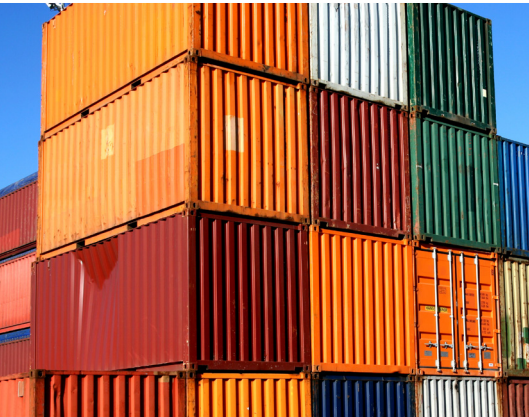




THE ECONOMIC IMPACT OF THE EU - VIETNAM FREE TRADE AGREEMENT

1 January 2017 - 31 December 2017



Trade



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THE ECONOMIC IMPACT OF THE EU - VIETNAM FREE TRADE AGREEMENT

Executive summary

The trade agreement with Vietnam is the most ambitious the EU has ever concluded with a developing country. It was made possible because of its strategic importance to both parties. For the EU, the agreement represents an important stepping stone towards securing a stronger trade and investment partnership with a dynamic ASEAN region and paves the path for future agreements with other ASEAN countries. For Vietnam, it is a crucial step to consolidate its long process of integration in the global economy. By promoting trade and investment linkages with the world's largest trading block, Vietnam makes sure that openness continues to be at the centre of its development strategy to sustainably steer the country into a middle income economy.

The agreement, comprehensive as it is, foresees not only the almost full elimination of bilateral tariffs and export taxes but also a substantial reduction of non-tariff barriers (NTBs) in the areas of services and investment. It also covers areas like government procurement, intellectual property rights (IPR), competition, and regulatory coherence.

This report has been prepared with the aim to present to the general public the expected gains of the agreement. Such an endeavour is however bound to remain incomplete, as the available methodological framework and data do not allow to adequately quantify the expected effects of all areas covered by the agreement. Still, when taken in its quantitative and qualitative dimensions, the analysis presented here points to substantial benefits for Vietnam and the EU.

The elimination of bilateral tariffs and export taxes, together with the reduction of NTBs affecting the cross-border exchanges of goods and services, are expected to boost bilateral trade considerably. EU exports to Vietnam are estimated to increase by around 29%, while Vietnam exports to the EU are estimated to grow by around 18%. These figures correspond to export gains of €8 billion by 2035 for EU firms, while Vietnam exports to the EU are expected to grow by €15 billion.

The much larger size of the EU economy and the greater liberalisation effort by Vietnam largely explain the relatively higher aggregate income impact of the trade agreement in Vietnam (€6 billion) than in the EU (about €2 billion). While the latter mostly reflects improvements on the terms of trade, the longer-term benefit of the agreement for the EU should be seen from the broader perspective of a further strengthening of the economic relationship with the ASEAN region, one of the fastest growing and most vibrant in the world.

Finally, it is important to note that the quantitative analysis presented in this report represents a lower bound estimate of the economic impact of the agreement. The modelling assessment does not account for what are arguably some of its most significant benefits, which will be found in the regulatory changes that allow for the greater integration of the EU and Vietnamese economies for example in the areas of investment, IPR and public procurement.

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1. Introduction

The purpose of this report is to offer a comprehensive assessment of the expected economic impact of the trade agreement between the European Union (EU) and Vietnam. It builds on a quantification of its economy-wide effects grounded on the use of a computable general equilibrium (CGE) model. Given the limitations of the latter, the assessment was complemented with qualitative analyses of the parts of the agreement that do not directly translate into specific and immediate changes in bilateral trade costs.

The trade agreement will be entering into force in the context of a fast-changing Vietnamese economy and an already flourishing commercial relationship between the EU and Vietnam. The economic and social transformation of Vietnam in the past 30 years has been remarkable, and has led the country to acquiring lower middle income status in 2010 and to the elimination of extreme poverty and the reduction of income inequalities. Today, Vietnam is a vibrant economy of more than 94 million inhabitants, with one of the fastest growing middle class in the ASEAN region and a young and dynamic workforce. Its relatively high literacy rate and education levels, comparatively low wages, good connectivity and central location within ASEAN, make the country especially competitive and attractive to foreign investors.

Unsurprisingly, the trade and investment links between the EU and Vietnam have been steadily strengthening, since the establishment of formal diplomatic relations in 1996. The other important milestones in the bilateral relationship were the conclusion in 2004 of the bilateral negotiations that paved the way for Vietnam's accession to the World Trade Organization (WTO) - the first bilateral agreement Vietnam had with a large WTO member - and the Early Harvest Agreement¹, which enabled mutual market access for companies three years before Vietnam's accession to the WTO. The EU has also been a committed supporter of Vietnam's economy, notably through development aid packages.

Through the years, the EU and Vietnam have built a modern and mature partnership. In 2017, the merchandise trade between the EU and Vietnam was worth €48 billion, making Vietnam the 19th largest goods trading partner of the EU and its second largest trading partner in ASEAN (after Singapore). For Vietnam the EU is in its turn its second biggest export market and one of its main suppliers. The bilateral relationship between the EU and Vietnam is framed by the Partnership and Cooperation Agreement that entered into force in October 2016. At the same time, the EU and Vietnam Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement signed in October 2018 aims at combating illegal logging by strengthening sustainable and legal forest management, improving governance and promoting trade in legally produced

¹ The Agreement on Market Access is an offshoot of the bilateral WTO accession deal. Effective from January 2005, the agreement suspended quotas on Vietnam's clothing exports to the EU. In exchange, Vietnam committed to treat the EU not less favourably than US or Japan. In addition, Vietnam offered companies of EU origin reduced tariffs on yarns, clothing, fabrics and made-up articles, fibres, beverages, motorbikes as well as manufacturing licenses in the pharma and cement sectors. Vietnam also committed to increase market access for service providers in the telecoms, construction, computer, engineering, integrated engineering, architecture, and urban planning service sectors. Further it granted licenses to EU companies in the life insurance, distribution, shipping, computer reservation system, environmental, and real estate service sectors.

timber. This proves both sides' commitment to forge a modern, broad-based and mutually-beneficial partnership, based on shared interest and principles.

The agreement represents a unique opportunity for European and Vietnamese businesses. It will put EU exporters at least on a par with those from other countries and regions with whom Vietnam has already concluded FTAs, like ASEAN, Australia, New Zealand, Chile, China, India, Japan, and South Korea. This will offer new business opportunities for agricultural, industrial and services exporters from the EU that have so far been curtailed by existing trade barriers. Vietnam will in turn enjoy privileged access to the EU market (on similar footing to South Korea and Singapore). Consumers and firms in the EU and Vietnam will stand to gain from the increased availability of products and inputs.

Moreover, considering the complementarity of EU and Vietnam comparative advantages profiles, Vietnam's strategic location in Asia, and its efforts towards greater integration with other ASEAN and Asian markets, the agreement can also be expected to promote production sharing between the EU and Asia as EU firms choose to set up production and exporting hubs in Vietnam. The reforms that Vietnam agreed to implement to improve business environment, including greater transparency in public procurement markets, will also contribute to making Vietnam a privileged destination for investment from the EU.

The economic analysis presented in this report cannot match the comprehensiveness and complexity of such an agreement. The quantification of its effects is necessarily bound to be partial, constrained by substantial limitations in terms of the availability of data and robust analytical methodologies at our disposal. Nonetheless, being based on a thorough reading of the agreement and grounded on the use of well-tested analytical tools, this assessment provides an important input to grasp the reach of the economic impacts at stake for the EU and Vietnam.

Furthermore, given that it is the most ambitious and comprehensive trade agreement the EU has concluded to date with a developing country, its implications will necessarily go beyond economics. For the EU, the agreement with Vietnam will serve as a benchmark for future negotiations with developing countries and, together with the trade agreement with Singapore, also constitute a reference point for negotiations with other ASEAN countries. While the sustainable development dimension of the agreement is of utmost importance considering the objective to promote basic rights at work, and human rights more broadly, and to seek adequate environmental protection (with the inclusion of strong commitments in these areas), the analysis of such components falls outside the scope of the assessment.

The report is structured as follows. Chapter 2 features an overview of the EU-Vietnam trade and investment relationship, including on existing barriers to trade. Chapter 3 provides a detailed account of the main changes that the trade agreement will bring along with regard to existing rules and regulations framing trade and investment relations between the EU and Vietnam. Chapter 4 offers a quantitative assessment of the impact of the agreement on the basis of a CGE-modelling simulation. Chapter 5 provides an analysis of changes to the public procurement markets and the increase in production sharing between the EU and Vietnam; two areas that the

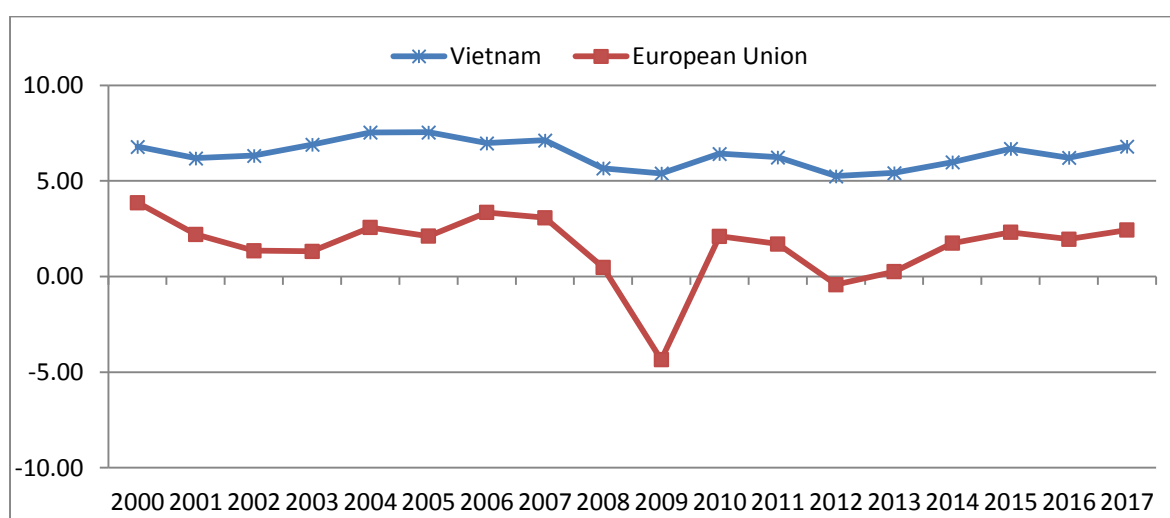
CGE model based analysis is not able to capture but that are expected to deliver important economic benefits.

2. Overview of EU-Vietnam economic and trade relations

2.1. EU-Vietnam economic relations

The recent change to the scale and depth of the economic relationship between the EU and Vietnam must be seen in light of the drastic transformation of Vietnam in the last 30 years as it emerged from poverty and isolation into a buoyant lower middle income nation that is quickly catching up with its Asian neighbours. Such an impressive economic track record can best be grasped by the simple fact that the country has been catching up rapidly measured on the real GDP growth rate. As shown in Figure 1, Vietnam's growth rate has been remarkable in the 2000-2017 period, averaging 6.4% per year. The EU growth rate, on the other hand, has been considerably lower and unlike in the case of Vietnam, economic activity even declined in 2009 and 2012. In 2017, Vietnam's growth rate is more than double as high as the one of the EU standing at 6.8% compared to 2.4% respectively. Such economic dynamism is set to continue with the IMF forecasts pointing to real GDP growth rate around 6.5% at least until 2023 (IMF 2018).

Figure 1: Evolution Growth rate GDP for Vietnam and the EU (in %)



Source: World Bank

To understand the current bilateral trade relationship and the potential impact of the trade agreement, it must be borne in mind that the EU and Vietnam are two unequal partners in many respects. First, the EU is a much larger and affluent economy than Vietnam. As shown in Table 1, in 2017 the GDP of the EU was worth almost 80 fold that of Vietnam. The population of Vietnam is less than a fifth of that of the EU. Second, despite the impressive economic catching up effect of the past decades, the per capita income in Vietnam is less than a tenth of the EU's.

Table 1: GDP and population in 2017

Indicator	Vietnam	EU (28)
GDP (in billion €)	195	15,336
GDP per capita (in €)	2,080	29,900
Population (in millions)	94	513

Source: Eurostat and the IMF

Moreover, Vietnam still presents structural features that are typical of lower middle income economies. For example, agriculture still employs over 40%² of the labour force, while delivering just over 15% of value added as shown in Table 2. As the country moves from a state-run economy into a modern privately organized economy, the potential to boost productivity and income from the reallocation of resources to the more productive manufacturing and services sectors is still considerable.

Table 2: Value added per economic activity as a percentage of GDP in 2017

Country	Agriculture	Industry	Services
Vietnam	15	33	41
EU	1.4	22	66

Source: World Bank

The strengthening of trade and foreign direct investments with key partners has been at the core of the structural transformation that Vietnam is going through³. However, there is still scope to open up the economy further. In 2016 the simple average applied tariff remained relatively high at 9.6% while the average bound tariff under its WTO commitments (on 100% of its tariff lines) stood at 11.5% (WTO 2018).

Furthermore, notwithstanding the ongoing reforms, Vietnam continues to be a difficult place to do business, notably when it comes to trade logistics. Vietnam ranked 68th on the World Bank's 2018 Doing Business scoreboard and the inefficiency of trade logistics was identified as a particularly serious bottleneck (World Bank 2018). Nonetheless, compared to other lower middle income countries in the East Asia and Pacific region, Vietnam scores higher in respect to timeliness, tracking and tracing, logistic competence, and international shipments (Figure 2). In terms of customs procedures and logistic infrastructure, Vietnam's score is higher than the average of other lower and middle income countries but lower than the East Asia and Pacific region.

² World Bank database, accessed 29 August 2018.

³ Vietnam is actively engaged in trade liberalization, having recently concluded negotiations for the Trans-Pacific Partnership (TPP) and is working towards a Regional Comprehensive Economic Partnership (RCEP) from within ASEAN.

Figure 2: Logistics performance index 2018

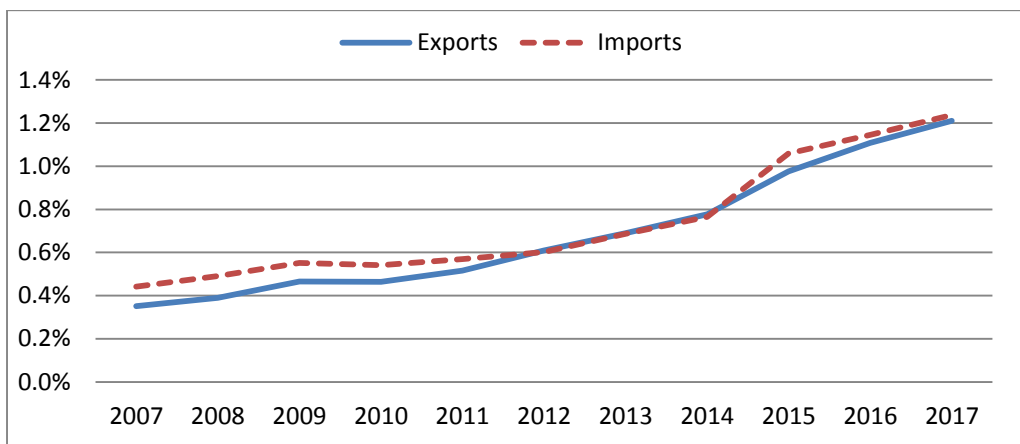
Source: World Bank (2018)

Against this background, the EU-Vietnam trade agreement will give the EU an additional opportunity to play a major role in the transformation of the Vietnamese economy, while making use of the numerous new business opportunities.

2.2 Trade in goods and services and investment

2.2.1 Trade in goods

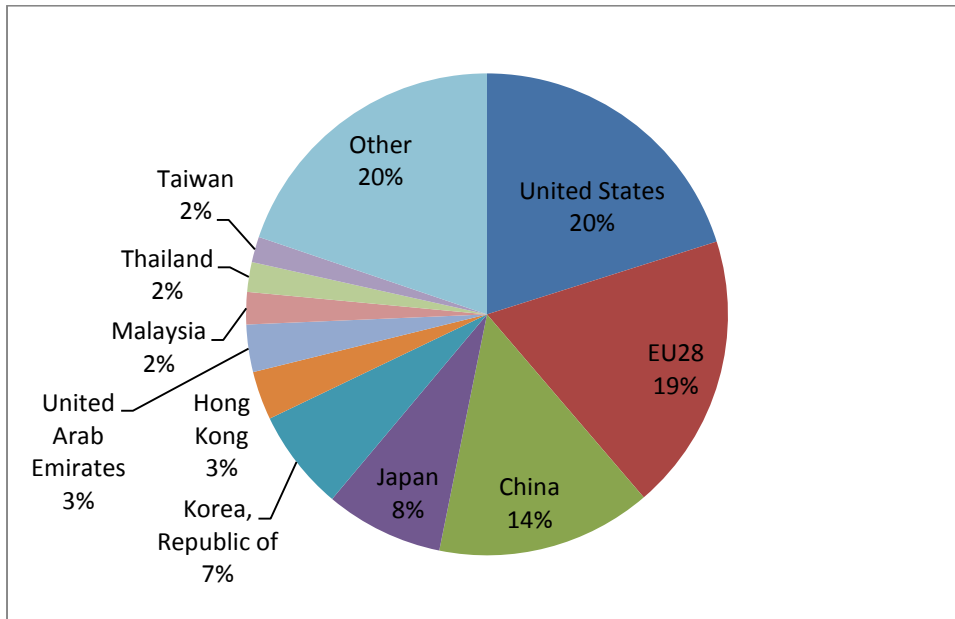
Over the last decade Vietnam's trade in goods with the world has grown at a rapid pace. Vietnamese exports increased from €35bn in 2007 to almost €200bn in 2017. Similarly, imports of goods from rest of the world rose from €46bn to nearly €200bn. This is reflected in the corresponding shares of Vietnam's goods imports and exports in global world trade. These shares increased from 0.44% to 1.24% and from 0.35% to 1.2% and respectively.

Figure 3: Vietnam's share of global imports and exports

Source: IMF Direction of Trade Statistics (2017)

Furthermore, as a consequence of the rapid economic transformation of its production structure, Vietnam's exports are becoming more sophisticated and its destination markets more diversified. By 2017, the top exports by broad sector were electrical and electronic equipment accounting for almost 40% of Vietnam's exports, footwear for 8%, and machinery for 6%.⁴ These represented more than 50% of Vietnam's exports to the rest of the world. The EU continues to be a key export market for Vietnam's goods exports. It ranks second with a share of 19% of total exports, just behind the US (20%) and well ahead of China (14%) ranking third (Figure 4).

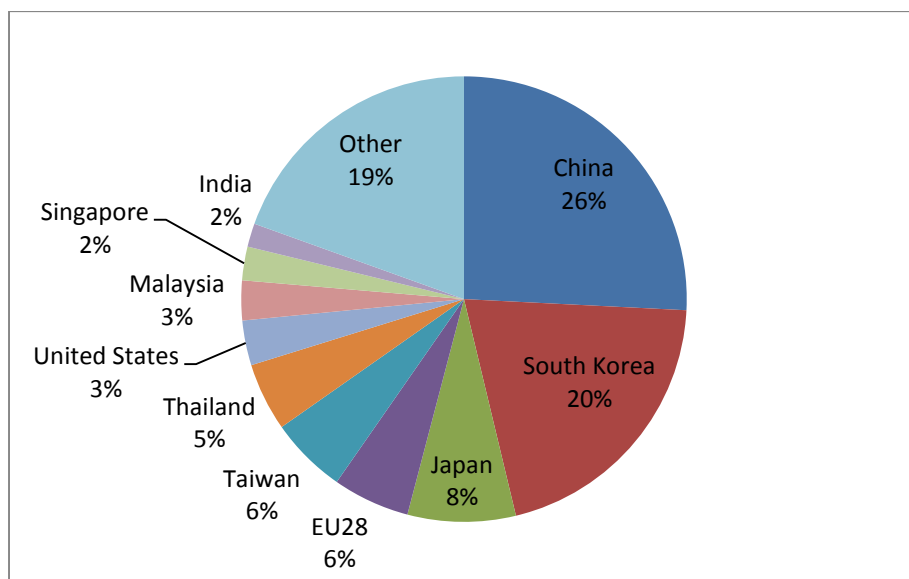
Figure 4: Main destinations of goods exports from Vietnam in 2017



Source: IMF

In terms of import structure, electrical machinery and equipment goods account for a sizable share of Vietnam's imports. In 2017, more than a third of the imports were electrical and electronic equipment (€54bn) and other (mechanical) machinery (€22.5bn). In respect to the geographical origin of the imported goods, China is the largest supplier accounting for more than a quarter of the total imports of merchandise products (Figure 5). The second most important source of imports is Korea, accounting for a share of 20% in Vietnam's good imports. In 2017, the EU was the 4th most important goods supplier after Japan responsible for 6% of Vietnam's total merchandise imports.

⁴ International Trade Center (ITC), *Trade Map* (2017).

Figure 5: Main suppliers of goods to Vietnam in 2017

Source: IMF

When looking at the importance of Vietnam in EU trade it is worth recalling the relative size of the two economies: in 2017, extra-EU trade in goods was nearly tenfold that of Vietnam with the rest of the world. In 2017, Vietnam's merchandise exports to the EU were worth €37 billion, which represented around 2% of total EU imports of goods, making it the 10th largest EU supplier. In the same year Vietnam purchased nearly €11 billion worth of merchandise from the EU, which accounted for not more than 0.6% of total EU sales of goods to the rest of the world.⁵

Traditionally, and as a result of the country's comparative advantage in labour intensive goods, Vietnam has been an important EU supplier of footwear, hats and other headgear as well as of textiles and clothing. Table 3 shows that garment products make up approximately a fifth of the EU imports from Vietnam. Some sectors that are relatively new to the country like machinery and appliances (mainly telecommunication equipment like mobile phones and tablets⁶) however already account for over half of EU purchases. The latter illustrates well the reach of the structural transformation of Vietnam's economy and points to the important role that the activities of multinational firms play in this process.

⁵ IMF Direction of Trade Statistics (DOTS) and DG Trade Integrated Statistical Database (ISDB).

⁶ Telecommunications equipment (SITC 2412) alone accounted for €13.6bn. This represented 12.8% of the total EU telecommunications equipment imports, making Vietnam the major supplier of these goods to the EU.

Table 3: EU imports from Vietnam by HS section in 2017, in million € and %

Sectors	Imports million €	Total %
1. Machinery and appliances	19,241	52.0%
2. Footwear, hats and other headgear	4,250	11.5%
3. Textiles and textile articles	3,523	9.5%
4. Vegetable products	2,446	6.6%
5. Miscellaneous manufactured articles	1,483	4.0%
6. Raw hides and skins, and saddlery	998	2.7%
7. Plastic, rubber and articles thereof	994	2.7%
8. Base metals and articles thereof	876	2.4%
9. Live animals and animal products	777	2.1%
10. Foodstuffs, beverages and tobacco	596	1.6%
11. Transport equipment	508	1.4%
12. Optical and photographic instruments etc	480	1.3%
Total	37,019	100%

Source: Eurostat Comext

Table 4 shows that EU exports to Vietnam consist mainly of machinery, chemicals and transport equipment, making it an important supplier of inputs and equipment goods that are essential to the ongoing transformation and modernisation of the Vietnamese economy. In 2017, these three broad sectors accounted for over 60% of EU merchandise sales to Vietnam.

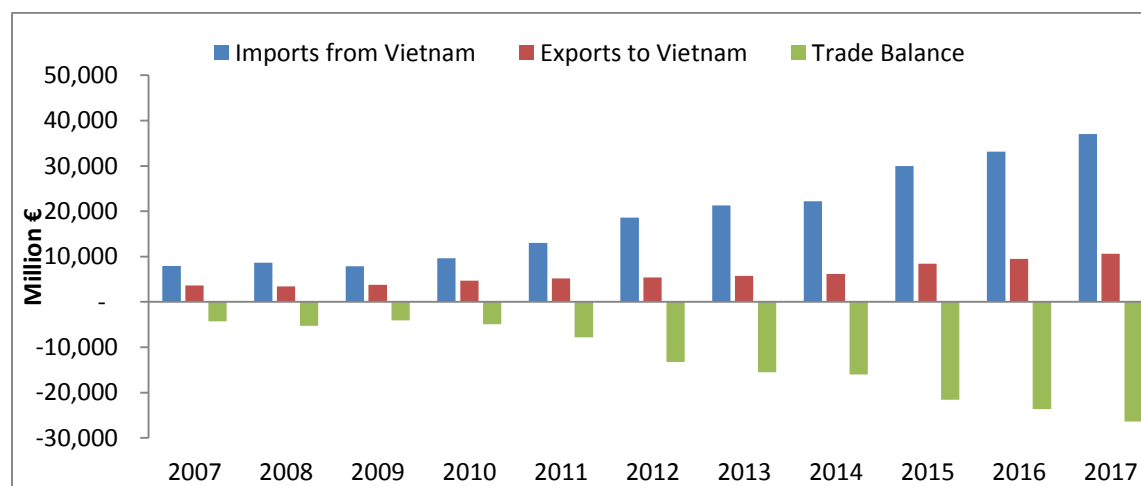
Table 4: EU exports to Vietnam by HS section in 2017 (in million € and %)

Sectors	Imports million €	Total %
1. Machinery and appliances	2,740	25.8%
2. Products of the chemical industries	2,082	19.6%
3. Transport equipment	1,757	16.5%
4. Live animals and animal products	539	5.1%
5. Foodstuffs, beverages and tobacco	516	4.9%
6. Vegetable products	508	4.8%
7. Optical and photographic instruments	344	3.2%
8. Raw hides and skins, and saddlery	338	3.2%
9. Base metals and articles thereof	334	3.1%
10. Textiles and textile articles	312	2.9%
11. Plastic, rubber and articles thereof	227	2.1%
12. Other	187	1.8%
Total	10,624	100%

Source: Eurostat, MADB

Overall, EU exports to Vietnam have increased significantly with values rising from €3.5bn in 2007 to nearly €11bn in 2017 corresponding to more than threefold surge (see Figure 6). Over the same period, EU imports from Vietnam have also grown substantially with values rising from almost €8bn in 2007 to €37bn in 2017. As imports have grown at a far greater pace than exports, the EU trade deficit with Vietnam has augmented from €4.3bn to over €26bn which corresponds to more than a fivefold increase.

Figure 6: Balance of trade in goods EU-Vietnam (million €), 2007-2017



Source: Eurostat Comext

2.2.2 Trade in services

Vietnam's trade in services is still very limited on a global scale. In 2017, commercial services exports amounted to only €11 billion while imports stood at €15 billion. However, services trade growth has been strong, averaging 16% between 2010 and 2017. Travel dominates services exports (around 67% of total) followed by transport (20%). Similarly, imports are mainly driven by transport (48%) and travel (30%)⁷.

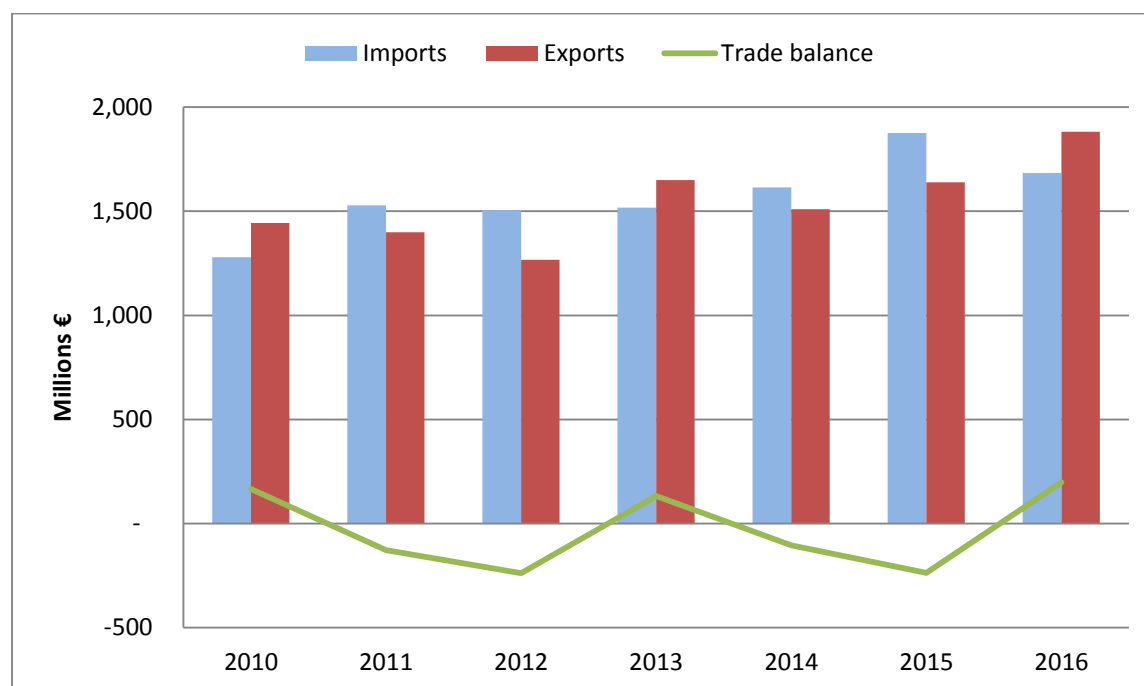
EU trade in services with Vietnam also lags behind trade in goods. Exports to Vietnam have increased by 32% since 2010 to a total of nearly €2 billion in 2016 (see Figure 7). Imports have also increased from €1.3 billion in 2010 to €1.7 billion in 2016. Data for 2016 shows that the EU had a trade in services surplus of about €200 million with Vietnam. There have been significant fluctuations in the trade balance over the seven-years period with both imports and exports varying in value.

This all reflects the relative underdevelopment of the services industries in Vietnam and points to the significant untapped potential for greater commercial linkages in services in the future. Services activities make up the largest share of the EU economy and they also have important

⁷ Data prepared by DG Trade - Chief Economist Unit - Statistics sector from WTO-UNCTAD-ITC data.

growth potential in Vietnam. The rapid urbanisation and growing wages are expected to spur production and intensify the demand for services in the country⁸.

Figure 7: EU-Vietnam trade in services, in million €



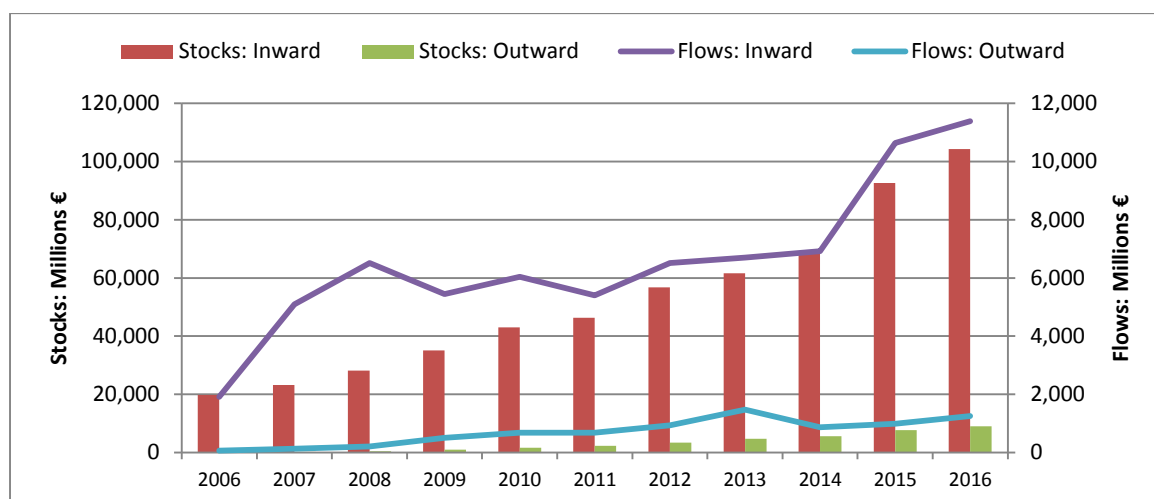
Source: WTO-UNCTAD-ITC

2.2.3 Foreign direct investments (FDIs) stocks and flows

Over the past years, Vietnam has seen a strong surge in FDI inflows triggered by the accession to the WTO in 2007 and the policies implemented to attract foreign firms. Figure 8 shows that inward FDI stocks in the country have increased five-fold between 2006 and 2016 to reach €104 billion. The attractiveness of the country for foreign investment is underlined by the quick recovery of FDI inflows from the worldwide FDI slump in the wake of the 2009 global financial crisis.

Vietnamese outward FDI stocks have risen from €119 million to €9 billion in the period 2006-2016. Similarly, inward and outward flows grew from almost €2 to €11 billion and from €68 million to €1.2 billion respectively.

⁸ For more details see U.S. International Trade Commission (2012). Available at: https://www.usitc.gov/publications/332/Vietnam_working_Paper_final2a.pdf.

Figure 8: Foreign direct investment in Vietnam

Source: UNCTAD

The EU has played a major role in this dynamics. As Table 5 shows EU outward investment stock in Vietnam increased from €4 to €8 billion in the period 2013-2016. In terms of inward stocks, Vietnamese investments in the EU have also augmented from €33 million to nearly €150 million in the same period.

Table 5: EU Foreign direct Investment in Vietnam (million euros)

Year	Outward Flows	Inward Flows	Outward Stocks	Inward Stocks
2013	3,148	-56	4,134	33
2014	581	-52	5,254	-28
2015	747	72	6,432	152
2016	1,458	2	8,261	148

Source: Eurostat

2.3. Trade barriers in place

2.3.1. Tariff profile of Vietnam and the EU

With the accession to the WTO in 2007, Vietnam adopted a more liberal tariff schedule on an MFN basis. In 2016, the trade weighted average tariff imposed by Vietnam against EU exports stood at 5%. The corresponding EU trade-weighted tariff faced by Vietnam was around half: 2.3%⁹.

However, the level of protection imposed on bilateral trade varies widely across sectors. This is apparent even at a fairly aggregated level by HS sections, as shown in tables 6 and 7. Tariffs currently faced by European exporters to Vietnam are highest on "footwear", "foodstuffs,

⁹ This already takes into account the fact that Vietnam benefits from the EU Generalised System of Preferences.

beverages, and tobacco", "articles of stone, glass and ceramics" and "miscellaneous manufactured articles". In "transport equipment" there is a large difference between the simple and the trade-weighted tariff indicating wide heterogeneity in the tariff profile within the sector.

Table 6: Structure of Vietnam tariffs on imports from EU by HS section (2017)

HS section	Label	Imports from EU: Value in million € EU exports	Tariff: simple AV average (%)	Tariff: weighted AV average (%)
01	Live animals, animal products	498	13.1	9.9
02	Vegetable products	223	16.2	6.9
03	Animal or vegetable fats and oils	10	10.7	10.3
04	Foodstuffs, beverages, tobacco	448	28.7	23.0
05	Mineral products	43	4.3	4.6
06	Products of the chemical or allied industries	1,486	2.8	3.0
07	Plastics, rubber and articles thereof	295	7.9	6.6
08	Raw hides, skins and saddlery	317	10.8	6.2
09	Wood, charcoal, cork and articles thereof	124	8.2	0.9
10	Pulp of wood, paper and paperboard	160	11.4	5.0
11	Textiles and textile articles	260	12.7	12.5
12	Footwear, hats and other headgear	13	25.0	22.9
13	Articles of stone, glass, ceramics	68	17.8	13.1
14	Pearls, precious metals and articles thereof	125	10.9	3.7
15	Base metals and articles thereof	298	7.8	7.0
16	Machinery and appliances	2,484	4.7	3.0
17	Transport equipment	1,984	19.1	2.3
18	Optical and photographic instruments	512	5.4	0.5
19	Arms and ammunition	4	2.3	0.4
20	Miscellaneous manufactured articles	118	18.1	14.9
21	Works of art, antiques	2	4.3	1.6
Total		9,471	9.9	5.0

Source: DG Trade, MADB, Reporter: Vietnam, Partner: EU28, ISDB extraction date: 01/08/2018

The EU tariff profile for imports from Vietnam reflects the country's status as GSP beneficiary. The European sectors that are currently most protected from imports from Vietnam are footwear, foodstuffs, beverages and tobacco and transport equipment.

Table 7: Structure of the EU tariffs on imports from Vietnam by HS section (2016)¹⁰

HS section	Label	Imports from Vietnam: Value in million €	Tariff: simple AV average (%)	Tariff: weighted AV average (%)
01	Live animals, animal products	700	5.4	5.0
02	Vegetable products	2,224	6.1	0.3
03	Animal or vegetable fats and oils	2	11.3	2.9
04	Foodstuffs, beverages, tobacco	506	10.2	8.3
05	Mineral products	30	0.0	0.0
06	Products of the chemical or allied industries	172	0.5	0.2
07	Plastics, rubber and articles thereof	793	0.7	1.1
08	Raw hides, skins and saddlery	804	1.3	0.9
09	Wood, charcoal, cork and articles thereof	147	0.7	0.2
10	Pulp of wood, paper and paperboard	25	0.0	0.0
11	Textiles and textile articles	3,205	7.3	9.0
12	Footwear, hats and other headgear	3,635	4.5	9.0
13	Articles of stone, glass, ceramics	173	1.7	0.9
14	Pearls, precious metals and articles thereof	117	0.0	0.0
15	Base metals and articles thereof	735	0.4	0.6
16	Machinery and appliances	17,261	0.2	0.0
17	Transport equipment	361	0.8	1.6
18	Optical and photographic instruments	391	0.1	0.2
19	Arms and ammunition	0	2.9	3.0
20	Miscellaneous manufactured articles	1,321	0.1	0.1
21	Works of art, antiques	1	0.0	0.0
	Total	32,603	2.9	2.3

Source: DG Trade, MacMap, Reporter: EU28, Partner: Vietnam, ISDB extraction date: 01/08/2018

2.3.2. Non-tariff barriers in place

In addition to tariffs, the business environment in Vietnam is also characterised by other measures of different nature that hamper foreign firms' access to the local market. The so-called non-tariff barriers (NTBs) result from a host of policy interventions that intentionally and/or unintentionally affect the trade of goods and services. It must be borne in mind that some of the trade frictions they introduce in the market place may be intertwined with factors that are

¹⁰ Specific duties are also taken into account.

inherent to the cross-national nature of trade, like for example language (i.e. the fact that rules and regulations are solely conveyed in the local language may contribute in some cases to the opacity of the regulatory framework) and/or reflect sovereignty and the inherent right to regulate, which go well beyond the remit of trade policy. Another important point is that the trade costs associated with NTBs are often difficult to measure. Moreover, most estimates of ad-valorem equivalents (AVEs) in the literature derive from a country's overall trade and are not bilateral. Therefore given their nature, scope and diversity it is difficult to have an overall idea of how high they might be.

The bilateral trade relationship between the EU and Vietnam faces various NTBs in place, of which we highlight some examples:

SPS

Market access for EU producers is hampered by the fact that Vietnam deviates from the World Organization for Animal Health (OIE) standards and does not recognise the OIE's Mad Cow Disease (BSE) status assessment. Instead Vietnam requires its own risk assessment. EU Member States have been classified by OIE as having “negligible” or “controlled” BSE disease risk status. Several EU Member States (subject to harmonised EU legislation) cannot export beef to Vietnam. At the same time Vietnam has been importing beef from other trading partners with a similar risk category status compared to several EU Member States. As a positive development, in 2015, Vietnam allowed exports from France and eliminated the associated BSE restriction. In 2017, Vietnam opened its market to Spanish beef while six EU Member States have submitted applications for being able to export beef to Vietnam.

Pharma

Although Vietnam extended full trading rights to pharmaceutical products as of 1 January 2009, as part of its WTO accession commitments, it has never fully implemented this commitment. In practice, foreign firms do not have the right to import pharmaceutical products into the country. Moreover, Vietnamese legislation does not offer clear provisions to safeguard exclusivity and confidentiality of the data that pharmaceutical companies must submit as part of market authorisation procedures. As a result, some producers are hesitant about entering the market¹¹.

Distribution services - Economic needs test

Even if, since 2009 the distribution market in Vietnam has been fully open to foreign-owned operators, an economic needs test (ENT) is still compulsory for those wanting to open more than

¹¹ Pieces of legislation regulating this field, Circular No. 05/2010/TT-BYT and subsequent Circular No. 44/2014/TT-BYT, do not really remedy the situation as data protection is not automatic.

one retail outlet. Discretionary interpretation by different local authorities of the relevant ENT criteria creates significant legal uncertainty for EU companies¹².

Trade in counterfeit products

Trade in counterfeit products is still a concern in Vietnam. According to the OECD-EUIPO study '*Mapping the Real Routes of Trade in Fake Goods*', Vietnam appears to be an important producer of counterfeit jewellery, clothing and textile fabrics, footwear, foodstuffs, as well as optical, photographic and medical equipment.

Intellectual property, geographical indications and public procurement

EU stakeholders are also concerned about the length of IP registration processes for trademarks and slow appeal procedures. While EU stakeholders' experience with authorities at national level has been positive, weaknesses were still noted at local level. Further progress remains necessary regarding IPR enforcement. EU stakeholders report that IPR infringements remain prevalent across the country, especially in street markets and commercial areas. Concerns have been raised that sanctions against infringers have an insufficient deterrent effect and that there is still a lack of trained IP officials, including in the customs authorities. In the Commission's annual Report on EU Customs Enforcement of IPR in 2016, Vietnam remains one of the "top 7" countries whose IPR infringing goods were detained and seized at the EU borders. More generally, Vietnam's enforcement system has remained highly complex, making it challenging for IP right holders to take effective and efficient action against IPR infringements.

Regarding geographical indications (GIs), Vietnam still grants a higher level of protection to wines and spirits GIs than to the rest of agricultural and foodstuff GIs.

3. Comprehensive overview of the EU-Vietnam FTA

This economic assessment of the potential impact of the trade agreement between the EU and Vietnam aims to be as objective and comprehensive as possible to the extent allowed by the availability of well-tested methodologies and the necessary data. The comprehensiveness of the agreement and the breadth and depth of issues that it covers, however, pose challenges to this endeavour.

This report adopts a multi-pronged approach that builds on an exhaustive reading of the text of the agreement in order to identify the main changes it brings to the conditions framing trade and investment relations between the EU and Vietnam. On that basis the quantification of the impact of parts of the liberalisation agreement, like the reduction of tariffs and export taxes, is done using standard trade policy evaluation methods like CGE model based simulations. Other regulatory changes, like for example the lowering of barriers to the cross-border delivery of

¹² Rules for economic needs tests were relaxed in case of establishing an outlet less than 500m². Within the area planned for trading activities and already completed construction of infrastructure, ENT is not required. Circular No. 08/2013/TT-BCT provides for rules governing ENTs and sets the exemption from ENT for outlets of less than 500m².

services, are mapped into trade costs reductions, which are ultimately used as inputs to the CGE model-based quantitative analysis. While this approach inevitably carries some degree of imprecision we believe that the enhanced comprehensiveness that it offers makes it worthwhile pursuing. Nonetheless, some parts of the agreement cannot be quantified in the same manner due to data and modelling limitations. This is the case for example for the liberalisation of cross-border investment and public procurement for which the present analysis provides only a qualitative assessment of their likely consequences.

3.1 Tariffs and export duties elimination

As with any trade agreement the dismantling of border restrictions plays a central role. In particular, the agreement between the EU and Vietnam foresees the elimination of tariffs averaging 2.2% in the EU and 5% in Vietnam on a trade-weighted basis. For almost all import duties this will be done over seven years in the EU and ten years in Vietnam, as of the entry into force of the agreement. However, some flexibility is foreseen for sensitive products. For example, the EU tariffs on Vietnamese exports of textiles and apparel will be removed in five to seven years for sensitive items and in three years or directly upon entry into force for less sensitive goods. For footwear, EU tariffs will be eliminated after seven years for sensitive items, and three years or upon entry into force on less sensitive ones. Vietnam, in turn, will withdraw tariffs on EU exports of almost all machinery and appliances and all textiles at the entry into force of the agreement. Also, around half of EU pharmaceutical exports will be able to enter the Vietnamese market duty-free immediately¹³.

Agricultural products:

- EU's exports to Vietnam will be mostly fully liberalised, and usually in no more than 7 years and linear (except poultry, beer, cigarettes), despite some tariff peaks.
- EU's agricultural imports from Vietnam are mostly (about 90%) products which are already MFN duty-free. Some of the few that are not (noodles, rice, manioc starch) would be subject to limited partial openings in the form of tariff rate quotas (TRQs).
- Tariffs on beef will be eliminated in 3 years and on pork in 7 years.
- As regards poultry, which was the subject of a difficult discussion given Vietnam's sensitivity, the EU commitment to offer sector reciprocity led to the liberalisation (within 10 years) of a product where the EU is a leading exporter to Vietnam.
- On dairy, all duties would be abolished in maximum 5 years, with shorter staging on most cheeses, milk powder and liquid milk (3 years).
- On alcoholic beverages, all duties will be eliminated in 7 years, with exception of beer (10 years).

¹³ The rest will be liberalised after seven years.

- On chocolate, full liberalisation of duties, as high as 30%, will take place in a 5-7 years period. Pasta (20% to 38% duty) will be fully liberalised in 7 years (10 years for some stuffed pasta, containing meat). The 20% duty on processed tomatoes will be dismantled in 5 years.

EU tariff rate quotas for Vietnam:

The EU has granted Vietnam duty-free tariff rate quotas on rice, sugar, and other products like sweet corn, garlic and mushrooms exported by Vietnam (see table below).

Table 8: EU tariff rate quotas in the EU-Vietnam FTA

TRQ Nr	Sector	Agreed TRQ
1	Eggs	500 t
2	Garlic	400 t
3	Sweetcorn	5 000 t
4	Mushrooms	350 t
5, 6 & 7	Rice	The concession on rice will be subdivided in 3 sub-TRQs to reduce the impact on the EU industry: 30 000 t of milled and semi-milled rice 20 000 t of husked rice (~14 000t in milled equivalent) 30 000 t of fragrant rice
8	Manioc starch	30 000 t
9	Modified starches, sorbitol etc.	2 000 t
10	Sugar - 1701 and 1702 (including 2 high sugar content lines 1806)	20 000 t +400 t for speciality sugar tariff lines 1701 and 1490
11	Ethanol	1 000 t

The export restrictions that Vietnam currently imposes on 470 tariff lines with a simple average of 12% will be almost fully eliminated. Some export taxes were allowed to remain in place notably on the exports of some fossil fuels and some mineral products.

3.2 Reduction of non-tariff barriers on trade in goods

3.2.1. Technical Barriers to Trade

The agreement also offers important breakthroughs regarding the reduction of non-tariff barriers that affect trade in goods between Vietnam and the EU. In that respect, the technical barriers to trade (TBT) chapter of the agreement contains provisions that go beyond those in the WTO TBT Agreement in order to ensure that technical regulations, standards, and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade.

With regard to technical regulations, Vietnam agreed to assess the available regulatory and non-regulatory alternative to the proposed technical regulation and to endeavour to assess its impact in the form of a regulatory impact assessment as recommended by the TBT Committee. Vietnam also agreed to review its technical regulations with a view to increasing their convergence with relevant international standards and to the use of relevant standards developed by a number of international standards setting bodies as a basis for Vietnam's technical regulations. In the agreement, Vietnam also committed to review at regular intervals its national and regional standards that are not based on relevant international standards, with a view to increasing their convergence with relevant international standards.

Importantly, Vietnam agreed to consider the supplier's declaration of conformity as assurance of conformity among the options for showing conformity with its technical regulations. Furthermore, Vietnam also committed in the agreement to ensure that economic operators can choose amongst conformity assessment facilities to avoid possible conflicts of interest between accreditation bodies and conformity assessment bodies by ensuring their independence.

With regard to transparency, the agreement will ensure that all technical regulations and mandatory conformity assessment procedures are publicly available on official websites and free of charge and allow economic operators of the other Party to participate in any formal public consultation process concerning the development of technical regulations.

Finally, Vietnam committed to prevent conflicts of interest between market surveillance and conformity assessment functions, as well as between market surveillance bodies and economic operators subject to their control.

Motor vehicles

It is fair to say that these are some of the far-reaching deliveries from the agreement that are likely to impact the way EU firms will do business in Vietnam. In the car sector, the agreement will improve the access conditions to the Vietnam market for EU producers by encouraging Vietnam to sign up to the UNECE 1958 Agreement on automotive technical regulations and to accept UNECE-conforming automotive products from EU suppliers without further technical requirements¹⁴. Such provisions are due to take effect within three years following the entry into force of the FTA^{15,16}.

Pharmaceuticals

In addition to the above-mentioned provisions in the IPR chapter, the pharmaceuticals sector will benefit from several other provisions in various chapters of the agreement aimed to ease bilateral

¹⁴ Per UNECE practice automotive parts are accepted by members on the basis of UNECE marks only. This includes products with new technologies as well as new whole vehicles as long as they are covered by a valid UNECE International Whole Vehicle Type Approval.

¹⁵ "EC whole vehicle" certificates are to be accepted by Vietnam within 5 years of the FTA coming into force.

¹⁶ All 77 UNECE regulations applying to passenger cars and parts are covered. Regulations that apply to parts for small buses and big trucks are also covered to the extent they are included in the UNECE Regulations on passenger cars.

trade. For example, the FTA requires Vietnam to recognise and adopt international standards, practices and guidelines for pharmaceutical products and medical devices¹⁷. Vietnam also committed to simplify requirements for marketing authorisations in order to reduce delays and costs in allowing the introduction to the local market of research-based medicinal products.

The agreement also settles another long-standing friction regarding trade in pharmaceutical products and the scope of Vietnam's obligations under the "trading rights" provisions of its WTO Protocol of Accession. Vietnam agreed to adopt and enforce the appropriate legal instruments necessary to allow foreign pharmaceutical companies to import pharmaceuticals (which obtained marketing authorization in the local market) to sell to local distributors or wholesalers. Foreign firms in the sector will also be given permission to build their own warehouses, to provide information to healthcare practitioners and to perform clinical studies and testing.

3.2.2. Sanitary and phytosanitary measures

Vietnam and the EU agreed on the principle of using the WTO SPS Agreement as the main guide for framing any future measures of this nature. The parties also agreed to adopt standards developed by international standard bodies. The aim is to make SPS requirements more operational and transparent to facilitate bilateral trade. This will offer solutions to concrete issues that have affected the bilateral relationship for a long time, like for example the lack of agreement on the establishment of health status for certain animal diseases (notably BSE). In that regard the parties have also agreed to adopt the international health status formulated by the World Organisation for Animal Health (OIE).

3.2.3. Intellectual Property Rights (IPR)

Vietnam agreed to make far-reaching changes to its domestic legal framework strengthening the protection of intellectual property rights, which is of particular importance for the EU business interests. Moreover, Vietnam will adopt the WIPO Internet Treaties¹⁸ to address issues like the protection of copyrights of material disseminated over digital networks such as the Internet. By doing so, Vietnam will also provide adequate legal protection and effective remedies against the circumvention of technological measures (such as encryption) used by right holders to protect their rights¹⁹.

In addition, the deliberate alteration or deletion of electronic "rights management information" i.e. the information which accompanies any protected material, and which identifies the work, its creators, performer, or owner, and the terms and conditions for its use is prohibited. The agreement will also give authors, broadcasters, performers and producers additional rights in

¹⁷ The agreement makes specific reference to standards developed by the WHO, the OECD, the International Conference on Harmonization (ICH) and the Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme (PIC/S) for pharmaceutical products. For medical devices standards the agreement refers to the International Medical Device Regulators Forum (IMDRF).

¹⁸ The WIPO Copyright Treaty and the WIPO Performances and Phonogram Treaty (known together as the "Internet Treaties") set down norms preventing unauthorized access to and use of creative works on the Internet or other digital networks.

¹⁹ These "anti-circumvention" provisions tackle the problem of "hacking".

Vietnam like the right of reproduction, distribution and of making available, the right of communication to the public and the right to single equitable remuneration (for broadcasts and communication to the public). In practice, this means, for example, that European artists can get royalties from food, drink and retail establishments that play music to attract consumers. Vietnam will also apply the WIPO recommendation on the protection of well-known trademarks, which takes into consideration additional parameters that are not restricted exclusively to its degree of prominence amongst relevant consumers in a country. It also agreed on offering additional clarification for grounds for revocation, including the obligation to have a requirement of use and protection against misleading use of names. Finally Vietnam committed to accede to the Hague Agreement²⁰ and to extend the protection for designs to 15 years. Patent owners will also benefit from an extension of patent protection in case of delays in marketing authorisation procedures.

Another important achievement of the agreement regards the increased protection of undisclosed information and data. For pharmaceutical products (including biologics) and agrochemical products, data protection has now been set to five years. In addition, the Parties agreed to protect plant varieties rights, in accordance with the International Convention for the Protection of New Varieties of Plants (UPOV) and its latest revision (the so-called "1991 UPOV ACT"). This means that innovative plant varieties that can lead to better yields will be protected. The latter is therefore likely to be introduced more quickly onto the Vietnamese market to the benefit of farmers and consumers.

The agreement settles another long-standing friction regarding trade in pharmaceutical products and the scope of Vietnam's obligations under the "trading rights" provisions of its WTO Protocol of Accession. Vietnam agreed to adopt and enforce the appropriate legal instruments necessary to allow foreign pharmaceutical companies to import pharmaceuticals (which obtained marketing authorization in the local market) to sell to local distributors or wholesalers. Foreign firms in the sector will also be given permission to build their own warehouses, to provide information to healthcare practitioners and to perform clinical studies and testing.

Vietnam will also provide an extension of patent protection, for up to two years, for delays in the marketing approval of pharmaceutical products if the approval process takes more than 24 months. In other words, Vietnam shall compensate for unreasonable delays in granting of marketing authorisations for pharmaceutical products by extending patent protection up to 2 years.

Finally, Vietnam also agreed to recognise a list of 169 EU GIs²¹ and to award a level of protection on par to that offered by EU legislation. The listed GIs will be able to coexist with prior registered trademarks in Vietnam²². This will be backed by appropriate administrative sanctions on the Vietnamese market, including upon request of an interested party.

²⁰ Procedural treaty on the registration of designs.

²¹ Moreover it will be possible to add new GIs in the future.

²² Specific solutions were found for five EU GIs. The "Champagne" GI will fully be protected after a transition period of 10 years, also against uses in transliteration such as "sam Bahn". The GIs for the cheeses "Feta", "Asiago", "Fontina" and "Gorgonzola" will be protected in the Vietnamese market but prior and actual commercial uses in good faith prior to 1

As regards enforcement, the FTA improves the legal framework on the enforcement of IPRs by including provisions that define more precisely the obligations of Vietnamese authorities and customs officers while attributing the increased competences and better tools to address infringements. Vietnam also agreed to recognise a number of entities as entitled applicants to enforcement measures and to provide provisional measures and injunctions against intermediaries. It also turned the right to information into an obligation extending it to other entities than the infringer, while introducing additional obligations regarding provisional measures like the possibility of recurring penalty payments, blocking of bank accounts and other assets and allowing possibility to replace injunctions or corrective measures by pecuniary compensation in certain cases of unintentional infringement. The FTA also grants custom officers the ability to act 'ex-officio' (i.e. to intervene without having to wait for a complaint while imposing the obligation to extend border enforcement measures to exports of infringing goods and of cooperating with right-holders and to use risk analysis.

3.2.4. Rules of Origin (RoO)

Rules of origin negotiated in the agreement follow the EU approach and share the main features of those of the EU's General System of Preferences (GSP) as well as of the EU's FTA with Singapore. They contain, however, a number of requirements and flexibilities which take into account the specific situation of Vietnam and of the EU. For garments to qualify for Vietnamese origin and hence be imported into the EU under reduced or zero duty rates, producers will need to set up the entire textiles value chain in Vietnam. The use of textiles originating in other countries with which the EU has an FTA in place can be allowed, thereby fostering a higher degree of integration into global value chains.

3.3 Services trade liberalisation

The agreement includes a number of provisions to improve bilateral market access conditions for firms in services sectors. These include regulatory changes affecting cross-border services trade (what is called mode 1 following the GATS nomenclature for market access in services) and cross-border commercial presence via foreign direct investment (mode 3).

The EU agreed to offer Vietnam the assurance that its current level of openness will remain unaltered. This means that the EU agreed to bind vis-a-vis Vietnam market access and national treatment commitments that go beyond GATS²³. However, as the EU services sectors are already generally relatively open it has not agreed to implement any additional reduction of the remaining "barriers" in place. For Vietnam, on the other hand, the agreement presented a good opportunity for an extensive overhaul of the legal and regulatory framework of many of its services sectors, which in some cases included making new market access and national treatment

January 2017 will be allowed. No new entrants will be allowed after that date. In addition, for "Feta" prior uses are only allowed if the cheese is made from sheep's milk or made of sheep's and goat's milk.

²³ For the EU, in line with past methodological practices, this means that the CGE-based quantification presented in section 4 adopted a 3% across-the-board reduction in services trade barriers.

commitments that go beyond the country's GATS obligations. In the text of the FTA we have identified around 320 individual sector-specific elements, which include for example:

- On commercial banking, Vietnam undertook binding commitments on its currently open regime on transfer of financial information and financial data processing. In addition, it agreed to liberalise the requirements for approval by the regulatory authority of new banking products or services and removed other restrictions to competition in the sector. For example, foreign banks branches controlled by an EU financial institution are, following the agreement, allowed to submit combined financial reports including balance sheet, income statement and cash flow statement which means that individual reports are no longer required.
- On insurance, Vietnam agreed to bind its open regime regarding the transfer of data and data privacy and the regulatory approval of new products. Vietnam also agreed to bind its liberal regime of not imposing discriminatory requirements for collateral and localisation of assets.
- On securities, Vietnam committed to allow market access and national treatment in respect to the cross border provision of financial data processing and to the provision of advisory, intermediation and other auxiliary securities related to trading for own account or for account of customers as long as they are permitted to Vietnam's own financial services suppliers, participating in issues of all kinds of securities, asset management settlement and clearing services for securities etc.
- Vietnam also made commitments applying to all financial services which aim at ensuring that internationally agreed standards for regulation and supervision in the financial services sector and for the fight against tax evasion and avoidance are implemented and applied in its territory; Vietnam also agreed to a set of principles on transparency and will make available its requirements for completing applications relating to the supply of financial services and inform the applicant of the status of its application, among others.
- On courier services, Vietnam committed to implement the separation of accounting of commercial and statutory functions and to improve its bindings for non-discriminatory market access for private courier services firms. Vietnam agreed to liberalise postal services, except those subject to universal service obligations and reserved services which means that while many postal services are still provided under monopoly, under the FTA, Vietnam will allow the EU to benefit from further liberalisation in this sector when this will be decided. For example, it is likely that the provision of universal service will be changed and some of the postal services will not be reserved services offered only by the universal service provider as is the case today. If this happens, then the EU will benefit through Vietnam's broad commitments in the FTA and therefore EU providers will be able to supply such liberalised services. Vietnam will also go beyond its GATS commitments on issues ensuring fairer competition by preventing anticompetitive practices in the postal sector, committing to the application of certain standards on licensing and to provisions ensuring the independence of the postal authority and its impartiality from the market participants.

- On logistics services, Vietnam agreed to binding commitments in customs brokerage, cargo handling, and ground handling related to giving firms access to authorized economic operator (AEO) status. Vietnam also fully committed cross border container station, depot and handling services; storage and warehouse services; dredging services. In addition, there is new market access for cross border passengers and freight transportation and passengers and freight maritime transportation. It also increased the commercial presence foreign equity share from 49% to up to 70%. Finally, Vietnam will also permit, subject authorisation, the international maritime transport service suppliers of the EU and/or its Member States to re-position their owned/leased empty containers and to provide feeder services, between certain Vietnamese ports.
- On business services, Vietnam committed for the first time the whole sector of computer services instead of committing only certain sub-sectors capturing hence all future technologies in the sector.
- On environmental services, Vietnam committed for the first time in the agreement the provision of sanitation (and similar services) as well as nature and landscape protection services for all modes of supply without any limitations for both market access and national treatment.
- On education, Vietnam committed for the first time the provision of cross border higher education services for market access and national treatment.
- In distribution services, Vietnam committed to the complete elimination of the economic needs test on outlets for retail services within 5 years from the entry into force of the agreement. As Vietnam implemented its GATS commitments on the distribution of wines and spirits in a rather restrictive way, it signed in addition an Understanding concerning such distribution services of wines and spirits ensuring that the commitments made under GATS are not implemented in a detrimental manner for the EU providers of wines and spirits.
- On telecommunications, Vietnam commitments related to commercial presence include an increase of the foreign equity cap for all non-facilities based basic telecommunication services (including voice telephone, packet-switched data, circuit switched, private leased circuits services, etc from 65% of legal capital of the joint ventures to 75% subject to a transitional period of 5 years. Vietnam also increased the non-facilities based Virtual Private Network foreign equity cap from 70 to 75%. In addition, Vietnam committed to a set of regulatory disciplines aiming at ensuring a level playing field for all operators, domestic and foreign such as licensing fees, access and interconnection, number portability for mobile services, co-location, leased circuits and unbundled network elements. At the same time Vietnam introduced very important principles on the functioning of the regulators ensuring their independence while regulating the sector.
- Vietnam also agreed to a set of principles aiming at regulating licensing and qualification procedures which are included in a dedicated Chapter on Domestic regulation. These principles will ensure that licensing requirements and procedures are not used as a means to obstruct entry into the market and deter the development of fair competition.

Applicants of licences will be further protected against any arbitrary treatment of their applications while a set of rights is ensured such as the right to appeal, to obtain a reply on their application within a reasonable timeframe etc.

- On health related services, Vietnam committed for the first time social services (with accommodation and without accommodation) for commercial presence subject to requirements while committed fully to cross border without any limitation. Furthermore, Vietnam abolished the GATS limitation for hospitals that "The minimum investment capital for a commercial presence in hospital services must be at least US\$20 million for a hospital, US\$2 million for a polyclinic unit and US\$200,000 for a specialty unit." Following this abolition and the one, included in GATS, Vietnam now offers in the FTA full commitments to medical and dental services.

3.4. Liberalisation of FDI in manufacturing sectors

The FTA includes commitments on market access via commercial presence in manufacturing sectors in Vietnam. In most sectors Vietnam already complies with the majority of such commitments. The most important changes that the FTA will bring relate to the screening and approval of FDI projects. Vietnam currently evaluates investment license applications using a number of criteria²⁴, and requires approval by the National Assembly²⁵ for several types of FDIs²⁶. With the agreement, Vietnam committed to remove administrative hurdles, except in sectors where conditions apply (see box 2).

The other important change relates to the national treatment article in the agreement that prohibits any kind of discriminatory measure other than the ones specified in Vietnam's reservation schedule, like for example with regards to the attribution of subsidies to domestic firms under certain conditions. Private land ownership will also remain prohibited in Vietnam²⁷.

²⁴ These include: 1) investor's legal status and financial capabilities; 2) the project's compatibility with Vietnam's "Master Plan" for economic and social development and projected revenue; 3) technology and expertise; 4) environmental protection; 5) plans for land use and land clearance compensation; 6) project incentives including tax rates, and 7) land, water, and sea surface rental fees.

²⁵ Projects which are not approved by the National Assembly or the Prime Minister are approved by the provincial People's Committee.

²⁶ Projects with a large environmental impact; Projects that change the land usage purpose in national parks; Projects located in protective forests larger than 50 hectares; Projects that require relocating 20,000 people in remote areas such as mountainous regions. Foreign investment projects that require Prime Ministerial approval include: Projects to build airports, seaports, or casinos; to explore, produce and process oil and gas; or to produce tobacco, Projects having investment capital more than VND5,000 billion (\$233 million); Projects with foreign investors in sea transportation, telecommunication or network infrastructure, forest plantation, publishing, or press; and 100 percent foreign-owned scientific and technology companies or organizations.

²⁷ However, the Land Law of 26 November 2003 (as amended) allows land to be leased, and assets associated with the land and the value of land-use rights to be mortgaged. Although the duration of a land-lease agreement should not exceed 50 years, leases may be extended upon expiry of the initial terms. For certain projects (e.g. large investments or those benefiting socio-economic difficult areas) the Government may grant land leases with an initial duration of up to 70 years.

Box 2: FDI in Vietnam - Conditional Sectors

Vietnam's investment framework as described in the WTO TPRM conducted in 2013 is grounded on the Enterprise Law (No. 60/2005/QH-11) and on the Investment Law (No. 59/2005/QH-11)²⁸ that apply to domestic and foreign investors. Also relevant are the Land Law of 26 November 2003 and the Decree No. 102/2010/ND-CP of 1 October 2010, which guides the implementation of certain provisions of the Enterprise Law, and prohibits investments deemed as detrimental to national defence and security, historical and cultural ethics, national traditions and fine customs, and the environment. In addition, it lists the sectors in which investment is conditional, which include sectors like manufacture of refined petroleum products; extraction of crude petroleum; mining of metal ores; other mining and quarrying; publishing, printing and reproduction of recorded media; manufacture of beverages; manufacture of tobacco products; production of electricity; transmission and distribution of electricity, and distribution of water. Also in fishing and aquaculture and forestry investment is conditional. In all other sectors investment is permitted without being subject to conditions.

In addition, Vietnam has negotiated some sector-specific reservations that will allow it to continue to apply some additional investment restrictions in some sectors, notably:

- In manufacturing of wood and of products of wood and cork (except furniture) and in manufacturing of articles of straw and plaiting materials Vietnam maintains the right to apply investment restriction to protect natural forests.
- In manufacturing of chemicals and chemical products, Vietnam reserves the right not to issue investment licenses to foreign investors for the production of industrial explosive devices (ISIC 2429).
- In manufacturing of other non-metallic mineral products, foreign investments on the production of construction glasses, production of clay bricks, production of vertical shaft cement production equipment and baked earth bricks and tiles, production of ready mixed concrete, stone crushing shall continue to be subject to planning by the Vietnamese government. In addition, investments in the glass and glass products, structural non-refractory clay and ceramic products, cement, lime and plaster, and articles of concrete, cement and plaster will continue to be subject to planning by the government.
- Some sub-sectors of machinery will also remain subject to restrictions. For example according to decree No. 187/2013/ND-CP the production of assorted fireworks (excluding signal fires used for navigational safety under the guidance of the Ministry of Transport), sky lanterns, assorted devices causing interference to vehicle speedometers goods in foreign firms is not allowed.

²⁸ The two laws were adopted in November 2005 and came into on 1 July 2006. Both were revised on 1 July 2015.

- In the transport equipment sector the investment in automobile production and assembly will continue to be subject to government planning. According to this reservation, local manufacturers of automobiles may be given privileges in terms of production quantity to meet the demand of domestic market and location preferences. The situation will be similar for investment in motorcycle assembly and manufacture, following Decision No. 02/2007/QD-BCT on the development of Vietnam's motorbike industry. Restrictions to investment will also remain in place in building and repairing of ships like the requirement that foreign equity participation does not exceed 50% in joint ventures. In manufacturing of railway and tramway locomotives and rolling stock Vietnam's schedule of commitments maintains the possibility of barring foreign firms from operating in the railways sector, which can be found in Decision 1686/QD-TTg dated 20/11/2008. In this sector any foreign operator must enter into a joint venture with the Vietnam Railways Administration or the Vietnam Railways Corporation; the foreign party's capital contribution may not exceed 49%. In manufacturing of aircraft and spacecraft Vietnam will maintain the restriction that can be found in Decision No 38/2007/QD-TTg dated 20/3/ 2007 that stipulates that foreign equity participations shall not exceed 49% of the legal capital of joint-venture companies in the sector.

Due to limitations of the CGE model used, the changes in the regulatory framework that aim to liberalise FDI in manufacturing will not be captured in the quantification of the economic impact of the agreement presented in section 4.

3.5. Customs and trade facilitation

The agreement includes a specific chapter on customs and trade facilitation that aims to facilitate trade between the EU and Vietnam by modernizing and simplifying customs rules, requirements, formalities, and procedures in Vietnam. For this analysis it is important to isolate the impact of the FTA from that of the WTO Trade Facilitation Agreement (TFA) that is currently being implemented by the two parties. With that in mind a thorough analysis of the agreement was undertaken to identify the WTO TFA -plus or WTO TFA-extra elements in the FTA. The latter introduces a commitment for regular consultations between border agencies and various stakeholders. In addition, Vietnam committed to ensure that fees and charges shall not exceed the approximate cost of the services provided and shall not be calculated on an ad-valorem basis.

4. Quantitative assessment of the agreement

4.1. Modelling technique

The quantification of the economic impact of the commitments undertaken to reduce tariffs and export taxes as well as non-tariff barriers affecting the cross-border exchanges of goods and services between the EU and Vietnam (including the value of binding commitment of market access commitments that go beyond WTO) is based on a simulation using a dynamic computable general equilibrium (CGE) model of the world economy.

CGE models are the most widely used tools to assess the impact of trade policy initiatives by simulating the response values of macroeconomic variables like income, prices, production and trade flows and comparing them against the values of the same macroeconomic variables in a "business as usual" baseline. In the case of dynamic CGE models like the one used in this analysis the baseline extends over the total implementation period (and beyond). The underlying long-term macroeconomic, technological and employment trends are the same in the baseline and in the policy scenario so that any differences between the two in terms of the value of the simulated macroeconomic variables is driven only by the trade policy change.

Table 9: Sector disaggregation and correspondence to GTAP sectors

	Description	GTAP Sectors		Description	GTAP Sectors
1	Rice	1 (PDR); 23 (PCR)	20	Chemicals, Rubber and Plastic Products	33 (CRP)
2	Cereals	2 (WHT); 3 (GRO)	21	Mineral Products	34(NMM)
3	Vegetables, Fruits and Nuts	4 (V_F)	22	Metals and Ferrous Metals	35 (I_S), 36 (NFM)
4	Oilseeds, Vegetable Oils and Fats	5 (OSD); 21 (VOL)	23	Metal Products	37 (FMP)
5	Sugar	6 (C_B); 24 (SGR)	24	Motor Vehicles	38 (MVH)
6	Plant and Animal Fibres, and Other Crops	7 (PFB); 8 (OCR), 12 (WOL)	25	Transport Equipment	39 (OTN)
7	Bovine and other Ruminant Meats	9 (CTL); 19 (CMT)	26	Electronic Equipment	40 (ELE)
8	Other Meat (Poultry, Pork)	10 (OAP); 20 (OMT)	27	Other Machinery and Equipment	41 (OME)
9	Dairy Products	11 (RMK); 22 (MIL)	28	Other Manufacturing	42 (OMF)
10	Forestry	13 (FRS);	29	Utilities	43 (ELY); 44 (GDT); 45 (WTR)
11	Fisheries	14 (FSH)	30	Construction	46 (CNS)
12	Other Food	25 (OFD)	31	Trade	47 (TRD)
13	Beverages and Tobacco	26 (B_T)	32	Transport nec	48 (OTP)
14	Fossil Fuel	15 (COA); 16 (OIL); 17 (GAS); 32 (P_C);	33	Water Transport	49 (WTP)
15	Minerals	18 (OMN)	34	Air Transport	50 (ATP)
16	Textiles	27 (TEX)	35	Communications	51 (CMN)
17	Wearing Apparel	28 (WAP)	36	Financial Services	52 (OFI)
18	Leather Product	29 (LEA)	37	Insurance	53 (ISR)
19	Wood and Paper	30 (LUM), 31 (PPP)	38	Business Services	54 (OBS)
			39	Other Services	55 (ROS); 57 (DWE), 56 (OSG)

Source: own aggregation of the GTAP database

We have used the dynamic version of the GTAP model (see box 3 for additional information) and the GTAP database version 9²⁹. The baseline for the simulation used to evaluate the impact of the agreement is projected up to the year 2035. All modelling results are reported in respect to that

²⁹ The GTAP database is developed by the GTAP consortium at the University of Purdue. Its regular updates build on the collaborative efforts of dozens of researchers, governmental agencies and international organizations around the world who use it extensively for trade policy analysis. For more information see: <https://www.gtap.agecon.purdue.edu/databases/v9/default.asp>.

year. The final set of import tariff cuts are to be implemented within 10 years of the entry into force of the agreement while the cuts of export tariffs are to be implemented with 16 years³⁰. Assuming the agreement enters into force in 2019 a cut-off date of 2035 allows time for any further dynamic effects of the last export tax reductions to unfold.

The baseline projection draws on IMF near term economic forecasts taken from World Economic Outlook report released in April 2017 (IMF 2017). For the long-term we relied on the CEPII projections for GDP real growth rates as well as population, skilled labour and unskilled labour growth rates, see Fouré *et al.* (2016). While the GTAP database accounts for the existing tariff schedules under Most-Favoured-Nation (MFN) treatment as well all preferential tariff rates as negotiated in FTAs and/or offered in unilateral tariff liberalization made by countries this information had to be updated to account for recent FTAs that were signed by the EU and Vietnam after 2011³¹. More specifically the FTAs that the EU signed with Korea, Singapore and Canada were added to the baseline as well the economic partnership agreements with West Africa and the Southern African Development Community. In the case of Vietnam the following FTAs were added to the baseline: Eurasian Economic Union, ASEAN Economic Community, CPTPP, ASEAN+1 (involving Australia and New Zealand, China, India, Japan, South Korea)³². The WTO's Trade Facilitation Agreement was not pre-simulated but trade facilitation gains under the EU-Vietnam were evaluated in this analysis on a post-TFA basis, as discussed above in section 3.5³³.

Box 3: Overview of the dynamic GTAP model; characteristics and assumptions

CGE models offer an integrated framework that captures the main features of an economy, based on standard national income and expenditure accounts, a production function for each sector that combines sector-specific requirements of factors (capital, skilled and unskilled labour) and intermediate inputs, and a trade account that captures all the international linkages for each sector of the economy (at the level of final and intermediate products).

These models offer the possibility to carry out comprehensive evaluations of the impact of policy changes like the implementation of a new trade agreement by accounting for the potential impact on the underlying domestic and international interlinkages across markets for goods and services and for factors of production. With CGE model-based simulation it is possible to simultaneously

³⁰ The tariff phase-out was based on FTA tariff reduction schedule, taking into account tariff rate quotas (TRQs), export taxes, and the fact that the Vietnam tariff reduction schedule is based on MFN rates which are above the GSP rates applied by the EU. The GTAP v9 protection data (for 2011) were used except for the key leather sector. For that sector the benchmark GTAP tariff for the EU was 10.66%, which contrasted with the much lower figure (7.05%) in World Integrated Trade Solution (WITS) for 2011 that is based on the Trade Analysis and Information System (TRAINS) database. In WITS only the data for 2010 is similar to that of GTAP at 11.31%. But this turned out to be an outlier in the time series, which otherwise varies from 6.63% to 7.32% over the period 2005-2015.

³¹ For practical reasons, only agreements concluded in 2011 or more recently and that account for at least 1% of the parties' trade are pre-simulated.

³² While in meantime the United States have decided to formally reject the TPP, there are indications that rest of the membership are considering continuing with its implementation in the current form. Moreover the United States has hinted that it may pursue bilateral agreement with several of the TPP members. As the final outcome remains still unclear the analysis was developed with the TPP in the baseline.

³³ The agreement entered into force on 22 February 2017 when the WTO obtained the two-thirds acceptance of the Agreement from its 164 Members.

quantify the impacts on the different components of national accounts (consumption, investment, government expenditure, real exports, and real imports), on economic welfare³⁴, sectoral output and value added as well as import and export flows (bilateral and global) reallocation of labour (skilled and unskilled) across sectors and price adjustments (consumer prices and terms of trade) and government revenue. This is done by comparing all these variables computed under a scenario that features the introduction of the trade policy change with the same variables in a "business as usual" baseline in which the policy change is absent. The GTAP model that we used was especially conceived to pick up the intricacies of trade policy initiatives and related trade costs savings.

The CGE model used in this economic assessment of the EU-Vietnam FTA is the dynamic GTAP model (GDyn) developed by the Center for Global Trade Analysis at the University of Purdue, see Ianchovichina & McDougall (2012) for more detail³⁵. This is a multi-sector, multi-region dynamic general equilibrium model that builds on and extends the standard, comparative static version of the GTAP model featuring endogenous capital accumulation based on a recursive dynamic investment framework and a Monash-type investment function. In such a recursive dynamics setting, capital supply responds to changes in the rates of return to capital. The growth rate of capital is determined by investors' willingness to supply increased capital to each sector in each country, which in turn depends on changes in the expected rates of return (ROR) for capital in that sector and region. Assuming that investors are cautious, any shock to the ROR in a given sector and region is, however, eliminated only gradually. Hence investment is treated similarly as in models that incorporate costs of adjustment that are positively related to the level of investment in a given year (based on, e.g., construction/installation costs of capital suppliers). The Monash model, however, instead of relying on increasing adjustment costs as the mechanism to limit investment, incorporates investor perceptions of risk for this purpose³⁶.

In addition capital is assumed to be perfectly mobile across sectors leading to a single rental price of capital that clears the market. Savings are treated as in the static GTAP model: the representative household allocates regional income to maximize per capita utility based on a Cobb-Douglas utility function complemented with non-homothetic preferences on the private consumption side. The Cobb-Douglas specification ensures that budget shares are constant, implicitly assuming a constant marginal propensity to save of the household. As in most recursive dynamic models, each period's equilibrium determines the level of global savings and implicitly the aggregate amount of investment expenditure available in that specific period.

It is important to note that while the dynamic GTAP model used for the simulations of the EU-Vietnam FTA is a state-of-the-art model tailor made for trade policy assessment, the simulated impact should be considered within the general limitations applying to CGE models. For example, the model doesn't capture all the complexities of modern trade agreements (notably when it

³⁴ Economic welfare is based on "equivalent variation", the lump sum payment at pre-shock prices that would have to be made to households to leave them as well off as in the post-shock economy.

³⁵ For more information related to the activities and output of the GTAP consortium please see <https://www.gtap.agecon.purdue.edu/>.

³⁶ The parameter that mediates the supply response of capital i.e. the elasticity of the supply of capital to RORs is set at unity, based on firm-level gravity modelling.

comes to reduction of non-tariff barriers to cross-border trade and investment) due to unavailability of sufficiently reliable data. It also cannot account for welfare gains from access to greater variety of final products and intermediate inputs. Furthermore, CGE models only assess the impact of a trade agreement on existing trade flows and not the potential expansion of trade on the introduction of new products and services. Finally, general equilibrium modelling generally doesn't account for greater incentives to innovate and knowledge transfer induced through a trade agreement, which are long-term drivers of intra-industry productivity gains. For all these reasons it is fair to view the results for the CGE modelling simulations as lower bound estimates of the true economic impact of a trade agreement.

To focus on key results the 57 sectors in the GTAP database were aggregated into 39 broader sectors, see table 9 for a full listing of the sectors considered and the correspondence with the original GTAP sectors. Also the countries in the GTAP database were bundled up into the following parties of interest: EU, Vietnam, USA, China, Turkey, Brunei, Singapore, Indonesia, Malaysia, Philippines, Thailand, Least Developed ASEAN Countries (e.g. Cambodia, Laos and Myanmar), Other Least Developed Countries, Rest of the TPP (e.g. Australia, Canada, Chile, Japan, Mexico, New Zealand, and Peru), and Rest of the World.

Before entering into specific details on the results of the CGE model simulation it is important to highlight that while these quantitative techniques offer very useful and detailed insights into the economic impact of FTAs they should not be taken as precise estimates. For a number of valid reasons CGE models tend in general to underestimate the economic impact of trade policy initiatives (see box 3 above). In addition, simulation results based on any GCE model must be interpreted in light of its specific characteristics. In the case of the present analysis it must be borne in mind that we have relied on the widely used assumption that the labour supply is fixed (i.e. it is assumed that the FTA does not change the long-run employment level in the economy and the latter does not respond to changes in wages). Moreover, the model does not account for Foreign Direct Investments (FDI). Finally, the external trade balance is allowed to adjust freely as well as the government balance.

4.2. Simulation design

In addition to the elimination of tariffs and export taxes³⁷ the following goods and services sectors as well as trade facilitation shocks have been included in the CGE model described in detail above:

³⁷ Given the lack of detailed, comprehensive and robust data on export taxes we have developed a baseline profile for the export tariffs imposed by Vietnam on the basis of the FTA liberalization schedule. For purposes of the modelling exercise described in section 4 the identified export taxes at the level of tariff lines were aggregated across all HS 6-digit codes with all other HS 6-digit export taxes set to zero. On that basis we have worked on the basis of simple averages to aggregate the data up to GTAP sectors in order to address the possible problem of endogeneity bias. The latter arises from the fact that, in developing a trade-weighted average tariff for each sector, the higher export tariffs that eliminate exports (which is the objective of the export tax) would be given a zero weight, which would push the sector export tariff downwards. The use of a simple average avoids this problem. As a result the average export restrictions will be reduced to less than 2%.

Goods sectors NTBs

As pointed out in section 3.2 some of the important improvements in market access apply to the motor vehicles and pharmaceuticals sectors. However, what will be the exact impact in terms of market access improvements is difficult to assess using the traditional quantitative analysis tools at our disposal. Nonetheless we have tried to take into account the impact of the regulatory changes foreseen in the agreement in these two sectors.

To include the impact of the regulatory changes in the automotive sector in the CGE model-based simulation we have built on an ex-post analysis of the impact of similar provisions in the EU-Korea FTA. The assumption that was made is that the EU import share in the automotive sector in Vietnam will increase in line with what was observed in the Korean market after the implementation period of the agreement with South Korea³⁸.

In respect to pharmaceuticals, it is difficult to quantify a priori what the regulatory changes would mean in terms of the reduction of trade costs and in terms of additional market shares given the current dominance of EU pharma firms in Vietnam. Nonetheless, the inclusion of a separate annex on pharmaceuticals with a well-developed section on transparency can be regarded also as an improvement in Vietnam's international standards compliance related to trade facilitation in the sector. We capture this in the CGE model simulation by including an additional small cut (0.32%) in the trade costs affecting this specific sector³⁹.

Services sectors liberalisation

Regulatory changes like the ones listed in section 3.3 are important achievements of the agreement in terms of economic returns, especially given the high services specialisation of the EU economy and the dynamic growth of the tertiary sector in Vietnam. However, an *ex-ante* quantification of their economic impact is problematic due to the difficulty in establishing a precise effect on firms' costs and the shortcomings in incorporating foreign investment in general equilibrium modelling tools. Due to the latter the CGE model-based simulations account only for changes to cross-border services trade (and not commercial presence). To compute their impact on trade costs all regulatory changes with binding effects⁴⁰ in each service industry in Vietnam were identified and mapped out following the OECD's Services Trade Restrictiveness Index⁴¹

³⁸ On the basis of the experience with the EU-Korea FTA during the period of implementation of the latter (2011-2013) the analysis in section 4 assumes that provisions for the car sector in the FTA between the EU and Vietnam will result in the same increase in the EU market share in Vietnam.

³⁹ This is based on 2.2% improvement in the sector-specific OECD trade facilitation indicator. However, given that in the quantitative CGE-based analysis presented in section 4 the pharmaceutical industry is part of a broader sector that also includes chemicals, rubber and plastics, the sector-specific percentage trade costs reduction that was used in the CGE model simulation was rescaled on the basis of the import trade weight of HS30 products (pharmaceuticals). As a result the reduction of trade costs that was considered for the broader sector was 0.2%.

⁴⁰ The impact of the "best endeavour" clauses has not been calculated since they do not create a binding commitment between parties.

⁴¹ For more information: <http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm>.

(STRI⁴²) for cross-border trade (Mode 1) and compared against the current levels of restrictiveness (accounting for applied restrictions and GATS commitments), see box 1⁴³.

Box 1: The value of services bindings

For firms operating in services sectors an important benefit that FTAs can deliver is the binding of the existing market access conditions. In legal terms this is achieved by reducing or eventually eliminating the difference between the commitments each party has undertaken in the WTO's General Agreement on Trade in Services (GATS) and the level of protection they apply. This difference is often referred to as "water". It gives an idea of the existing policy space of a country to increase market access restrictions without violating WTO commitments, see Miroudot and Pertel (2015).

By removing this "water" authorities reduce the uncertainty that businesses face about market access conditions in the future, which promotes more trade and investment. The investment literature shows that firms make state-contingent decisions: if there is uncertainty about future states and given the, at least partial, irreversibility of investment decisions they factor in the cost of investment the option value of delaying and that of accumulating the necessary additional information⁴⁴. The same reasoning would apply to the decisions backing the necessary investment to engage in cross-border services trade. This role of uncertainty is especially important in international trade given the important information asymmetries about foreign markets. The higher the uncertainty about future market access the fewer firms will be ready to take the risk to start serving customers abroad.

The OECD has undertaken work on the measurement of policy uncertainty in services sectors that led to the first estimates of the "water" in the GATS bindings computed as the difference between the STRI indices based on applied restrictions against commitments under GATS. In this report to calibrate the policy shock for the CGE simulation presented in section 4 we follow this

⁴² This methodology covers both horizontal and sector-specific commitments. The horizontal commitments stipulate conditions and restrictions that apply to all sectors of the economy.

⁴³ At the time of the analysis the OCED had not published a STRI for Vietnam so one had to be produced from scratch to capture the current regulatory landscape in the country across the different services sectors, including applied measures and GATS commitments (as reported in GATS/SC/142, 19 March 2007). This work was guided by the methodology developed by the OECD and on the information collected from Vietnam's laws and regulations and other secondary sources including the World Bank's STRI and the APEC STAR Database. The STRIs developed by the OECD for similar countries (notably China, Indonesia and Korea) were used as benchmarks. The analysis was done for 34 sectors (19 of the OECD's 22 services sectors as audio, visual, and broadcasting were excluded and 15 additional sectors) and the regulations considered were mapped out under five policy areas: restrictions on foreign ownership and other market entry conditions; restrictions on the movement of people; other discriminatory measures and international standards; barriers to competition and public ownership; and regulatory transparency and administrative requirements. These policy areas were further broken down in order to capture specific issues of relevance for each sector. Given that the original OECD STRI lacks measures to properly capture the restriction/liberalizations related to licensing requirements it was decided to add further information to the area of transparency requirements, based on the STRI developed by the World Bank (while keeping the same overall scores for the five policy areas).

⁴⁴ As a result such costs linked to uncertainty can deter investment. As Dixit and Pindyck (1994) emphasize such "hurdle rates" are substantially higher than the cost of capital and may be a significant factor inhibiting investment. Bloom *et al.* (2007) make the case that uncertainty does indeed make firms more cautious and, further, that this effect is large.

methodology. To get to a composite non-tariff barrier per sector that accounts for both applied restrictions and the existing "water" we follow the methodology proposed in Ciuriak and Lysenko (2016) that attributes to reductions in "water" half the weight of the reductions in applied restrictions.

The exact change in the overall restrictiveness in each sector ultimately depends on the extensiveness of the regulatory change and also on the weight given to each type of regulatory reform (as assigned by the OECD). The difference between the post-agreement and pre-agreement STRI in a given sector shows the relative importance of the reduction of the existing barriers to services trade in the sector. The impact of improved bindings was established by comparing the STRI calculated on the basis of GATS commitments (GTRI) and the STRI computed on the basis of the new commitments agreed in the FTA (which are binding to both parties). This allowed taking into account the reduction in policy space that is implied by the FTA⁴⁵. By combining the reduction in actual barriers and the binding shock we computed the percentage change of a composite measure (accounting for applied restriction and policy space) of the non-tariff barriers that affect trade in each of the services sector. This provides a synthetic and quantifiable view of the changes in the regulatory environment in each sector in Vietnam in the presence of the FTA. This change was then applied to a measure of the sector specific ad-valorem trade costs equivalents⁴⁶ to generate estimates of the trade cost reductions by GTAP services sector. Overall as a result of the implementation the weighted average reduction in costs affecting cross-border services trade in Vietnam are expected to fall by 8.8%. This information was used to calibrate the liberalisation shock associated with the implementation of the agreement.

Trade facilitation

In order to account for the customs and trade facilitation reforms identified above in the CGE-based quantification we resorted to mapping the policy changes above into Vietnam's OECD's Trade Facilitation Indicators (TFI)^{47,48}. This resulted in a 3.47% improvement of Vietnam's score, which led to 0.5% reduction in Vietnam's trade costs across the board⁴⁹.

4.3. The potential impact on the EU and Vietnam

The CGE model-based simulation confirms that the importance of the economic gains from the agreement is likely to be different for the two parties. The CGE simulations with the dynamic GTAP model show that the agreement is due to deliver a €6 billion increase in economic welfare

⁴⁵ The difference between applied restrictions and GATS bindings corresponds to the binding overhang and is also called the "water in the bindings". This is often perceived as the policy space that countries can use without breaching their GATS commitments.

⁴⁶ As estimated by CEPII, see Fontagné *et al.* (2011).

⁴⁷ The TFI index incorporates a large number of indicators that measure the ease of carrying out trade transactions (e.g. Vietnam's TFI is comprised of 78 indicators). These are aggregated into several intermediate categories. TFI values range from 0 to 2, where 2 corresponds to the best performance that can be achieved.

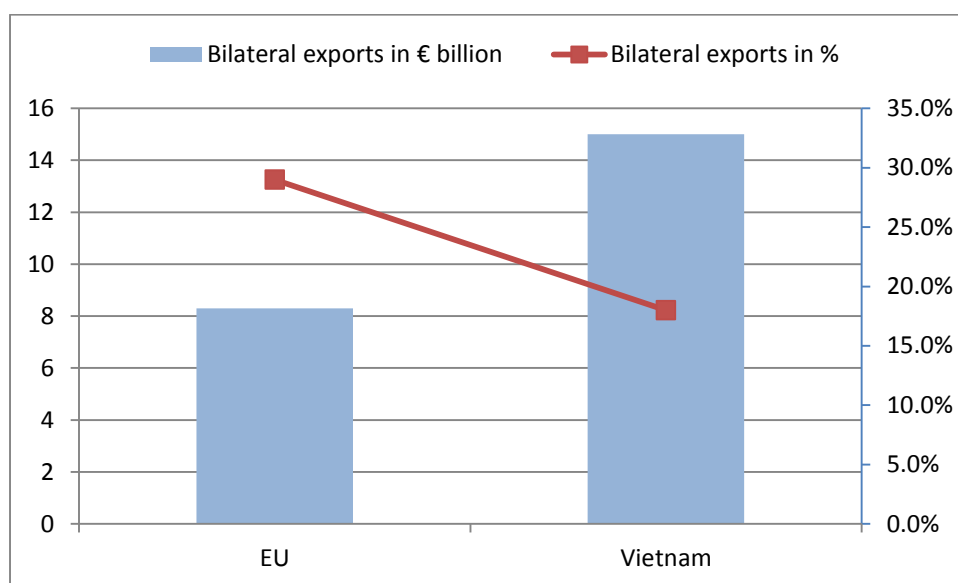
⁴⁸ These WTO TFA-plus impacts are of a bilateral nature, as the two measures (consultations with traders and evaluation of fees and charges) would be either purely bilateral consultations or available on request by EU traders.

⁴⁹ For countries in Vietnam's income class, the TFI factors account for about 15.5% of trade costs, as measured by the World Bank's trade cost data.

in Vietnam by 2035 (relative to a situation without the agreement in place). In the case of the EU, the welfare gain would reach €1.9 billion, mostly reflecting improvements in the terms of trade⁵⁰. For both Vietnam and the EU, these are net welfare gains already taking into account the tariff revenue losses.

The difference in the size of the impact of the agreement for the EU and Vietnam reflects the initial conditions. The EU is a much bigger trading partner to Vietnam than Vietnam is to the EU. This means that the economic returns from the bilateral liberalisation and resulting improvement in market access will necessarily translate into bigger macroeconomic gains for Vietnam. Moreover, the agreement requires Vietnam to undertake a much greater liberalisation effort than the EU. This means that in Vietnam there will be a lot more scope to reap economic returns from efficiency gains.

Figure 9: Economic and trade gains, changes relative to baseline



Source: GDyn simulations

Figure 9 shows the impact of the agreement on bilateral trade flows in absolute and relative terms. By 2035 the boost given to bilateral trade flows compared to the situation without the FTA is considerable for the two parties. EU exports to Vietnam are due to increase by around 29% while Vietnam exports to the EU are expected to grow by around 18%. When it comes to total trade flows the percentage changes are considerably more important for Vietnam given the greater contribution of the bilateral trade to its total trade. In absolute terms Vietnamese exports of goods and services to the EU increase by €15 billion while EU exports to Vietnam augment by €8.3 billion.

⁵⁰ Terms of trade gains refer to the improvement in the real purchasing power of an average consumer due to the increase in the ratio of export to import prices.

Table 10: Impact on EU trade of specific sectors with Vietnam, variation in % and EUR millions

	Exports to Vietnam		Imports from Vietnam	
	%	EUR	%	EUR
Rice	286.6	1	311.8	82
Cereals	3.7	2	14.1	0
Vegetables, Fruits and Nuts	76.1	13	0.7	3
Oilseeds, Vegetable Oils and Fats	96.8	27	4.7	0
Sugar	130.5	1	170.5	15
Plant and Animal Fibres, and Other Crops	132.5	294	0.5	9
Bovine and other Ruminant Meats	90.2	51	0.0	0
Other Meat (Poultry, Pork)	37.7	161	16.7	6
Dairy	36.5	93	342.7	0
Forestry	4.3	7	10.6	0
Fisheries	26.1	3	2.6	1
Other Food	64.9	578	30.9	678
Beverages and Tobacco	69.6	229	14.4	2
Fossil Fuels	116.8	39	-0.9	0
Minerals	3.0	11	6.5	3
Textiles	134.2	349	69.9	929
Wearing Apparel	302.7	91	87.4	5,091
Leather Products	153.8	448	62.2	7,477
Wood and Paper Products	72.5	173	5.3	174
Chemicals, Rubber and Plastics	30.0	655	4.4	126
Mineral Products	124.6	81	3.9	23
Ferrous Metals	10.0	39	13.3	60
Metal Products	100.5	107	2.6	40
Motor Vehicles	444.8	1,538	4.0	10
Transport Equipment	76.8	572	7.0	75
Electronic Equipment	25.9	56	-0.8	-196
Other Machinery and Equipment	26.4	575	-0.8	-32
Other Manufacturing	211.2	81	1.7	15
Utilities	3.0	1	10.6	119
Construction	2.8	37	7.4	121
Trade	6.8	119	7.2	201
Transport Nec	13.2	243	8.5	73
Water Transport	6.4	57	8.9	52
Air Transport	4.9	104	8.5	91
Communications	73.8	632	6.5	174
Financial Services	9.4	226	6.8	247
Insurance	2.6	31	8.3	81
Business Services	10.4	535	6.3	543

Other Services	8.6	136	6.3	318
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Source: GDyn simulation results

Table 10 makes clear that the sectoral impacts in terms of bilateral trade flows are substantial, particularly in percentage terms. In absolute terms, the most notable impacts are the increases in Vietnam exports to the EU of "wearing apparel" (up €5 billion) and of "leather products" (up around €7 billion). In contrast, Vietnam exports to the EU in some equipment sectors like "electronics" and "other machinery and equipment" are due to decline (albeit moderately). This indicates that the FTA may promote further Vietnam's specialisation in the sectors where the country has traditionally held a comparative advantage.

Regarding EU exports to Vietnam the impacts are more evenly distributed across sectors: the main increases are expected in "motor vehicles" (up €1.5 billion), "chemicals, rubber and plastics" (up €655 million), "communications" (up € 632 million), "other food" (up €578 million), "other machinery and equipment" (up €575 million), "transport equipment" (up €572 million), "business services" (up €535 million) and "leather products" (up €448 million). For the other sectors the expected increases in trade values are very modest.

The impact of the considerable increase of leather products and apparel imports from Vietnam on EU producers is due to be substantially mitigated by a combination of export gains and trade diversion. EU exporters of leather products make significant gains (€700 million) in the Vietnamese market and elsewhere. Moreover, much of the market share captured by Vietnam in the EU's market place comes at the expense of third parties: total EU imports of leather and footwear products rise by only €1.9 billion. The situation is similar in the apparel sector with total imports due to go up by only €1.2 billion.

4.4. The potential impact on third countries

The impact of the agreement on third parties is muted. The biggest impact on real GDP in percentage terms are to be expected in ASEAN's Least Developed Countries (-0.1%) and Turkey (-0.05%) due to trade diversion. However, in absolute values, China will suffer the biggest reduction in welfare as Vietnam takes away significant market share in leather and wearing apparel in the EU market. Globally, the impact of the agreement is positive leading to an increase of world national income of almost EUR 3 billion.

Table 11: Real GDP and welfare impacts on trade partners

	GDP (%)	National income (EUR millions)
US	0.00	-363
China	0.00	-2,313
Turkey	-0.03	-535
Brunei	-0.01	3
Singapore	-0.01	-56

Indonesia	-0.01	-135
Malaysia	-0.01	-36
Philippines	-0.02	-228
Thailand	-0.02	-151
ASEAN LDCs	-0.09	-132
Rest of TPP	0.00	-193
Other LDCs	-0.02	-458
ROW	-0.01	-753
World total (including EU and Vietnam)	0.00	2,961

Source: GDyn simulation results

5. Additional economic impacts

5.1 Public procurement

Although it is very hard to offer a precise quantification of the economic impact of the legal provisions included in the agreement regarding the functioning of public procurement markets this is an area where important returns are expected as Vietnam is currently making an important public investment effort to improve its underdeveloped infrastructure. The poor transport infrastructure is often pointed out as an important bottleneck for the continuation of the modernisation of the country's economy. Greater openness and transparency in the country's public procurement markets will benefit EU firms by giving them the possibility to tender for public contracts linked to the infrastructure investment. It will also benefit Vietnam by giving its public institutions access to goods and services with better quality/prices ratios offers.

For now, the total value of public procurement tenders in Vietnam is still small in absolute terms; in 2014 it amounted to €16.8 billion, which represented 12% of Vietnam's GDP⁵¹. Table 12 shows that open bidding was the dominant tendering mode (58% of the total value of tenders), amounting to around €9.7 billion. Direct appointments represented just 24% of total procurement values (€4.1 billion) but accounted for the lion's share of the numbers of tenders. This is because these tend to be smaller contracts (average value of €41,544). In contrast, the average value for open bid tenders was around €586,767.

Currently, public procurement is mainly regulated by the 2013 Law on Bidding⁵², which set out the rules for the selection of contractors. As this law was issued after Vietnam became an observer of the WTO Government Procurement Agreement (GPA), its regulations are already in line with international practices notably in terms of definitions, bidding procedures, and notifications.

⁵¹ Exchange rate conversion factors are based on the IMF World Economic Outlook Database.

⁵² 43/2013/QH13 and Decree No 63/2014/ND-CP.

Moreover, the entire legislative and regulatory framework is available online as is the information regarding procurement opportunities in Vietnam.⁵³

Table 12: Overview of Vietnam's public procurement market in 2014

	Tenders	VN Dong billions	EUR billions	% of Total	Average Value (EUR)	Average Value (SDR)
Total Procurement		471,672	16.76	100%		
of which: Investment & Development	112,260	365,899	13.00	78%		
Open Bidding	16,573	273,733	9.72	58%	586,767	518,716
Direct Appointment	98,237	114,880	4.08	24%	41,544	36,726

Source: Ministry of Planning and Investment of Vietnam

The agreement builds on Vietnam's current legal framework to improve transparency and legal certainty regarding national treatment and market access. Given that Vietnam is not yet a party to the GPA, the latter has been the guiding principle of the negotiations. As far as disciplines are concerned, Vietnam has accepted a government procurement chapter that incorporates over 90% of revised GPA rules, with even some GPA plus elements for both sides.

More specifically, to improve transparency Vietnam has agreed to reinforce market consultation and publication of notices. Article 9.10 of the agreement requires that at the beginning of the procurement cycle parties carry out consultations with the private sector to assess its needs. This is something that the current Vietnamese law does not require. However, given that it is a lower middle income economy, Vietnam was granted the benefit of a limited list of transitional measures. For example, Vietnam was given up to 10 years to develop a central web portal for advertising procurement contracts⁵⁴ and to improve the handling of international tendering by its procuring officers. In addition, Article 9.6 requires that the summary of the contract notices are made available in English. The EU agreed to financially support the necessary infrastructure investment in respect to making the summary notices available. It is important to highlight that these new transparency obligations will have multilateral effect. They will not benefit only firms from the EU but also from other countries that have access to the Vietnamese public procurement market.

To ensure national treatment for EU firms, the agreement will impose additional disciplines on Vietnam's current regime. According to the latter, foreign entities that meet basic standards of good standing⁵⁵ are allowed to bid on tenders in some cases but not all. For example, pursuant to Article 5.1. of the Law on Public Procurement No.43/2013/QH13 from 2013: "A tenderer or

⁵³ It is made available on the Ministry of Planning and Investment's website (http://muasamcong.mpi.gov.vn/main/index_en.html) as well as from listings of government or private tenders in Vietnam provided by Intellasia (<http://www.dau-thau.com>).

⁵⁴ Vietnam committed (under the same Article VI) to develop a central web portal for advertising procurement contracts, which should be operational at the latest 10 years after entry into force of the FTA.

⁵⁵ Article 5 in the Law of Bidding 2013 stipulates that suppliers need to have: (a) legal registration; (b) independent and healthy finance; (c) not be banned from the bid participation; and (d) be on the short list in the case of limited bidding.

investor being an organization shall be deemed to be eligible when it satisfies the following conditions: It must have a partnership with domestic contractors or use sub-contractors if it is a foreign tenderer when participating in international bid in Vietnam, unless domestic contractors have not full capability to participate in any part of bidding package." At the evaluation of bids when two firms have submitted equally competitive offers and one of them is domestic, the contract is awarded to the domestic firm. The agreement in Article 9.4 establishes the general principles of national treatment and non-discrimination thus removing the possibility of deploying such discriminatory practices against qualified EU suppliers.

In addition, Vietnam also agreed to certain legal obligations in terms of offering market access to EU suppliers notably regarding procurement by central and sub-central government entities (annex 1 and 2 respectively) as well as by other public entities (as listed in annex 3). More specifically the new market access conditions include all Vietnamese ministries at central level⁵⁶ as well as two key utility-related state-owned enterprises: the branches of Vietnam Electricity (EVN) in charge of power transport and electricity distribution and Vietnam Railways (VNR), the nationwide railway operator. In addition, EU companies will also be able to bid on equal footing with domestic companies for contracts to be awarded by two of the country's most important universities (Vietnam National University in Hanoi and Vietnam National University in Ho Chi Minh City) as well as by municipal departments in Hanoi and Ho Chi Minh City. The latter account for 50% of procurement conducted at the provincial level⁵⁷. The product coverage of the new market access obligations is relatively extensive in goods (with some exceptions for agricultural products). It includes in particular all pharmaceuticals purchased by the Ministry of Health, the Departments of Health of Hanoi and Ho Chi Minh City and as by other 34 hospitals. A wide range of services will be also open to tendering by EU firms, including computer-related services. For public works, Vietnam agreed to cover basically all construction services and notably dredging services, sectors of importance for a number of Member States. Overall, all this offers a wide range of potentially important market access opportunities for EU firms in Vietnam.

However, given Vietnam status as a lower middle income economy this liberalisation will be gradual. The agreement foresees differentiated treatment and transitional measures regarding threshold values by each entities as well as offsets. More specifically, the agreement stipulates a transitional period of fifteen years that will apply across the board with a progressive scaling-down of thresholds up to a level comparable to those offered by GPA members (except for goods and services for sub-central level and Annex III entities). More specifically for central government entities the starting threshold for goods and services has been fixed at 1.5 million SDR, which will eventually converge to the threshold of 130,000 SDR that most GPA members' adopt⁵⁸.

For sub-central entities and Annex III entities it was agreed an initial threshold for goods and services of 3 million SDR, which will eventually fall to 1 million SDR (which is still above the highest

⁵⁶ For the central government level, Vietnam offers from the entry into force all ministries, the social security office as well as two other entities equivalent to ministries.

⁵⁷ Delegation of the European Union to Vietnam (2016).

⁵⁸ For construction services, the agreed initial threshold is 40 million SDR with a final convergence with the standard GPA threshold of 5 million SDR.

GPA threshold for the same categories at 450,000 SDR)⁵⁹. As a result, in the first years of the agreement the potential market access gains for EU suppliers will be partially offset given that the agreed thresholds are relatively high compared to the average in Vietnam's procurement market. For example, the initial threshold (1.5 million SDR) for central government entities is about three times the average tender size for open tenders, as can be seen in table 12⁶⁰.

This means that only the very large contracts for Vietnam's standards will effectively be subject to the non-discrimination disciplines that Vietnam agreed to. Still given the pace of the country's investment in infrastructure in areas such as energy, transportation, waste water treatment and water supply, for which the value of contracts tends to be large, these new disciplines could still end up offering important business opportunities for EU firms in Vietnam⁶¹. In 15 years the threshold for non-discriminatory treatment of EU firms in Vietnam will fall well below the average size of open bid tenders in 2014. This will entail the effective liberalisation of a much larger share of the Vietnamese public procurement market.

As far as offsets are concerned, the agreement grants Vietnam a transitional period of eighteen years to complete exhaustion of the existing offset schemes⁶². The maximum offset ratio permitted during the first ten years of the implementation of the FTA will be 40% and then 30% during the next remaining eight years. For pharmaceuticals, after a transitional period of three years during which EU suppliers would not be granted legally secured market access, Vietnam can still maintain set-asides for 65% of procurement contracts for seven years, then 60% for the next five years and a final set-aside rate of 50%. The final guaranteed market access (50%) will be largely above the current market share of EU pharma producers in Vietnam (30%).

To increase legal certainty for EU firms participating in public markets in Vietnam the agreement also includes a clause to extend the time to file a pre-award complaint in case of disputes from 9 days (as foreseen in Vietnam's domestic law) to 10 days. Moreover, for pre-award complaints the agreement's Article 9.19 (on domestic review) requires that Vietnam maintains, establishes or designates an impartial administrative or judicial authority that is independent of its procuring entities to hear such complaints⁶³.

⁵⁹ In addition given the low amount of procurement contracts for the purchase of single pharmaceutical products, Vietnam agreed on a much lower final threshold for these contracts. For construction services, the starting threshold is 40 million SDR with a final convergence with the highest GPA thresholds for this category, 15 million SDR.

⁶⁰ Although these averages undoubtedly mask a highly skewed distribution of tender amounts, the available information unfortunately does not allow us to indicate the likely scale of contestable open bid contracts.

⁶¹ The national treatment and non-discrimination for larger contracts might drive very substantial procurement gains even if the number of additional tenders won is comparatively small.

⁶² This is in line with the GPA prohibition of offsets.

⁶³ Under Vietnam's current regime, the complaint can be reviewed by the same people whose action is being challenged.

Finally, the agreement also puts in place some important institutional provisions that include a specialised committee on government procurement (Articles 17.2 and 9.23) and a commitment to promote cooperation for improved mutual understanding of the two parties' government procurement systems (Article 9.21).

The leverage that the commitments undertaken by Vietnam will give to EU suppliers is likely to be concentrated where they are able to outbid Vietnamese competitors, while being at an advantage vis-a-vis other foreign suppliers due to the national treatment they will enjoy. Such opportunities are likely to grow over time as thresholds fall and offsets expire.

5.2. Global value chain integration

The ASEAN block has been over the years at the forefront of the cross-border fragmentation of production. This led to the creation of cost efficient regional production chains grounded on the comparative advantages of each participating economy, which today underpin its highly competitive position in global trade. Vietnam is a relative newcomer to this process and until recently its exports were largely confined to primary products. However, since 2005 the change in the country's export profile has evolved hand in hand with the growing participation in regional production sharing. An important driver has been the rise of real wages in China that has changed relative prices in the region. Vietnam, given its central geographical position and rapidly improvement in infrastructure, has progressively turned into an attractive destination for labour-intensive light manufacturing within Asia. In mobile telephone products, for example, the country has emerged since 2010 as a mini-assembly hub based on the sourcing inputs from China and other industrialized East Asian economies for transformation into final products destined for exports.

The EU-Vietnam FTA represents an opportunity to promote EU-Vietnam value chain integration via increased FDI activity and expanded bilateral trade in intermediate goods and services between the EU and Vietnam. For the EU, this will improve access into a growing assembly hub in the ASEAN and wider Asia region. For Vietnam, it will promote a closer economic relationship with a major industrial hub and major investor in Asia, ultimately to the benefit of its standing in the intra-ASEAN value chains. EU firms are expected to lead this process as many will recognise that the conditions are there to set up activities in Vietnam to integrate into their supply chains. This could play an important role in their strategy to serve the buoyant wider Asian market. Also firms from other countries will be prompted to use production activities in Vietnam as a means to create a platform to gain access to the EU market given the preferential access given by the FTA⁶⁴. Vietnamese firms are likely to take the opportunity to plug into value chains organized by EU or third-country firms.

⁶⁴ This has happened in similar situations. For example, Vietnam's prospective TPP-based access to the US apparel market prompted relocation of Chinese textiles mills to Vietnam to enable clothing production to qualify under the TPP's preferential rules of origin as exports "originating" from Vietnam into the United States (Fung, 2015).

Overall, the agreement provides opportunities for firms based in Vietnam to take up a greater involvement in production sharing within the region, particularly in labour-intensive tasks. The preferential access to the EU market will give them an advantage over other locations. To some extent, the results from the CGE analysis in section 4 already capture this. However, eventually the agreement will also lead to the emergence of production sharing in new products and sectors, which is more difficult to anticipate. The increase in trade may eventually by far exceed what can be estimated with a CGE model. Ultimately, the main value chain-related developments that the agreement may deliver will be determined by firms' strategic decisions in Vietnam and in the EU in light of the changes to the business environment. This is difficult to second guess accurately based on readings of existing data. The latter can only go so far as to suggest the extent of existing capabilities and preparedness of firms in some locations to take on new additional roles in production sharing.

For Vietnamese firms, given their stage of technological development, the most probable benefits are linked to the possibility of plugging into value chains organized by EU firms. Therefore, their sectoral interests will dovetail with the interests of EU firms. In sectors like "leather products" and "textiles and clothing" the main beneficiaries may well be SME suppliers of EU-sponsored value chains. However this is conditioned on access to the EU market where rules of origin in the agreement will play an important role in shaping the value chain activity in the country. In the textiles and clothing sector the double transformation requirement will give a strong incentive for the development of the production of fabrics.

Some Vietnamese firms may also use their improved access to the EU market to benefit from the ongoing re-composition of Asian value chains in other (less traditional) sectors. For example Vietnam's adoption of international standards that the agreement promotes will enable Vietnamese firms to enter the production of pharmaceutical inputs, improving their chances to outcompete some China-based producers, which are already increasingly under pressure due to rising labour costs. This may lead to substituting Chinese for Vietnamese pharmaceutical inputs as intermediate consumption in EU value-chains. Furthermore, a deeper participation in EU value chains through production of raw materials would give Vietnam incentives to accelerate its compliance with international standards in order to win these mandates in competition with other Southeast Asian economies.

To what extent and how quickly Vietnamese firms will manage to acquire new GVC roles depend on firms' strategic decisions. These could result in large scaling up of trade (as in the case of mobile phones as these were devolved from China). But such discontinuous jumps in levels of trade cannot be anticipated based on existing trends in the data.

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