81	2,96	3,12	3,28	3,44	3,60	3,76
Scenario 1B	2,01	2,20	2,39	2,58	2,77	2,97	3,17	3,37	3,57	3,77	3,97	4,17	4,38	4,59	4,79
Scenario 2A	1,46	1,62	1,78	1,94	2,11	2,29	2,48	2,68	2,89	3,12	3,36	3,63	3,92	4,24	4,59
Scenario 2B	2,08	2,29	2,51	2,73	2,96	3,20	3,45	3,70	3,97	4,25	4,54	4,85	5,18	5,54	5,92
Scenario 3A	1,40	1,54	1,69	1,84	1,99	2,15	2,31	2,48	2,66	2,84	3,02	3,22	3,42	3,63	3,84
Scenario 3B	2,02	2,22	2,43	2,64	2,86	3,08	3,30	3,53	3,77	4,01	4,26	4,52	4,78	5,05	5,33

The trade impacts turn out also to be all positive, resulting in more exports, more imports and a better external balance because exports supersede imports.

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The following set of three tables provides the impacts relative to the reference base.

Table 5 - Impacts on Foreign Balances

Foreign Balances (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	2,06	2,25	2,45	2,64	2,84	3,04	3,24	3,45	3,65	3,86	4,07	4,27	4,48	4,70	4,91
Scenario 1B	2,62	2,87	3,13	3,38	3,64	3,90	4,16	4,43	4,69	4,96	5,24	5,51	5,79	6,07	6,35
Scenario 2A	1,96	2,18	2,41	2,65	2,90	3,17	3,45	3,76	4,10	4,46	4,86	5,30	5,79	6,34	6,96
Scenario 2B	2,74	3,03	3,33	3,65	3,97	4,32	4,68	5,06	5,46	5,89	6,35	6,84	7,38	7,96	8,59
Scenario 3A	1,87	2,07	2,28	2,49	2,71	2,94	3,18	3,42	3,68	3,95	4,23	4,52	4,82	5,14	5,48
Scenario 3B	2,64	2,92	3,20	3,48	3,78	4,09	4,40	4,73	5,06	5,41	5,77	6,14	6,52	6,92	7,34

Table 6 - Impacts on Exports

Exports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	2,34	2,58	2,82	3,07	3,32	3,56	3,81	4,07	4,32	4,57	4,83	5,08	5,34	5,60	5,86
Scenario 1B	2,93	3,24	3,54	3,85	4,16	4,47	4,79	5,11	5,42	5,74	6,06	6,39	6,71	7,04	7,36
Scenario 2A	2,03	2,23	2,43	2,63	2,83	3,02	3,21	3,39	3,57	3,74	3,89	4,03	4,16	4,26	4,34
Scenario 2B	2,81	3,09	3,37	3,65	3,93	4,21	4,49	4,76	5,03	5,29	5,55	5,79	6,02	6,23	6,43
Scenario 3A	1,98	2,18	2,38	2,58	2,77	2,97	3,17	3,37	3,56	3,76	3,95	4,14	4,32	4,51	4,69
Scenario 3B	2,78	3,06	3,34	3,62	3,91	4,19	4,47	4,75	5,03	5,31	5,59	5,87	6,14	6,42	6,69

Table 7 - Impacts on Imports

Imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	2,17	2,39	2,60	2,82	3,04	3,26	3,48	3,70	3,93	4,16	4,38	4,61	4,84	5,08	5,31
Scenario 1B	2,75	3,02	3,30	3,57	3,85	4,14	4,42	4,71	5,00	5,29	5,58	5,88	6,18	6,48	6,78
Scenario 2A	1,99	2,20	2,42	2,64	2,87	3,11	3,35	3,61	3,88	4,16	4,46	4,77	5,11	5,47	5,86
Scenario 2B	2,77	3,05	3,35	3,65	3,96	4,27	4,60	4,94	5,28	5,64	6,01	6,40	6,81	7,23	7,68
Scenario 3A	1,92	2,12	2,32	2,53	2,74	2,95	3,17	3,40	3,63	3,87	4,11	4,36	4,61	4,87	5,14
Scenario 3B	2,70	2,97	3,26	3,54	3,83	4,13	4,43	4,74	5,05	5,37	5,69	6,03	6,36	6,71	7,06

5.2. Labor Market

Given the positive impacts on GDP, positive impacts are also expected on the labor market. Total employment is expected to increase between 1,05% and 1,67%. If we take a reference of 100.000 employed, this would imply an additional 1.050 to 1.670 new jobs by 2030.

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Table 8 - Impacts on Employment

Employment (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	0,49	0,54	0,59	0,64	0,69	0,74	0,79	0,84	0,89	0,95	1,00	1,05	1,11	1,16	1,22
Scenario 1B	0,62	0,68	0,74	0,80	0,86	0,93	0,99	1,06	1,12	1,19	1,25	1,32	1,39	1,46	1,53
Scenario 2A	0,42	0,47	0,51	0,56	0,61	0,66	0,71	0,76	0,81	0,87	0,93	1,00	1,07	1,14	1,22
Scenario 2B	0,61	0,67	0,73	0,80	0,87	0,93	1,01	1,08	1,15	1,23	1,31	1,40	1,48	1,57	1,67
Scenario 3A	0,39	0,43	0,47	0,52	0,56	0,60	0,65	0,70	0,74	0,79	0,84	0,89	0,95	1,00	1,05
Scenario 3B	0,56	0,62	0,68	0,74	0,80	0,86	0,92	0,98	1,05	1,11	1,18	1,25	1,32	1,39	1,46

The unemployment rate is expected to, consequently, fall. The next table provides the estimates of reduction of these rates.

Table 9 - Impacts on Unemployment

Unemployment rate (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	-0,46	-0,50	-0,55	-0,60	-0,64	-0,69	-0,74	-0,79	-0,84	-0,88	-0,93	-0,98	-1,03	-1,08	-1,14
Scenario 1B	-0,58	-0,64	-0,69	-0,75	-0,81	-0,87	-0,93	-0,99	-1,05	-1,11	-1,17	-1,23	-1,30	-1,36	-1,42
Scenario 2A	-0,40	-0,44	-0,48	-0,52	-0,57	-0,61	-0,66	-0,71	-0,76	-0,82	-0,87	-0,93	-1,00	-1,06	-1,14
Scenario 2B	-0,57	-0,63	-0,69	-0,75	-0,81	-0,88	-0,94	-1,01	-1,08	-1,15	-1,23	-1,30	-1,38	-1,47	-1,56
Scenario 3A	-0,37	-0,41	-0,45	-0,49	-0,53	-0,57	-0,61	-0,65	-0,70	-0,74	-0,79	-0,83	-0,88	-0,93	-0,98
Scenario 3B	-0,53	-0,58	-0,64	-0,69	-0,75	-0,80	-0,86	-0,92	-0,98	-1,04	-1,10	-1,17	-1,23	-1,30	-1,37

5.3. Government Revenues

A higher GDP is expected to generate higher revenues, both from taxes on income and taxes on consumption. Government revenues are expected to increase anywhere between 3,59 and 5,53% relative to the base scenario.

Table 10 - Impacts on Government Revenues

Government Revenues (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,56	1,71	1,86	2,01	2,16	2,31	2,46	2,62	2,77	2,92	3,08	3,24	3,39	3,55	3,71
Scenario 1B	2,00	2,19	2,38	2,57	2,76	2,96	3,16	3,35	3,55	3,75	3,95	4,16	4,36	4,57	4,78
Scenario 2A	1,40	1,55	1,70	1,85	2,01	2,18	2,35	2,53	2,73	2,93	3,14	3,38	3,63	3,90	4,19
Scenario 2B	1,99	2,19	2,40	2,61	2,83	3,05	3,28	3,52	3,77	4,02	4,29	4,58	4,87	5,19	5,53
Scenario 3A	1,34	1,47	1,61	1,76	1,90	2,05	2,20	2,36	2,52	2,69	2,86	3,03	3,21	3,40	3,59
Scenario 3B	1,92	2,12	2,31	2,51	2,71	2,92	3,13	3,34	3,56	3,78	4,01	4,25	4,49	4,73	4,98

5.4. Household Welfare

Household welfare is evaluated through equivalent variation. Since the Social Accounting Matrix used in the model disaggregates between six household income categories, welfare impacts are estimated accordingly.

The following series of tables present the results of equivalent variation for each of the six income groups.

The group that seems to benefit relatively less is the lowest income group, registering the least increases relative to the BAU scenario. The four middle income groups are those that register the strongest relative increases, vis-à-vis the BAU scenario.

Table 11 - Impacts on Income of Household Income Level 1

Equivalent Variation HH1 (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	0,64	0,69	0,75	0,81	0,86	0,92	0,97	1,03	1,08	1,14	1,19	1,25	1,30	1,36	1,41
Scenario 1B	0,80	0,88	0,95	1,02	1,09	1,16	1,23	1,30	1,37	1,44	1,51	1,58	1,65	1,72	1,79
Scenario 2A	0,63	0,69	0,76	0,83	0,90	0,98	1,06	1,14	1,23	1,33	1,44	1,55	1,68	1,82	1,98
Scenario 2B	0,87	0,95	1,04	1,13	1,22	1,31	1,41	1,51	1,62	1,73	1,84	1,97	2,10	2,24	2,39
Scenario 3A	0,61	0,67	0,73	0,80	0,86	0,93	1,00	1,07	1,14	1,22	1,30	1,38	1,46	1,55	1,64
Scenario 3B	0,87	0,95	1,04	1,13	1,21	1,30	1,39	1,49	1,58	1,68	1,78	1,88	1,98	2,09	2,20

Table 12 - Impacts on Income of Household Income Level 2

Equiv. Variation HH2 (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,34	1,47	1,60	1,72	1,85	1,98	2,11	2,24	2,37	2,50	2,63	2,76	2,90	3,03	3,16
Scenario 1B	1,69	1,84	2,00	2,16	2,32	2,48	2,64	2,81	2,97	3,13	3,30	3,46	3,62	3,79	3,95
Scenario 2A	1,25	1,38	1,52	1,66	1,80	1,95	2,11	2,28	2,46	2,64	2,85	3,06	3,30	3,55	3,84
Scenario 2B	1,75	1,92	2,10	2,29	2,48	2,67	2,87	3,08	3,29	3,51	3,74	3,99	4,24	4,51	4,80
Scenario 3A	1,20	1,32	1,44	1,57	1,70	1,84	1,98	2,12	2,27	2,42	2,57	2,73	2,90	3,07	3,25
Scenario 3B	1,70	1,87	2,04	2,22	2,39	2,57	2,76	2,94	3,14	3,33	3,53	3,73	3,94	4,15	4,36

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Table 13 - Impacts on Income of Household Income Level 3

Equivalent Variation HH2 (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,34	1,47	1,60	1,72	1,85	1,98	2,11	2,24	2,37	2,50	2,63	2,76	2,90	3,03	3,16
Scenario 1B	1,69	1,84	2,00	2,16	2,32	2,48	2,64	2,81	2,97	3,13	3,30	3,46	3,62	3,79	3,95
Scenario 2A	1,25	1,38	1,52	1,66	1,80	1,95	2,11	2,28	2,46	2,64	2,85	3,06	3,30	3,55	3,84
Scenario 2B	1,75	1,92	2,10	2,29	2,48	2,67	2,87	3,08	3,29	3,51	3,74	3,99	4,24	4,51	4,80
Scenario 3A	1,20	1,32	1,44	1,57	1,70	1,84	1,98	2,12	2,27	2,42	2,57	2,73	2,90	3,07	3,25
Scenario 3B	1,70	1,87	2,04	2,22	2,39	2,57	2,76	2,94	3,14	3,33	3,53	3,73	3,94	4,15	4,36

Table 14 - Impacts on Income of Household Income Level 4

Equivalent Variation HH4 (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,46	1,60	1,74	1,88	2,02	2,16	2,30	2,44	2,59	2,73	2,87	3,01	3,16	3,30	3,45
Scenario 1B	1,83	2,01	2,18	2,35	2,53	2,70	2,88	3,06	3,23	3,41	3,59	3,77	3,95	4,12	4,30
Scenario 2A	1,35	1,50	1,64	1,79	1,95	2,11	2,28	2,46	2,66	2,86	3,08	3,31	3,56	3,84	4,14
Scenario 2B	1,89	2,08	2,28	2,48	2,68	2,89	3,11	3,33	3,56	3,80	4,05	4,31	4,59	4,88	5,18
Scenario 3A	1,29	1,43	1,56	1,70	1,84	1,99	2,14	2,29	2,45	2,62	2,78	2,96	3,14	3,32	3,51
Scenario 3B	1,84	2,02	2,21	2,40	2,59	2,79	2,99	3,19	3,40	3,61	3,82	4,04	4,26	4,49	4,72

Table 15 - Impacts on Income of Household Income Level 5

Equivalent Variation HH5 (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,54	1,69	1,84	1,98	2,13	2,28	2,43	2,58	2,73	2,88	3,03	3,18	3,33	3,49	3,64
Scenario 1B	1,94	2,12	2,30	2,48	2,67	2,85	3,04	3,22	3,41	3,60	3,79	3,97	4,16	4,35	4,54
Scenario 2A	1,43	1,58	1,73	1,89	2,05	2,23	2,41	2,60	2,80	3,01	3,24	3,49	3,75	4,04	4,36
Scenario 2B	2,00	2,20	2,40	2,61	2,83	3,05	3,27	3,51	3,75	4,00	4,26	4,54	4,83	5,13	5,46
Scenario 3A	1,36	1,50	1,65	1,79	1,94	2,10	2,26	2,42	2,59	2,76	2,93	3,12	3,31	3,50	3,70
Scenario 3B	1,94	2,13	2,33	2,53	2,73	2,94	3,15	3,36	3,58	3,80	4,02	4,25	4,49	4,73	4,97

Table 16 - Impacts on Income of Household Income Level 6

Equivalent Variation HH6 (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	1,26	1,38	1,51	1,63	1,75	1,87	1,99	2,12	2,24	2,37	2,49	2,62	2,74	2,87	3,00
Scenario 1B	1,58	1,73	1,89	2,04	2,19	2,34	2,49	2,65	2,80	2,96	3,11	3,27	3,42	3,58	3,73
Scenario 2A	1,16	1,29	1,41	1,54	1,68	1,82	1,97	2,12	2,28	2,46	2,64	2,84	3,06	3,29	3,55
Scenario 2B	1,63	1,80	1,97	2,14	2,32	2,50	2,68	2,87	3,07	3,28	3,49	3,72	3,95	4,20	4,46
Scenario 3A	1,11	1,23	1,34	1,46	1,59	1,71	1,84	1,98	2,11	2,25	2,40	2,55	2,70	2,86	3,02
Scenario 3B	1,59	1,75	1,91	2,07	2,24	2,41	2,58	2,76	2,93	3,12	3,30	3,49	3,68	3,88	4,08

Looking at the equivalent variation in euros we arrive at an estimate of added wellbeing equivalent to 75 to 119 million euros per year by the time we reach 2030.

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If we consider a GDP of 3.800 million euros, this represents an increment of two to three percent.

Table 17 - Impacts on Income of Household Income – Aggregate

Total Equivalent Variation (million €)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1A	22,29	25,01	27,88	30,89	34,06	37,39	40,88	44,54	48,38	52,41	56,63	61,06	65,69	70,54	75,62
Scenario 1B	28,19	31,66	35,30	39,14	43,17	47,41	51,87	56,54	61,45	66,60	72,01	77,67	83,61	89,83	96,34
Scenario 2A	20,65	23,40	26,36	29,55	32,99	36,73	40,79	45,21	50,07	55,41	61,32	67,89	75,24	83,50	92,83
Scenario 2B	29,25	33,06	37,14	41,49	46,16	51,16	56,53	62,31	68,54	75,28	82,60	90,55	99,24	108,76	119,24
Scenario 3A	19,70	22,28	25,04	27,98	31,13	34,49	38,08	41,92	46,03	50,43	55,14	60,20	65,61	71,42	77,66
Scenario 3B	28,42	32,08	35,97	40,11	44,52	49,20	54,18	59,47	65,10	71,09	77,46	84,25	91,47	99,17	107,37

5.5. Value Added by sector

The impact of TTIP on the different production sectors can be analyzed through its impact on the value added generated. Even though the total impact is positive, some sectors are more likely to gain and others to lose, relative to the business as usual scenario.

The following table shows the gainers and the losers for scenario 1A

Impact of TTIP on the Economy of the Azores

Table 18 - Value Added Impacts by Sector – Scenario 1A

Scenario 1A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Value added (% change to the BAU)															
Agriculture, hunting and forestry, logging	0,14	0,18	0,22	0,26	0,31	0,35	0,40	0,45	0,50	0,55	0,61	0,66	0,71	0,77	0,82
Fishing	-0,45	-0,49	-0,54	-0,58	-0,63	-0,67	-0,71	-0,76	-0,80	-0,84	-0,88	-0,93	-0,97	-1,01	-1,05
Mining and quarrying	-0,91	-1,01	-1,11	-1,21	-1,31	-1,41	-1,51	-1,61	-1,72	-1,82	-1,92	-2,02	-2,12	-2,23	-2,33
Production of meat and meat products	-0,71	-0,78	-0,85	-0,92	-0,99	-1,07	-1,14	-1,21	-1,28	-1,35	-1,42	-1,49	-1,56	-1,64	-1,71
Processing of fish and fish products	-0,36	-0,39	-0,42	-0,46	-0,49	-0,51	-0,54	-0,57	-0,60	-0,62	-0,65	-0,67	-0,70	-0,72	-0,74
Manufacture of dairy products	5,25	5,79	6,34	6,88	7,44	7,99	8,55	9,12	9,68	10,25	10,82	11,40	11,97	12,55	13,13
Prepared animal feeds	-1,29	-1,39	-1,48	-1,56	-1,65	-1,74	-1,82	-1,90	-1,99	-2,07	-2,15	-2,24	-2,32	-2,40	-2,49
Beverages & tobacco products	0,91	1,00	1,11	1,21	1,31	1,42	1,52	1,63	1,74	1,85	1,96	2,07	2,19	2,30	2,41
Fruits, vegetables, animal oils, grain mill, starches	-2,72	-2,97	-3,22	-3,47	-3,71	-3,96	-4,20	-4,45	-4,69	-4,93	-5,17	-5,42	-5,66	-5,90	-6,14
Textiles and leather	-0,59	-0,67	-0,75	-0,84	-0,92	-1,00	-1,09	-1,17	-1,26	-1,34	-1,42	-1,51	-1,59	-1,67	-1,75
Wood and products of wood and cork	0,69	0,76	0,84	0,91	0,99	1,06	1,14	1,22	1,30	1,38	1,46	1,54	1,62	1,70	1,79
Pulp, paper products; publishing and printing	-3,01	-3,32	-3,62	-3,93	-4,24	-4,54	-4,85	-5,16	-5,47	-5,78	-6,09	-6,39	-6,70	-7,01	-7,32
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-0,04	-0,04	-0,04	-0,03	-0,03	-0,02	-0,01	0,00	0,01	0,02	0,04	0,05	0,07	0,09	0,11
Rubber and plastic products	-2,73	-3,01	-3,30	-3,59	-3,88	-4,17	-4,46	-4,75	-5,04	-5,33	-5,62	-5,91	-6,20	-6,49	-6,79
Other non-metallic mineral products	-1,89	-2,09	-2,30	-2,51	-2,71	-2,92	-3,13	-3,34	-3,55	-3,76	-3,97	-4,18	-4,39	-4,60	-4,81
Basic metals and fabricated metal products	-2,26	-2,54	-2,83	-3,12	-3,41	-3,70	-4,00	-4,29	-4,59	-4,89	-5,19	-5,49	-5,79	-6,09	-6,39
Machinery and equipment n.e.c.	-4,94	-5,54	-6,15	-6,76	-7,38	-8,00	-8,62	-9,25	-9,87	-10,49	-11,12	-11,74	-12,36	-12,98	-13,60
Electrical and optical equipment	-8,22	-9,03	-9,86	-10,68	-11,50	-12,32	-13,14	-13,95	-14,77	-15,58	-16,39	-17,19	-17,99	-18,78	-19,58
Transport equipment	-7,48	-8,19	-8,91	-9,62	-10,33	-11,04	-11,75	-12,46	-13,17	-13,87	-14,57	-15,27	-15,97	-16,66	-17,35
Manufacturing n.e.c.	-2,57	-2,89	-3,23	-3,57	-3,92	-4,27	-4,62	-4,98	-5,34	-5,70	-6,06	-6,43	-6,79	-7,15	-7,52
Electricity, gas, steam and hot water supply	0,96	1,05	1,15	1,24	1,34	1,43	1,53	1,62	1,72	1,82	1,92	2,02	2,12	2,23	2,33
Collection, purification and distribution of water	1,12	1,23	1,35	1,46	1,58	1,69	1,81	1,93	2,05	2,17	2,29	2,42	2,54	2,66	2,79
Construction	0,18	0,19	0,21	0,23	0,25	0,27	0,28	0,30	0,32	0,34	0,36	0,38	0,40	0,42	0,44
Sale, maintenance, repair of motor vehicles and motorcycles	1,39	1,52	1,65	1,79	1,92	2,06	2,20	2,34	2,48	2,62	2,76	2,91	3,05	3,20	3,34
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1,31	1,44	1,56	1,69	1,82	1,95	2,08	2,21	2,35	2,48	2,61	2,75	2,89	3,02	3,16
Retail trade, except of motor vehicles and motorcycles	1,36	1,49	1,62	1,75	1,89	2,02	2,16	2,30	2,44	2,57	2,72	2,86	3,00	3,14	3,29
Hotels and restaurants	2,50	2,74	2,98	3,22	3,47	3,71	3,96	4,21	4,46	4,72	4,97	5,23	5,49	5,75	6,02
Land transport; transport via pipelines	0,79	0,87	0,96	1,04	1,13	1,22	1,30	1,39	1,48	1,57	1,66	1,76	1,85	1,94	2,04
Water transport	-0,73	-0,83	-0,93	-1,03	-1,13	-1,23	-1,34	-1,44	-1,55	-1,65	-1,75	-1,86	-1,96	-2,07	-2,17
Air transport	1,49	1,67	1,85	2,03	2,22	2,41	2,60	2,80	2,99	3,19	3,39	3,59	3,79	3,99	4,19
Supporting transport activities; activities of travel agencies	0,95	1,06	1,17	1,29	1,40	1,51	1,63	1,74	1,86	1,98	2,10	2,22	2,34	2,46	2,58
Post and telecommunications	0,91	1,00	1,10	1,19	1,29	1,38	1,48	1,58	1,68	1,78	1,88	1,98	2,08	2,19	2,29
Financial intermediation, excluding insurance and pension funding	-0,20	-0,22	-0,24	-0,26	-0,27	-0,29	-0,30	-0,32	-0,34	-0,35	-0,37	-0,38	-0,40	-0,41	-0,42
Insurance and pension funding, except compulsory social security	0,35	0,38	0,42	0,45	0,49	0,53	0,56	0,60	0,64	0,68	0,72	0,75	0,79	0,83	0,87
Activities auxiliary to financial intermediation	-2,44	-2,77	-3,11	-3,46	-3,81	-4,17	-4,53	-4,89	-5,26	-5,63	-6,00	-6,38	-6,75	-7,13	-7,50
Real estate activities	0,46	0,52	0,57	0,63	0,68	0,74	0,80	0,86	0,92	0,98	1,04	1,10	1,16	1,22	1,28
Renting of machinery and equipment without operator	-0,40	-0,45	-0,51	-0,56	-0,61	-0,66	-0,71	-0,76	-0,81	-0,86	-0,91	-0,96	-1,02	-1,07	-1,12
Computer and related activities; research and development	-0,96	-1,10	-1,23	-1,37	-1,51	-1,66	-1,80	-1,95	-2,09	-2,24	-2,39	-2,53	-2,68	-2,83	-2,97
Other business activities	-0,79	-0,87	-0,95	-1,04	-1,12	-1,21	-1,29	-1,38	-1,46	-1,54	-1,63	-1,71	-1,79	-1,88	-1,96
Public administration and defence; compulsory social security	-0,74	-0,81	-0,88	-0,95	-1,02	-1,10	-1,17	-1,25	-1,33	-1,40	-1,48	-1,56	-1,63	-1,71	-1,79
Education	-0,73	-0,79	-0,86	-0,92	-0,99	-1,06	-1,12	-1,19	-1,26	-1,33	-1,40	-1,47	-1,54	-1,61	-1,68
Health and social work	0,34	0,37	0,41	0,44	0,48	0,52	0,55	0,59	0,62	0,66	0,70	0,74	0,77	0,81	0,85
Other community, social and personal service activities	1,20	1,32	1,44	1,56	1,68	1,80	1,93	2,05	2,18	2,30	2,43	2,56	2,69	2,82	2,95
Activities of households as employers of domestic staff	1,53	1,68	1,82	1,97	2,12	2,27	2,42	2,58	2,73	2,88	3,04	3,20	3,35	3,51	3,67

Focusing on the main sectors of the Azorean economy, the results of this first scenario point to a positive, even if small, impact on agriculture and dairy production and a negative impact on meat production, fishing and fish processing. None of the major economic activities in the Azores are significantly affected on the negative side. The negative impact of public administration results from the assumptions made with respect to closure rules which restrict public expenditure. Public policy might eventually determine otherwise. This would imply a different scenario. Still on the positive impacts we would find retail trade, restaurant and hotel activities and air transport. This conclusion is similar to that obtained by François and Manchin (2014), except for the results we find for agriculture and the dairy industry which is positive.

Scenario 1B provides the same pattern of results, with slightly different impact magnitudes.

Scenario 2A provides a different conclusion for the impact on agriculture which is now negative, even if small. Otherwise, the same conclusions hold even if with different magnitudes that are consistent with the aggregate results obtained. This result might be due to induced effects through the national economy which had a negative variation in the primary sector.

The same conclusion holds for the remaining scenarios.

This leads to a general conclusion that critical sectors like dairy will not be negatively affected. On the contrary this sector will tend to gain with the new context, with impacts that vary, by 2030, from 5,55% in scenario 2A to 13,13% in scenario 1B. The for agriculture are ambiguous, varying from plus 0,82% to minus 1,6%.

The impact on construction is very small, at a maximum of 0,48% in the more favorable scenario.

Retail trade, tourism, and air travel all increase with clearly positive impacts.

Fisheries and fish processing will tend to exhibit negative impacts. This result is consistent in all scenarios and with the results of François and Manchin (2014).

The results of scenario 2A are presented below. The results of all other scenarios are included in the annex.

Impact of TTIP on the Economy of the Azores

Table 19 - Value Added Impacts by Sector – Scenario 2A

Scenario 2A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Value added (% change to the BAU)															
Agriculture, hunting and forestry, logging	-0,16	-0,18	-0,21	-0,24	-0,28	-0,32	-0,36	-0,42	-0,48	-0,56	-0,64	-0,74	-0,86	-0,99	-1,15
Fishing	-0,40	-0,46	-0,51	-0,57	-0,63	-0,70	-0,77	-0,84	-0,93	-1,02	-1,12	-1,23	-1,35	-1,49	-1,65
Mining and quarrying	-0,77	-0,86	-0,96	-1,06	-1,16	-1,26	-1,37	-1,49	-1,60	-1,73	-1,86	-2,00	-2,15	-2,31	-2,48
Production of meat and meat products	-0,62	-0,69	-0,76	-0,84	-0,92	-1,00	-1,08	-1,17	-1,26	-1,35	-1,44	-1,54	-1,65	-1,76	-1,88
Processing of fish and fish products	-0,59	-0,67	-0,76	-0,84	-0,94	-1,04	-1,15	-1,28	-1,41	-1,57	-1,73	-1,93	-2,14	-2,38	-2,66
Manufacture of dairy products	2,90	3,17	3,44	3,70	3,95	4,19	4,42	4,64	4,84	5,02	5,19	5,33	5,43	5,51	5,55
Prepared animal feeds	-1,14	-1,25	-1,37	-1,50	-1,62	-1,76	-1,91	-2,06	-2,23	-2,41	-2,61	-2,82	-3,06	-3,31	-3,60
Beverages & tobacco products	0,57	0,63	0,68	0,74	0,79	0,84	0,89	0,94	0,99	1,03	1,07	1,10	1,13	1,15	1,16
Fruits, vegetables, animal oils, grain mill, starches	-2,50	-2,75	-3,01	-3,27	-3,54	-3,81	-4,09	-4,37	-4,67	-4,98	-5,30	-5,64	-5,99	-6,36	-6,76
Textiles and leather	15,08	18,06	21,40	25,13	29,29	33,93	39,11	44,88	51,32	58,50	66,51	75,45	85,41	96,51	108,88
Wood and products of wood and cork	-0,66	-0,75	-0,84	-0,93	-1,02	-1,13	-1,24	-1,35	-1,48	-1,61	-1,75	-1,91	-2,08	-2,26	-2,46
Pulp, paper products; publishing and printing	-2,35	-2,62	-2,89	-3,17	-3,47	-3,77	-4,09	-4,42	-4,77	-5,14	-5,53	-5,95	-6,39	-6,87	-7,39
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-3,05	-3,33	-3,61	-3,90	-4,18	-4,46	-4,75	-5,04	-5,32	-5,61	-5,91	-6,21	-6,51	-6,82	-7,14
Rubber and plastic products	-2,00	-2,22	-2,46	-2,69	-2,94	-3,19	-3,45	-3,72	-4,00	-4,29	-4,59	-4,91	-5,25	-5,60	-5,99
Other non-metallic mineral products	-1,51	-1,69	-1,87	-2,05	-2,24	-2,44	-2,64	-2,85	-3,06	-3,29	-3,53	-3,78	-4,04	-4,32	-4,62
Basic metals and fabricated metal products	-1,83	-2,07	-2,32	-2,57	-2,83	-3,10	-3,38	-3,67	-3,97	-4,27	-4,59	-4,93	-5,28	-5,65	-6,04
Machinery and equipment n.e.c.	-3,56	-4,01	-4,49	-4,97	-5,46	-5,97	-6,49	-7,03	-7,59	-8,16	-8,75	-9,37	-10,02	-10,70	-11,41
Electrical and optical equipment	-5,95	-6,59	-7,24	-7,90	-8,58	-9,28	-9,99	-10,73	-11,49	-12,28	-13,10	-13,96	-14,86	-15,81	-16,82
Transport equipment	-5,41	-5,97	-6,54	-7,12	-7,71	-8,32	-8,95	-9,60	-10,27	-10,97	-11,70	-12,46	-13,26	-14,11	-15,02
Manufacturing n.e.c.	-1,89	-2,15	-2,42	-2,69	-2,98	-3,27	-3,57	-3,88	-4,20	-4,54	-4,88	-5,25	-5,62	-6,02	-6,43
Electricity, gas, steam and hot water supply	0,68	0,75	0,82	0,90	0,97	1,06	1,14	1,24	1,33	1,44	1,55	1,67	1,80	1,95	2,10
Collection, purification and distribution of water	0,72	0,80	0,87	0,95	1,03	1,11	1,20	1,29	1,38	1,47	1,57	1,68	1,79	1,91	2,04
Construction	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
Sale, maintenance, repair of motor vehicles and motorcycles	1,02	1,12	1,23	1,34	1,45	1,56	1,68	1,81	1,94	2,08	2,22	2,37	2,54	2,71	2,90
Wholesale trade and commission trade, except of motor vehicles and motorcycles	0,92	1,01	1,11	1,20	1,30	1,41	1,51	1,62	1,74	1,86	1,99	2,13	2,28	2,44	2,61
Retail trade, except of motor vehicles and motorcycles	0,97	1,08	1,18	1,29	1,40	1,52	1,64	1,77	1,90	2,04	2,19	2,36	2,53	2,72	2,93
Hotels and restaurants	1,95	2,15	2,35	2,56	2,78	3,01	3,25	3,50	3,76	4,04	4,34	4,66	5,00	5,38	5,79
Land transport; transport via pipelines	0,58	0,64	0,70	0,76	0,83	0,89	0,95	1,02	1,08	1,14	1,21	1,28	1,35	1,42	1,49
Water transport	-0,25	-0,29	-0,34	-0,39	-0,45	-0,51	-0,58	-0,66	-0,74	-0,83	-0,94	-1,06	-1,19	-1,34	-1,51
Air transport	0,76	0,84	0,91	0,98	1,04	1,09	1,14	1,17	1,19	1,20	1,19	1,17	1,11	1,04	0,92
Supporting transport activities; activities of travel agencies	0,77	0,85	0,93	1,01	1,08	1,16	1,23	1,30	1,37	1,43	1,49	1,54	1,59	1,63	1,66
Post and telecommunications	0,71	0,79	0,87	0,95	1,04	1,13	1,22	1,32	1,42	1,53	1,64	1,76	1,89	2,03	2,19
Financial intermediation, excluding insurance and pension funding	-0,11	-0,12	-0,13	-0,15	-0,16	-0,17	-0,18	-0,19	-0,21	-0,22	-0,24	-0,26	-0,28	-0,30	-0,32
Insurance and pension funding, except compulsory social security	0,29	0,32	0,36	0,39	0,43	0,47	0,52	0,56	0,61	0,67	0,73	0,80	0,87	0,95	1,04
Activities auxiliary to financial intermediation	-1,77	-2,03	-2,29	-2,57	-2,86	-3,15	-3,46	-3,78	-4,10	-4,45	-4,80	-5,17	-5,56	-5,97	-6,40
Real estate activities	0,32	0,36	0,40	0,44	0,48	0,53	0,58	0,62	0,68	0,73	0,79	0,85	0,92	0,99	1,07
Renting of machinery and equipment without operator	-0,29	-0,33	-0,37	-0,41	-0,46	-0,50	-0,55	-0,60	-0,65	-0,70	-0,75	-0,81	-0,86	-0,93	-0,99
Computer and related activities; research and development	-0,28	-0,33	-0,37	-0,43	-0,49	-0,55	-0,62	-0,70	-0,78	-0,88	-0,98	-1,10	-1,24	-1,39	-1,56
Other business activities	-0,57	-0,63	-0,70	-0,77	-0,85	-0,93	-1,01	-1,09	-1,18	-1,27	-1,37	-1,48	-1,59	-1,71	-1,85
Public administration and defence; compulsory social security	-0,52	-0,57	-0,63	-0,68	-0,73	-0,78	-0,84	-0,89	-0,95	-1,01	-1,06	-1,12	-1,18	-1,24	-1,30
Education	-0,51	-0,55	-0,60	-0,64	-0,69	-0,74	-0,78	-0,83	-0,88	-0,93	-0,98	-1,03	-1,08	-1,13	-1,18
Health and social work	0,26	0,29	0,32	0,36	0,39	0,43	0,48	0,52	0,58	0,63	0,70	0,77	0,85	0,94	1,05
Other community, social and personal service activities	0,90	1,00	1,10	1,21	1,32	1,44	1,56	1,69	1,83	1,98	2,14	2,32	2,51	2,72	2,95
Activities of households as employers of domestic staff	1,17	1,29	1,42	1,56	1,70	1,86	2,02	2,19	2,37	2,57	2,78	3,01	3,27	3,55	3,87

5.6. Exports by Sector

In scenario 1A, shown below, total exports exhibit a positive impact except for agriculture, fisheries and mining and quarrying, and some other small sectors. The same pattern holds for scenario 1B (see annex).

In scenario 2A, also shown below, total exports exhibit a positive impact except for agriculture and fisheries and mining and quarrying and a few other less significant sectors. The same pattern holds for scenario 2B and 3A and 3B (see annex).

Looking at regional impacts, exports to the US tend to increase for all sectors except agriculture and fisheries, which are, anyway of little absolute weight. The full set of simulations is presented in the annex.

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Table 20 - Total Export Impacts by Sector – Scenario 1A

Scenario 1A															
Total exports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-1,35	-1,46	-1,56	-1,67	-1,77	-1,87	-1,97	-2,07	-2,16	-2,26	-2,36	-2,46	-2,55	-2,65	-2,74
Fishing	-1,55	-1,70	-1,85	-2,01	-2,16	-2,31	-2,47	-2,62	-2,77	-2,93	-3,08	-3,24	-3,39	-3,54	-3,69
Mining and quarrying	-1,17	-1,30	-1,43	-1,55	-1,68	-1,81	-1,94	-2,07	-2,20	-2,33	-2,46	-2,59	-2,72	-2,85	-2,98
Production of meat and meat products	1,20	1,29	1,39	1,48	1,58	1,68	1,77	1,87	1,97	2,07	2,16	2,26	2,36	2,45	2,55
Processing of fish and fish products	0,91	0,98	1,05	1,12	1,19	1,26	1,33	1,40	1,47	1,53	1,60	1,67	1,74	1,81	1,87
Manufacture of dairy products	5,14	5,65	6,18	6,70	7,23	7,76	8,29	8,82	9,36	9,89	10,43	10,98	11,52	12,07	12,61
Prepared animal feeds	4,11	4,50	4,89	5,28	5,67	6,07	6,46	6,86	7,26	7,66	8,06	8,47	8,87	9,27	9,68
Beverages & tobacco products	4,13	4,53	4,92	5,32	5,72	6,12	6,52	6,93	7,33	7,74	8,15	8,55	8,96	9,38	9,79
Fruits, vegetables, animal oils, grain mill, starches	2,83	3,08	3,33	3,58	3,83	4,09	4,34	4,59	4,84	5,09	5,34	5,60	5,85	6,10	6,35
Textiles and leather	3,44	3,73	4,02	4,30	4,59	4,87	5,16	5,44	5,72	6,00	6,28	6,56	6,84	7,12	7,40
Wood and products of wood and cork	3,71	4,06	4,41	4,77	5,12	5,48	5,84	6,20	6,56	6,92	7,28	7,64	8,00	8,36	8,73
Pulp, paper products; publishing and printing	2,91	3,14	3,37	3,60	3,82	4,04	4,27	4,49	4,71	4,93	5,15	5,37	5,59	5,80	6,02
Coke, refined petroleum products and nuclear	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	5,59	6,11	6,64	7,17	7,70	8,23	8,77	9,31	9,86	10,40	10,95	11,51	12,06	12,62	13,18
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	3,81	4,11	4,40	4,70	5,00	5,29	5,59	5,89	6,18	6,48	6,77	7,07	7,36	7,66	7,95
Basic metals and fabricated metal products	3,87	4,14	4,40	4,65	4,90	5,15	5,40	5,64	5,88	6,12	6,36	6,60	6,83	7,07	7,30
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	3,29	3,50	3,71	3,91	4,10	4,29	4,48	4,66	4,84	5,02	5,19	5,37	5,54	5,71	5,88
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and	3,66	4,02	4,37	4,73	5,08	5,44	5,80	6,16	6,52	6,88	7,24	7,60	7,96	8,33	8,69
Wholesale trade and commission trade, except of	2,70	2,98	3,25	3,53	3,80	4,08	4,36	4,63	4,91	5,19	5,47	5,74	6,02	6,30	6,58
Retail trade, except of motor vehicles and	2,81	3,09	3,37	3,66	3,94	4,23	4,51	4,80	5,09	5,37	5,66	5,95	6,24	6,52	6,81
Hotels and restaurants	3,94	4,31	4,68	5,06	5,43	5,81	6,19	6,58	6,96	7,35	7,73	8,12	8,52	8,91	9,31
Land transport; transport via pipelines	1,05	1,17	1,29	1,41	1,53	1,65	1,76	1,88	2,00	2,12	2,24	2,36	2,48	2,60	2,72
Water transport	-0,13	-0,18	-0,23	-0,29	-0,35	-0,41	-0,47	-0,54	-0,60	-0,67	-0,73	-0,80	-0,87	-0,93	-1,00
Air transport	2,49	2,76	3,03	3,30	3,57	3,84	4,11	4,39	4,66	4,94	5,22	5,50	5,78	6,06	6,34
Supporting transport activities; activities of travel	0,98	1,10	1,22	1,34	1,46	1,59	1,71	1,83	1,95	2,08	2,20	2,32	2,45	2,57	2,69
Post and telecommunications	1,26	1,39	1,52	1,65	1,79	1,92	2,06	2,19	2,32	2,46	2,59	2,72	2,86	2,99	3,13
Financial intermediation, excluding insurance and	-1,75	-1,92	-2,08	-2,25	-2,42	-2,58	-2,75	-2,92	-3,08	-3,25	-3,42	-3,58	-3,75	-3,92	-4,08
Insurance and pension funding, except	-1,06	-1,16	-1,25	-1,34	-1,43	-1,53	-1,62	-1,71	-1,80	-1,90	-1,99	-2,08	-2,18	-2,27	-2,37
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and	2,47	2,65	2,82	2,99	3,15	3,32	3,48	3,64	3,80	3,95	4,11	4,26	4,42	4,57	4,72
Other business activities	-0,66	-0,75	-0,85	-0,94	-1,03	-1,13	-1,22	-1,31	-1,41	-1,50	-1,59	-1,69	-1,78	-1,88	-1,97
Public administration and defence; compulsory	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service	3,26	3,57	3,88	4,20	4,51	4,83	5,14	5,46	5,78	6,10	6,41	6,73	7,05	7,37	7,69
Activities of households as employers of	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table 21 - Total Export Impacts by Sector – Scenario 2A

Scenario 2A															
Total exports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-1,34	-1,48	-1,63	-1,78	-1,94	-2,10	-2,28	-2,46	-2,65	-2,85	-3,07	-3,30	-3,55	-3,82	-4,12
Fishing	-1,32	-1,47	-1,63	-1,80	-1,97	-2,15	-2,34	-2,54	-2,75	-2,97	-3,22	-3,48	-3,76	-4,07	-4,41
Mining and quarrying	-1,31	-1,47	-1,63	-1,80	-1,98	-2,16	-2,36	-2,57	-2,78	-3,02	-3,26	-3,53	-3,82	-4,14	-4,48
Production of meat and meat products	0,28	0,27	0,25	0,23	0,21	0,18	0,14	0,10	0,04	-0,02	-0,10	-0,19	-0,29	-0,42	-0,56
Processing of fish and fish products	-0,02	-0,08	-0,15	-0,23	-0,32	-0,43	-0,56	-0,70	-0,87	-1,07	-1,31	-1,57	-1,89	-2,25	-2,67
Manufacture of dairy products	3,58	3,90	4,22	4,53	4,84	5,13	5,40	5,66	5,90	6,12	6,32	6,48	6,61	6,70	6,75
Prepared animal feeds	2,38	2,57	2,74	2,91	3,07	3,22	3,35	3,47	3,56	3,64	3,69	3,71	3,69	3,64	3,53
Beverages & tobacco products	3,00	3,25	3,51	3,76	3,99	4,22	4,44	4,65	4,84	5,01	5,16	5,29	5,40	5,46	5,49
Fruits, vegetables, animal oils, grain mill, starches	-3,95	-4,35	-4,75	-5,16	-5,58	-6,01	-6,46	-6,91	-7,38	-7,86	-8,37	-8,90	-9,46	-10,05	-10,67
Textiles and leather	52,41	58,48	64,69	71,00	77,38	83,79	90,18	96,50	102,70	108,74	114,56	120,12	125,39	130,32	134,88
Wood and products of wood and cork	-0,59	-0,70	-0,81	-0,94	-1,08	-1,23	-1,40	-1,58	-1,78	-2,01	-2,26	-2,53	-2,84	-3,19	-3,58
Pulp, paper products; publishing and printing	-0,80	-0,96	-1,13	-1,31	-1,51	-1,72	-1,95	-2,21	-2,49	-2,80	-3,14	-3,52	-3,94	-4,42	-4,95
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-10,28	-11,18	-12,08	-12,97	-13,85	-14,74	-15,62	-16,49	-17,37	-18,24	-19,12	-20,00	-20,88	-21,77	-22,67
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	-3,06	-3,42	-3,79	-4,16	-4,55	-4,94	-5,35	-5,77	-6,21	-6,66	-7,14	-7,64	-8,17	-8,73	-9,33
Basic metals and fabricated metal products	-5,65	-6,28	-6,91	-7,56	-8,21	-8,87	-9,55	-10,23	-10,93	-11,64	-12,37	-13,12	-13,89	-14,68	-15,50
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	-2,23	-2,55	-2,89	-3,23	-3,59	-3,97	-4,35	-4,76	-5,18	-5,62	-6,08	-6,56	-7,07	-7,61	-8,19
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and	5,24	5,72	6,20	6,68	7,15	7,62	8,08	8,53	8,98	9,41	9,82	10,22	10,59	10,94	11,27
Wholesale trade and commission trade, except of	4,17	4,55	4,93	5,31	5,67	6,03	6,38	6,71	7,03	7,33	7,61	7,87	8,10	8,29	8,44
Retail trade, except of motor vehicles and	4,42	4,83	5,23	5,63	6,02	6,40	6,77	7,12	7,46	7,78	8,08	8,36	8,60	8,81	8,97
Hotels and restaurants	5,03	5,50	5,98	6,45	6,93	7,41	7,89	8,37	8,85	9,34	9,82	10,31	10,80	11,29	11,78
Land transport; transport via pipelines	1,72	1,88	2,03	2,17	2,30	2,43	2,54	2,64	2,72	2,79	2,83	2,85	2,84	2,79	2,71
Water transport	0,58	0,60	0,61	0,62	0,61	0,60	0,58	0,55	0,50	0,44	0,37	0,27	0,15	0,01	-0,17
Air transport	1,75	1,90	2,06	2,20	2,34	2,47	2,58	2,68	2,76	2,82	2,86	2,87	2,85	2,79	2,68
Supporting transport activities; activities of travel	1,67	1,83	1,99	2,14	2,28	2,41	2,53	2,64	2,73	2,81	2,87	2,90	2,90	2,87	2,80
Post and telecommunications	2,09	2,28	2,46	2,64	2,81	2,97	3,11	3,25	3,37	3,47	3,56	3,62	3,65	3,65	3,61
Financial intermediation, excluding insurance and	-0,40	-0,47	-0,54	-0,62	-0,71	-0,80	-0,91	-1,03	-1,17	-1,32	-1,50	-1,69	-1,92	-2,18	-2,47
Insurance and pension funding, except compulsory	-0,01	-0,02	-0,04	-0,06	-0,09	-0,12	-0,17	-0,22	-0,28	-0,36	-0,45	-0,56	-0,69	-0,84	-1,03
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and	3,96	4,29	4,62	4,94	5,25	5,56	5,86	6,15	6,42	6,69	6,94	7,17	7,38	7,56	7,72
Other business activities	0,20	0,17	0,13	0,08	0,03	-0,03	-0,10	-0,19	-0,29	-0,40	-0,53	-0,69	-0,86	-1,07	-1,31
Public administration and defence; compulsory	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service	2,80	3,05	3,30	3,54	3,77	4,00	4,23	4,44	4,64	4,83	5,01	5,16	5,30	5,42	5,50
Activities of households as employers of domestic	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

5.7. Imports by Sector

Total imports and imports from the major trade partners – EU, Mainland and the US – exhibit a positive evolution. In the end, this means that the impact of TTIP will lead to more imports in all sectors, which is consistent with more economic activity in a small open economy that imports just about everything. Because of the homogeneity of the pattern of imports, we only report the values of scenario 1A. The other scenarios can be found in the annex.

Impact of TTIP on the Economy of the Azores

Table 22 - Total Import Impacts by Sector – Scenario 1A

Scenario 1A															
Total imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	4,78	5,25	5,73	6,22	6,70	7,19	7,68	8,18	8,68	9,19	9,70	10,21	10,72	11,24	11,76
Fishing	2,94	3,22	3,51	3,80	4,09	4,39	4,68	4,98	5,29	5,59	5,90	6,20	6,51	6,83	7,14
Mining and quarrying	1,41	1,54	1,66	1,79	1,92	2,05	2,18	2,31	2,45	2,58	2,71	2,85	2,98	3,12	3,26
Production of meat and meat products	5,68	6,24	6,80	7,37	7,94	8,51	9,09	9,67	10,26	10,85	11,44	12,04	12,64	13,25	13,86
Processing of fish and fish products	5,09	5,58	6,08	6,59	7,10	7,61	8,13	8,65	9,18	9,71	10,24	10,78	11,32	11,87	12,42
Manufacture of dairy products	4,43	4,83	5,22	5,62	6,02	6,42	6,82	7,23	7,65	8,06	8,48	8,90	9,33	9,76	10,19
Prepared animal feeds	4,53	4,96	5,39	5,82	6,26	6,71	7,15	7,60	8,06	8,51	8,97	9,44	9,91	10,38	10,85
Beverages & tobacco products	5,45	5,96	6,47	6,98	7,50	8,02	8,55	9,08	9,61	10,15	10,69	11,23	11,78	12,33	12,89
Fruits, vegetables, animal oils, grain mill, starches	2,68	2,94	3,21	3,47	3,74	4,00	4,27	4,54	4,81	5,09	5,36	5,64	5,92	6,20	6,48
Textiles and leather	2,09	2,29	2,49	2,69	2,89	3,09	3,30	3,51	3,71	3,92	4,13	4,34	4,56	4,77	4,98
Wood and products of wood and cork	7,00	7,64	8,28	8,93	9,59	10,25	10,91	11,58	12,26	12,94	13,62	14,31	15,01	15,71	16,42
Pulp, paper products; publishing and printing	3,36	3,70	4,04	4,39	4,74	5,09	5,44	5,80	6,16	6,52	6,89	7,25	7,62	7,99	8,37
Coke, refined petroleum products and nuclear fuel	1,28	1,40	1,53	1,65	1,77	1,90	2,02	2,15	2,28	2,41	2,54	2,67	2,80	2,93	3,06
Chemicals and chemical products	1,21	1,32	1,44	1,55	1,66	1,78	1,89	2,01	2,13	2,24	2,36	2,48	2,60	2,72	2,84
Rubber and plastic products	1,40	1,54	1,67	1,81	1,95	2,08	2,22	2,36	2,50	2,65	2,79	2,93	3,08	3,22	3,37
Other non-metallic mineral products	3,19	3,53	3,87	4,22	4,57	4,93	5,28	5,64	6,00	6,36	6,73	7,10	7,47	7,84	8,21
Basic metals and fabricated metal products	2,07	2,31	2,56	2,81	3,06	3,32	3,58	3,84	4,11	4,37	4,64	4,91	5,19	5,46	5,74
Machinery and equipment n.e.c.	1,33	1,48	1,65	1,81	1,98	2,14	2,31	2,48	2,66	2,83	3,00	3,18	3,35	3,53	3,71
Electrical and optical equipment	0,58	0,64	0,70	0,76	0,81	0,87	0,93	0,99	1,05	1,11	1,17	1,23	1,30	1,36	1,42
Transport equipment	1,22	1,34	1,45	1,57	1,69	1,81	1,92	2,04	2,17	2,29	2,41	2,53	2,66	2,78	2,90
Manufacturing n.e.c.	1,14	1,26	1,37	1,49	1,60	1,72	1,84	1,96	2,08	2,20	2,32	2,44	2,57	2,69	2,82
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	6,70	7,31	7,93	8,56	9,19	9,82	10,46	11,11	11,76	12,42	13,08	13,75	14,43	15,11	15,80
Wholesale trade and commission trade, except of motor vehicles and motorcycles	7,99	8,71	9,43	10,15	10,89	11,63	12,38	13,13	13,90	14,67	15,45	16,23	17,03	17,83	18,64
Retail trade, except of motor vehicles and motorcycles	8,55	9,32	10,10	10,89	11,69	12,49	13,30	14,12	14,95	15,79	16,63	17,49	18,35	19,22	20,10
Hotels and restaurants	5,50	6,01	6,52	7,04	7,56	8,09	8,62	9,15	9,69	10,23	10,78	11,33	11,88	12,44	13,00
Land transport; transport via pipelines	7,64	8,33	9,03	9,73	10,45	11,17	11,89	12,62	13,36	14,11	14,86	15,63	16,39	17,17	17,95
Water transport	6,58	7,24	7,91	8,59	9,27	9,97	10,67	11,37	12,09	12,81	13,54	14,27	15,01	15,76	16,51
Air transport	4,44	4,84	5,24	5,65	6,05	6,46	6,87	7,29	7,71	8,13	8,55	8,98	9,41	9,84	10,28
Supporting transport activities; activities of travel agencies	8,11	8,84	9,59	10,34	11,09	11,86	12,63	13,41	14,20	14,99	15,80	16,61	17,43	18,26	19,09
Post and telecommunications	7,50	8,19	8,88	9,58	10,29	11,01	11,73	12,46	13,19	13,93	14,68	15,44	16,20	16,97	17,75
Financial intermediation, excluding insurance and pension funding	6,31	6,93	7,55	8,18	8,81	9,45	10,09	10,74	11,40	12,06	12,73	13,40	14,08	14,76	15,45
Insurance and pension funding, except compulsory social security	5,81	6,35	6,90	7,45	8,01	8,58	9,14	9,72	10,30	10,88	11,46	12,06	12,65	13,26	13,86
Activities auxiliary to financial intermediation	1,01	1,11	1,21	1,31	1,42	1,52	1,63	1,74	1,85	1,96	2,07	2,18	2,29	2,41	2,52
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	6,36	6,99	7,62	8,26	8,91	9,56	10,22	10,88	11,55	12,22	12,90	13,58	14,27	14,97	15,67
Computer and related activities; research and development	0,67	0,74	0,80	0,87	0,94	1,01	1,08	1,15	1,22	1,29	1,36	1,43	1,51	1,58	1,66
Other business activities	4,65	5,12	5,61	6,09	6,58	7,08	7,58	8,08	8,58	9,09	9,61	10,12	10,64	11,16	11,69
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	7,20	7,87	8,55	9,23	9,92	10,62	11,32	12,03	12,74	13,47	14,19	14,93	15,67	16,42	17,18
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

6. Conclusion

The current work focused on the estimation of the impacts of the TTIP agreement on the economy of the Azores, a very small open economy, totally integrated in the Portuguese economy. A dynamic CGE model – AZORMOD - was used to undertake the exercise and to try to overcome some of the shortcomings of a similar study undertaken by Francois and Manchin (2014).

The conclusions at which the current study arrives are not, overall, inconsistent, even if different, with previous estimates, providing finer estimates and more specific detail.

Six scenarios were used to obtain results, varying according to two factors: one was the assumptions about indirect impacts, given that we are considering a small integrated open economy and, as such, it was considered desirable to study potential indirect impacts coming from the US, the Mainland and the EU; the other was the intensity of reduction of non-tariff barriers.

For the major aggregate variables analyzed, the current study concludes that, by 2030, depending on the scenario that is chosen: GDP will rise between 0,4% relative to BAU, in a modest scenario (2A) and a higher limit of 0,77%, obtained in an ambitious scenario (3B); All scenarios, for all periods, point to positive GDP impacts that become larger with time; Private consumption will be higher between 3,70% and 5,92%; foreign balances will be improved in the presence of intensified trade both in imports and exports; Employment will rise between 1,05% and 1,67%, meaning additional jobs (quite different from the -019% to -08% in François and Manchin (2014)); The unemployment rate can fall as much as 1,56 percent; Government revenues can rise by as much as 5,5%.

One major concern of the TTIP agreement, however, is its impact on different sectors. For the Azores that would, mainly, imply the milk value chain, the fish value chain and the tourism value chain. This was analyzed resorting to the measured impacts on value added generation. The main conclusion was that the overall positive impact was unevenly distributed with some sectors gaining and some loosing. The main negative impact, even if small, is in fisheries and fish processing. The results for agriculture are ambiguous (positive in some scenarios and negative in others). None of the major economic activities in the Azores, however, are significantly affected on the negative side.

The negative impact of public administration results from the assumptions made with respect to closure rules which restrict public expenditure. Public policy might eventually determine otherwise. The main gainers are the dairy industry, and all the activities associated to tourism.

This result, in conjunction with the previous aggregate results, suggests that adhering to TTIP will provide positive results, even if catering to some areas where the impacts will most likely be negative, is recommendable. For the Azores, this implies looking closely fisheries, given its importance for the local economy. Agriculture also warrants attention given its weight in the regional economy and the ambiguity of the results.

Another concern was the distributional impacts of this trade liberalization policy. To assess the impacts equivalent variation measures were used, distributed by six household income categories. One conclusion is that the overall impact will amount to a value equivalent to between 75 and 119 million euros per year, by 2030. The income group that will gain, relatively, the least is the lowest one. The second lowest gainer, in relative terms, is the highest income group.

Finally one can break down the aggregate trade impacts by sectors. Imports, it turns out, as expected, will tend to increase in all sectors, for all trading partners.

Exports, however, will have a differentiated impact depending on the sector. Many will gain exports but some will fall, affecting demand. In this case the main export gainers are the dairy industry, hotels and restaurants and air transport services. The main export losers are fisheries and fish processing and agriculture.

Given the overall results of the simulations undertaken support is provided for the decision to subscribe to the TTIP agreement, as far as this region is concerned. Care and adequate policies, however, should be designed to mitigate the potential negative impacts in some sectors such as fisheries and agriculture. On the other hand, working on the positive side, sectors with potential positive effects could be a good area of policy incidence to promote growth.

Even though we have tried to carefully refer the shortcomings of the current study one should still refer the main areas of improvement of the current work. The main area would be the preparation of a new, more up to date, Social Accounting Matrix. The current matrix was originally composed with 2001 data now updated to 2005. More recent data would provide a better point of reference for the projections. Otherwise modeling reality is a never ending task and other specifications could be tried to relax some of the assumptions made such as perfect competition.

Nevertheless, models are useful tools to guide policy makers as to the right direction to take. With the enumerated caveats, the current study provides some clear policy paths to increment social wellbeing.

References

1. Bayar, et al. (2010). “Dynamic General Equilibrium Model of the Azorean Economy”. In *Computable General Equilibrium Models: Theory and Applications*. Centro de Estudos de Economia Aplicada do Atlântico, Mário Fortuna and Sameer Rege, eds. University of the Azores. 2010.
2. CEPR (2013a). “Reducing Transatlantic Barriers to Trade and Investment, An Economic Assessment”, Final Project Report under Implementing Framework Contract TRADE10/A2/A16 by Francois et al.
3. CEPR (2013b). “Estimating the Economic Impact on the UK of a Transatlantic Trade and Investment Partnership (TTIP) Agreement between the European Union and the United States”, Final Project Report.
4. Dervis, K. De Melo, J. and Robinson, S. (1982). *General Equilibrium Models for Development Policy*. The World Bank. Washington DC.
5. Dixon, Peter and Rimmer, Maureen. (2002). *USAGE-ITC: Theoretical Structure*. Centre of Policy Studies, Monash University, Australia
6. Ecorys (2009), “Non-Tariff Measures in EU-US Trade and Investment. An Economic Analysis”. http://trade.ec.europa.eu/doclib/docs/2009/december/tradoc_145613.pdf (Report prepared for European Commission, Directorate-General-for -Trade, Reference: OJ 2007/S 180N219493).
7. Jacques Pelkmans, Arjan Lejour, Lorna Schrefler, Federica Mustilli and Jacopo Timini (2014). *The Impact of TTIP: The underlying economic model and comparisons*. Centre for Economic Policy Research, London.

8. Joseph Francois and Miriam Manchin. (2014). Quantifying the Impact of a Transatlantic Trade and Investment Partnership (T-TIP) Agreement on Portugal. Centre for Economic Policy Research. London.
9. Joseph Francois, Miriam Manchin, Hanna Norberg, Olga Pindyuk, Patrick Tomberger (2013) “Reducing Transatlantic Barriers to Trade and Investment: an economic assessment”. Centre for Economic Policy Research, London
10. Löfgren, Harris and Robinson, S. (2002). A Standard Computable General Equilibrium (CGE) Model in GAMS. Microcomputers in Policy Research. <http://www.ifpri.org/pubs/microcom/micro5.htm> 5, IFPRI.
11. Rosenthal. R.E. (2006). GAMS – A User’s Guide (GAMS Development Corporation, Washington DC.
12. Sanz-de-Galdeano, Anna and Turunen, J. (2006). “The Euro Area Wage Curve”. In Economic Letters, Volume 92, Issue 1, July, Pages 93-98.
13. Varian, H. (1992). Microeconomic Analysis. Third Edition. Norton & Company. N.Y.

ANNEXES

Brief Characterization of the Azorean Economy

The purpose of the current annex is to put into perspective some numbers that might help understand the simulations of the impacts of TTIP and to help interpret the estimates that are obtained. Focus will be placed, on the one hand, on the relative weight of each sector in terms of contribution to value added and employment and, on the other hand, on the relative weight of direct trade. We speak of direct trade because the trade statistics only capture trade that is done directly with third countries through customs in the Azores. It is expected that a great deal of the trade done goes through mainland customs and, as such, does not show up as trade from the Azores.

Looking first at the value added statistics, we can analyze table 1 that illustrates the importance of Public Administration in the economy of the Azores together with Education and Health (29%). The contribution of Sales, Transport and Storage, Hotels, Restaurants and Similar (24%) is also of notice. Agriculture, Animal Production, Hunting, Fishing and Forestry contribute with 10% to total gross value added. Industry accounts for 9%. A surprisingly high share of value added is generated in real-estate activities.

These values suggest that the analysis should focus on the main primary transactional production activities – agriculture and fishing and on industry. It also suggests that industry will be of some importance.

Service activities associated to commerce and tourism are also of considerable weight (24%). One should also note that there were no major structural changes between 2000

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and 2014. The bigger changes are registered in real-estate activities and construction, both non-transactional sectors.

Table A-1 - Gross value added in the Azores by sector of activity.

Unit: millions of euros

Sectors	2000	%	2010	%	2014(pre)	%
<i>Agriculture, Animal Production, Hunting, Fishing and Forestry</i>	239,9	11%	273,1	8%	324,7	10%
<i>Mining and Quarrying, Processing Industries, Electricity, Gas, Steam, Hot Water Supply and Purification and Distribution of Water</i>	154,8	7%	280,8	8%	284,9	9%
<i>Construction</i>	166,5	8%	204,3	6%	124,5	4%
<i>Sales, Transport and Storage, Hotels, Restaurants and similar</i>	495,9	23%	830,3	25%	787,8	24%
<i>Telecommunications</i>	49,2	2%	61,4	2%	53,6	2%
<i>Financial and Insurance Activities</i>	79,6	4%	125,7	4%	94,9	3%
<i>Real Estate Activities</i>	180,9	9%	372,6	11%	439,6	13%
<i>Consultant, Scientific and Technical Activities;</i>						
<i>Administrative Activities and Support Services</i>	71,9	3%	120,7	4%	114,9	4%
<i>Public Administration and Defense; Compulsory Social Security; Education, Health and Social Work</i>	638,2	30%	1004,5	30%	930	29%
<i>Artistic, Sport and Recreative Activities and Other Service Activities</i>	50,1	2%	101	3%	108,1	3%

2014 data are preliminary.

Source: SREA- Serviço Regional de Estatística dos Açores

Regarding employment, we obtain a similar picture of the Azorean economy as with value added. Table A-2 illustrates the contribution of the several sectors to total employment in the Azores. Public Administration, Defense and Education sustains a quarter of total employment in the region. Agriculture and fisheries still employ about 13% of the workforce. The wholesale and retail sector also weights about 13% of the total. The number of persons with employment in the Transportation, Hotels and Restaurants sectors shows an increasing trend in the most recent years, accounting to about 10% of the total.

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Table A-2 - Employment in the Azores by sector of activity.

Unit: number of persons

	2011	%	2012	%	2013	%
Sectors						
<i>Agriculture, Animal Production, Hunting, Fishing and Forestry</i>	13 398	13%	14 700	14%	13 014	13%
<i>Mining and Quarrying, Processing Industries, Electricity, Gas, Steam, Hot Water Supply and Purification and Distribution of Water</i>	8 969	8%	7 700	8%	7 993	8%
<i>Construction</i>	11 888	11%	8 400	8%	6 307	6%
<i>Sales</i>	14 491	14%	13 100	13%	12 685	13%
<i>Transport and Storage</i>	3 477	3%	3 400	3%	3 472	4%
<i>Hotels, Restaurants and similar</i>	5 363	5%	5 100	5%	6 014	6%
<i>Public Administration and Defense; Compulsory Social Security; Education</i>	25 117	24%	25 400	25%	25 117	25%
<i>Health and Social Work</i>	9 569	9%	10 000	10%	10 162	10%
<i>Other Services</i>	14 110	13%	14 000	14%	14 420	15%
Total employment	106 382	100%	101 800	100%	99 183	100%

Source: INE/DRE, Estatísticas do Emprego.

In table A-3, using 2013 statistics, we compare the Openness Index of Portugal with that of the Azores. The value obtained for the Azorean Economy (6,22%) is not comparable with the 61,74% obtained for Portugal. The numbers reflect the fact that, in many cases, external trade uses channels installed in the mainland and the statistics underestimate the true value of both exports and imports of the Azores.

For 2013, table A-4 offers a detailed description of Exports and Imports from and to the Azores Islands, understood as direct transactions with third countries. Processing industries have accounted for more than 80% of the exports and imports. There is also an important contribution of the fishing industry in what concerns exports. Within processing industries, Beverages and Tobacco products, dominate both imports and

exports. Nevertheless, those conclusions are evidence of the limitations of the data on external trade already referred.

It is curious that the processing industries import more than they export. This result is a consequence of, for example, buying raw materials in the international markets, which boosts imports, and selling final products in the national market or through the national markets, which does not show on the export statistics of the Azores.

The weight of trade in the Azores is about a tenth of the weight it has in the rest of the country. The real discrepancy is surely not this large. This result has to do with the already mentioned fact that most trade is not done directly with third countries but rather indirectly through the mainland.

This renders any traditional trade analysis in the Azores to be biased if caution is not taken in clearly identifying the commercial patterns in the islands.

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Table A-3 - Exports and Imports in the year 2013.

Exports	Portugal	Mainland	Azores
Prepared foodstuffs and beverages	5.135.267.709 €	4.691.980.905 €	66.458.145 €
Other manufactured articles	16.144.522.181 €	15.488.291.449 €	225.736 €
Fuels and lubricants	3.774.168.181 €	3.598.201.599 €	8.025.030 €
Machinery, and other capital goods (except transportation articles) and parts and accessories	6.291.690.786 €	5.872.679.553 €	16.045.588 €
Transportation articles and accessories	7.042.975.420 €	6.936.828.899 €	2.481.681 €
Other consumption articles	9.618.334.773 €	9.240.294.575 €	1.979.079 €
Other	72.546.392 €	29.815.140 €	152.492 €
Exports - Total	48.053.695.644 €	45.860.508.361 €	95.367.751 €
GDP	173.446.000.000 €	165.516.000.000 €	3.731.000.000 €
Exports/GDP	27,71%	27,71%	2,56%

Imports	Portugal	Mainland	Azores
Prepared foodstuffs and beverages	7.687.208.877 €	7.130.946.379 €	50.017.803 €
Other manufactured articles	16.780.102.469 €	15.493.103.322 €	40.670.754 €
Fuels and lubricants	10.038.215.038 €	9.787.456.719 €	28.078.222 €
Machinery, and other capital goods (except transportation articles) and parts and accessories	8.529.402.054 €	7.658.038.308 €	9.596.801 €
Transportation articles and accessories	7.361.213.410 €	6.842.666.419 €	2.628.715 €
Other consumption articles	8.623.312.630 €	7.713.486.586 €	5.529.248 €
Other	11.551.204 €	6.906.965 €	0 €
Imports - Total	59.032.120.694 €	54.633.717.019 €	136.521.543 €
GDP	173.446.000.000 €	165.516.000.000 €	3.731.000.000 €
Imports/GDP	34,03%	33,01%	3,66%
(Exports + Imports)/GDP	61,74%	60,72%	6,22%

Source: INE

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Table A- 4 - Exports and Imports of the Azores in the year 2015

		Intra-EU	%	Extra-EU	%	Intra and Extra-EU	%
<i>Agriculture, animal production, hunting and forestry</i>	Exp	154.154 €	0%	94.537 €	0%	248.691 €	0%
	Imp	21.300.350 €	21%	496.720 €	2%	21.797.070 €	17%
<i>Fishing</i>	Exp	14.079.095 €	22%	2.560.354 €	6%	16.639.449 €	16%
	Imp	459.601 €	0%	3.315 €	0%	462.916 €	0%
<i>Mining and quarrying</i>	Exp	615 €	0%	1.294 €	0%	1.909 €	0%
	Imp	40.605 €	0%	3.782 €	0%	44.387 €	0%
<i>Energy products from mining and quarrying</i>	Exp	0 €	0%	0 €	0%	0 €	0%
	Imp	130 €	0%	0 €	0%	130 €	0%
<i>Other products from mining and quarrying</i>	Exp	615 €	0%	1.294 €	0%	1.909 €	0%
	Imp	40.475 €	0%	3.782 €	0%	44.257 €	0%
<i>Processing Industries</i>	Exp	49.497.199 €	78%	38.002.884 €	93%	87.500.083 €	84%
	Imp	77.318.590 €	78%	31.999.587 €	98%	109.318.177 €	83%
<i>Beverages & Tobacco products</i>	Exp	31.268.537 €	49%	21.507.513 €	53%	52.776.050 €	51%
	Imp	39.856.210 €	40%	26.200.332 €	81%	66.056.542 €	50%
<i>Textiles</i>	Exp	208 €	0%	80.105 €	0%	80.313 €	0%
	Imp	1.566.866 €	2%	218.917 €	1%	1.785.783 €	1%
<i>Leather</i>	Exp	0 €	0%	261 €	0%	261 €	0%
	Imp	145.453 €	0%	24.531 €	0%	169.984 €	0%
<i>Wood and products of wood and cork</i>	Exp	46 €	0%	610.873 €	2%	610.919 €	1%
	Imp	435.843 €	0%	26.102 €	0%	461.945 €	0%
<i>Pulp, paper products, publishing and printing</i>	Exp	36 €	0%	84.868 €	0%	84.904 €	0%
	Imp	856.449 €	1%	152.417 €	0%	1.008.866 €	1%
<i>Coke and refined oil products</i>	Exp	94 €	0%	6.070.462 €	15%	6.070.556 €	6%
	Imp	17.854.613 €	18%	1.215 €	0%	17.855.828 €	14%
<i>Chemical and pharmaceutical products</i>	Exp	18.560 €	0%	140.798 €	0%	159.358 €	0%
	Imp	2.659.888 €	3%	152.751 €	0%	2.812.639 €	2%
<i>Rubber and plastic products</i>	Exp	269 €	0%	96.505 €	0%	96.774 €	0%
	Imp	3.481.937 €	4%	88.172 €	0%	3.570.109 €	3%
<i>Other mineral and non metal products</i>	Exp	380 €	0%	9.012 €	0%	9.392 €	0%
	Imp	104.080 €	0%	46.375 €	0%	150.455 €	0%
<i>Basic metals and fabricated metal products</i>	Exp	81 €	0%	92.133 €	0%	92.214 €	0%
	Imp	1.749.570 €	2%	224.167 €	1%	1.973.737 €	1%
<i>Machinery and equipment</i>	Exp	1.099.677 €	2%	456.500 €	1%	1.556.177 €	1%
	Imp	5.040.050 €	5%	435.781 €	1%	5.475.831 €	4%
<i>Electrical and optical equipment</i>	Exp	17.109.302 €	27%	2.477.104 €	6%	19.586.406 €	19%
	Imp	1.148.844 €	1%	1.194.422 €	4%	2.343.266 €	2%
<i>Transport equipment</i>	Exp	0 €	0%	6.237.875 €	15%	6.237.875 €	6%
	Imp	1.893.950 €	2%	3.067.599 €	9%	4.961.549 €	4%
<i>Other processing industries</i>	Exp	9 €	0%	138.875 €	0%	138.884 €	0%
	Imp	524.837 €	1%	166.806 €	1%	691.643 €	1%
<i>Other</i>	Exp	0 €	0%	9.680 €	0%	9.680 €	0%
	Imp	16.914 €	0%	953 €	0%	17.867 €	0%
Total	Exp	63.731.063 €	100%	40.668.749 €	100%	104.399.812 €	100%
	Imp	99.136.060 €	100%	32.504.357 €	100%	131.640.417 €	100%

Source: SREA- Serviço Regional de Estatística dos Açores

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To assess longer run tendencies we can look at Tables A-5 and A-6, which give an evolutionary perspective of imports and exports.

Table A-5 - Imports of the Azores, 2003-2013.

IMPORTS											
Unit: 1000 euros	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
World	102 161,00	84 771,00	55 514,00	122 912,00	78 674,00	86 975,00	127 605,00	175 806,00	120 471,00	203 999,00	190 982,00
EFTA	2 171,00	203,00	58,00	443,00	9 743,00	133,00	2 628,00	220,00	395,00	116,00	99,00
%	2,1%	0,2%	0,1%	0,4%	12,4%	0,2%	2,1%	0,1%	0,3%	0,1%	0,1%
EU	70 983,00	52 260,00	25 803,00	74 674,00	34 062,00	47 566,00	74 324,00	72 740,00	88 806,00	163 603,00	133 051,00
%	69,5%	61,6%	46,5%	60,8%	43,3%	54,7%	58,2%	41,4%	73,7%	80,2%	69,7%
USA	14 200,00	11 754,00	12 279,00	10 962,00	5 235,00	46,00	14 344,00	12 409,00	14 788,00	8 795,00	14 192,00
%	13,9%	13,9%	22,1%	8,9%	6,7%	0,1%	11,2%	7,1%	12,3%	4,3%	7,4%

Table A-6 - Exports of the Azores, 2003-2013.

EXPORTS											
Unit: 1000 euros	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
World	45 852,00	33 245,00	34 237,00	23 889,00	41 013,00	46 667,00	77 856,00	83 082,00	117 096,00	109 670,00	124 443,00
EFTA	277,00	355,00	617,00	320,00	320,00	216,00	272,00	228,00	305,00	450,00	482,00
%	0,6%	1,1%	1,8%	1,3%	0,8%	0,5%	0,3%	0,3%	0,3%	0,4%	0,4%
EU	25 342,00	19 898,00	20 117,00	11 793,00	19 643,00	21 481,00	49 289,00	51 272,00	59 457,00	64 853,00	70 504,00
%	55,3%	59,9%	58,8%	49,4%	47,9%	46,0%	63,3%	61,7%	50,8%	59,1%	56,7%
USA	4 126,00	3 584,00	3 104,00	3 104,00	3 072,00	3 584,00	3 057,00	2 968,00	4 606,00	4 229,00	4 907,00
%	9,0%	10,8%	9,1%	13,0%	7,5%	7,7%	3,9%	3,6%	3,9%	3,9%	3,9%

From the tables it becomes evident that most of the trade is done with the EU. The US accounts for a very small percentage of both imports and exports. The absolute values render the trade volume with the US clearly marginal, which might mean that there is a lot of progress that can be made.

Tables A-7 and A-8 provide further detail as to the products that are traded with the US, for selected years.

One can conclude that there is no specific export or import product that sets any type of pattern.

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Table A-7 - Imports of the Azores, from the US for Selected Years

IMPORTS	2003		2010		2013	
	1 000 €	Countries of origin	1 000 €	Countries of origin	1 000 €	Countries of origin
Fruits, peel of citrus and melons	52	USA and Canada	475	Spain and USA	427	Spain and USA
Cereals	19 250	USA, France and Canada	15 751		10 664	
Oils, fats and shortenings	1 505		1 735	Spain and USA	2 135	Spain and USA
Sugar and sugar products	1 995	Norway and USA	413	Spain and USA	2 458	USA and Sweden
Cocoa and its preparations	128	USA	725	USA and Italy	829	USA and Italy
Cereals, corn and milk preparations	255	USA	1 489	USA and Spain	1 276	Spain and USA
Vegetables preparation	234	Spain and USA	976	USA and Spain	688	Spain and USA
Diverse food preparation			839		787	USA and Spain
Beverage, alcohol and vinegar	750		2 320		1 483	Spain and USA
Food residue, animal food	9 579	USA and Nigeria	13 593		30 641	Ivory Coast and USA
Soaps, waxes, cleaning and conservation	60		592	Spain and USA	499	Spain and USA
Rubber and derivatives	97		1 120		368	Spain and USA
Wood, Coal	66	Spain and USA			290	
Knitted or crocheted fabric	1 026	USA and Italy	724		318	
Melted iron, iron and steel	5 310		4 478		24	USA and China
Manufactured Melted iron, iron and steel	998	Spain and USA	1 835		1 212	Spain and USA
Machinery and electronic equipment	3 562	Denmark and USA	3 380	USA and Spain	1 185	Spain and USA
Aircraft, spacecraft			63 366	Canada and USA	1 443	USA and Canada
Shipcraft	2 432	Poland and USA			19 005	
Optical, photography, cinema equipment			2 067	USA and Spain	340	Spain and USA
Furniture, lighting, signs, Medical, technical	383	Spain and USA	1 900		374	Spain and USA
Toys, games and sports	575	Spain and USA	596		277	

Table A-8 - Exports of the Azores, from the US for Selected Years

Exports	2003		2010		2013	
	1 000 €	Countries of destination	1 000 €	Countries of destination	1 000 €	Countries of destination
Vegetable products	139	Canada and USA	18	USA and Spain	153	Spain and USA
Coffee, tea, mate and spices			38		33	USA and Spain
Meat, fish and shellfish preparations	11 225		16 878	USA and Spain	45 941	
Cereals, corn and milk preparations	83	Canada and USA			215	USA and San-Tome and Principe
Vegetables preparation	51	Canada and USA	56		109	Spain and USA
Beverage, alcohol and vinegar	684	USA and Canada	939	Spain and USA	663	Spain and USA
Salt; sulphur; earths and stone; plastering	45	Canada and USA				
Plastic and derivatives	17		56	Turkey and USA	151	
Books, journals, graphic industry products	20		12	Canada and USA	24	Spain and USA
Clothing, not knit or crochet	1 073	USA			161	
Other clothing artifacts	205	USA	78	USA and Canada	169	USA and Spain
Ceramics	55	Angola and USA			145	
metals	5		53	Angola and USA	52	
Machinery and electronic equipment	391		321	Belgium and USA	17 272	
Vehicles	50	USA	358		459	
Aircraft, spacecraft	5 016		935	Canada and USA	1 420	Canada and USA
Optical, photography, cinema equipment			3 611		435	USA and Canada

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Simulation Results

Value Added

Table A-8 – Value Added Impacts by Sector – Scenario 3A

Scenario 3A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Value added (% change to the BAU)															
Agriculture, hunting and forestry, logging	-0,13	-0,14	-0,16	-0,18	-0,21	-0,23	-0,27	-0,30	-0,34	-0,38	-0,43	-0,49	-0,54	-0,61	-0,68
Fishing	-0,60	-0,68	-0,76	-0,84	-0,93	-1,02	-1,12	-1,21	-1,32	-1,42	-1,53	-1,64	-1,76	-1,88	-2,01
Mining and quarrying	-0,75	-0,84	-0,93	-1,02	-1,12	-1,21	-1,31	-1,41	-1,51	-1,62	-1,72	-1,83	-1,94	-2,06	-2,17
Production of meat and meat products	-0,56	-0,62	-0,69	-0,76	-0,82	-0,89	-0,97	-1,04	-1,11	-1,19	-1,26	-1,34	-1,42	-1,50	-1,58
Processing of fish and fish products	-0,76	-0,86	-0,97	-1,08	-1,19	-1,32	-1,44	-1,58	-1,71	-1,86	-2,01	-2,17	-2,34	-2,51	-2,70
Manufacture of dairy products	3,00	3,29	3,57	3,84	4,12	4,38	4,64	4,90	5,14	5,38	5,62	5,84	6,05	6,25	6,44
Prepared animal feeds	-1,08	-1,18	-1,29	-1,40	-1,51	-1,63	-1,75	-1,88	-2,01	-2,15	-2,30	-2,45	-2,61	-2,77	-2,94
Beverages & tobacco products	0,50	0,55	0,60	0,64	0,69	0,73	0,77	0,82	0,86	0,89	0,93	0,97	1,00	1,03	1,07
Fruits, vegetables, animal oils, grain mill, starches	-2,54	-2,79	-3,05	-3,30	-3,56	-3,83	-4,09	-4,36	-4,64	-4,91	-5,20	-5,48	-5,77	-6,07	-6,37
Textiles and leather	15,78	18,70	21,89	25,37	29,13	33,19	37,56	42,25	47,27	52,63	58,35	64,43	70,89	77,74	84,99
Wood and products of wood and cork	-0,76	-0,85	-0,94	-1,04	-1,14	-1,24	-1,35	-1,46	-1,57	-1,68	-1,80	-1,93	-2,05	-2,19	-2,32
Pulp, paper products; publishing and printing	-2,21	-2,46	-2,71	-2,97	-3,23	-3,50	-3,78	-4,06	-4,35	-4,65	-4,96	-5,27	-5,59	-5,93	-6,27
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-3,60	-3,93	-4,25	-4,57	-4,88	-5,20	-5,51	-5,82	-6,13	-6,43	-6,73	-7,03	-7,33	-7,63	-7,93
Rubber and plastic products	-1,90	-2,11	-2,32	-2,54	-2,77	-2,99	-3,22	-3,46	-3,70	-3,94	-4,19	-4,44	-4,70	-4,96	-5,23
Other non-metallic mineral products	-1,47	-1,63	-1,80	-1,98	-2,15	-2,33	-2,52	-2,70	-2,89	-3,09	-3,28	-3,48	-3,69	-3,90	-4,11
Basic metals and fabricated metal products	-1,80	-2,03	-2,27	-2,52	-2,77	-3,02	-3,28	-3,55	-3,82	-4,09	-4,37	-4,66	-4,95	-5,24	-5,54
Machinery and equipment n.e.c.	-3,40	-3,84	-4,28	-4,74	-5,20	-5,67	-6,15	-6,64	-7,13	-7,64	-8,15	-8,67	-9,20	-9,74	####
Electrical and optical equipment	-5,67	-6,27	-6,88	-7,50	-8,12	-8,76	-9,40	####	####	####	####	####	####	####	####
Transport equipment	-5,17	-5,69	-6,22	-6,76	-7,31	-7,87	-8,43	-9,00	-9,58	####	####	####	####	####	####
Manufacturing n.e.c.	-1,82	-2,07	-2,32	-2,58	-2,84	-3,11	-3,39	-3,68	-3,96	-4,26	-4,56	-4,86	-5,17	-5,49	-5,81
Electricity, gas, steam and hot water supply	0,65	0,72	0,79	0,86	0,93	1,01	1,08	1,16	1,25	1,33	1,42	1,51	1,60	1,70	1,80
Collection, purification and distribution of water	0,71	0,78	0,86	0,93	1,01	1,08	1,16	1,24	1,32	1,41	1,49	1,58	1,67	1,76	1,85
Construction	0,11	0,12	0,13	0,14	0,15	0,16	0,18	0,19	0,20	0,21	0,23	0,24	0,25	0,26	0,28
Sale, maintenance, repair of motor vehicles and motorcycles	0,99	1,09	1,20	1,30	1,41	1,51	1,62	1,74	1,85	1,97	2,09	2,22	2,34	2,47	2,61
Wholesale trade and commission trade, except of motor vehicles and motorcycles	0,89	0,98	1,07	1,16	1,26	1,35	1,45	1,55	1,65	1,76	1,87	1,98	2,09	2,20	2,32
Retail trade, except of motor vehicles and motorcycles	0,94	1,04	1,13	1,24	1,34	1,44	1,55	1,66	1,78	1,90	2,02	2,14	2,27	2,41	2,54
Hotels and restaurants	1,90	2,09	2,28	2,48	2,68	2,89	3,11	3,32	3,55	3,78	4,02	4,27	4,52	4,78	5,05
Land transport; transport via pipelines	0,56	0,62	0,68	0,74	0,80	0,86	0,92	0,98	1,04	1,11	1,17	1,23	1,30	1,36	1,43
Water transport	-0,27	-0,31	-0,36	-0,41	-0,47	-0,52	-0,59	-0,65	-0,72	-0,79	-0,87	-0,95	-1,04	-1,13	-1,23
Air transport	0,67	0,74	0,80	0,86	0,92	0,98	1,03	1,08	1,12	1,16	1,20	1,22	1,24	1,25	1,26
Supporting transport activities; activities of travel agencies	0,71	0,78	0,86	0,93	1,00	1,07	1,14	1,21	1,28	1,35	1,42	1,48	1,54	1,60	1,66
Post and telecommunications	0,70	0,78	0,85	0,93	1,01	1,09	1,18	1,27	1,36	1,45	1,54	1,64	1,74	1,84	1,95
Financial intermediation, excluding insurance and pension funding	-0,13	-0,14	-0,16	-0,17	-0,18	-0,19	-0,21	-0,22	-0,23	-0,25	-0,26	-0,27	-0,29	-0,30	-0,31
Insurance and pension funding, except compulsory social security	0,27	0,30	0,33	0,36	0,40	0,43	0,47	0,51	0,55	0,59	0,63	0,68	0,73	0,78	0,84
Activities auxiliary to financial intermediation	-1,69	-1,93	-2,18	-2,44	-2,71	-2,98	-3,26	-3,55	-3,84	-4,15	-4,45	-4,77	-5,09	-5,41	-5,75
Real estate activities	0,30	0,34	0,38	0,42	0,46	0,50	0,54	0,59	0,64	0,68	0,73	0,78	0,84	0,89	0,95
Renting of machinery and equipment without operator	-0,28	-0,32	-0,36	-0,40	-0,44	-0,48	-0,52	-0,56	-0,60	-0,65	-0,69	-0,74	-0,78	-0,83	-0,88
Computer and related activities; research and development	-0,46	-0,53	-0,61	-0,69	-0,77	-0,86	-0,95	-1,05	-1,15	-1,25	-1,36	-1,48	-1,60	-1,73	-1,86
Other business activities	-0,55	-0,61	-0,68	-0,74	-0,81	-0,88	-0,95	-1,03	-1,10	-1,18	-1,26	-1,34	-1,42	-1,50	-1,59
Public administration and defence; compulsory social security	-0,49	-0,54	-0,59	-0,63	-0,68	-0,73	-0,78	-0,83	-0,88	-0,93	-0,98	-1,03	-1,09	-1,14	-1,19
Education	-0,47	-0,51	-0,56	-0,60	-0,64	-0,68	-0,72	-0,77	-0,81	-0,85	-0,89	-0,94	-0,98	-1,02	-1,07
Health and social work	0,25	0,27	0,31	0,34	0,37	0,40	0,44	0,48	0,52	0,56	0,61	0,65	0,70	0,75	0,81
Other community, social and personal service activities	0,87	0,96	1,06	1,16	1,26	1,36	1,47	1,58	1,70	1,82	1,94	2,07	2,21	2,35	2,49
Activities of households as employers of domestic staff	1,12	1,24	1,36	1,49	1,62	1,76	1,90	2,04	2,19	2,34	2,51	2,67	2,85	3,03	3,22

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Table A-9 – Value Added Impacts by Sector – Scenario 1B

Scenario 1B	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Value added (% change to the BAU)															
Agriculture, hunting and forestry, logging	0,14	0,18	0,22	0,26	0,31	0,35	0,40	0,45	0,50	0,55	0,61	0,66	0,71	0,77	0,82
Fishing	-0,45	-0,49	-0,54	-0,58	-0,63	-0,67	-0,71	-0,76	-0,80	-0,84	-0,88	-0,93	-0,97	-1,01	-1,05
Mining and quarrying	-0,91	-1,01	-1,11	-1,21	-1,31	-1,41	-1,51	-1,61	-1,72	-1,82	-1,92	-2,02	-2,12	-2,23	-2,33
Production of meat and meat products	-0,71	-0,78	-0,85	-0,92	-0,99	-1,07	-1,14	-1,21	-1,28	-1,35	-1,42	-1,49	-1,56	-1,64	-1,71
Processing of fish and fish products	-0,36	-0,39	-0,42	-0,46	-0,49	-0,51	-0,54	-0,57	-0,60	-0,62	-0,65	-0,67	-0,70	-0,72	-0,74
Manufacture of dairy products	5,25	5,79	6,34	6,88	7,44	7,99	8,55	9,12	9,68	10,25	10,82	11,40	11,97	12,55	13,13
Prepared animal feeds	-1,29	-1,39	-1,48	-1,56	-1,65	-1,74	-1,82	-1,90	-1,99	-2,07	-2,15	-2,24	-2,32	-2,40	-2,49
Beverages & tobacco products	0,91	1,00	1,11	1,21	1,31	1,42	1,52	1,63	1,74	1,85	1,96	2,07	2,19	2,30	2,41
Fruits, vegetables, animal oils, grain mill, starches	-2,72	-2,97	-3,22	-3,47	-3,71	-3,96	-4,20	-4,45	-4,69	-4,93	-5,17	-5,42	-5,66	-5,90	-6,14
Textiles and leather	-0,59	-0,67	-0,75	-0,84	-0,92	-1,00	-1,09	-1,17	-1,26	-1,34	-1,42	-1,51	-1,59	-1,67	-1,75
Wood and products of wood and cork	0,69	0,76	0,84	0,91	0,99	1,06	1,14	1,22	1,30	1,38	1,46	1,54	1,62	1,70	1,79
Pulp, paper products; publishing and printing	-3,01	-3,32	-3,62	-3,93	-4,24	-4,54	-4,85	-5,16	-5,47	-5,78	-6,09	-6,39	-6,70	-7,01	-7,32
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-0,04	-0,04	-0,04	-0,03	-0,03	-0,02	-0,01	0,00	0,01	0,02	0,04	0,05	0,07	0,09	0,11
Rubber and plastic products	-2,73	-3,01	-3,30	-3,59	-3,88	-4,17	-4,46	-4,75	-5,04	-5,33	-5,62	-5,91	-6,20	-6,49	-6,79
Other non-metallic mineral products	-1,89	-2,09	-2,30	-2,51	-2,71	-2,92	-3,13	-3,34	-3,55	-3,76	-3,97	-4,18	-4,39	-4,60	-4,81
Basic metals and fabricated metal products	-2,26	-2,54	-2,83	-3,12	-3,41	-3,70	-4,00	-4,29	-4,59	-4,89	-5,19	-5,49	-5,79	-6,09	-6,39
Machinery and equipment n.e.c.	-4,94	-5,54	-6,15	-6,76	-7,38	-8,00	-8,62	-9,25	-9,87	-10,49	-11,12	-11,74	-12,36	-12,98	-13,60
Electrical and optical equipment	-8,22	-9,03	-9,86	-10,68	-11,50	-12,32	-13,14	-13,95	-14,77	-15,58	-16,39	-17,19	-17,99	-18,78	-19,58
Transport equipment	-7,48	-8,19	-8,91	-9,62	-10,33	-11,04	-11,75	-12,46	-13,17	-13,87	-14,57	-15,27	-15,97	-16,66	-17,35
Manufacturing n.e.c.	-2,57	-2,89	-3,23	-3,57	-3,92	-4,27	-4,62	-4,98	-5,34	-5,70	-6,06	-6,43	-6,79	-7,15	-7,52
Electricity, gas, steam and hot water supply	0,96	1,05	1,15	1,24	1,34	1,43	1,53	1,62	1,72	1,82	1,92	2,02	2,12	2,23	2,33
Collection, purification and distribution of water	1,12	1,23	1,35	1,46	1,58	1,69	1,81	1,93	2,05	2,17	2,29	2,42	2,54	2,66	2,79
Construction	0,18	0,19	0,21	0,23	0,25	0,27	0,28	0,30	0,32	0,34	0,36	0,38	0,40	0,42	0,44
Sale, maintenance, repair of motor vehicles and motorcycles	1,39	1,52	1,65	1,79	1,92	2,06	2,20	2,34	2,48	2,62	2,76	2,91	3,05	3,20	3,34
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1,31	1,44	1,56	1,69	1,82	1,95	2,08	2,21	2,35	2,48	2,61	2,75	2,89	3,02	3,16
Retail trade, except of motor vehicles and motorcycles	1,36	1,49	1,62	1,75	1,89	2,02	2,16	2,30	2,44	2,57	2,72	2,86	3,00	3,14	3,29
Hotels and restaurants	2,50	2,74	2,98	3,22	3,47	3,71	3,96	4,21	4,46	4,72	4,97	5,23	5,49	5,75	6,02
Land transport; transport via pipelines	0,79	0,87	0,96	1,04	1,13	1,22	1,30	1,39	1,48	1,57	1,66	1,76	1,85	1,94	2,04
Water transport	-0,73	-0,83	-0,93	-1,03	-1,13	-1,23	-1,34	-1,44	-1,55	-1,65	-1,75	-1,86	-1,96	-2,07	-2,17
Air transport	1,49	1,67	1,85	2,03	2,22	2,41	2,60	2,80	2,99	3,19	3,39	3,59	3,79	3,99	4,19
Supporting transport activities; activities of travel agencies	0,95	1,06	1,17	1,29	1,40	1,51	1,63	1,74	1,86	1,98	2,10	2,22	2,34	2,46	2,58
Post and telecommunications	0,91	1,00	1,10	1,19	1,29	1,38	1,48	1,58	1,68	1,78	1,88	1,98	2,08	2,19	2,29
Financial intermediation, excluding insurance and pension funding	-0,20	-0,22	-0,24	-0,26	-0,27	-0,29	-0,30	-0,32	-0,34	-0,35	-0,37	-0,38	-0,40	-0,41	-0,42
Insurance and pension funding, except compulsory social security	0,35	0,38	0,42	0,45	0,49	0,53	0,56	0,60	0,64	0,68	0,72	0,75	0,79	0,83	0,87
Activities auxiliary to financial intermediation	-2,44	-2,77	-3,11	-3,46	-3,81	-4,17	-4,53	-4,89	-5,26	-5,63	-6,00	-6,38	-6,75	-7,13	-7,50
Real estate activities	0,46	0,52	0,57	0,63	0,68	0,74	0,80	0,86	0,92	0,98	1,04	1,10	1,16	1,22	1,28
Renting of machinery and equipment without operator	-0,40	-0,45	-0,51	-0,56	-0,61	-0,66	-0,71	-0,76	-0,81	-0,86	-0,91	-0,96	-1,02	-1,07	-1,12
Computer and related activities; research and development	-0,96	-1,10	-1,23	-1,37	-1,51	-1,66	-1,80	-1,95	-2,09	-2,24	-2,39	-2,53	-2,68	-2,83	-2,97
Other business activities	-0,79	-0,87	-0,95	-1,04	-1,12	-1,21	-1,29	-1,38	-1,46	-1,54	-1,63	-1,71	-1,79	-1,88	-1,96
Public administration and defence; compulsory social security	-0,74	-0,81	-0,88	-0,95	-1,02	-1,10	-1,17	-1,25	-1,33	-1,40	-1,48	-1,56	-1,63	-1,71	-1,79
Education	-0,73	-0,79	-0,86	-0,92	-0,99	-1,06	-1,12	-1,19	-1,26	-1,33	-1,40	-1,47	-1,54	-1,61	-1,68
Health and social work	0,34	0,37	0,41	0,44	0,48	0,52	0,55	0,59	0,62	0,66	0,70	0,74	0,77	0,81	0,85
Other community, social and personal service activities	1,20	1,32	1,44	1,56	1,68	1,80	1,93	2,05	2,18	2,30	2,43	2,56	2,69	2,82	2,95
Activities of households as employers of domestic staff	1,53	1,68	1,82	1,97	2,12	2,27	2,42	2,58	2,73	2,88	3,04	3,20	3,35	3,51	3,67

Impact of TTIP on the Economy of the Azores

Table A-10 – Value Added Impacts by Sector – Scenario 2B

Scenario 2B															
Value added (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-0,38	-0,42	-0,47	-0,53	-0,59	-0,65	-0,72	-0,80	-0,88	-0,97	-1,07	-1,18	-1,31	-1,45	-1,60
Fishing	-0,36	-0,39	-0,41	-0,44	-0,46	-0,48	-0,50	-0,51	-0,53	-0,55	-0,57	-0,59	-0,61	-0,63	-0,67
Mining and quarrying	-1,12	-1,25	-1,38	-1,51	-1,65	-1,80	-1,94	-2,09	-2,25	-2,41	-2,57	-2,75	-2,93	-3,12	-3,32
Production of meat and meat products	-0,89	-1,00	-1,11	-1,22	-1,33	-1,45	-1,57	-1,69	-1,82	-1,95	-2,09	-2,23	-2,37	-2,52	-2,68
Processing of fish and fish products	-0,57	-0,63	-0,68	-0,74	-0,80	-0,87	-0,93	-1,01	-1,08	-1,17	-1,26	-1,36	-1,48	-1,61	-1,77
Manufacture of dairy products	3,79	4,14	4,50	4,84	5,19	5,52	5,85	6,16	6,46	6,75	7,02	7,28	7,51	7,71	7,89
Prepared animal feeds	-1,70	-1,88	-2,05	-2,23	-2,42	-2,61	-2,81	-3,02	-3,24	-3,47	-3,72	-3,98	-4,25	-4,54	-4,86
Beverages & tobacco products	0,79	0,88	0,96	1,05	1,13	1,22	1,30	1,38	1,47	1,55	1,63	1,71	1,79	1,86	1,93
Fruits, vegetables, animal oils, grain mill, starches	-3,22	-3,54	-3,87	-4,20	-4,54	-4,89	-5,24	-5,60	-5,97	-6,35	-6,74	-7,14	-7,55	-7,99	-8,44
Textiles and leather	13,81	16,51	19,52	22,86	26,57	30,68	35,24	40,28	45,87	52,06	58,91	66,49	74,89	84,18	94,46
Wood and products of wood and cork	-0,36	-0,42	-0,48	-0,54	-0,61	-0,68	-0,77	-0,85	-0,95	-1,06	-1,17	-1,30	-1,44	-1,59	-1,76
Pulp, paper products; publishing and printing	-3,33	-3,70	-4,07	-4,46	-4,85	-5,26	-5,68	-6,11	-6,55	-7,01	-7,49	-7,99	-8,52	-9,07	-9,65
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-4,52	-4,92	-5,32	-5,72	-6,12	-6,52	-6,91	-7,30	-7,70	-8,09	-8,48	-8,87	-9,27	-9,66	-10,06
Rubber and plastic products	-2,82	-3,13	-3,44	-3,77	-4,10	-4,44	-4,78	-5,14	-5,50	-5,87	-6,25	-6,65	-7,06	-7,49	-7,94
Other non-metallic mineral products	-2,08	-2,32	-2,56	-2,80	-3,06	-3,31	-3,57	-3,84	-4,12	-4,41	-4,70	-5,01	-5,32	-5,65	-6,00
Basic metals and fabricated metal products	-2,49	-2,82	-3,14	-3,48	-3,83	-4,18	-4,54	-4,91	-5,29	-5,68	-6,07	-6,48	-6,91	-7,34	-7,79
Machinery and equipment n.e.c.	-4,93	-5,55	-6,19	-6,84	-7,50	-8,18	-8,87	-9,57	-10,28	-11,01	-11,76	-12,52	-13,31	-14,12	-14,96
Electrical and optical equipment	-8,23	-9,09	-9,96	####	####	####	####	-14,54	-15,50	-16,48	-17,49	-18,52	-19,58	-20,67	-21,81
Transport equipment	-7,47	-8,22	-8,98	-9,75	####	####	####	-12,97	-13,81	-14,67	-15,56	-16,47	-17,41	-18,38	-19,38
Manufacturing n.e.c.	-2,61	-2,96	-3,32	-3,68	-4,06	-4,45	-4,85	-5,25	-5,67	-6,10	-6,54	-6,99	-7,45	-7,93	-8,43
Electricity, gas, steam and hot water supply	0,94	1,04	1,14	1,24	1,34	1,45	1,56	1,67	1,79	1,91	2,04	2,18	2,32	2,48	2,64
Collection, purification and distribution of water	1,00	1,10	1,21	1,31	1,42	1,52	1,64	1,75	1,87	1,99	2,11	2,24	2,37	2,51	2,65
Construction	0,18	0,19	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,32	0,33	0,34	0,35	0,36	0,37
Sale, maintenance, repair of motor vehicles and motorcycles	1,42	1,56	1,71	1,86	2,01	2,16	2,32	2,49	2,65	2,83	3,01	3,20	3,39	3,60	3,81
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1,30	1,43	1,56	1,69	1,83	1,97	2,11	2,26	2,41	2,57	2,73	2,90	3,08	3,27	3,46
Retail trade, except of motor vehicles and motorcycles	1,38	1,52	1,66	1,81	1,96	2,12	2,28	2,44	2,61	2,79	2,98	3,17	3,38	3,59	3,83
Hotels and restaurants	2,75	3,02	3,31	3,60	3,89	4,20	4,51	4,84	5,18	5,53	5,90	6,28	6,69	7,12	7,58
Land transport; transport via pipelines	0,84	0,93	1,02	1,11	1,20	1,29	1,38	1,47	1,56	1,65	1,75	1,84	1,94	2,03	2,13
Water transport	-0,08	-0,10	-0,12	-0,14	-0,17	-0,20	-0,24	-0,28	-0,33	-0,38	-0,45	-0,53	-0,61	-0,72	-0,83
Air transport	1,84	2,05	2,25	2,45	2,65	2,84	3,03	3,21	3,38	3,53	3,67	3,80	3,90	3,99	4,04
Supporting transport activities; activities of travel agencies	1,33	1,48	1,63	1,78	1,93	2,08	2,23	2,37	2,52	2,66	2,80	2,93	3,06	3,18	3,29
Post and telecommunications	1,01	1,11	1,22	1,34	1,45	1,57	1,69	1,81	1,94	2,08	2,21	2,36	2,51	2,66	2,83
Financial intermediation, excluding insurance and pension funding	-0,13	-0,14	-0,15	-0,16	-0,18	-0,19	-0,20	-0,21	-0,23	-0,24	-0,26	-0,27	-0,29	-0,31	-0,34
Insurance and pension funding, except compulsory social security	0,42	0,47	0,51	0,56	0,61	0,66	0,71	0,77	0,83	0,89	0,95	1,02	1,10	1,17	1,26
Activities auxiliary to financial intermediation	-2,49	-2,84	-3,20	-3,57	-3,96	-4,36	-4,76	-5,18	-5,61	-6,05	-6,51	-6,97	-7,45	-7,95	-8,46
Real estate activities	0,47	0,53	0,59	0,65	0,71	0,77	0,84	0,90	0,97	1,05	1,12	1,20	1,28	1,37	1,46
Renting of machinery and equipment without operator	-0,39	-0,44	-0,49	-0,54	-0,60	-0,65	-0,71	-0,77	-0,83	-0,89	-0,96	-1,02	-1,09	-1,17	-1,24
Computer and related activities; research and development	-0,39	-0,45	-0,51	-0,57	-0,63	-0,71	-0,78	-0,86	-0,95	-1,05	-1,15	-1,26	-1,39	-1,53	-1,68
Other business activities	-0,79	-0,88	-0,97	-1,07	-1,16	-1,27	-1,37	-1,48	-1,59	-1,71	-1,83	-1,95	-2,09	-2,23	-2,38
Public administration and defence; compulsory social security	-0,74	-0,81	-0,89	-0,96	-1,04	-1,12	-1,20	-1,28	-1,36	-1,45	-1,53	-1,62	-1,71	-1,80	-1,89
Education	-0,72	-0,79	-0,86	-0,93	-1,00	-1,07	-1,14	-1,21	-1,29	-1,36	-1,44	-1,51	-1,59	-1,67	-1,75
Health and social work	0,37	0,41	0,45	0,50	0,54	0,59	0,64	0,70	0,76	0,82	0,89	0,96	1,04	1,13	1,22
Other community, social and personal service activities	1,27	1,40	1,54	1,68	1,83	1,98	2,13	2,29	2,46	2,64	2,82	3,02	3,22	3,45	3,68
Activities of households as employers of domestic staff	1,63	1,80	1,97	2,15	2,33	2,52	2,72	2,93	3,14	3,37	3,61	3,86	4,13	4,42	4,73

Impact of TTIP on the Economy of the Azores

Table A-11 – Value Added Impacts by Sector – Scenario 3B

Scenario 3B															
Value added (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-0,35	-0,39	-0,44	-0,48	-0,53	-0,59	-0,64	-0,70	-0,76	-0,83	-0,90	-0,98	-1,06	-1,15	-1,24
Fishing	-0,87	-0,98	-1,09	-1,20	-1,32	-1,44	-1,56	-1,68	-1,81	-1,94	-2,07	-2,21	-2,35	-2,49	-2,64
Mining and quarrying	-1,09	-1,21	-1,33	-1,46	-1,59	-1,72	-1,85	-1,99	-2,12	-2,26	-2,40	-2,54	-2,69	-2,84	-2,98
Production of meat and meat products	-0,79	-0,89	-0,98	-1,08	-1,17	-1,27	-1,37	-1,47	-1,58	-1,68	-1,79	-1,90	-2,00	-2,12	-2,23
Processing of fish and fish products	-0,99	-1,11	-1,24	-1,38	-1,52	-1,67	-1,82	-1,97	-2,14	-2,31	-2,48	-2,66	-2,85	-3,05	-3,25
Manufacture of dairy products	3,91	4,28	4,65	5,01	5,37	5,73	6,07	6,41	6,75	7,08	7,40	7,71	8,01	8,31	8,59
Prepared animal feeds	-1,65	-1,81	-1,97	-2,14	-2,31	-2,49	-2,66	-2,85	-3,04	-3,23	-3,43	-3,64	-3,85	-4,07	-4,30
Beverages & tobacco products	0,64	0,70	0,76	0,82	0,88	0,94	1,00	1,05	1,11	1,16	1,21	1,26	1,31	1,36	1,40
Fruits, vegetables, animal oils, grain mill, starches	-3,19	-3,51	-3,83	-4,15	-4,47	-4,80	-5,13	-5,46	-5,80	-6,14	-6,49	-6,84	-7,19	-7,55	-7,91
Textiles and leather	14,72	17,44	20,42	23,65	27,15	30,93	34,99	39,34	44,00	48,97	54,26	59,88	65,85	72,17	78,85
Wood and products of wood and cork	-0,30	-0,35	-0,39	-0,44	-0,50	-0,55	-0,61	-0,67	-0,74	-0,81	-0,88	-0,96	-1,04	-1,13	-1,22
Pulp, paper products; publishing and printing	-3,15	-3,49	-3,84	-4,20	-4,55	-4,92	-5,29	-5,67	-6,06	-6,45	-6,85	-7,25	-7,67	-8,09	-8,52
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-5,27	-5,72	-6,17	-6,61	-7,04	-7,46	-7,88	-8,29	-8,70	-9,10	-9,50	-9,89	####	####	####
Rubber and plastic products	-2,68	-2,98	-3,27	-3,57	-3,88	-4,18	-4,50	-4,81	-5,13	-5,45	-5,78	-6,11	-6,44	-6,78	-7,13
Other non-metallic mineral products	-2,01	-2,23	-2,46	-2,69	-2,92	-3,16	-3,39	-3,64	-3,88	-4,13	-4,38	-4,64	-4,90	-5,16	-5,43
Basic metals and fabricated metal products	-2,45	-2,76	-3,08	-3,41	-3,74	-4,07	-4,41	-4,76	-5,11	-5,47	-5,83	-6,19	-6,56	-6,93	-7,31
Machinery and equipment n.e.c.	-4,75	-5,34	-5,95	-6,56	-7,19	-7,82	-8,46	-9,11	-9,76	####	####	####	####	####	####
Electrical and optical equipment	-7,89	-8,70	-9,52	####	####	####	####	####	####	####	####	####	####	####	####
Transport equipment	-7,18	-7,88	-8,60	-9,32	####	####	####	####	####	####	####	####	####	####	####
Manufacturing n.e.c.	-2,51	-2,84	-3,18	-3,53	-3,89	-4,25	-4,62	-4,99	-5,37	-5,75	-6,14	-6,54	-6,93	-7,34	-7,75
Electricity, gas, steam and hot water supply	0,93	1,03	1,12	1,22	1,32	1,42	1,53	1,63	1,74	1,85	1,97	2,09	2,21	2,33	2,46
Collection, purification and distribution of water	1,00	1,10	1,21	1,31	1,41	1,52	1,63	1,74	1,85	1,96	2,08	2,19	2,31	2,43	2,56
Construction	0,19	0,21	0,23	0,25	0,26	0,29	0,31	0,33	0,35	0,37	0,39	0,41	0,43	0,45	0,48
Sale, maintenance, repair of motor vehicles and motorcycles	1,41	1,55	1,69	1,84	1,98	2,13	2,29	2,44	2,60	2,76	2,92	3,09	3,26	3,43	3,61
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1,28	1,41	1,54	1,67	1,80	1,94	2,07	2,21	2,35	2,50	2,65	2,80	2,95	3,10	3,26
Retail trade, except of motor vehicles and motorcycles	1,35	1,49	1,63	1,77	1,91	2,06	2,21	2,36	2,52	2,68	2,84	3,01	3,18	3,36	3,54
Hotels and restaurants	2,72	2,99	3,26	3,54	3,83	4,12	4,42	4,72	5,03	5,35	5,67	6,00	6,34	6,69	7,05
Land transport; transport via pipelines	0,82	0,91	0,99	1,08	1,17	1,26	1,35	1,44	1,53	1,62	1,71	1,80	1,90	1,99	2,09
Water transport	-0,10	-0,12	-0,14	-0,16	-0,19	-0,21	-0,24	-0,27	-0,30	-0,34	-0,38	-0,43	-0,47	-0,52	-0,58
Air transport	2,00	2,23	2,46	2,69	2,93	3,16	3,39	3,61	3,84	4,06	4,28	4,49	4,70	4,90	5,10
Supporting transport activities; activities of travel agencies	1,31	1,45	1,60	1,75	1,90	2,05	2,20	2,36	2,51	2,66	2,81	2,96	3,11	3,25	3,40
Post and telecommunications	1,01	1,12	1,23	1,34	1,46	1,57	1,69	1,81	1,94	2,06	2,19	2,32	2,46	2,60	2,74
Financial intermediation, excluding insurance and pension funding	-0,17	-0,19	-0,21	-0,22	-0,24	-0,25	-0,27	-0,28	-0,30	-0,31	-0,33	-0,35	-0,36	-0,38	-0,40
Insurance and pension funding, except compulsory social security	0,40	0,45	0,49	0,54	0,58	0,63	0,68	0,74	0,79	0,84	0,90	0,96	1,02	1,08	1,15
Activities auxiliary to financial intermediation	-2,39	-2,72	-3,07	-3,42	-3,79	-4,16	-4,54	-4,92	-5,32	-5,72	-6,12	-6,53	-6,95	-7,37	-7,80
Real estate activities	0,47	0,52	0,58	0,64	0,70	0,77	0,83	0,89	0,96	1,03	1,10	1,17	1,25	1,32	1,40
Renting of machinery and equipment without operator	-0,36	-0,41	-0,46	-0,51	-0,56	-0,61	-0,66	-0,71	-0,76	-0,81	-0,86	-0,92	-0,97	-1,02	-1,08
Computer and related activities; research and development	-0,81	-0,92	-1,05	-1,17	-1,31	-1,44	-1,58	-1,72	-1,87	-2,02	-2,18	-2,34	-2,50	-2,67	-2,85
Other business activities	-0,77	-0,85	-0,94	-1,03	-1,12	-1,22	-1,31	-1,40	-1,50	-1,60	-1,70	-1,80	-1,91	-2,01	-2,12
Public administration and defence; compulsory social security	-0,69	-0,75	-0,82	-0,88	-0,95	-1,02	-1,09	-1,16	-1,23	-1,30	-1,37	-1,44	-1,52	-1,59	-1,66
Education	-0,66	-0,72	-0,78	-0,84	-0,90	-0,96	-1,02	-1,08	-1,14	-1,20	-1,26	-1,33	-1,39	-1,45	-1,51
Health and social work	0,37	0,41	0,46	0,50	0,55	0,59	0,64	0,69	0,74	0,80	0,86	0,92	0,98	1,04	1,11
Other community, social and personal service activities	1,26	1,39	1,53	1,67	1,81	1,95	2,10	2,25	2,41	2,57	2,73	2,90	3,08	3,25	3,44
Activities of households as employers of domestic staff	1,62	1,78	1,95	2,13	2,30	2,48	2,67	2,86	3,06	3,26	3,47	3,68	3,90	4,12	4,36

Impact of TTIP on the Economy of the Azores

Total Exports

Table A-12 – Total Export Impacts by Sector – Scenario 3A

Scenario 3A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total exports (% change to the BAU)															
Agriculture, hunting and forestry, logging	-1,34	-1,47	-1,62	-1,76	-1,91	-2,06	-2,21	-2,37	-2,54	-2,71	-2,89	-3,07	-3,26	-3,45	-3,66
Fishing	-1,71	-1,91	-2,11	-2,32	-2,53	-2,74	-2,97	-3,20	-3,43	-3,67	-3,92	-4,17	-4,43	-4,70	-4,97
Mining and quarrying	-1,29	-1,44	-1,60	-1,76	-1,92	-2,09	-2,26	-2,44	-2,62	-2,81	-3,00	-3,20	-3,41	-3,62	-3,83
Production of meat and meat products	0,42	0,43	0,43	0,44	0,44	0,43	0,42	0,41	0,40	0,38	0,35	0,33	0,29	0,26	0,21
Processing of fish and fish products	-0,34	-0,43	-0,53	-0,63	-0,75	-0,88	-1,01	-1,16	-1,31	-1,48	-1,66	-1,86	-2,06	-2,28	-2,52
Manufacture of dairy products	3,71	4,05	4,39	4,73	5,06	5,38	5,70	6,01	6,31	6,60	6,89	7,16	7,42	7,66	7,90
Prepared animal feeds	2,62	2,83	3,04	3,25	3,44	3,63	3,82	4,00	4,16	4,32	4,47	4,61	4,74	4,86	4,97
Beverages & tobacco products	2,75	2,99	3,23	3,46	3,68	3,90	4,12	4,33	4,53	4,73	4,92	5,10	5,27	5,44	5,59
Fruits, vegetables, animal oils, grain mill,	-5,24	-5,75	-6,25	-6,76	-7,28	-7,79	-8,31	-8,84	-9,36	-9,90	-10,43	-10,98	-11,52	-12,08	-12,64
Textiles and leather	59,95	67,60	75,66	84,16	93,10	102,50	112,38	122,74	133,61	145,01	156,93	169,41	182,46	196,09	210,32
Wood and products of wood and cork	-0,96	-1,10	-1,25	-1,40	-1,56	-1,73	-1,90	-2,08	-2,27	-2,46	-2,67	-2,88	-3,11	-3,34	-3,59
Pulp, paper products; publishing and printing	-1,26	-1,44	-1,64	-1,84	-2,05	-2,28	-2,51	-2,75	-3,00	-3,27	-3,54	-3,83	-4,13	-4,44	-4,77
Coke, refined petroleum products and nuclear	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-13,41	-14,55	-15,68	-16,79	-17,90	-18,98	-20,06	-21,12	-22,17	-23,20	-24,23	-25,24	-26,24	-27,23	-28,21
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	-4,16	-4,60	-5,05	-5,51	-5,97	-6,44	-6,91	-7,38	-7,86	-8,35	-8,84	-9,34	-9,85	-10,36	-10,88
Basic metals and fabricated metal products	-7,53	-8,31	-9,09	-9,87	-10,66	-11,45	-12,24	-13,04	-13,83	-14,63	-15,43	-16,23	-17,04	-17,84	-18,65
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	-3,31	-3,71	-4,13	-4,56	-4,99	-5,43	-5,88	-6,34	-6,80	-7,28	-7,75	-8,24	-8,74	-9,24	-9,75
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and	5,65	6,18	6,70	7,23	7,76	8,28	8,81	9,33	9,85	10,37	10,88	11,39	11,90	12,41	12,91
Wholesale trade and commission trade, except	4,57	5,00	5,43	5,85	6,28	6,70	7,11	7,52	7,93	8,34	8,74	9,13	9,52	9,90	10,27
Retail trade, except of motor vehicles and	4,86	5,31	5,77	6,22	6,67	7,11	7,55	7,99	8,43	8,86	9,28	9,70	10,11	10,52	10,92
Hotels and restaurants	5,30	5,80	6,30	6,80	7,31	7,81	8,32	8,83	9,35	9,87	10,39	10,91	11,43	11,96	12,49
Land transport; transport via pipelines	1,60	1,75	1,89	2,04	2,17	2,31	2,43	2,56	2,67	2,79	2,89	2,99	3,08	3,16	3,24
Water transport	0,49	0,50	0,51	0,51	0,51	0,50	0,49	0,47	0,44	0,40	0,36	0,31	0,26	0,19	0,12
Air transport	1,57	1,72	1,86	1,99	2,13	2,25	2,38	2,49	2,60	2,70	2,79	2,88	2,95	3,01	3,07
Supporting transport activities; activities of	1,55	1,71	1,86	2,00	2,14	2,28	2,41	2,54	2,66	2,77	2,88	2,98	3,07	3,16	3,23
Post and telecommunications	2,30	2,51	2,72	2,93	3,13	3,33	3,52	3,71	3,90	4,08	4,25	4,42	4,59	4,74	4,89
Financial intermediation, excluding insurance	-1,25	-1,39	-1,53	-1,68	-1,83	-1,99	-2,15	-2,32	-2,49	-2,67	-2,85	-3,05	-3,24	-3,45	-3,66
Insurance and pension funding, except	-0,84	-0,93	-1,02	-1,11	-1,21	-1,30	-1,41	-1,51	-1,62	-1,73	-1,85	-1,97	-2,10	-2,23	-2,37
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and	3,00	3,23	3,46	3,68	3,90	4,11	4,31	4,51	4,71	4,89	5,07	5,25	5,41	5,57	5,72
Other business activities	-0,09	-0,14	-0,20	-0,26	-0,33	-0,40	-0,48	-0,56	-0,65	-0,74	-0,84	-0,95	-1,06	-1,18	-1,31
Public administration and defence; compulsory	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service	2,68	2,92	3,16	3,40	3,63	3,87	4,10	4,33	4,55	4,77	4,99	5,21	5,41	5,62	5,82
Activities of households as employers of	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-13 – Total Export Impacts by Sector – Scenario 1A

Scenario 1B	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total exports (% change to the BAU)															
Agriculture, hunting and forestry, logging	-0,35	-0,39	-0,44	-0,48	-0,53	-0,59	-0,64	-0,70	-0,76	-0,83	-0,90	-0,98	-1,06	-1,15	-1,24
Fishing	-0,87	-0,98	-1,09	-1,20	-1,32	-1,44	-1,56	-1,68	-1,81	-1,94	-2,07	-2,21	-2,35	-2,49	-2,64
Mining and quarrying	-1,09	-1,21	-1,33	-1,46	-1,59	-1,72	-1,85	-1,99	-2,12	-2,26	-2,40	-2,54	-2,69	-2,84	-2,98
Production of meat and meat products	-0,79	-0,89	-0,98	-1,08	-1,17	-1,27	-1,37	-1,47	-1,58	-1,68	-1,79	-1,90	-2,00	-2,12	-2,23
Processing of fish and fish products	-0,99	-1,11	-1,24	-1,38	-1,52	-1,67	-1,82	-1,97	-2,14	-2,31	-2,48	-2,66	-2,85	-3,05	-3,25
Manufacture of dairy products	3,91	4,28	4,65	5,01	5,37	5,73	6,07	6,41	6,75	7,08	7,40	7,71	8,01	8,31	8,59
Prepared animal feeds	-1,65	-1,81	-1,97	-2,14	-2,31	-2,49	-2,66	-2,85	-3,04	-3,23	-3,43	-3,64	-3,85	-4,07	-4,30
Beverages & tobacco products	0,64	0,70	0,76	0,82	0,88	0,94	1,00	1,05	1,11	1,16	1,21	1,26	1,31	1,36	1,40
Fruits, vegetables, animal oils, grain mill, starches	-3,19	-3,51	-3,83	-4,15	-4,47	-4,80	-5,13	-5,46	-5,80	-6,14	-6,49	-6,84	-7,19	-7,55	-7,91
Textiles and leather	14,72	17,44	20,42	23,65	27,15	30,93	34,99	39,34	44,00	48,97	54,26	59,88	65,85	72,17	78,85
Wood and products of wood and cork	-0,30	-0,35	-0,39	-0,44	-0,50	-0,55	-0,61	-0,67	-0,74	-0,81	-0,88	-0,96	-1,04	-1,13	-1,22
Pulp, paper products; publishing and printing	-3,15	-3,49	-3,84	-4,20	-4,55	-4,92	-5,29	-5,67	-6,06	-6,45	-6,85	-7,25	-7,67	-8,09	-8,52
Coke, refined petroleum products and nuclear	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-5,27	-5,72	-6,17	-6,61	-7,04	-7,46	-7,88	-8,29	-8,70	-9,10	-9,50	-9,89	-10,27	-10,65	-11,03
Rubber and plastic products	-2,68	-2,98	-3,27	-3,57	-3,88	-4,18	-4,50	-4,81	-5,13	-5,45	-5,78	-6,11	-6,44	-6,78	-7,13
Other non-metallic mineral products	-2,01	-2,23	-2,46	-2,69	-2,92	-3,16	-3,39	-3,64	-3,88	-4,13	-4,38	-4,64	-4,90	-5,16	-5,43
Basic metals and fabricated metal products	-2,45	-2,76	-3,08	-3,41	-3,74	-4,07	-4,41	-4,76	-5,11	-5,47	-5,83	-6,19	-6,56	-6,93	-7,31
Machinery and equipment n.e.c.	-4,75	-5,34	-5,95	-6,56	-7,19	-7,82	-8,46	-9,11	-9,76	-10,42	-11,08	-11,76	-12,43	-13,12	-13,81
Electrical and optical equipment	-7,89	-8,70	-9,52	-10,35	-11,18	-12,02	-12,87	-13,72	-14,58	-15,44	-16,31	-17,19	-18,07	-18,96	-19,86
Transport equipment	-7,18	-7,88	-8,60	-9,32	-10,05	-10,78	-11,52	-12,27	-13,02	-13,77	-14,53	-15,30	-16,08	-16,86	-17,65
Manufacturing n.e.c.	-2,51	-2,84	-3,18	-3,53	-3,89	-4,25	-4,62	-4,99	-5,37	-5,75	-6,14	-6,54	-6,93	-7,34	-7,75
Electricity, gas, steam and hot water supply	0,93	1,03	1,12	1,22	1,32	1,42	1,53	1,63	1,74	1,85	1,97	2,09	2,21	2,33	2,46
Collection, purification and distribution of water	1,00	1,10	1,21	1,31	1,41	1,52	1,63	1,74	1,85	1,96	2,08	2,19	2,31	2,43	2,56
Construction	0,19	0,21	0,23	0,25	0,26	0,29	0,31	0,33	0,35	0,37	0,39	0,41	0,43	0,45	0,48
Sale, maintenance, repair of motor vehicles and	1,41	1,55	1,69	1,84	1,98	2,13	2,29	2,44	2,60	2,76	2,92	3,09	3,26	3,43	3,61
Wholesale trade and commission trade, except of	1,28	1,41	1,54	1,67	1,80	1,94	2,07	2,21	2,35	2,50	2,65	2,80	2,95	3,10	3,26
Retail trade, except of motor vehicles and	1,35	1,49	1,63	1,77	1,91	2,06	2,21	2,36	2,52	2,68	2,84	3,01	3,18	3,36	3,54
Hotels and restaurants	2,72	2,99	3,26	3,54	3,83	4,12	4,42	4,72	5,03	5,35	5,67	6,00	6,34	6,69	7,05
Land transport; transport via pipelines	0,82	0,91	0,99	1,08	1,17	1,26	1,35	1,44	1,53	1,62	1,71	1,80	1,90	1,99	2,09
Water transport	-0,10	-0,12	-0,14	-0,16	-0,19	-0,21	-0,24	-0,27	-0,30	-0,34	-0,38	-0,43	-0,47	-0,52	-0,58
Air transport	2,00	2,23	2,46	2,69	2,93	3,16	3,39	3,61	3,84	4,06	4,28	4,49	4,70	4,90	5,10
Supporting transport activities; activities of travel	1,31	1,45	1,60	1,75	1,90	2,05	2,20	2,36	2,51	2,66	2,81	2,96	3,11	3,25	3,40
Post and telecommunications	1,01	1,12	1,23	1,34	1,46	1,57	1,69	1,81	1,94	2,06	2,19	2,32	2,46	2,60	2,74
Financial intermediation, excluding insurance and	-0,17	-0,19	-0,21	-0,22	-0,24	-0,25	-0,27	-0,28	-0,30	-0,31	-0,33	-0,35	-0,36	-0,38	-0,40
Insurance and pension funding, except	0,40	0,45	0,49	0,54	0,58	0,63	0,68	0,74	0,79	0,84	0,90	0,96	1,02	1,08	1,15
Activities auxiliary to financial intermediation	-2,39	-2,72	-3,07	-3,42	-3,79	-4,16	-4,54	-4,92	-5,32	-5,72	-6,12	-6,53	-6,95	-7,37	-7,80
Real estate activities	0,47	0,52	0,58	0,64	0,70	0,77	0,83	0,89	0,96	1,03	1,10	1,17	1,25	1,32	1,40
Renting of machinery and equipment without	-0,36	-0,41	-0,46	-0,51	-0,56	-0,61	-0,66	-0,71	-0,76	-0,81	-0,86	-0,92	-0,97	-1,02	-1,08
Computer and related activities; research and	-0,81	-0,92	-1,05	-1,17	-1,31	-1,44	-1,58	-1,72	-1,87	-2,02	-2,18	-2,34	-2,50	-2,67	-2,85
Other business activities	-0,77	-0,85	-0,94	-1,03	-1,12	-1,22	-1,31	-1,40	-1,50	-1,60	-1,70	-1,80	-1,91	-2,01	-2,12
Public administration and defence; compulsory	-0,69	-0,75	-0,82	-0,88	-0,95	-1,02	-1,09	-1,16	-1,23	-1,30	-1,37	-1,44	-1,52	-1,59	-1,66
Education	-0,66	-0,72	-0,78	-0,84	-0,90	-0,96	-1,02	-1,08	-1,14	-1,20	-1,26	-1,33	-1,39	-1,45	-1,51
Health and social work	0,37	0,41	0,46	0,50	0,55	0,59	0,64	0,69	0,74	0,80	0,86	0,92	0,98	1,04	1,11
Other community, social and personal service	1,26	1,39	1,53	1,67	1,81	1,95	2,10	2,25	2,41	2,57	2,73	2,90	3,08	3,25	3,44
Activities of households as employers of	1,62	1,78	1,95	2,13	2,30	2,48	2,67	2,86	3,06	3,26	3,47	3,68	3,90	4,12	4,36

Impact of TTIP on the Economy of the Azores

Table A-14 – Total Export Impacts by Sector – Scenario 2B

Scenario 2B															
Total exports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-2,15	-2,37	-2,61	-2,84	-3,09	-3,34	-3,59	-3,86	-4,13	-4,41	-4,71	-5,02	-5,34	-5,68	-6,03
Fishing	-1,70	-1,87	-2,05	-2,22	-2,40	-2,58	-2,77	-2,96	-3,15	-3,36	-3,57	-3,79	-4,03	-4,28	-4,54
Mining and quarrying	-2,16	-2,40	-2,65	-2,90	-3,16	-3,43	-3,71	-4,00	-4,30	-4,61	-4,93	-5,27	-5,63	-6,01	-6,40
Production of meat and meat products	0,23	0,20	0,17	0,13	0,08	0,03	-0,03	-0,09	-0,17	-0,26	-0,35	-0,46	-0,59	-0,73	-0,88
Processing of fish and fish products	0,40	0,38	0,37	0,34	0,30	0,25	0,18	0,10	0,00	-0,12	-0,26	-0,43	-0,64	-0,87	-1,16
Manufacture of dairy products	4,64	5,06	5,48	5,89	6,29	6,68	7,05	7,41	7,76	8,08	8,39	8,67	8,92	9,13	9,32
Prepared animal feeds	2,92	3,14	3,36	3,57	3,76	3,95	4,12	4,28	4,41	4,53	4,63	4,70	4,75	4,76	4,73
Beverages & tobacco products	4,02	4,38	4,73	5,08	5,42	5,75	6,07	6,38	6,68	6,96	7,23	7,47	7,70	7,90	8,07
Fruits, vegetables, animal oils, grain mill, starches	-2,54	-2,83	-3,13	-3,43	-3,75	-4,08	-4,43	-4,78	-5,15	-5,54	-5,95	-6,38	-6,84	-7,32	-7,84
Textiles and leather	50,88	56,76	62,80	68,96	75,21	81,53	87,88	94,21	100,49	106,68	112,72	118,59	124,23	129,61	134,69
Wood and products of wood and cork	1,05	1,09	1,12	1,14	1,14	1,14	1,12	1,08	1,02	0,95	0,85	0,72	0,57	0,38	0,15
Pulp, paper products; publishing and printing	0,50	0,44	0,37	0,28	0,17	0,04	-0,10	-0,27	-0,46	-0,68	-0,93	-1,21	-1,53	-1,89	-2,30
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-15,56	-16,87	-18,16	-19,43	-20,69	-21,93	-23,15	-24,36	-25,56	-26,74	-27,91	-29,08	-30,23	-31,37	-32,51
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	-1,51	-1,75	-2,00	-2,27	-2,54	-2,83	-3,13	-3,44	-3,77	-4,12	-4,49	-4,88	-5,29	-5,73	-6,21
Basic metals and fabricated metal products	-5,51	-6,16	-6,82	-7,49	-8,18	-8,87	-9,58	-10,29	-11,02	-11,76	-12,51	-13,28	-14,06	-14,87	-15,69
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	-0,87	-1,11	-1,37	-1,64	-1,92	-2,23	-2,55	-2,88	-3,24	-3,61	-4,00	-4,42	-4,85	-5,32	-5,82
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and	6,60	7,22	7,84	8,45	9,07	9,67	10,28	10,87	11,46	12,04	12,61	13,16	13,70	14,21	14,71
Wholesale trade and commission trade, except of	5,21	5,70	6,19	6,68	7,16	7,63	8,09	8,54	8,98	9,41	9,82	10,21	10,57	10,91	11,22
Retail trade, except of motor vehicles and	5,46	5,98	6,49	6,99	7,50	7,99	8,47	8,94	9,40	9,84	10,27	10,67	11,06	11,41	11,73
Hotels and restaurants	6,73	7,37	8,01	8,65	9,30	9,95	10,61	11,27	11,93	12,59	13,26	13,93	14,61	15,29	15,97
Land transport; transport via pipelines	2,81	3,07	3,33	3,59	3,84	4,08	4,30	4,52	4,72	4,91	5,08	5,23	5,36	5,45	5,52
Water transport	1,36	1,47	1,57	1,66	1,75	1,83	1,90	1,96	2,01	2,04	2,06	2,07	2,05	2,02	1,96
Air transport	3,66	4,02	4,39	4,75	5,10	5,45	5,78	6,10	6,41	6,70	6,97	7,22	7,43	7,62	7,77
Supporting transport activities; activities of travel	2,70	2,99	3,26	3,54	3,81	4,07	4,32	4,56	4,79	5,00	5,19	5,37	5,52	5,65	5,75
Post and telecommunications	2,75	3,01	3,26	3,50	3,74	3,96	4,18	4,39	4,58	4,76	4,93	5,07	5,19	5,28	5,34
Financial intermediation, excluding insurance and	0,13	0,12	0,09	0,07	0,03	-0,01	-0,06	-0,13	-0,21	-0,30	-0,40	-0,53	-0,68	-0,86	-1,06
Insurance and pension funding, except compulsory	0,93	1,01	1,08	1,15	1,21	1,27	1,32	1,36	1,39	1,41	1,42	1,41	1,39	1,34	1,27
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and	5,45	5,92	6,38	6,83	7,28	7,72	8,15	8,58	9,00	9,40	9,79	10,17	10,53	10,87	11,19
Other business activities	0,20	0,16	0,11	0,06	-0,01	-0,08	-0,15	-0,24	-0,35	-0,46	-0,59	-0,74	-0,90	-1,09	-1,31
Public administration and defence; compulsory	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service	4,05	4,42	4,79	5,15	5,51	5,86	6,20	6,53	6,86	7,17	7,47	7,75	8,02	8,26	8,49
Activities of households as employers of domestic	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-15 – Total Export Impacts by Sector – Scenario 3B

Scenario 3B															
Total exports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-2,19	-2,42	-2,65	-2,88	-3,12	-3,35	-3,60	-3,84	-4,10	-4,35	-4,61	-4,88	-5,15	-5,43	-5,72
Fishing	-2,67	-2,96	-3,26	-3,56	-3,86	-4,17	-4,48	-4,80	-5,12	-5,45	-5,78	-6,12	-6,46	-6,81	-7,17
Mining and quarrying	-2,17	-2,41	-2,65	-2,89	-3,14	-3,39	-3,65	-3,91	-4,17	-4,44	-4,72	-4,99	-5,28	-5,57	-5,87
Production of meat and meat products	0,47	0,48	0,47	0,47	0,46	0,45	0,43	0,42	0,39	0,37	0,33	0,30	0,26	0,21	0,16
Processing of fish and fish products	-0,27	-0,37	-0,47	-0,58	-0,70	-0,83	-0,97	-1,11	-1,27	-1,45	-1,63	-1,82	-2,03	-2,25	-2,49
Manufacture of dairy products	4,84	5,29	5,74	6,19	6,62	7,05	7,48	7,89	8,30	8,70	9,09	9,47	9,84	10,20	10,55
Prepared animal feeds	3,32	3,59	3,86	4,12	4,37	4,62	4,86	5,09	5,32	5,53	5,74	5,94	6,13	6,31	6,47
Beverages & tobacco products	3,57	3,88	4,19	4,50	4,80	5,10	5,39	5,67	5,95	6,23	6,49	6,75	7,01	7,25	7,48
Fruits, vegetables, animal oils, grain mill,	-3,40	-3,76	-4,12	-4,48	-4,86	-5,23	-5,61	-6,00	-6,40	-6,80	-7,20	-7,62	-8,04	-8,47	-8,91
Textiles and leather	58,01	65,30	72,98	81,05	89,52	98,41	107,74	117,50	127,72	138,41	149,59	161,25	173,43	186,12	199,35
Wood and products of wood and cork	1,14	1,20	1,26	1,30	1,35	1,38	1,40	1,42	1,43	1,43	1,42	1,40	1,37	1,33	1,28
Pulp, paper products; publishing and printing	0,23	0,16	0,08	-0,01	-0,12	-0,23	-0,35	-0,49	-0,64	-0,79	-0,97	-1,15	-1,35	-1,56	-1,79
Coke, refined petroleum products and nuclear	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	-19,87	-21,48	-23,05	-24,59	-26,10	-27,58	-29,03	-30,44	-31,83	-33,20	-34,53	-35,84	-37,12	-38,38	-39,62
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	-2,16	-2,45	-2,74	-3,05	-3,36	-3,67	-3,99	-4,32	-4,66	-5,01	-5,36	-5,72	-6,08	-6,46	-6,84
Basic metals and fabricated metal products	-7,45	-8,25	-9,06	-9,88	-10,70	-11,52	-12,35	-13,17	-14,00	-14,84	-15,67	-16,50	-17,34	-18,18	-19,02
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	-1,60	-1,89	-2,19	-2,51	-2,84	-3,18	-3,53	-3,89	-4,25	-4,63	-5,02	-5,42	-5,82	-6,24	-6,68
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and	7,20	7,89	8,57	9,26	9,95	10,64	11,33	12,02	12,71	13,39	14,08	14,77	15,45	16,14	16,82
Wholesale trade and commission trade, except	5,78	6,33	6,89	7,45	8,00	8,55	9,10	9,65	10,20	10,74	11,28	11,81	12,34	12,87	13,39
Retail trade, except of motor vehicles and	6,08	6,67	7,25	7,84	8,42	9,00	9,58	10,15	10,72	11,29	11,86	12,42	12,98	13,53	14,07
Hotels and restaurants	7,13	7,81	8,49	9,18	9,87	10,56	11,27	11,97	12,68	13,40	14,12	14,85	15,58	16,32	17,06
Land transport; transport via pipelines	2,58	2,84	3,09	3,33	3,58	3,81	4,05	4,28	4,50	4,72	4,94	5,14	5,35	5,54	5,73
Water transport	1,25	1,35	1,45	1,54	1,63	1,71	1,79	1,86	1,93	1,99	2,04	2,09	2,13	2,16	2,18
Air transport	3,87	4,27	4,67	5,07	5,47	5,87	6,26	6,65	7,03	7,41	7,78	8,15	8,51	8,85	9,19
Supporting transport activities; activities of	2,48	2,75	3,01	3,28	3,54	3,80	4,05	4,30	4,55	4,79	5,03	5,25	5,48	5,69	5,90
Post and telecommunications	3,02	3,31	3,59	3,88	4,16	4,44	4,71	4,98	5,25	5,51	5,77	6,02	6,26	6,50	6,73
Financial intermediation, excluding insurance	-1,71	-1,89	-2,08	-2,27	-2,46	-2,66	-2,86	-3,07	-3,28	-3,50	-3,72	-3,95	-4,18	-4,43	-4,67
Insurance and pension funding, except	-0,94	-1,03	-1,13	-1,22	-1,33	-1,43	-1,54	-1,65	-1,77	-1,89	-2,01	-2,14	-2,27	-2,41	-2,56
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and	3,50	3,76	4,01	4,26	4,50	4,73	4,95	5,17	5,39	5,59	5,79	5,99	6,17	6,35	6,52
Other business activities	-0,46	-0,56	-0,66	-0,76	-0,87	-0,98	-1,10	-1,22	-1,35	-1,48	-1,62	-1,76	-1,91	-2,07	-2,23
Public administration and defence; compulsory	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service	4,11	4,49	4,87	5,25	5,63	6,01	6,38	6,76	7,12	7,49	7,85	8,21	8,57	8,92	9,26
Activities of households as employers of	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Exports to the US

Table A-16 – Total Export to US Impacts by Sector – Scenario 1A

Scenario 1A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Exports to the US (% change to the BAU)															
Agriculture, hunting and forestry, logging	-1,35	-1,45	-1,56	-1,66	-1,76	-1,86	-1,96	-2,06	-2,16	-2,26	-2,35	-2,45	-2,54	-2,64	-2,74
Fishing	-1,00	-1,10	-1,21	-1,31	-1,42	-1,52	-1,63	-1,73	-1,84	-1,94	-2,05	-2,16	-2,26	-2,37	-2,48
Mining and quarrying	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Production of meat and meat products	1,22	1,32	1,42	1,51	1,61	1,71	1,81	1,91	2,01	2,11	2,21	2,31	2,41	2,50	2,60
Processing of fish and fish products	4,11	4,48	4,85	5,22	5,59	5,96	6,33	6,70	7,07	7,44	7,81	8,19	8,56	8,94	9,31
Manufacture of dairy products	5,30	5,83	6,37	6,90	7,45	7,99	8,54	9,09	9,64	10,20	10,75	11,31	11,87	12,43	13,00
Prepared animal feeds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Beverages & tobacco products	4,24	4,64	5,05	5,45	5,86	6,27	6,69	7,10	7,52	7,93	8,35	8,77	9,19	9,61	10,03
Fruits, vegetables, animal oils, grain mill, starches	3,51	3,83	4,14	4,46	4,77	5,09	5,40	5,72	6,03	6,35	6,67	6,99	7,30	7,62	7,94
Textiles and leather	4,28	4,65	5,02	5,38	5,75	6,11	6,47	6,83	7,20	7,56	7,92	8,28	8,64	9,00	9,37
Wood and products of wood and cork	3,71	4,07	4,42	4,78	5,13	5,49	5,85	6,21	6,57	6,93	7,29	7,65	8,02	8,38	8,74
Pulp, paper products; publishing and printing	3,36	3,63	3,90	4,17	4,43	4,70	4,96	5,23	5,49	5,75	6,02	6,28	6,54	6,80	7,06
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	6,20	6,78	7,37	7,95	8,55	9,14	9,74	10,34	10,95	11,56	12,17	12,79	13,41	14,03	14,66
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	4,05	4,38	4,70	5,02	5,34	5,66	5,98	6,30	6,62	6,93	7,25	7,57	7,89	8,21	8,53
Basic metals and fabricated metal products	4,35	4,66	4,97	5,27	5,57	5,86	6,15	6,44	6,73	7,01	7,30	7,58	7,86	8,15	8,43
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	4,03	4,31	4,58	4,85	5,11	5,37	5,63	5,88	6,13	6,38	6,62	6,87	7,11	7,35	7,59
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	3,67	4,02	4,38	4,73	5,09	5,45	5,81	6,17	6,53	6,89	7,25	7,61	7,98	8,34	8,71
Wholesale trade and commission trade, except of motor vehicles and motorcycles	3,12	3,43	3,75	4,06	4,37	4,69	5,01	5,32	5,64	5,96	6,27	6,59	6,91	7,23	7,55
Retail trade, except of motor vehicles and motorcycles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hotels and restaurants	5,53	6,05	6,58	7,10	7,63	8,17	8,70	9,24	9,79	10,33	10,88	11,43	11,99	12,54	13,10
Land transport; transport via pipelines	3,13	3,44	3,75	4,06	4,38	4,69	5,01	5,32	5,63	5,95	6,27	6,58	6,90	7,22	7,53
Water transport	1,93	2,06	2,19	2,32	2,45	2,57	2,70	2,82	2,94	3,06	3,17	3,29	3,41	3,52	3,64
Air transport	3,34	3,69	4,03	4,38	4,73	5,09	5,44	5,80	6,15	6,51	6,87	7,23	7,60	7,96	8,32
Supporting transport activities; activities of travel agencies	3,06	3,37	3,68	4,00	4,31	4,63	4,95	5,26	5,58	5,90	6,22	6,54	6,86	7,18	7,51
Post and telecommunications	3,34	3,67	3,99	4,32	4,65	4,98	5,30	5,63	5,97	6,30	6,63	6,96	7,29	7,63	7,96
Financial intermediation, excluding insurance and pension funding	3,68	4,01	4,34	4,67	5,00	5,33	5,66	6,00	6,33	6,66	7,00	7,33	7,67	8,00	8,34
Insurance and pension funding, except compulsory social security	4,40	4,82	5,23	5,64	6,06	6,48	6,89	7,31	7,73	8,15	8,58	9,00	9,43	9,85	10,28
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and development	3,04	3,27	3,50	3,72	3,94	4,16	4,37	4,58	4,80	5,01	5,22	5,42	5,63	5,84	6,04
Other business activities	3,71	4,02	4,33	4,64	4,95	5,25	5,56	5,87	6,18	6,49	6,80	7,11	7,43	7,74	8,05
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	3,32	3,64	3,96	4,28	4,60	4,92	5,24	5,56	5,89	6,21	6,54	6,86	7,19	7,51	7,84
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-17 – Total Export to US Impacts by Sector – Scenario 2A

Scenario 2A															
Exports to the US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	20,14	22,14	24,16	26,21	28,28	30,38	32,50	34,65	36,81	38,99	41,19	43,40	45,61	47,82	50,03
Fishing	20,18	22,15	24,15	26,18	28,23	30,30	32,38	34,49	36,61	38,74	40,88	43,02	45,16	47,29	49,40
Mining and quarrying	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Production of meat and meat products	27,14	29,90	32,72	35,58	38,51	41,48	44,52	47,60	50,74	53,93	57,17	60,45	63,78	67,15	70,55
Processing of fish and fish products	29,54	32,55	35,61	38,73	41,89	45,11	48,37	51,67	55,00	58,36	61,75	65,13	68,52	71,88	75,20
Manufacture of dairy products	31,27	34,56	37,91	41,33	44,83	48,39	52,02	55,71	59,46	63,27	67,13	71,03	74,97	78,93	82,90
Prepared animal feeds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Beverages & tobacco products	29,96	33,06	36,24	39,48	42,78	46,15	49,58	53,07	56,62	60,23	63,88	67,58	71,32	75,08	78,87
Fruits, vegetables, animal oils, grain mill, starches	17,22	18,86	20,52	22,18	23,86	25,54	27,23	28,92	30,61	32,29	33,96	35,61	37,23	38,82	40,36
Textiles and leather	437,56	525,96	628,26	746,39	882,48	1038,83	1218,00	1422,72	1655,94	1920,84	2220,83	2559,54	2940,87	3368,95	3848,24
Wood and products of wood and cork	12,41	13,55	14,69	15,83	16,96	18,10	19,22	20,34	21,44	22,52	23,59	24,62	25,62	26,58	27,48
Pulp, paper products; publishing and printing	12,04	13,11	14,17	15,23	16,27	17,31	18,33	19,34	20,32	21,27	22,18	23,06	23,88	24,64	25,32
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	27,62	30,44	33,33	36,27	39,27	42,32	45,44	48,61	51,83	55,11	58,44	61,81	65,23	68,69	72,17
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	18,15	19,85	21,57	23,29	25,02	26,76	28,51	30,26	32,01	33,75	35,48	37,20	38,89	40,54	42,16
Basic metals and fabricated metal products	61,16	68,07	75,26	82,72	90,47	98,52	106,88	115,55	124,53	133,84	143,47	153,42	163,69	174,28	185,16
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	16,60	18,10	19,59	21,09	22,58	24,08	25,57	27,06	28,53	30,00	31,45	32,89	34,29	35,66	36,99
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	3,50	3,82	4,14	4,45	4,75	5,05	5,34	5,62	5,89	6,15	6,39	6,61	6,82	6,99	7,14
Wholesale trade and commission trade, except of motor vehicles and motorcycles	3,00	3,27	3,54	3,80	4,06	4,30	4,53	4,75	4,96	5,14	5,31	5,45	5,56	5,64	5,67
Retail trade, except of motor vehicles and motorcycles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hotels and restaurants	5,42	5,93	6,43	6,94	7,45	7,97	8,48	9,00	9,51	10,03	10,55	11,08	11,60	12,12	12,65
Land transport; transport via pipelines	7,24	7,92	8,60	9,27	9,94	10,60	11,25	11,89	12,51	13,12	13,70	14,26	14,79	15,29	15,74
Water transport	6,35	6,91	7,46	8,01	8,55	9,09	9,62	10,13	10,64	11,13	11,60	12,05	12,48	12,88	13,25
Air transport	4,56	4,98	5,40	5,81	6,21	6,61	6,99	7,36	7,71	8,04	8,34	8,62	8,86	9,07	9,23
Supporting transport activities; activities of travel agencies	7,19	7,88	8,56	9,24	9,91	10,58	11,24	11,89	12,52	13,14	13,74	14,32	14,86	15,37	15,85
Post and telecommunications	4,22	4,61	4,99	5,36	5,73	6,09	6,44	6,77	7,09	7,39	7,68	7,93	8,16	8,36	8,51
Financial intermediation, excluding insurance and pension funding	9,10	9,93	10,75	11,58	12,40	13,21	14,02	14,82	15,60	16,37	17,11	17,84	18,53	19,18	19,79
Insurance and pension funding, except compulsory social security	9,65	10,56	11,46	12,37	13,27	14,18	15,08	15,98	16,87	17,75	18,61	19,47	20,30	21,10	21,88
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and development	4,80	5,21	5,62	6,02	6,41	6,80	7,18	7,55	7,90	8,25	8,58	8,89	9,18	9,44	9,68
Other business activities	5,98	6,48	6,98	7,47	7,96	8,44	8,91	9,37	9,81	10,24	10,64	11,03	11,38	11,71	12,00
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	5,48	5,98	6,49	6,99	7,48	7,97	8,46	8,93	9,40	9,85	10,29	10,72	11,12	11,50	11,85
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-18 – Total Export to US Impacts by Sector – Scenario 3A

Scenario 3A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Exports to the US (% change to the BAU)															
Agriculture, hunting and forestry, logging	-0,61	-0,68	-0,76	-0,84	-0,92	-1,01	-1,10	-1,20	-1,30	-1,40	-1,52	-1,64	-1,77	-1,90	-2,04
Fishing	-0,36	-0,44	-0,52	-0,61	-0,70	-0,80	-0,90	-1,02	-1,13	-1,26	-1,39	-1,53	-1,67	-1,83	-1,99
Mining and quarrying	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Production of meat and meat products	-0,17	-0,22	-0,27	-0,32	-0,38	-0,43	-0,50	-0,56	-0,63	-0,70	-0,78	-0,86	-0,95	-1,04	-1,13
Processing of fish and fish products	1,95	2,07	2,18	2,27	2,36	2,44	2,51	2,57	2,61	2,64	2,66	2,67	2,66	2,64	2,60
Manufacture of dairy products	3,22	3,51	3,81	4,10	4,38	4,66	4,93	5,19	5,44	5,69	5,92	6,14	6,36	6,55	6,74
Prepared animal feeds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Beverages & tobacco products	2,23	2,41	2,60	2,78	2,96	3,13	3,29	3,45	3,60	3,75	3,89	4,02	4,14	4,26	4,36
Fruits, vegetables, animal oils, grain mill, starches	2,86	3,08	3,29	3,49	3,69	3,88	4,07	4,25	4,42	4,58	4,73	4,87	5,01	5,13	5,24
Textiles and leather	-23,86	-25,50	-27,09	-28,64	-30,16	-31,64	-33,10	-34,53	-35,94	-37,33	-38,70	-40,06	-41,41	-42,74	-44,05
Wood and products of wood and cork	2,14	2,29	2,42	2,55	2,68	2,79	2,90	3,00	3,09	3,17	3,24	3,31	3,36	3,40	3,42
Pulp, paper products; publishing and printing	1,95	2,06	2,15	2,24	2,31	2,38	2,43	2,47	2,51	2,52	2,53	2,52	2,50	2,46	2,41
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	6,55	7,14	7,74	8,33	8,93	9,53	10,14	10,74	11,34	11,95	12,55	13,15	13,76	14,36	14,96
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	3,71	3,97	4,23	4,47	4,71	4,94	5,17	5,38	5,59	5,79	5,98	6,16	6,33	6,48	6,63
Basic metals and fabricated metal products	5,28	5,63	5,97	6,31	6,63	6,94	7,23	7,52	7,80	8,07	8,32	8,57	8,80	9,02	9,23
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	3,66	3,88	4,09	4,28	4,47	4,64	4,80	4,95	5,10	5,23	5,35	5,45	5,55	5,64	5,71
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	3,78	4,13	4,48	4,83	5,17	5,51	5,85	6,19	6,52	6,85	7,18	7,50	7,81	8,13	8,43
Wholesale trade and commission trade, except of motor vehicles and motorcycles	3,30	3,61	3,91	4,21	4,51	4,81	5,10	5,38	5,66	5,94	6,21	6,47	6,73	6,98	7,22
Retail trade, except of motor vehicles and motorcycles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hotels and restaurants	5,65	6,18	6,71	7,24	7,78	8,32	8,86	9,40	9,94	10,49	11,04	11,59	12,15	12,71	13,27
Land transport; transport via pipelines	3,72	4,06	4,40	4,74	5,08	5,41	5,73	6,06	6,37	6,68	6,98	7,28	7,57	7,85	8,13
Water transport	2,52	2,72	2,92	3,10	3,29	3,46	3,63	3,79	3,95	4,10	4,24	4,37	4,50	4,61	4,72
Air transport	4,15	4,54	4,92	5,30	5,68	6,05	6,42	6,78	7,13	7,48	7,82	8,15	8,48	8,79	9,09
Supporting transport activities; activities of travel agencies	3,67	4,02	4,36	4,71	5,05	5,38	5,71	6,04	6,35	6,67	6,97	7,27	7,57	7,85	8,12
Post and telecommunications	3,80	4,15	4,50	4,85	5,19	5,53	5,86	6,19	6,52	6,84	7,15	7,46	7,76	8,06	8,35
Financial intermedation, excluding insurance and pension funding	4,30	4,67	5,04	5,40	5,76	6,11	6,46	6,81	7,15	7,48	7,81	8,13	8,44	8,74	9,04
Insurance and pension funding, except compulsory social security	5,03	5,48	5,94	6,39	6,85	7,30	7,74	8,19	8,63	9,07	9,51	9,94	10,37	10,79	11,21
Activities auxiliary to financial intermedation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and development	3,45	3,73	4,00	4,26	4,52	4,77	5,02	5,26	5,49	5,72	5,94	6,16	6,37	6,57	6,76
Other business activities	4,29	4,63	4,98	5,32	5,66	5,99	6,32	6,64	6,95	7,27	7,57	7,87	8,16	8,44	8,71
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	4,17	4,55	4,93	5,31	5,69	6,07	6,44	6,82	7,19	7,56	7,92	8,28	8,64	8,99	9,34
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-19 – Total Export to US Impacts by Sector – Scenario 1B

Scenario 1B															
Exports to the US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-1,71	-1,85	-1,98	-2,11	-2,24	-2,37	-2,50	-2,63	-2,76	-2,88	-3,01	-3,13	-3,26	-3,39	-3,51
Fishing	-1,27	-1,41	-1,54	-1,68	-1,81	-1,95	-2,08	-2,22	-2,36	-2,49	-2,63	-2,77	-2,91	-3,05	-3,19
Mining and quarrying	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Production of meat and meat products	1,51	1,64	1,76	1,88	2,00	2,12	2,24	2,36	2,48	2,60	2,72	2,84	2,95	3,07	3,19
Processing of fish and fish products	5,15	5,62	6,08	6,54	7,01	7,47	7,94	8,40	8,87	9,34	9,81	10,27	10,74	11,21	11,68
Manufacture of dairy products	6,66	7,34	8,01	8,70	9,38	10,07	10,76	11,46	12,16	12,86	13,57	14,28	14,99	15,70	16,42
Prepared animal feeds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Beverages & tobacco products	5,32	5,83	6,34	6,86	7,37	7,89	8,41	8,94	9,46	9,99	10,51	11,04	11,57	12,10	12,64
Fruits, vegetables, animal oils, grain mill, starches	4,40	4,79	5,19	5,58	5,97	6,37	6,76	7,15	7,55	7,94	8,34	8,73	9,13	9,52	9,92
Textiles and leather	5,38	5,84	6,31	6,77	7,22	7,68	8,14	8,59	9,05	9,51	9,96	10,41	10,87	11,32	11,78
Wood and products of wood and cork	4,66	5,10	5,54	5,99	6,44	6,89	7,34	7,79	8,24	8,69	9,14	9,60	10,05	10,51	10,96
Pulp, paper products; publishing and printing	4,20	4,54	4,87	5,21	5,54	5,86	6,19	6,52	6,84	7,16	7,48	7,80	8,12	8,44	8,76
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	7,84	8,58	9,33	10,08	10,84	11,60	12,37	13,14	13,92	14,71	15,50	16,29	17,09	17,90	18,71
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	5,10	5,50	5,91	6,31	6,71	7,12	7,52	7,92	8,32	8,72	9,11	9,51	9,91	10,31	10,71
Basic metals and fabricated metal products	5,48	5,87	6,26	6,64	7,01	7,39	7,75	8,11	8,48	8,83	9,19	9,55	9,90	10,25	10,60
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	5,07	5,43	5,77	6,11	6,44	6,77	7,09	7,40	7,72	8,03	8,33	8,64	8,94	9,24	9,54
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	4,60	5,05	5,50	5,94	6,39	6,84	7,29	7,75	8,20	8,65	9,11	9,57	10,02	10,48	10,94
Wholesale trade and commission trade, except of motor vehicles and motorcycles	3,91	4,30	4,69	5,09	5,48	5,88	6,27	6,67	7,07	7,46	7,86	8,26	8,66	9,06	9,46
Retail trade, except of motor vehicles and motorcycles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hotels and restaurants	6,99	7,66	8,32	9,00	9,68	10,36	11,05	11,74	12,43	13,13	13,84	14,55	15,26	15,98	16,71
Land transport; transport via pipelines	3,92	4,31	4,70	5,09	5,48	5,87	6,26	6,66	7,05	7,44	7,84	8,23	8,63	9,02	9,42
Water transport	2,41	2,58	2,74	2,90	3,05	3,21	3,36	3,51	3,65	3,80	3,94	4,09	4,23	4,37	4,50
Air transport	4,18	4,61	5,05	5,48	5,92	6,36	6,80	7,25	7,70	8,14	8,59	9,04	9,49	9,94	10,40
Supporting transport activities; activities of travel agencies	3,83	4,22	4,61	5,00	5,40	5,79	6,19	6,59	6,98	7,38	7,78	8,18	8,58	8,98	9,38
Post and telecommunications	4,18	4,59	5,00	5,41	5,82	6,23	6,64	7,05	7,47	7,88	8,29	8,71	9,12	9,54	9,95
Financial intermediation, excluding insurance and pension funding	4,61	5,03	5,44	5,86	6,28	6,69	7,11	7,53	7,94	8,36	8,78	9,20	9,62	10,04	10,46
Insurance and pension funding, except compulsory social security	5,53	6,05	6,57	7,09	7,62	8,14	8,67	9,20	9,72	10,26	10,79	11,32	11,86	12,39	12,93
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and development	3,82	4,11	4,39	4,67	4,94	5,21	5,48	5,75	6,01	6,28	6,54	6,79	7,05	7,31	7,56
Other business activities	4,67	5,06	5,44	5,83	6,22	6,61	7,00	7,39	7,77	8,16	8,55	8,94	9,33	9,72	10,12
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	4,16	4,56	4,95	5,35	5,76	6,16	6,56	6,96	7,37	7,77	8,18	8,58	8,99	9,40	9,80
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-20 – Total Export to US Impacts by Sector – Scenario 2B

Scenario 2B	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Exports to the US (% change to the BAU)															
Agriculture, hunting and forestry, logging	49,29	54,77	60,44	66,32	72,39	78,68	85,18	91,90	98,84	106,02	113,42	121,05	128,92	137,03	145,38
Fishing	48,89	54,31	59,93	65,74	71,75	77,97	84,39	91,03	97,89	104,97	112,28	119,82	127,58	135,56	143,77
Mining and quarrying	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Production of meat and meat products	51,72	57,51	63,50	69,71	76,15	82,82	89,73	96,89	104,29	111,96	119,88	128,07	136,54	145,28	154,30
Processing of fish and fish products	55,09	61,32	67,78	74,48	81,42	88,61	96,06	103,77	111,75	119,98	128,48	137,23	146,24	155,49	164,97
Manufacture of dairy products	58,17	64,89	71,88	79,15	86,70	94,55	102,71	111,17	119,95	129,05	138,48	148,23	158,32	168,73	179,47
Prepared animal feeds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Beverages & tobacco products	56,07	62,48	69,15	76,07	83,26	90,73	98,48	106,52	114,86	123,50	132,45	141,71	151,28	161,16	171,36
Fruits, vegetables, animal oils, grain mill, starches	17,00	18,61	20,22	21,84	23,47	25,11	26,74	28,38	30,02	31,65	33,27	34,87	36,45	38,01	39,53
Textiles and leather	392,23	468,74	556,68	657,56	773,07	905,02	1055,42	1226,42	1420,36	1639,71	1887,16	2165,54	2477,88	2827,37	3217,44
Wood and products of wood and cork	24,48	26,92	29,39	31,89	34,42	36,99	39,58	42,20	44,84	47,50	50,18	52,86	55,55	58,23	60,89
Pulp, paper products; publishing and printing	23,61	25,88	28,18	30,49	32,82	35,17	37,53	39,90	42,28	44,66	47,03	49,39	51,72	54,02	56,28
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	45,78	50,82	56,03	61,41	66,98	72,72	78,66	84,79	91,11	97,63	104,35	111,28	118,41	125,75	133,29
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	18,06	19,72	21,40	23,08	24,78	26,48	28,18	29,88	31,59	33,29	34,99	36,67	38,33	39,97	41,58
Basic metals and fabricated metal products	109,79	124,01	139,15	155,26	172,41	190,67	210,09	230,75	252,71	276,05	300,85	327,16	355,07	384,66	415,98
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	16,76	18,22	19,68	21,14	22,60	24,05	25,49	26,93	28,36	29,78	31,19	32,57	33,94	35,28	36,58
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	4,26	4,66	5,05	5,44	5,82	6,20	6,57	6,93	7,28	7,62	7,94	8,26	8,55	8,82	9,07
Wholesale trade and commission trade, except of motor vehicles and motorcycles	3,55	3,89	4,22	4,54	4,86	5,17	5,47	5,76	6,03	6,29	6,53	6,75	6,95	7,12	7,26
Retail trade, except of motor vehicles and motorcycles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hotels and restaurants	6,93	7,58	8,23	8,89	9,56	10,22	10,89	11,56	12,24	12,92	13,60	14,28	14,96	15,65	16,34
Land transport; transport via pipelines	11,64	12,77	13,90	15,03	16,16	17,30	18,43	19,56	20,68	21,79	22,89	23,97	25,04	26,08	27,09
Water transport	9,98	10,91	11,84	12,77	13,70	14,63	15,55	16,47	17,38	18,28	19,17	20,05	20,91	21,75	22,57
Air transport	6,06	6,65	7,25	7,84	8,43	9,01	9,58	10,14	10,68	11,21	11,72	12,21	12,66	13,09	13,48
Supporting transport activities; activities of travel agencies	11,53	12,67	13,82	14,97	16,13	17,29	18,44	19,60	20,75	21,89	23,02	24,14	25,24	26,31	27,36
Post and telecommunications	5,64	6,17	6,69	7,21	7,72	8,22	8,72	9,20	9,67	10,13	10,57	10,99	11,38	11,75	12,09
Financial intermediation, excluding insurance and pension funding	14,96	16,38	17,81	19,25	20,70	22,15	23,60	25,05	26,51	27,95	29,40	30,82	32,24	33,63	34,99
Insurance and pension funding, except compulsory social security	15,96	17,51	19,08	20,66	22,24	23,84	25,45	27,07	28,69	30,32	31,95	33,57	35,19	36,80	38,40
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and development	6,72	7,31	7,89	8,46	9,03	9,60	10,16	10,71	11,25	11,78	12,29	12,80	13,28	13,75	14,19
Other business activities	8,40	9,13	9,85	10,57	11,29	12,00	12,70	13,40	14,08	14,75	15,40	16,04	16,66	17,25	17,81
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	8,35	9,14	9,92	10,71	11,49	12,27	13,05	13,82	14,59	15,35	16,10	16,83	17,55	18,25	18,93
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-21 – Total Export to US Impacts by Sector – Scenario 3B

Scenario 3B															
Exports to the US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	-0,96	-1,08	-1,20	-1,32	-1,45	-1,58	-1,72	-1,86	-2,00	-2,15	-2,31	-2,47	-2,64	-2,82	-3,00
Fishing	-0,71	-0,83	-0,95	-1,08	-1,22	-1,35	-1,50	-1,65	-1,81	-1,97	-2,14	-2,32	-2,50	-2,69	-2,89
Mining and quarrying	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Production of meat and meat products	-1,03	-1,17	-1,30	-1,44	-1,59	-1,73	-1,88	-2,04	-2,19	-2,35	-2,52	-2,69	-2,86	-3,04	-3,22
Processing of fish and fish products	1,54	1,61	1,67	1,72	1,76	1,79	1,81	1,82	1,81	1,80	1,77	1,73	1,67	1,60	1,52
Manufacture of dairy products	3,42	3,74	4,05	4,36	4,66	4,95	5,23	5,51	5,78	6,04	6,29	6,52	6,75	6,97	7,17
Prepared animal feeds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Beverages & tobacco products	2,15	2,33	2,51	2,68	2,85	3,01	3,16	3,31	3,46	3,59	3,72	3,84	3,96	4,06	4,16
Fruits, vegetables, animal oils, grain mill, starches	2,11	2,25	2,38	2,51	2,62	2,73	2,84	2,93	3,02	3,09	3,16	3,22	3,27	3,30	3,33
Textiles and leather	-23,09	-24,70	-26,28	-27,82	-29,32	-30,80	-32,25	-33,67	-35,08	-36,47	-37,84	-39,19	-40,54	-41,87	-43,18
Wood and products of wood and cork	1,56	1,66	1,76	1,84	1,92	1,99	2,06	2,11	2,16	2,20	2,23	2,25	2,26	2,25	2,24
Pulp, paper products; publishing and printing	1,05	1,06	1,05	1,03	1,00	0,96	0,91	0,85	0,78	0,69	0,59	0,47	0,35	0,21	0,05
Coke, refined petroleum products and nuclear fuel	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Chemicals and chemical products	8,50	9,29	10,09	10,89	11,70	12,52	13,34	14,17	15,00	15,84	16,69	17,54	18,39	19,25	20,11
Rubber and plastic products	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other non-metallic mineral products	3,02	3,20	3,37	3,54	3,69	3,84	3,98	4,11	4,23	4,34	4,44	4,54	4,62	4,69	4,75
Basic metals and fabricated metal products	5,37	5,70	6,01	6,30	6,59	6,86	7,12	7,36	7,60	7,82	8,03	8,23	8,42	8,59	8,76
Machinery and equipment n.e.c.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Electrical and optical equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Transport equipment	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing n.e.c.	3,24	3,38	3,51	3,63	3,73	3,82	3,89	3,96	4,01	4,05	4,08	4,10	4,11	4,10	4,09
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	4,36	4,77	5,18	5,59	5,99	6,40	6,80	7,20	7,59	7,99	8,38	8,76	9,14	9,52	9,89
Wholesale trade and commission trade, except of motor vehicles and motorcycles	3,66	4,02	4,37	4,72	5,06	5,40	5,74	6,08	6,41	6,73	7,05	7,36	7,67	7,97	8,26
Retail trade, except of motor vehicles and motorcycles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hotels and restaurants	6,98	7,63	8,30	8,96	9,63	10,31	10,98	11,66	12,35	13,04	13,74	14,43	15,14	15,84	16,55
Land transport; transport via pipelines	3,99	4,37	4,75	5,12	5,50	5,86	6,23	6,58	6,94	7,28	7,63	7,96	8,29	8,61	8,92
Water transport	1,94	2,10	2,25	2,40	2,55	2,68	2,82	2,94	3,06	3,18	3,28	3,38	3,47	3,56	3,63
Air transport	4,59	5,06	5,53	5,99	6,46	6,92	7,39	7,84	8,30	8,74	9,18	9,62	10,04	10,46	10,87
Supporting transport activities; activities of travel agencies	3,88	4,28	4,68	5,07	5,46	5,85	6,23	6,61	6,98	7,35	7,72	8,07	8,42	8,77	9,10
Post and telecommunications	4,25	4,65	5,05	5,45	5,84	6,24	6,62	7,01	7,39	7,76	8,13	8,49	8,85	9,20	9,54
Financial intermediation, excluding insurance and pension funding	4,89	5,32	5,74	6,16	6,58	6,99	7,39	7,79	8,19	8,58	8,97	9,34	9,72	10,08	10,44
Insurance and pension funding, except compulsory social security	5,87	6,40	6,94	7,48	8,02	8,55	9,08	9,61	10,14	10,67	11,19	11,71	12,22	12,73	13,24
Activities auxiliary to financial intermediation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Computer and related activities; research and development	4,02	4,32	4,62	4,91	5,20	5,48	5,75	6,02	6,28	6,53	6,78	7,02	7,25	7,48	7,70
Other business activities	4,98	5,39	5,79	6,18	6,58	6,97	7,35	7,73	8,11	8,48	8,84	9,20	9,55	9,89	10,23
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	4,63	5,06	5,50	5,93	6,36	6,78	7,21	7,63	8,05	8,47	8,89	9,30	9,70	10,11	10,51
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Total Imports

Table A-22 – Total Import Impacts by Sector – Scenario 1B

Scenario 1B															
Total imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	6,05	6,65	7,26	7,88	8,50	9,13	9,77	10,41	11,05	11,70	12,36	13,02	13,69	14,36	15,04
Fishing	3,72	4,08	4,45	4,82	5,20	5,58	5,96	6,35	6,74	7,13	7,52	7,92	8,33	8,73	9,14
Mining and quarrying	1,79	1,95	2,11	2,28	2,44	2,61	2,77	2,94	3,11	3,28	3,46	3,63	3,81	3,98	4,16
Production of meat and meat products	7,22	7,94	8,66	9,39	10,13	10,87	11,62	12,37	13,13	13,90	14,68	15,46	16,25	17,04	17,85
Processing of fish and fish products	6,47	7,11	7,75	8,40	9,06	9,72	10,39	11,07	11,75	12,44	13,14	13,84	14,55	15,26	15,98
Manufacture of dairy products	5,65	6,16	6,66	7,18	7,70	8,22	8,75	9,28	9,82	10,37	10,92	11,47	12,03	12,60	13,17
Prepared animal feeds	5,68	6,23	6,78	7,34	7,90	8,47	9,05	9,63	10,21	10,80	11,40	12,00	12,61	13,22	13,83
Beverages & tobacco products	6,94	7,59	8,24	8,91	9,58	10,25	10,93	11,62	12,31	13,01	13,72	14,43	15,15	15,87	16,60
Fruits, vegetables, animal oils, grain mill, starches	3,39	3,73	4,06	4,40	4,74	5,08	5,42	5,77	6,12	6,47	6,82	7,18	7,53	7,89	8,26
Textiles and leather	2,64	2,90	3,15	3,41	3,67	3,93	4,19	4,46	4,72	4,99	5,26	5,53	5,81	6,08	6,36
Wood and products of wood and cork	8,90	9,72	10,56	11,40	12,25	13,10	13,97	14,84	15,73	16,62	17,52	18,43	19,35	20,28	21,22
Pulp, paper products; publishing and printing	4,25	4,69	5,12	5,56	6,01	6,45	6,91	7,36	7,82	8,29	8,76	9,23	9,70	10,18	10,66
Coke, refined petroleum products and nuclear fuel	1,63	1,78	1,94	2,09	2,25	2,41	2,57	2,73	2,90	3,06	3,23	3,40	3,57	3,74	3,91
Chemicals and chemical products	1,54	1,68	1,83	1,97	2,12	2,27	2,41	2,56	2,71	2,87	3,02	3,17	3,33	3,49	3,64
Rubber and plastic products	1,78	1,95	2,12	2,30	2,47	2,65	2,83	3,01	3,19	3,37	3,55	3,74	3,93	4,12	4,31
Other non-metallic mineral products	4,04	4,47	4,91	5,35	5,80	6,25	6,71	7,17	7,63	8,09	8,56	9,03	9,51	9,99	10,47
Basic metals and fabricated metal products	2,63	2,93	3,24	3,56	3,88	4,21	4,54	4,87	5,21	5,55	5,90	6,24	6,59	6,95	7,30
Machinery and equipment n.e.c.	1,66	1,86	2,06	2,27	2,47	2,68	2,90	3,11	3,33	3,54	3,76	3,98	4,20	4,42	4,64
Electrical and optical equipment	0,73	0,81	0,88	0,95	1,02	1,10	1,17	1,25	1,32	1,40	1,47	1,55	1,63	1,70	1,78
Transport equipment	1,54	1,69	1,83	1,98	2,13	2,28	2,44	2,59	2,74	2,90	3,05	3,21	3,37	3,53	3,69
Manufacturing n.e.c.	1,45	1,59	1,74	1,88	2,03	2,18	2,33	2,48	2,64	2,79	2,94	3,10	3,26	3,42	3,57
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	8,57	9,36	10,17	10,98	11,80	12,63	13,47	14,33	15,19	16,06	16,94	17,83	18,73	19,64	20,57
Wholesale trade and commission trade, except of motor vehicles and motorcycles	10,22	11,14	12,08	13,03	13,99	14,97	15,95	16,95	17,96	18,98	20,02	21,07	22,13	23,21	24,30
Retail trade, except of motor vehicles and motorcycles	10,94	11,95	12,97	14,00	15,04	16,10	17,17	18,26	19,36	20,47	21,60	22,75	23,90	25,08	26,27
Hotels and restaurants	7,00	7,65	8,31	8,98	9,66	10,34	11,03	11,72	12,42	13,13	13,85	14,57	15,30	16,04	16,78
Land transport; transport via pipelines	9,77	10,66	11,57	12,49	13,42	14,37	15,32	16,29	17,26	18,25	19,26	20,27	21,30	22,34	23,39
Water transport	8,35	9,20	10,06	10,93	11,82	12,71	13,62	14,54	15,46	16,40	17,35	18,31	19,27	20,25	21,24
Air transport	5,65	6,16	6,68	7,20	7,72	8,25	8,79	9,33	9,87	10,42	10,97	11,53	12,09	12,66	13,23
Supporting transport activities; activities of travel agencies	10,35	11,30	12,27	13,24	14,23	15,23	16,25	17,27	18,31	19,36	20,43	21,51	22,60	23,71	24,83
Post and telecommunications	9,58	10,47	11,38	12,29	13,21	14,15	15,10	16,06	17,03	18,01	19,00	20,01	21,03	22,06	23,10
Financial intermediation, excluding insurance and pension funding	8,04	8,84	9,64	10,45	11,27	12,10	12,94	13,79	14,65	15,51	16,39	17,28	18,17	19,08	19,99
Insurance and pension funding, except compulsory social security	7,40	8,10	8,81	9,53	10,25	10,99	11,73	12,47	13,23	14,00	14,77	15,55	16,34	17,13	17,94
Activities auxiliary to financial intermediation	1,27	1,40	1,53	1,66	1,79	1,93	2,06	2,20	2,34	2,48	2,62	2,76	2,90	3,05	3,20
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	8,09	8,89	9,71	10,53	11,36	12,21	13,06	13,92	14,79	15,66	16,55	17,45	18,35	19,27	20,19
Computer and related activities; research and development	0,85	0,93	1,02	1,10	1,19	1,28	1,36	1,45	1,54	1,63	1,73	1,82	1,91	2,01	2,10
Other business activities	5,89	6,50	7,12	7,74	8,37	9,01	9,65	10,30	10,95	11,61	12,27	12,94	13,62	14,30	14,99
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	9,20	10,07	10,95	11,84	12,74	13,65	14,57	15,50	16,44	17,40	18,37	19,34	20,33	21,34	22,35
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-23 – Total Import Impacts by Sector – Scenario 2A

Scenario 2A															
Total imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	3,56	3,90	4,25	4,60	4,95	5,29	5,64	5,98	6,32	6,65	6,98	7,30	7,62	7,92	8,21
Fishing	2,35	2,58	2,82	3,06	3,30	3,55	3,80	4,05	4,32	4,58	4,85	5,13	5,42	5,72	6,02
Mining and quarrying	1,16	1,28	1,39	1,51	1,63	1,75	1,89	2,02	2,16	2,31	2,47	2,64	2,82	3,02	3,24
Production of meat and meat products	5,14	5,69	6,26	6,84	7,45	8,07	8,72	9,40	10,10	10,85	11,64	12,47	13,37	14,33	15,38
Processing of fish and fish products	4,56	5,04	5,53	6,05	6,57	7,12	7,69	8,29	8,92	9,58	10,28	11,02	11,83	12,69	13,63
Manufacture of dairy products	3,90	4,28	4,67	5,08	5,50	5,93	6,39	6,86	7,36	7,88	8,43	9,02	9,65	10,33	11,06
Prepared animal feeds	3,69	4,04	4,39	4,74	5,10	5,46	5,83	6,21	6,59	6,98	7,38	7,78	8,20	8,64	9,09
Beverages & tobacco products	4,95	5,45	5,96	6,49	7,04	7,60	8,19	8,80	9,45	10,13	10,85	11,62	12,44	13,33	14,30
Fruits, vegetables, animal oils, grain mill, starches	2,34	2,57	2,82	3,06	3,32	3,58	3,84	4,12	4,41	4,70	5,01	5,33	5,68	6,04	6,42
Textiles and leather	3,94	4,39	4,87	5,38	5,92	6,50	7,13	7,81	8,55	9,35	10,22	11,17	12,20	13,33	14,57
Wood and products of wood and cork	5,99	6,61	7,25	7,90	8,58	9,27	9,99	10,74	11,52	12,33	13,19	14,09	15,06	16,08	17,19
Pulp, paper products; publishing and printing	2,75	3,03	3,31	3,60	3,90	4,20	4,50	4,82	5,14	5,47	5,80	6,15	6,51	6,89	7,29
Coke, refined petroleum products and nuclear fuel	1,08	1,19	1,29	1,41	1,52	1,64	1,76	1,89	2,03	2,17	2,32	2,47	2,65	2,83	3,03
Chemicals and chemical products	1,13	1,25	1,38	1,51	1,64	1,78	1,93	2,09	2,26	2,44	2,64	2,85	3,08	3,33	3,61
Rubber and plastic products	1,20	1,33	1,45	1,58	1,71	1,85	1,99	2,13	2,28	2,44	2,61	2,79	2,98	3,18	3,40
Other non-metallic mineral products	2,83	3,15	3,47	3,81	4,16	4,51	4,88	5,26	5,65	6,06	6,49	6,94	7,41	7,91	8,45
Basic metals and fabricated metal products	1,73	1,95	2,18	2,42	2,66	2,92	3,18	3,46	3,74	4,04	4,35	4,67	5,02	5,39	5,78
Machinery and equipment n.e.c.	1,17	1,32	1,47	1,63	1,79	1,95	2,12	2,30	2,48	2,67	2,86	3,06	3,27	3,50	3,73
Electrical and optical equipment	0,52	0,58	0,63	0,69	0,75	0,81	0,87	0,93	1,00	1,07	1,14	1,22	1,31	1,40	1,49
Transport equipment	1,11	1,23	1,35	1,47	1,59	1,72	1,86	2,00	2,15	2,31	2,48	2,67	2,86	3,08	3,31
Manufacturing n.e.c.	1,05	1,17	1,28	1,41	1,53	1,66	1,80	1,95	2,10	2,26	2,43	2,62	2,82	3,04	3,28
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	5,98	6,57	7,19	7,83	8,49	9,17	9,90	10,66	11,46	12,31	13,23	14,21	15,28	16,44	17,72
Wholesale trade and commission trade, except of motor vehicles and motorcycles	7,19	7,89	8,62	9,37	10,15	10,97	11,83	12,73	13,69	14,71	15,80	16,98	18,27	19,67	21,22
Retail trade, except of motor vehicles and motorcycles	7,73	8,50	9,29	10,12	10,98	11,87	12,82	13,81	14,87	16,00	17,21	18,52	19,95	21,52	23,25
Hotels and restaurants	4,92	5,42	5,94	6,47	7,03	7,61	8,21	8,85	9,53	10,25	11,02	11,85	12,76	13,74	14,83
Land transport; transport via pipelines	6,78	7,44	8,13	8,84	9,57	10,33	11,13	11,97	12,86	13,80	14,80	15,88	17,04	18,31	19,70
Water transport	6,20	6,80	7,42	8,04	8,68	9,34	10,01	10,69	11,40	12,13	12,87	13,65	14,46	15,30	16,18
Air transport	3,96	4,35	4,75	5,15	5,58	6,01	6,46	6,93	7,43	7,95	8,50	9,09	9,72	10,40	11,14
Supporting transport activities; activities of travel agencies	7,18	7,86	8,56	9,27	10,01	10,78	11,57	12,39	13,25	14,15	15,10	16,11	17,18	18,34	19,58
Post and telecommunications	6,81	7,49	8,20	8,93	9,69	10,49	11,33	12,21	13,14	14,14	15,21	16,37	17,63	19,01	20,53
Financial intermediation, excluding insurance and pension funding	5,73	6,33	6,95	7,59	8,26	8,95	9,67	10,43	11,22	12,06	12,96	13,91	14,94	16,05	17,25
Insurance and pension funding, except compulsory social security	5,25	5,79	6,35	6,92	7,52	8,14	8,79	9,47	10,20	10,97	11,79	12,68	13,65	14,70	15,85
Activities auxiliary to financial intermediation	0,83	0,92	1,00	1,09	1,19	1,28	1,38	1,48	1,58	1,69	1,80	1,92	2,04	2,17	2,31
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	5,82	6,44	7,08	7,74	8,43	9,14	9,88	10,66	11,48	12,34	13,27	14,26	15,32	16,48	17,74
Computer and related activities; research and development	0,63	0,70	0,76	0,83	0,90	0,97	1,04	1,12	1,20	1,28	1,37	1,47	1,57	1,68	1,80
Other business activities	4,12	4,57	5,03	5,51	6,00	6,50	7,02	7,57	8,13	8,73	9,35	10,02	10,72	11,47	12,29
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	6,54	7,21	7,89	8,61	9,35	10,13	10,94	11,80	12,71	13,68	14,72	15,85	17,07	18,41	19,89
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-24 – Total Import Impacts by Sector – Scenario 2B

Scenario 2B															
Total imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	4,81	5,29	5,77	6,26	6,74	7,23	7,72	8,21	8,70	9,18	9,67	10,15	10,63	11,10	11,57
Fishing	3,58	3,95	4,32	4,70	5,08	5,48	5,88	6,29	6,71	7,14	7,58	8,03	8,49	8,96	9,45
Mining and quarrying	1,72	1,89	2,05	2,22	2,40	2,57	2,76	2,94	3,14	3,34	3,55	3,76	3,99	4,23	4,48
Production of meat and meat products	7,26	8,03	8,83	9,65	10,48	11,35	12,24	13,15	14,11	15,09	16,12	17,20	18,33	19,51	20,77
Processing of fish and fish products	6,54	7,21	7,91	8,62	9,34	10,09	10,87	11,67	12,49	13,35	14,24	15,18	16,16	17,20	18,29
Manufacture of dairy products	5,51	6,06	6,61	7,19	7,77	8,38	9,00	9,64	10,31	11,00	11,72	12,48	13,27	14,10	14,98
Prepared animal feeds	4,93	5,39	5,86	6,34	6,82	7,31	7,81	8,31	8,83	9,35	9,88	10,42	10,97	11,54	12,11
Beverages & tobacco products	6,99	7,69	8,40	9,14	9,89	10,67	11,47	12,30	13,15	14,04	14,97	15,94	16,96	18,04	19,18
Fruits, vegetables, animal oils, grain mill, starches	3,24	3,57	3,90	4,24	4,59	4,94	5,31	5,67	6,05	6,44	6,84	7,26	7,69	8,14	8,61
Textiles and leather	4,61	5,11	5,64	6,19	6,78	7,40	8,06	8,76	9,51	10,32	11,18	12,10	13,10	14,17	15,32
Wood and products of wood and cork	8,49	9,36	10,24	11,14	12,07	13,03	14,01	15,02	16,06	17,14	18,27	19,44	20,66	21,95	23,30
Pulp, paper products; publishing and printing	3,81	4,19	4,59	4,99	5,39	5,80	6,22	6,65	7,08	7,53	7,98	8,44	8,92	9,41	9,91
Coke, refined petroleum products and nuclear fuel	1,59	1,75	1,91	2,07	2,24	2,41	2,58	2,76	2,95	3,14	3,34	3,55	3,77	4,00	4,24
Chemicals and chemical products	1,57	1,72	1,89	2,05	2,23	2,41	2,59	2,79	2,99	3,21	3,43	3,67	3,93	4,20	4,50
Rubber and plastic products	1,69	1,86	2,03	2,21	2,38	2,57	2,75	2,95	3,14	3,35	3,56	3,78	4,01	4,26	4,51
Other non-metallic mineral products	4,05	4,50	4,96	5,43	5,91	6,39	6,90	7,41	7,94	8,48	9,04	9,62	10,22	10,84	11,50
Basic metals and fabricated metal products	2,49	2,81	3,13	3,46	3,80	4,15	4,52	4,89	5,27	5,67	6,08	6,50	6,94	7,40	7,88
Machinery and equipment n.e.c.	1,66	1,86	2,07	2,29	2,50	2,73	2,96	3,19	3,43	3,67	3,92	4,17	4,44	4,71	4,99
Electrical and optical equipment	0,75	0,83	0,90	0,98	1,06	1,15	1,23	1,31	1,40	1,49	1,59	1,68	1,78	1,89	1,99
Transport equipment	1,59	1,75	1,91	2,08	2,25	2,43	2,61	2,80	3,00	3,20	3,41	3,63	3,86	4,11	4,37
Manufacturing n.e.c.	1,50	1,65	1,82	1,98	2,15	2,33	2,51	2,70	2,89	3,10	3,31	3,53	3,76	4,01	4,28
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	8,58	9,43	10,30	11,19	12,12	13,07	14,06	15,09	16,17	17,30	18,48	19,73	21,06	22,48	24,00
Wholesale trade and commission trade, except of motor vehicles and motorcycles	10,28	11,27	12,29	13,34	14,43	15,55	16,72	17,94	19,21	20,55	21,96	23,44	25,03	26,72	28,53
Retail trade, except of motor vehicles and motorcycles	11,08	12,16	13,29	14,44	15,64	16,88	18,17	19,52	20,93	22,42	23,98	25,64	27,41	29,31	31,35
Hotels and restaurants	7,01	7,71	8,43	9,18	9,94	10,74	11,56	12,41	13,30	14,23	15,21	16,24	17,33	18,49	19,74
Land transport; transport via pipelines	9,64	10,57	11,52	12,51	13,52	14,57	15,66	16,79	17,97	19,20	20,50	21,86	23,31	24,84	26,49
Water transport	9,35	10,25	11,15	12,07	13,01	13,96	14,94	15,93	16,95	17,99	19,05	20,15	21,28	22,44	23,64
Air transport	5,79	6,34	6,90	7,47	8,06	8,66	9,28	9,93	10,59	11,28	12,00	12,75	13,54	14,37	15,25
Supporting transport activities; activities of travel agencies	10,85	11,87	12,92	14,00	15,11	16,24	17,41	18,62	19,87	21,16	22,51	23,91	25,38	26,93	28,56
Post and telecommunications	9,74	10,71	11,71	12,73	13,80	14,90	16,04	17,23	18,47	19,78	21,16	22,62	24,17	25,83	27,61
Financial intermediation, excluding insurance and pension funding	8,15	9,00	9,87	10,76	11,68	12,64	13,62	14,64	15,70	16,81	17,97	19,18	20,46	21,82	23,26
Insurance and pension funding, except compulsory social security	7,49	8,24	9,02	9,82	10,64	11,50	12,38	13,30	14,26	15,26	16,31	17,42	18,60	19,85	21,19
Activities auxiliary to financial intermediation	1,13	1,25	1,37	1,49	1,61	1,74	1,87	2,00	2,13	2,27	2,41	2,56	2,71	2,87	3,03
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	8,29	9,16	10,06	10,98	11,92	12,90	13,90	14,95	16,03	17,16	18,35	19,59	20,90	22,28	23,76
Computer and related activities; research and development	0,90	0,99	1,09	1,18	1,27	1,37	1,47	1,57	1,68	1,79	1,90	2,02	2,15	2,27	2,41
Other business activities	5,83	6,45	7,10	7,76	8,43	9,12	9,83	10,56	11,32	12,10	12,91	13,75	14,63	15,55	16,52
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	9,35	10,29	11,26	12,26	13,30	14,37	15,49	16,65	17,86	19,13	20,48	21,90	23,41	25,02	26,76
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-25 – Total Import Impacts by Sector – Scenario 3A

Scenario 3A															
Total imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	3,56	3,91	4,25	4,60	4,96	5,31	5,66	6,01	6,35	6,70	7,05	7,40	7,74	8,09	8,43
Fishing	2,10	2,30	2,51	2,71	2,92	3,14	3,35	3,57	3,78	4,00	4,23	4,45	4,68	4,91	5,15
Mining and quarrying	1,10	1,20	1,31	1,42	1,53	1,64	1,75	1,87	1,99	2,11	2,24	2,37	2,50	2,64	2,78
Production of meat and meat products	4,92	5,44	5,97	6,52	7,07	7,64	8,22	8,81	9,42	10,04	10,68	11,34	12,02	12,71	13,43
Processing of fish and fish products	4,33	4,79	5,26	5,74	6,23	6,73	7,25	7,78	8,32	8,88	9,46	10,05	10,65	11,28	11,93
Manufacture of dairy products	3,74	4,10	4,47	4,85	5,23	5,63	6,03	6,45	6,87	7,31	7,76	8,23	8,71	9,20	9,71
Prepared animal feeds	3,60	3,94	4,27	4,61	4,96	5,31	5,66	6,01	6,37	6,73	7,09	7,45	7,82	8,19	8,57
Beverages & tobacco products	4,77	5,25	5,74	6,23	6,74	7,26	7,79	8,33	8,89	9,46	10,05	10,65	11,28	11,92	12,58
Fruits, vegetables, animal oils, grain mill, starches	2,26	2,49	2,72	2,96	3,20	3,44	3,68	3,93	4,19	4,44	4,71	4,97	5,25	5,52	5,81
Textiles and leather	3,86	4,26	4,67	5,09	5,54	6,00	6,47	6,97	7,49	8,03	8,59	9,18	9,80	10,44	11,11
Wood and products of wood and cork	5,75	6,34	6,95	7,56	8,19	8,84	9,50	10,17	10,86	11,57	12,29	13,04	13,80	14,58	15,39
Pulp, paper products; publishing and printing	2,68	2,95	3,22	3,50	3,78	4,07	4,36	4,65	4,94	5,24	5,54	5,84	6,15	6,46	6,78
Coke, refined petroleum products and nuclear fuel	1,02	1,12	1,22	1,32	1,42	1,53	1,63	1,74	1,86	1,97	2,09	2,21	2,33	2,46	2,59
Chemicals and chemical products	1,09	1,20	1,32	1,44	1,56	1,69	1,82	1,96	2,10	2,24	2,39	2,55	2,71	2,88	3,06
Rubber and plastic products	1,16	1,28	1,40	1,52	1,64	1,77	1,89	2,02	2,16	2,29	2,43	2,57	2,72	2,87	3,02
Other non-metallic mineral products	2,69	3,00	3,31	3,62	3,95	4,27	4,61	4,95	5,30	5,66	6,03	6,40	6,78	7,17	7,57
Basic metals and fabricated metal products	1,62	1,83	2,04	2,27	2,49	2,73	2,97	3,21	3,47	3,73	3,99	4,26	4,54	4,83	5,12
Machinery and equipment n.e.c.	1,12	1,27	1,41	1,56	1,71	1,87	2,03	2,19	2,35	2,52	2,70	2,87	3,05	3,24	3,43
Electrical and optical equipment	0,50	0,55	0,61	0,66	0,71	0,77	0,83	0,89	0,95	1,01	1,07	1,14	1,21	1,27	1,35
Transport equipment	1,06	1,17	1,28	1,39	1,51	1,63	1,75	1,87	2,00	2,13	2,27	2,41	2,55	2,70	2,86
Manufacturing n.e.c.	1,01	1,11	1,22	1,34	1,45	1,57	1,69	1,82	1,95	2,09	2,22	2,37	2,51	2,67	2,83
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	5,68	6,23	6,80	7,38	7,98	8,59	9,22	9,86	10,52	11,21	11,91	12,64	13,39	14,17	14,97
Wholesale trade and commission trade, except of motor vehicles and motorcycles	6,86	7,52	8,19	8,88	9,58	10,31	11,05	11,82	12,61	13,42	14,26	15,12	16,02	16,94	17,90
Retail trade, except of motor vehicles and motorcycles	7,36	8,07	8,81	9,56	10,33	11,13	11,94	12,78	13,65	14,54	15,47	16,42	17,41	18,44	19,50
Hotels and restaurants	4,67	5,14	5,62	6,11	6,61	7,12	7,65	8,20	8,76	9,33	9,93	10,55	11,18	11,84	12,53
Land transport; transport via pipelines	6,48	7,11	7,74	8,40	9,06	9,75	10,45	11,17	11,91	12,68	13,46	14,27	15,11	15,97	16,87
Water transport	5,87	6,44	7,03	7,62	8,22	8,83	9,46	10,09	10,74	11,40	12,07	12,75	13,45	14,16	14,88
Air transport	3,76	4,12	4,49	4,86	5,25	5,64	6,04	6,45	6,87	7,30	7,74	8,20	8,67	9,15	9,65
Supporting transport activities; activities of travel agencies	6,78	7,42	8,07	8,73	9,40	10,09	10,79	11,51	12,24	13,00	13,77	14,56	15,38	16,22	17,08
Post and telecommunications	6,47	7,11	7,76	8,43	9,12	9,82	10,55	11,29	12,06	12,85	13,67	14,52	15,39	16,30	17,25
Financial intermediation, excluding insurance and pension funding	5,45	6,02	6,60	7,19	7,80	8,42	9,06	9,71	10,39	11,08	11,79	12,52	13,27	14,05	14,85
Insurance and pension funding, except compulsory social security	5,00	5,50	6,02	6,55	7,09	7,64	8,21	8,79	9,39	10,01	10,65	11,31	11,99	12,70	13,43
Activities auxiliary to financial intermediation	0,81	0,90	0,98	1,07	1,16	1,25	1,34	1,43	1,53	1,62	1,72	1,82	1,93	2,03	2,14
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	5,56	6,14	6,74	7,35	7,97	8,61	9,27	9,94	10,63	11,34	12,07	12,82	13,60	14,40	15,22
Computer and related activities; research and development	0,59	0,65	0,71	0,77	0,84	0,90	0,97	1,04	1,11	1,18	1,25	1,33	1,41	1,49	1,57
Other business activities	3,94	4,37	4,80	5,25	5,70	6,17	6,64	7,12	7,62	8,13	8,65	9,18	9,73	10,29	10,86
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	6,21	6,84	7,47	8,12	8,79	9,48	10,18	10,91	11,66	12,43	13,23	14,06	14,91	15,80	16,72
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-26 – Total Import Impacts by Sector – Scenario 3B

Scenario 3B															
Total imports (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	4,82	5,30	5,79	6,27	6,75	7,24	7,72	8,21	8,70	9,19	9,68	10,17	10,65	11,14	11,63
Fishing	3,11	3,41	3,72	4,03	4,34	4,65	4,97	5,29	5,62	5,94	6,27	6,60	6,94	7,28	7,62
Mining and quarrying	1,67	1,82	1,98	2,14	2,31	2,47	2,64	2,81	2,98	3,16	3,34	3,52	3,71	3,90	4,10
Production of meat and meat products	7,01	7,75	8,50	9,26	10,04	10,84	11,65	12,48	13,33	14,19	15,07	15,98	16,90	17,85	18,82
Processing of fish and fish products	6,26	6,91	7,57	8,25	8,94	9,64	10,36	11,10	11,85	12,62	13,41	14,22	15,04	15,89	16,76
Manufacture of dairy products	5,35	5,86	6,39	6,93	7,48	8,04	8,61	9,19	9,79	10,40	11,03	11,67	12,32	12,99	13,68
Prepared animal feeds	4,81	5,26	5,71	6,17	6,63	7,10	7,57	8,04	8,52	9,00	9,49	9,98	10,48	10,98	11,48
Beverages & tobacco products	6,80	7,48	8,16	8,86	9,58	10,31	11,05	11,81	12,58	13,37	14,18	15,01	15,86	16,74	17,63
Fruits, vegetables, animal oils, grain mill, starches	3,16	3,47	3,79	4,11	4,44	4,77	5,11	5,45	5,79	6,14	6,49	6,85	7,22	7,59	7,97
Textiles and leather	4,57	5,03	5,51	6,01	6,52	7,04	7,59	8,15	8,73	9,34	9,96	10,61	11,29	11,99	12,72
Wood and products of wood and cork	8,23	9,06	9,90	10,75	11,63	12,51	13,42	14,34	15,29	16,25	17,24	18,24	19,27	20,33	21,41
Pulp, paper products; publishing and printing	3,73	4,10	4,48	4,86	5,25	5,64	6,04	6,44	6,84	7,24	7,66	8,07	8,49	8,91	9,34
Coke, refined petroleum products and nuclear fuel	1,54	1,69	1,84	2,00	2,15	2,31	2,48	2,64	2,81	2,98	3,16	3,34	3,52	3,70	3,89
Chemicals and chemical products	1,53	1,68	1,84	2,00	2,16	2,33	2,50	2,68	2,86	3,05	3,24	3,44	3,64	3,86	4,07
Rubber and plastic products	1,66	1,82	1,98	2,15	2,32	2,49	2,67	2,85	3,03	3,21	3,40	3,59	3,79	3,99	4,19
Other non-metallic mineral products	3,91	4,34	4,78	5,22	5,68	6,14	6,60	7,08	7,56	8,05	8,55	9,06	9,58	10,11	10,65
Basic metals and fabricated metal products	2,37	2,67	2,97	3,28	3,60	3,93	4,26	4,60	4,95	5,31	5,67	6,04	6,41	6,80	7,19
Machinery and equipment n.e.c.	1,62	1,82	2,02	2,23	2,44	2,65	2,87	3,10	3,32	3,55	3,78	4,02	4,26	4,50	4,75
Electrical and optical equipment	0,74	0,82	0,89	0,97	1,05	1,13	1,21	1,30	1,38	1,47	1,56	1,65	1,74	1,83	1,93
Transport equipment	1,55	1,71	1,87	2,03	2,19	2,36	2,53	2,70	2,88	3,06	3,25	3,44	3,63	3,83	4,04
Manufacturing n.e.c.	1,46	1,62	1,77	1,93	2,09	2,26	2,43	2,60	2,78	2,96	3,15	3,34	3,54	3,74	3,94
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	8,23	9,03	9,84	10,67	11,51	12,38	13,26	14,17	15,10	16,06	17,04	18,04	19,08	20,15	21,25
Wholesale trade and commission trade, except of motor vehicles and motorcycles	9,92	10,86	11,81	12,79	13,79	14,82	15,87	16,94	18,05	19,18	20,35	21,55	22,78	24,05	25,37
Retail trade, except of motor vehicles and motorcycles	10,65	11,67	12,72	13,79	14,89	16,02	17,17	18,36	19,57	20,83	22,12	23,44	24,81	26,22	27,68
Hotels and restaurants	6,74	7,41	8,09	8,78	9,49	10,22	10,96	11,72	12,50	13,30	14,12	14,96	15,83	16,72	17,64
Land transport; transport via pipelines	9,31	10,19	11,08	12,00	12,94	13,90	14,88	15,89	16,92	17,98	19,07	20,18	21,33	22,51	23,72
Water transport	9,00	9,86	10,73	11,60	12,50	13,40	14,32	15,26	16,21	17,17	18,16	19,16	20,18	21,21	22,27
Air transport	5,59	6,10	6,63	7,16	7,71	8,26	8,82	9,40	9,98	10,58	11,19	11,82	12,46	13,12	13,79
Supporting transport activities; activities of travel agencies	10,54	11,52	12,52	13,55	14,59	15,65	16,74	17,84	18,98	20,14	21,32	22,53	23,78	25,05	26,35
Post and telecommunications	9,37	10,28	11,21	12,16	13,14	14,14	15,16	16,21	17,29	18,39	19,53	20,71	21,91	23,16	24,45
Financial intermediation, excluding insurance and pension funding	7,82	8,62	9,44	10,28	11,13	12,00	12,89	13,81	14,74	15,70	16,68	17,68	18,71	19,77	20,86
Insurance and pension funding, except compulsory social security	7,21	7,93	8,66	9,40	10,16	10,94	11,74	12,56	13,39	14,25	15,13	16,04	16,96	17,92	18,91
Activities auxiliary to financial intermediation	1,12	1,23	1,35	1,47	1,58	1,71	1,83	1,95	2,08	2,21	2,34	2,47	2,60	2,74	2,88
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	8,02	8,85	9,69	10,56	11,44	12,34	13,26	14,20	15,17	16,15	17,16	18,20	19,26	20,35	21,47
Computer and related activities; research and development	0,85	0,94	1,03	1,11	1,21	1,30	1,39	1,49	1,59	1,69	1,79	1,90	2,00	2,11	2,23
Other business activities	5,64	6,24	6,86	7,48	8,12	8,77	9,43	10,10	10,78	11,48	12,19	12,92	13,66	14,42	15,19
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	8,97	9,86	10,77	11,69	12,64	13,62	14,61	15,64	16,69	17,76	18,87	20,02	21,19	22,41	23,66
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Imports from the US

Table A-27 –US Import Impacts by Sector – Scenario 1A

Scenario 1A	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Imports from US (% change to the BAU)															
Agriculture, hunting and forestry, logging	4,85	5,33	5,81	6,29	6,78	7,27	7,76	8,26	8,76	9,27	9,78	10,29	10,80	11,32	11,84
Fishing	3,44	3,73	4,02	4,31	4,61	4,90	5,20	5,50	5,80	6,11	6,42	6,73	7,04	7,35	7,67
Mining and quarrying	1,92	2,05	2,18	2,31	2,44	2,57	2,70	2,83	2,97	3,10	3,24	3,37	3,51	3,64	3,78
Production of meat and meat products	5,83	6,39	6,96	7,52	8,10	8,67	9,25	9,83	10,42	11,01	11,61	12,20	12,81	13,42	14,03
Processing of fish and fish products	5,81	6,31	6,82	7,32	7,84	8,35	8,88	9,40	9,93	10,46	11,00	11,54	12,09	12,64	13,19
Manufacture of dairy products	4,98	5,38	5,77	6,17	6,57	6,98	7,39	7,80	8,21	8,63	9,05	9,47	9,90	10,33	10,77
Prepared animal feeds	4,58	5,00	5,44	5,87	6,31	6,75	7,20	7,65	8,11	8,56	9,02	9,49	9,96	10,43	10,90
Beverages & tobacco products	5,59	6,10	6,61	7,12	7,64	8,16	8,69	9,22	9,75	10,29	10,83	11,37	11,92	12,48	13,03
Fruits, vegetables, animal oils, grain mill, starches	2,81	3,07	3,34	3,60	3,87	4,14	4,40	4,68	4,95	5,22	5,50	5,77	6,05	6,33	6,61
Textiles and leather	2,59	2,79	2,99	3,19	3,40	3,60	3,81	4,01	4,22	4,43	4,64	4,86	5,07	5,28	5,50
Wood and products of wood and cork	7,17	7,81	8,45	9,10	9,76	10,42	11,08	11,76	12,43	13,11	13,80	14,49	15,19	15,89	16,60
Pulp, paper products; publishing and printing	3,59	3,93	4,28	4,62	4,97	5,32	5,68	6,04	6,40	6,76	7,12	7,49	7,86	8,23	8,61
Coke, refined petroleum products and nuclear fuel	1,37	1,49	1,61	1,73	1,86	1,98	2,11	2,23	2,36	2,49	2,62	2,75	2,88	3,02	3,15
Chemicals and chemical products	1,67	1,78	1,89	2,01	2,12	2,24	2,35	2,47	2,59	2,70	2,82	2,94	3,06	3,18	3,31
Rubber and plastic products	1,96	2,10	2,23	2,37	2,51	2,65	2,79	2,93	3,07	3,21	3,36	3,50	3,65	3,79	3,94
Other non-metallic mineral products	3,66	4,00	4,35	4,70	5,05	5,40	5,76	6,12	6,48	6,85	7,21	7,58	7,95	8,33	8,70
Basic metals and fabricated metal products	2,58	2,82	3,07	3,32	3,58	3,83	4,10	4,36	4,63	4,89	5,16	5,44	5,71	5,99	6,27
Machinery and equipment n.e.c.	1,37	1,53	1,69	1,86	2,02	2,19	2,36	2,53	2,70	2,88	3,05	3,22	3,40	3,58	3,75
Electrical and optical equipment	0,71	0,77	0,82	0,88	0,94	1,00	1,06	1,12	1,18	1,24	1,30	1,36	1,42	1,48	1,55
Transport equipment	1,29	1,40	1,52	1,64	1,75	1,87	1,99	2,11	2,23	2,35	2,48	2,60	2,72	2,85	2,97
Manufacturing n.e.c.	1,31	1,42	1,53	1,65	1,77	1,88	2,00	2,12	2,24	2,36	2,48	2,61	2,73	2,85	2,98
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	7,00	7,61	8,23	8,86	9,49	10,13	10,77	11,42	12,07	12,73	13,40	14,07	14,75	15,43	16,12
Wholesale trade and commission trade, except of motor vehicles and motorcycles	8,27	8,98	9,70	10,43	11,17	11,91	12,66	13,42	14,18	14,96	15,74	16,53	17,32	18,13	18,94
Retail trade, except of motor vehicles and motorcycles	8,86	9,63	10,42	11,21	12,00	12,81	13,63	14,45	15,28	16,12	16,97	17,82	18,69	19,56	20,45
Hotels and restaurants	6,11	6,62	7,14	7,66	8,18	8,71	9,24	9,78	10,32	10,86	11,41	11,97	12,53	13,09	13,65
Land transport; transport via pipelines	7,85	8,55	9,25	9,95	10,67	11,39	12,11	12,85	13,59	14,34	15,09	15,86	16,63	17,40	18,19
Water transport	6,76	7,42	8,09	8,77	9,46	10,15	10,85	11,56	12,28	13,00	13,73	14,47	15,21	15,96	16,71
Air transport	4,62	5,02	5,43	5,83	6,24	6,65	7,06	7,48	7,90	8,32	8,74	9,17	9,60	10,03	10,47
Supporting transport activities; activities of travel agencies	8,32	9,05	9,80	10,55	11,31	12,07	12,85	13,63	14,42	15,21	16,02	16,83	17,65	18,48	19,32
Post and telecommunications	7,70	8,39	9,09	9,79	10,50	11,22	11,94	12,67	13,41	14,15	14,90	15,66	16,42	17,19	17,97
Financial intermediation, excluding insurance and pension funding	6,52	7,14	7,76	8,39	9,02	9,66	10,31	10,96	11,62	12,28	12,95	13,62	14,30	14,98	15,67
Insurance and pension funding, except compulsory social security	5,98	6,52	7,07	7,63	8,19	8,75	9,32	9,89	10,47	11,06	11,64	12,24	12,84	13,44	14,05
Activities auxiliary to financial intermediation	1,11	1,21	1,31	1,41	1,52	1,62	1,73	1,84	1,95	2,06	2,17	2,28	2,39	2,51	2,62
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	6,57	7,20	7,83	8,47	9,12	9,77	10,43	11,09	11,76	12,44	13,12	13,80	14,49	15,19	15,89
Computer and related activities; research and development	0,71	0,77	0,84	0,91	0,98	1,04	1,11	1,18	1,25	1,33	1,40	1,47	1,54	1,62	1,69
Other business activities	4,75	5,23	5,72	6,20	6,69	7,19	7,69	8,19	8,70	9,21	9,72	10,23	10,75	11,28	11,81
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	7,29	7,96	8,64	9,32	10,01	10,71	11,41	12,12	12,84	13,56	14,29	15,02	15,77	16,52	17,27
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-28 –US Import Impacts by Sector – Scenario 1B

Scenario 1B															
Imports from US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	6,12	6,73	7,34	7,96	8,58	9,21	9,85	10,49	11,13	11,78	12,44	13,10	13,77	14,45	15,12
Fishing	4,23	4,60	4,97	5,34	5,72	6,10	6,48	6,87	7,26	7,66	8,05	8,46	8,86	9,27	9,68
Mining and quarrying	2,31	2,47	2,63	2,80	2,96	3,13	3,30	3,47	3,64	3,81	3,98	4,16	4,33	4,51	4,69
Production of meat and meat products	7,38	8,10	8,82	9,55	10,29	11,03	11,78	12,54	13,30	14,07	14,85	15,63	16,42	17,22	18,02
Processing of fish and fish products	7,21	7,85	8,50	9,15	9,81	10,48	11,15	11,84	12,52	13,22	13,92	14,62	15,34	16,06	16,78
Manufacture of dairy products	6,20	6,71	7,22	7,74	8,26	8,79	9,32	9,86	10,40	10,95	11,50	12,06	12,62	13,19	13,77
Prepared animal feeds	5,73	6,28	6,83	7,39	7,95	8,52	9,09	9,68	10,26	10,85	11,45	12,05	12,66	13,27	13,89
Beverages & tobacco products	7,07	7,73	8,38	9,05	9,72	10,39	11,07	11,76	12,46	13,16	13,86	14,58	15,29	16,02	16,75
Fruits, vegetables, animal oils, grain mill, starches	3,53	3,86	4,19	4,53	4,87	5,21	5,56	5,90	6,25	6,60	6,96	7,31	7,67	8,03	8,39
Textiles and leather	3,15	3,40	3,66	3,92	4,18	4,44	4,70	4,97	5,24	5,51	5,78	6,05	6,33	6,60	6,88
Wood and products of wood and cork	9,07	9,89	10,73	11,57	12,42	13,28	14,15	15,02	15,91	16,80	17,70	18,62	19,54	20,47	21,41
Pulp, paper products; publishing and printing	4,49	4,92	5,35	5,80	6,24	6,69	7,15	7,60	8,06	8,53	9,00	9,47	9,95	10,43	10,91
Coke, refined petroleum products and nuclear fuel	1,71	1,86	2,02	2,18	2,34	2,50	2,66	2,82	2,98	3,15	3,32	3,48	3,65	3,83	4,00
Chemicals and chemical products	2,00	2,14	2,29	2,43	2,58	2,73	2,87	3,02	3,18	3,33	3,48	3,64	3,79	3,95	4,11
Rubber and plastic products	2,34	2,51	2,69	2,86	3,04	3,22	3,40	3,58	3,76	3,94	4,13	4,31	4,50	4,69	4,88
Other non-metallic mineral products	4,51	4,95	5,39	5,83	6,28	6,73	7,19	7,65	8,12	8,58	9,06	9,53	10,01	10,49	10,97
Basic metals and fabricated metal products	3,14	3,44	3,76	4,08	4,40	4,73	5,06	5,40	5,74	6,08	6,42	6,77	7,12	7,48	7,84
Machinery and equipment n.e.c.	1,70	1,90	2,11	2,31	2,52	2,73	2,94	3,16	3,37	3,59	3,81	4,03	4,25	4,47	4,69
Electrical and optical equipment	0,86	0,93	1,00	1,08	1,15	1,22	1,30	1,37	1,45	1,52	1,60	1,68	1,75	1,83	1,91
Transport equipment	1,61	1,75	1,90	2,05	2,20	2,35	2,50	2,66	2,81	2,96	3,12	3,28	3,44	3,59	3,75
Manufacturing n.e.c.	1,61	1,75	1,90	2,04	2,19	2,34	2,49	2,65	2,80	2,95	3,11	3,26	3,42	3,58	3,74
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	8,87	9,67	10,47	11,29	12,11	12,95	13,79	14,65	15,51	16,38	17,27	18,16	19,06	19,98	20,90
Wholesale trade and commission trade, except of motor vehicles and motorcycles	10,50	11,42	12,36	13,32	14,28	15,26	16,24	17,24	18,26	19,28	20,32	21,37	22,44	23,52	24,61
Retail trade, except of motor vehicles and motorcycles	11,26	12,27	13,29	14,32	15,37	16,43	17,51	18,60	19,70	20,82	21,95	23,10	24,26	25,43	26,63
Hotels and restaurants	7,61	8,27	8,94	9,61	10,29	10,97	11,66	12,36	13,07	13,78	14,50	15,23	15,96	16,71	17,46
Land transport; transport via pipelines	9,98	10,88	11,79	12,72	13,65	14,59	15,55	16,52	17,50	18,49	19,49	20,51	21,54	22,58	23,64
Water transport	8,54	9,39	10,25	11,12	12,01	12,91	13,81	14,73	15,66	16,60	17,55	18,51	19,48	20,46	21,45
Air transport	5,83	6,35	6,86	7,39	7,91	8,44	8,98	9,52	10,06	10,61	11,17	11,72	12,29	12,86	13,43
Supporting transport activities; activities of travel agencies	10,56	11,52	12,48	13,46	14,45	15,45	16,47	17,50	18,54	19,59	20,66	21,74	22,84	23,94	25,07
Post and telecommunications	9,79	10,68	11,59	12,50	13,43	14,37	15,32	16,28	17,25	18,23	19,23	20,24	21,26	22,29	23,33
Financial intermediation, excluding insurance and pension funding	8,26	9,05	9,85	10,67	11,49	12,32	13,16	14,01	14,87	15,74	16,62	17,50	18,40	19,31	20,23
Insurance and pension funding, except compulsory social security	7,57	8,28	8,99	9,70	10,43	11,16	11,91	12,66	13,41	14,18	14,95	15,73	16,52	17,32	18,13
Activities auxiliary to financial intermediation	1,37	1,50	1,63	1,76	1,89	2,03	2,16	2,30	2,44	2,58	2,72	2,86	3,01	3,15	3,30
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	8,29	9,10	9,92	10,74	11,58	12,42	13,28	14,14	15,01	15,89	16,78	17,68	18,58	19,50	20,42
Computer and related activities; research and development	0,89	0,97	1,05	1,14	1,23	1,31	1,40	1,49	1,58	1,67	1,76	1,86	1,95	2,04	2,14
Other business activities	6,00	6,61	7,23	7,85	8,48	9,12	9,76	10,41	11,06	11,72	12,39	13,06	13,73	14,42	15,10
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	9,29	10,16	11,04	11,93	12,83	13,74	14,66	15,60	16,54	17,50	18,46	19,44	20,43	21,44	22,45
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-29 –US Import Impacts by Sector – Scenario 2A

Scenario 2A															
Imports from US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	3,63	3,98	4,33	4,68	5,02	5,37	5,72	6,06	6,40	6,73	7,06	7,38	7,69	8,00	8,29
Fishing	2,85	3,09	3,32	3,56	3,81	4,06	4,31	4,57	4,83	5,10	5,37	5,65	5,94	6,24	6,54
Mining and quarrying	1,68	1,79	1,91	2,02	2,15	2,27	2,40	2,54	2,68	2,83	2,99	3,16	3,35	3,54	3,76
Production of meat and meat products	5,29	5,85	6,41	7,00	7,60	8,23	8,88	9,56	10,27	11,01	11,80	12,64	13,54	14,50	15,55
Processing of fish and fish products	5,28	5,76	6,26	6,78	7,31	7,86	8,44	9,04	9,67	10,33	11,04	11,79	12,60	13,47	14,41
Manufacture of dairy products	4,44	4,83	5,22	5,63	6,05	6,49	6,95	7,42	7,92	8,44	9,00	9,59	10,23	10,91	11,65
Prepared animal feeds	3,74	4,08	4,43	4,79	5,14	5,51	5,88	6,25	6,64	7,03	7,42	7,83	8,25	8,69	9,14
Beverages & tobacco products	5,09	5,59	6,10	6,63	7,17	7,74	8,33	8,95	9,59	10,27	10,99	11,76	12,59	13,48	14,44
Fruits, vegetables, animal oils, grain mill, starches	2,47	2,70	2,95	3,20	3,45	3,71	3,98	4,25	4,54	4,83	5,14	5,47	5,81	6,17	6,56
Textiles and leather	4,46	4,91	5,38	5,89	6,44	7,03	7,66	8,34	9,08	9,89	10,76	11,71	12,75	13,89	15,13
Wood and products of wood and cork	6,15	6,78	7,41	8,07	8,74	9,44	10,16	10,91	11,69	12,51	13,36	14,27	15,24	16,27	17,37
Pulp, paper products; publishing and printing	2,97	3,26	3,54	3,83	4,13	4,43	4,74	5,05	5,37	5,70	6,04	6,39	6,75	7,13	7,53
Coke, refined petroleum products and nuclear fuel	1,16	1,27	1,38	1,49	1,61	1,72	1,85	1,98	2,11	2,25	2,40	2,56	2,73	2,91	3,12
Chemicals and chemical products	1,59	1,71	1,83	1,96	2,10	2,24	2,39	2,55	2,72	2,90	3,10	3,31	3,55	3,80	4,08
Rubber and plastic products	1,76	1,89	2,01	2,14	2,27	2,41	2,55	2,70	2,85	3,01	3,18	3,36	3,55	3,75	3,97
Other non-metallic mineral products	3,29	3,61	3,94	4,28	4,63	4,99	5,35	5,73	6,13	6,54	6,97	7,42	7,90	8,40	8,94
Basic metals and fabricated metal products	2,24	2,46	2,69	2,93	3,18	3,43	3,70	3,97	4,26	4,56	4,87	5,20	5,54	5,91	6,30
Machinery and equipment n.e.c.	1,22	1,37	1,52	1,67	1,83	2,00	2,17	2,34	2,53	2,71	2,91	3,11	3,32	3,54	3,78
Electrical and optical equipment	0,65	0,70	0,76	0,81	0,87	0,93	0,99	1,06	1,13	1,20	1,27	1,35	1,43	1,52	1,62
Transport equipment	1,18	1,29	1,41	1,53	1,66	1,79	1,93	2,07	2,22	2,38	2,55	2,73	2,93	3,15	3,38
Manufacturing n.e.c.	1,21	1,33	1,44	1,57	1,69	1,83	1,96	2,11	2,26	2,42	2,60	2,78	2,98	3,20	3,44
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	6,27	6,87	7,49	8,13	8,79	9,48	10,20	10,96	11,77	12,63	13,54	14,53	15,60	16,77	18,05
Wholesale trade and commission trade, except of motor vehicles and motorcycles	7,46	8,16	8,89	9,65	10,43	11,25	12,11	13,02	13,98	15,00	16,10	17,28	18,56	19,97	21,52
Retail trade, except of motor vehicles and motorcycles	8,04	8,81	9,61	10,43	11,29	12,19	13,14	14,14	15,20	16,33	17,55	18,86	20,30	21,87	23,60
Hotels and restaurants	5,52	6,03	6,54	7,08	7,64	8,22	8,83	9,48	10,16	10,88	11,66	12,50	13,40	14,40	15,49
Land transport; transport via pipelines	6,99	7,66	8,34	9,05	9,79	10,55	11,35	12,19	13,08	14,02	15,03	16,11	17,28	18,55	19,94
Water transport	6,38	6,98	7,60	8,23	8,87	9,52	10,20	10,88	11,59	12,32	13,07	13,85	14,65	15,50	16,38
Air transport	4,15	4,53	4,93	5,34	5,76	6,20	6,65	7,12	7,62	8,14	8,69	9,28	9,91	10,59	11,33
Supporting transport activities; activities of travel agencies	7,39	8,07	8,77	9,48	10,22	10,99	11,78	12,61	13,47	14,37	15,32	16,33	17,41	18,56	19,81
Post and telecommunications	7,01	7,69	8,40	9,14	9,90	10,70	11,54	12,42	13,36	14,36	15,43	16,59	17,85	19,23	20,76
Financial intermediation, excluding insurance and pension funding	5,93	6,54	7,16	7,80	8,47	9,16	9,89	10,64	11,44	12,28	13,18	14,13	15,16	16,27	17,48
Insurance and pension funding, except compulsory social security	5,42	5,96	6,52	7,09	7,69	8,31	8,96	9,65	10,38	11,15	11,97	12,86	13,83	14,88	16,04
Activities auxiliary to financial intermediation	0,93	1,02	1,10	1,19	1,29	1,38	1,48	1,58	1,68	1,79	1,90	2,02	2,15	2,28	2,42
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	6,03	6,65	7,29	7,95	8,64	9,35	10,09	10,87	11,69	12,56	13,49	14,48	15,54	16,70	17,97
Computer and related activities; research and development	0,67	0,73	0,80	0,86	0,93	1,00	1,08	1,15	1,23	1,32	1,41	1,50	1,60	1,71	1,83
Other business activities	4,22	4,68	5,14	5,61	6,10	6,61	7,13	7,68	8,25	8,84	9,47	10,13	10,83	11,59	12,40
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	6,63	7,29	7,98	8,70	9,44	10,22	11,03	11,89	12,80	13,77	14,81	15,94	17,17	18,51	19,99
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-30 –US Import Impacts by Sector – Scenario 2B

Scenario 2B															
Imports from US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	4,88	5,36	5,85	6,33	6,82	7,31	7,80	8,29	8,77	9,26	9,75	10,23	10,71	11,18	11,65
Fishing	4,09	4,46	4,83	5,21	5,60	6,00	6,40	6,81	7,23	7,67	8,11	8,56	9,02	9,50	9,99
Mining and quarrying	2,24	2,40	2,57	2,74	2,92	3,10	3,28	3,47	3,66	3,86	4,07	4,29	4,52	4,76	5,01
Production of meat and meat products	7,41	8,19	8,99	9,81	10,65	11,51	12,40	13,32	14,27	15,26	16,29	17,37	18,50	19,69	20,95
Processing of fish and fish products	7,27	7,95	8,65	9,36	10,10	10,85	11,63	12,43	13,27	14,13	15,03	15,97	16,96	18,00	19,11
Manufacture of dairy products	6,07	6,61	7,17	7,75	8,34	8,95	9,57	10,22	10,89	11,58	12,31	13,07	13,86	14,70	15,58
Prepared animal feeds	4,98	5,44	5,91	6,39	6,87	7,36	7,86	8,36	8,88	9,40	9,93	10,47	11,02	11,59	12,17
Beverages & tobacco products	7,12	7,83	8,54	9,28	10,03	10,81	11,61	12,44	13,30	14,19	15,12	16,09	17,11	18,19	19,34
Fruits, vegetables, animal oils, grain mill, starches	3,37	3,70	4,04	4,38	4,72	5,08	5,44	5,81	6,19	6,58	6,98	7,40	7,83	8,28	8,74
Textiles and leather	5,12	5,63	6,16	6,72	7,30	7,93	8,59	9,30	10,05	10,86	11,72	12,65	13,65	14,73	15,89
Wood and products of wood and cork	8,66	9,53	10,41	11,32	12,25	13,20	14,18	15,20	16,24	17,33	18,45	19,62	20,85	22,14	23,49
Pulp, paper products; publishing and printing	4,04	4,43	4,82	5,22	5,63	6,04	6,46	6,89	7,32	7,77	8,22	8,68	9,16	9,65	10,15
Coke, refined petroleum products and nuclear fuel	1,67	1,83	1,99	2,15	2,32	2,49	2,67	2,85	3,03	3,23	3,43	3,64	3,86	4,09	4,33
Chemicals and chemical products	2,02	2,18	2,35	2,51	2,69	2,87	3,06	3,25	3,46	3,67	3,90	4,14	4,40	4,67	4,97
Rubber and plastic products	2,25	2,42	2,59	2,77	2,95	3,13	3,32	3,52	3,71	3,92	4,13	4,36	4,59	4,83	5,09
Other non-metallic mineral products	4,52	4,97	5,44	5,91	6,39	6,88	7,38	7,90	8,43	8,97	9,53	10,12	10,72	11,35	12,00
Basic metals and fabricated metal products	3,01	3,32	3,64	3,98	4,32	4,67	5,04	5,41	5,80	6,20	6,61	7,03	7,48	7,94	8,42
Machinery and equipment n.e.c.	1,70	1,91	2,12	2,33	2,55	2,77	3,00	3,23	3,47	3,72	3,97	4,22	4,48	4,76	5,04
Electrical and optical equipment	0,88	0,95	1,03	1,11	1,19	1,27	1,36	1,44	1,53	1,62	1,71	1,81	1,91	2,01	2,12
Transport equipment	1,66	1,82	1,98	2,15	2,32	2,50	2,68	2,87	3,06	3,27	3,48	3,70	3,93	4,18	4,44
Manufacturing n.e.c.	1,66	1,82	1,98	2,15	2,32	2,49	2,67	2,86	3,06	3,26	3,47	3,70	3,93	4,18	4,44
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	8,89	9,73	10,61	11,50	12,43	13,39	14,38	15,42	16,49	17,62	18,81	20,07	21,40	22,82	24,34
Wholesale trade and commission trade, except of motor vehicles and motorcycles	10,56	11,55	12,57	13,63	14,72	15,85	17,02	18,24	19,51	20,85	22,26	23,75	25,34	27,03	28,85
Retail trade, except of motor vehicles and motorcycles	11,39	12,48	13,61	14,77	15,97	17,22	18,51	19,86	21,28	22,77	24,34	26,00	27,78	29,68	31,72
Hotels and restaurants	7,62	8,33	9,06	9,80	10,57	11,37	12,20	13,05	13,95	14,88	15,87	16,90	18,00	19,17	20,43
Land transport; transport via pipelines	9,86	10,79	11,75	12,73	13,75	14,80	15,89	17,02	18,20	19,44	20,74	22,10	23,55	25,09	26,74
Water transport	9,54	10,43	11,34	12,26	13,20	14,16	15,13	16,13	17,15	18,19	19,26	20,36	21,48	22,65	23,85
Air transport	5,98	6,53	7,09	7,66	8,25	8,85	9,48	10,12	10,78	11,47	12,19	12,94	13,74	14,57	15,45
Supporting transport activities; activities of travel agencies	11,06	12,09	13,14	14,22	15,33	16,46	17,64	18,85	20,10	21,39	22,74	24,15	25,62	27,17	28,81
Post and telecommunications	9,95	10,92	11,92	12,95	14,01	15,11	16,26	17,45	18,70	20,01	21,39	22,85	24,40	26,06	27,85
Financial intermediation, excluding insurance and pension funding	8,36	9,21	10,08	10,98	11,90	12,86	13,84	14,86	15,93	17,04	18,20	19,41	20,70	22,06	23,50
Insurance and pension funding, except compulsory social security	7,66	8,42	9,20	10,00	10,82	11,68	12,56	13,48	14,44	15,44	16,50	17,61	18,79	20,04	21,39
Activities auxiliary to financial intermediation	1,24	1,35	1,47	1,59	1,71	1,84	1,97	2,10	2,23	2,37	2,52	2,66	2,81	2,97	3,14
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	8,50	9,37	10,27	11,19	12,14	13,11	14,12	15,17	16,26	17,39	18,57	19,82	21,13	22,52	24,00
Computer and related activities; research and development	0,94	1,03	1,12	1,21	1,31	1,41	1,51	1,61	1,72	1,83	1,94	2,06	2,18	2,31	2,45
Other business activities	5,93	6,56	7,21	7,87	8,54	9,23	9,95	10,68	11,43	12,21	13,02	13,87	14,75	15,67	16,64
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	9,44	10,38	11,35	12,36	13,39	14,47	15,58	16,74	17,96	19,23	20,58	22,00	23,51	25,13	26,87
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-31 –US Import Impacts by Sector – Scenario 3A

Scenario 3A															
Imports from US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	3,63	3,98	4,33	4,68	5,03	5,38	5,73	6,08	6,43	6,78	7,13	7,48	7,82	8,16	8,51
Fishing	2,60	2,80	3,01	3,22	3,43	3,64	3,86	4,08	4,30	4,52	4,74	4,97	5,20	5,43	5,66
Mining and quarrying	1,61	1,72	1,82	1,93	2,04	2,16	2,27	2,39	2,51	2,63	2,76	2,89	3,02	3,16	3,30
Production of meat and meat products	5,08	5,60	6,13	6,67	7,23	7,80	8,38	8,97	9,58	10,21	10,85	11,51	12,18	12,88	13,60
Processing of fish and fish products	5,05	5,51	5,98	6,47	6,96	7,47	7,99	8,52	9,07	9,63	10,21	10,80	11,42	12,05	12,70
Manufacture of dairy products	4,28	4,65	5,02	5,40	5,78	6,18	6,59	7,01	7,44	7,88	8,33	8,80	9,28	9,78	10,29
Prepared animal feeds	3,65	3,98	4,32	4,66	5,01	5,35	5,70	6,06	6,41	6,77	7,14	7,50	7,87	8,24	8,62
Beverages & tobacco products	4,91	5,39	5,87	6,37	6,88	7,40	7,93	8,47	9,03	9,60	10,19	10,80	11,42	12,06	12,72
Fruits, vegetables, animal oils, grain mill, starches	2,39	2,62	2,86	3,09	3,33	3,57	3,82	4,07	4,32	4,58	4,84	5,11	5,38	5,66	5,94
Textiles and leather	4,37	4,77	5,18	5,61	6,06	6,52	7,00	7,50	8,02	8,56	9,13	9,72	10,34	10,99	11,66
Wood and products of wood and cork	5,91	6,50	7,11	7,73	8,36	9,01	9,67	10,34	11,04	11,74	12,47	13,21	13,98	14,76	15,57
Pulp, paper products; publishing and printing	2,90	3,18	3,45	3,73	4,01	4,30	4,59	4,88	5,17	5,47	5,77	6,08	6,39	6,70	7,02
Coke, refined petroleum products and nuclear fuel	1,10	1,20	1,30	1,40	1,50	1,61	1,72	1,83	1,94	2,06	2,17	2,29	2,42	2,55	2,68
Chemicals and chemical products	1,55	1,66	1,78	1,90	2,02	2,15	2,28	2,42	2,56	2,70	2,86	3,01	3,17	3,34	3,52
Rubber and plastic products	1,72	1,84	1,96	2,08	2,20	2,33	2,46	2,59	2,72	2,86	3,00	3,14	3,29	3,44	3,59
Other non-metallic mineral products	3,16	3,46	3,78	4,09	4,42	4,75	5,09	5,43	5,78	6,14	6,51	6,88	7,27	7,66	8,06
Basic metals and fabricated metal products	2,13	2,34	2,55	2,78	3,00	3,24	3,48	3,73	3,98	4,24	4,51	4,78	5,06	5,35	5,64
Machinery and equipment n.e.c.	1,17	1,31	1,46	1,60	1,76	1,91	2,07	2,23	2,40	2,57	2,74	2,92	3,10	3,28	3,47
Electrical and optical equipment	0,63	0,68	0,73	0,78	0,84	0,90	0,95	1,01	1,07	1,13	1,20	1,26	1,33	1,40	1,47
Transport equipment	1,13	1,24	1,35	1,46	1,58	1,69	1,81	1,94	2,07	2,20	2,33	2,47	2,62	2,77	2,92
Manufacturing n.e.c.	1,17	1,27	1,38	1,50	1,61	1,73	1,86	1,98	2,11	2,25	2,39	2,53	2,68	2,83	2,99
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	5,97	6,53	7,10	7,68	8,28	8,89	9,52	10,17	10,83	11,52	12,22	12,95	13,71	14,49	15,29
Wholesale trade and commission trade, except of motor vehicles and motorcycles	7,13	7,79	8,46	9,15	9,86	10,59	11,33	12,10	12,89	13,70	14,54	15,41	16,31	17,24	18,20
Retail trade, except of motor vehicles and motorcycles	7,66	8,38	9,12	9,87	10,65	11,44	12,26	13,10	13,97	14,87	15,80	16,76	17,75	18,78	19,84
Hotels and restaurants	5,28	5,74	6,23	6,72	7,22	7,74	8,27	8,82	9,38	9,96	10,56	11,18	11,82	12,48	13,17
Land transport; transport via pipelines	6,70	7,32	7,96	8,61	9,28	9,97	10,67	11,39	12,14	12,90	13,69	14,50	15,34	16,20	17,10
Water transport	6,05	6,63	7,21	7,80	8,41	9,02	9,64	10,28	10,93	11,59	12,26	12,94	13,64	14,35	15,08
Air transport	3,94	4,30	4,67	5,05	5,43	5,82	6,22	6,64	7,06	7,49	7,93	8,39	8,86	9,34	9,84
Supporting transport activities; activities of travel agencies	6,99	7,63	8,27	8,93	9,61	10,30	11,00	11,72	12,46	13,21	13,99	14,78	15,60	16,44	17,30
Post and telecommunications	6,68	7,31	7,97	8,64	9,32	10,03	10,75	11,50	12,27	13,07	13,89	14,73	15,61	16,52	17,47
Financial intermediation, excluding insurance and pension funding	5,66	6,23	6,81	7,40	8,01	8,63	9,27	9,93	10,60	11,29	12,01	12,74	13,49	14,27	15,08
Insurance and pension funding, except compulsory social security	5,17	5,67	6,19	6,72	7,26	7,81	8,38	8,97	9,57	10,19	10,83	11,49	12,17	12,88	13,61
Activities auxiliary to financial intermediation	0,92	1,00	1,08	1,17	1,26	1,35	1,44	1,53	1,63	1,73	1,82	1,93	2,03	2,13	2,24
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	5,76	6,35	6,94	7,56	8,18	8,82	9,48	10,15	10,84	11,56	12,29	13,04	13,82	14,62	15,45
Computer and related activities; research and development	0,63	0,69	0,75	0,81	0,87	0,94	1,01	1,07	1,14	1,22	1,29	1,37	1,44	1,53	1,61
Other business activities	4,05	4,48	4,91	5,36	5,81	6,28	6,75	7,23	7,73	8,24	8,76	9,29	9,84	10,40	10,98
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	6,30	6,92	7,56	8,21	8,88	9,57	10,27	11,00	11,75	12,52	13,32	14,15	15,01	15,89	16,82
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Impact of TTIP on the Economy of the Azores

Table A-32 –US Import Impacts by Sector – Scenario 3B

Scenario 3B															
Imports from US (% change to the BAU)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture, hunting and forestry, logging	4,90	5,38	5,86	6,35	6,83	7,32	7,80	8,29	8,78	9,27	9,76	10,25	10,74	11,22	11,71
Fishing	3,62	3,92	4,23	4,54	4,85	5,17	5,49	5,81	6,14	6,46	6,79	7,13	7,46	7,80	8,15
Mining and quarrying	2,19	2,34	2,50	2,66	2,83	2,99	3,16	3,33	3,51	3,69	3,87	4,05	4,24	4,43	4,63
Production of meat and meat products	7,17	7,91	8,66	9,43	10,21	11,00	11,82	12,65	13,49	14,36	15,24	16,15	17,07	18,02	19,00
Processing of fish and fish products	6,99	7,64	8,31	8,99	9,69	10,40	11,13	11,87	12,62	13,40	14,19	15,00	15,83	16,69	17,56
Manufacture of dairy products	5,90	6,42	6,95	7,49	8,04	8,60	9,18	9,77	10,37	10,98	11,61	12,25	12,91	13,59	14,28
Prepared animal feeds	4,86	5,31	5,76	6,22	6,68	7,15	7,62	8,09	8,57	9,05	9,54	10,03	10,53	11,03	11,53
Beverages & tobacco products	6,94	7,62	8,30	9,00	9,72	10,45	11,19	11,95	12,73	13,52	14,33	15,16	16,01	16,89	17,78
Fruits, vegetables, animal oils, grain mill, starches	3,29	3,60	3,92	4,25	4,57	4,90	5,24	5,58	5,92	6,27	6,63	6,99	7,35	7,73	8,10
Textiles and leather	5,08	5,55	6,03	6,53	7,04	7,57	8,11	8,68	9,27	9,87	10,50	11,16	11,84	12,54	13,27
Wood and products of wood and cork	8,40	9,23	10,07	10,93	11,80	12,69	13,60	14,52	15,47	16,43	17,42	18,43	19,46	20,52	21,60
Pulp, paper products; publishing and printing	3,96	4,33	4,71	5,10	5,49	5,88	6,27	6,67	7,08	7,48	7,90	8,31	8,73	9,16	9,59
Coke, refined petroleum products and nuclear fuel	1,62	1,77	1,93	2,08	2,24	2,40	2,56	2,73	2,89	3,07	3,24	3,42	3,60	3,79	3,98
Chemicals and chemical products	1,99	2,14	2,30	2,46	2,62	2,79	2,97	3,14	3,33	3,51	3,71	3,91	4,11	4,32	4,54
Rubber and plastic products	2,22	2,38	2,55	2,72	2,89	3,06	3,24	3,42	3,60	3,78	3,97	4,17	4,36	4,56	4,77
Other non-metallic mineral products	4,38	4,82	5,26	5,70	6,16	6,62	7,09	7,57	8,05	8,54	9,05	9,56	10,08	10,61	11,15
Basic metals and fabricated metal products	2,88	3,18	3,48	3,80	4,12	4,45	4,78	5,13	5,47	5,83	6,20	6,57	6,94	7,33	7,72
Machinery and equipment n.e.c.	1,66	1,86	2,07	2,27	2,49	2,70	2,92	3,14	3,37	3,60	3,83	4,07	4,31	4,55	4,80
Electrical and optical equipment	0,87	0,94	1,02	1,10	1,18	1,26	1,34	1,42	1,51	1,59	1,68	1,77	1,86	1,96	2,05
Transport equipment	1,62	1,77	1,93	2,09	2,26	2,42	2,59	2,77	2,95	3,13	3,31	3,50	3,70	3,90	4,10
Manufacturing n.e.c.	1,62	1,78	1,93	2,09	2,26	2,42	2,59	2,77	2,95	3,13	3,31	3,51	3,70	3,90	4,11
Electricity, gas, steam and hot water supply	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Collection, purification and distribution of water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Construction	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sale, maintenance, repair of motor vehicles and motorcycles	8,54	9,33	10,15	10,97	11,82	12,69	13,58	14,49	15,42	16,38	17,36	18,37	19,41	20,48	21,59
Wholesale trade and commission trade, except of motor vehicles and motorcycles	10,20	11,14	12,10	13,08	14,08	15,11	16,16	17,24	18,35	19,48	20,65	21,86	23,09	24,37	25,68
Retail trade, except of motor vehicles and motorcycles	10,97	11,99	13,04	14,12	15,22	16,35	17,51	18,69	19,92	21,17	22,46	23,80	25,17	26,58	28,05
Hotels and restaurants	7,36	8,03	8,71	9,41	10,12	10,85	11,60	12,36	13,15	13,95	14,78	15,62	16,50	17,39	18,32
Land transport; transport via pipelines	9,52	10,41	11,31	12,23	13,17	14,13	15,11	16,12	17,16	18,22	19,30	20,42	21,57	22,75	23,97
Water transport	9,19	10,05	10,91	11,79	12,69	13,60	14,52	15,46	16,41	17,38	18,36	19,36	20,38	21,42	22,47
Air transport	5,77	6,29	6,82	7,35	7,90	8,45	9,01	9,59	10,18	10,78	11,39	12,02	12,66	13,32	13,99
Supporting transport activities; activities of travel agencies	10,75	11,73	12,74	13,76	14,81	15,87	16,96	18,07	19,21	20,37	21,55	22,77	24,01	25,29	26,60
Post and telecommunications	9,57	10,49	11,42	12,37	13,35	14,35	15,38	16,43	17,51	18,62	19,76	20,93	22,14	23,39	24,68
Financial intermediation, excluding insurance and pension funding	8,03	8,83	9,65	10,49	11,35	12,22	13,11	14,03	14,96	15,92	16,90	17,91	18,94	20,00	21,09
Insurance and pension funding, except compulsory social security	7,39	8,10	8,83	9,58	10,34	11,12	11,92	12,74	13,58	14,44	15,32	16,22	17,15	18,11	19,10
Activities auxiliary to financial intermediation	1,22	1,34	1,45	1,57	1,69	1,81	1,93	2,05	2,18	2,31	2,44	2,57	2,71	2,84	2,98
Real estate activities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Renting of machinery and equipment without operator	8,23	9,06	9,91	10,77	11,66	12,56	13,48	14,42	15,39	16,38	17,39	18,43	19,49	20,58	21,70
Computer and related activities; research and development	0,89	0,97	1,06	1,15	1,24	1,33	1,43	1,53	1,62	1,72	1,83	1,93	2,04	2,15	2,26
Other business activities	5,75	6,35	6,97	7,59	8,23	8,88	9,54	10,21	10,90	11,59	12,31	13,03	13,78	14,54	15,31
Public administration and defence; compulsory social security	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Education	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Health and social work	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other community, social and personal service activities	9,06	9,95	10,86	11,79	12,74	13,71	14,71	15,73	16,78	17,86	18,97	20,12	21,29	22,51	23,76
Activities of households as employers of domestic staff	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00