# EXPECTED ECONOMIC EFFECTS OF THE EU FTAs WITH CHILE, MEXICO, AND NEW ZEALAND

FINAL REPORT



#### **AUTHORS**

JOOST WITTEMAN, ADAM KUCZYNSKI, NILS VERHEUVEL, NIENKE OOMES, THIERRY BELT, ELISABETH HOOLE, MAARTJE DE GROOT, EMILY VAN DEN BURG & BO SANGERS

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Roetersstraat 29 1018 WB, Amsterdam The Netherlands +31 20 399 1255

secretariaat@seo.nl www.seo.nl/en/

## Executive summary

Based on multiple sources of evidence we estimate small but positive increases of Dutch real GDP as a result of the EU FTAs with New Zealand, Chile, and Mexico. Trade effects are estimated to be larger than GDP effects for all three FTAs, specifically in certain industries that are over-represented in current patterns of trade.

The Dutch Ministry of Foreign Affairs (MFA) commissioned SEO Amsterdam Economics (SEO) to assess the potential economic impact of the expected new Free Trade Agreement (FTA) between the EU and New Zealand (NZ),<sup>1</sup> and the modernisation of the FTAs between the EU and Mexico, and the EU and Chile. Our assessment is based on desk research, interviews, and data analysis and econometric estimates.

We estimate small but positive increases of Dutch real GDP as a result of the FTAs. This assessment is based on several complementary pieces of evidence, namely:

- New Zealand, Mexico, and Chile are currently relatively modest trading partners of the Netherlands. Given this
  basis, we expect New Zealand, Mexico, and Chile to remain relatively modest trading partners, even after the
  new EU-New Zealand FTA and the modernised EU-Mexico and EU-Chili FTAs enter into force.
- In order to estimate the economic effects of further liberalising trade between the EU and New Zealand, Chile, and Mexico, we developed a state-of-the art gravity model of international trade and performed a scenario-analysis. This analysis is based on a simulation that expands the scope of counterfactual trade agreements but not directly simulates changes in tariffs. Our headline estimates for the Netherlands are positive but indicate a small welfare effect (+0.00 per cent after rounding). The gravity model abstracts from changes in production and sectoral composition, instead it isolates the gains-from-trade-effect, and only covers manufacturing trade and output. Therefore, we consider the main estimates to be a lower bound.
- Our estimate is consistent with previous assessments of the effects of the three FTAs, which all reported positive but modest welfare effects. SEO (2016) previously estimated that Dutch real GDP would only increase marginally (+0.01 per cent on average) in response to the individual FTAs. Estimates by the European Commission (New Zealand), BKP Development Research & Consulting (Mexico) and LSE Consulting (Mexico) yield quantitatively similar conclusions for the EU as a whole.
- Consulted experts and market participants confirmed that they mostly expect only modest effects from the
  introduction or modernisation of these FTAs. Interviewees consistently highlighted the geographical distance
  between the EU and the partner countries, their comparatively modest size, as well as the pre-existing
  agreements in the cases of Mexico and Chile. As a result, they only anticipated minor effects on Dutch imports,
  exports, and GDP.

We estimate a modest increase in New Zealand's real GDP as a result of the EU-New Zealand FTA, and small but positive increases for the real GDP of Mexico and Chile following the modernisation of both FTAs. This assessment is based on several complementary pieces of evidence, namely:

On 27 June 2023, the EU council adopted the decision to sign the FTA with New Zealand. See: https://www.consilium.europa.eu/en/press/press-releases/2023/06/27/eu-new-zealand-council-adopts-the-decision-to-sign-free-trade-agreement/



- We estimated a gravity model of international trade on manufacturing data and performed a scenario-analysis to estimate the welfare effects of further liberalising trade between the EU and New Zealand, Mexico, and Chile. Our headline estimate for New Zealand's real GDP is a welfare effect equivalent (after rounding) to +0.17 per cent of real GDP. For the real GDP of Mexico and Chile we estimate small but positive effects (around +0.01 per cent). The small effect size here is accounted by the fact that the new FTAs with Mexico and Chile are modernisations of existing FTAs, which already offer significant market access.
- Consulted experts and market participants consider the EU market a significant market for New Zealand to
  enter. The same holds true for certain sectors in Mexico and Chile, but experts note that these countries already
  have significant market access under the present FTAs. As such, they expect smaller effects from the
  modernised agreements.

Figure S.1 We estimate small, but positive, increases in real GDP and trade as a result of the three draft FTAs

	E	EU-NZ FTA		EU-MEX FTA		EU-CL FTA	
	NL	NZ	NL	MEX	NL	CL	
Real GDP	0.00%	0.17%	0.00%	0.01%	0.00%	0.01%	
Total Exports	0.00%	0.49%	0.00%	0.03%	0.00%	0.05%	
Total Imports	0.00%	0.45%	0.00%	0.04%	0.00%	0.04%	

Source: SEO Amsterdam Economics.

We estimate that trade effects will be larger than GDP effects for all three countries. This assessment is based on several complementary pieces of evidence, namely:

- Prior assessments of the FTAs' impact on the EU highlighted changes in bilateral trade between the EU and New Zealand/Chile/Mexico of at least +10.2, +1.4, and +9.3 per cent respectively.<sup>2</sup> With regard to the impact on the Netherlands specifically, the prior assessment by SEO (2016) estimated bilateral trade changes associated to these FTAs with New Zealand/Chile/Mexico to be at least +21, +16.7, and +24.9 per cent respectively.
- Gravity model estimates suggest small put positive trade effects. Trade effects are estimated to be somewhat bigger than GDP effects.
- Consulted experts and market participants highlight new export and import opportunities for specific industries as a result of the introduction or modernisation of the FTAs.

**Headline effects disguise potential differences in impact per sector.** These industry-level differences are comparatively modest. This assessment is based on several complementary pieces of evidence, namely:

• Certain industries are overrepresented in current patterns of trade. Around 40 to 60 per cent of Dutch exports to Chile and New Zealand are accounted for by only two industries (food products and machinery). Approximately 20 per cent of Dutch exports to Mexico are machinery. The Netherlands mainly imports animal products from New Zealand (mostly meat), accounting for more than 50 per cent of total Dutch imports from New Zealand. Almost 50 per cent of Dutch imports from Chile consists of fruits and vegetables and almost 20 percent consisted of minerals and metals (lithium and copper). For Mexico half of the products exported to the Netherlands is machinery.

Prior assessments of the EU-New Zealand/Chile/Mexico FTAs were conducted by the European Commission (2017 and 2020), and SEO Amsterdam Economics (2016).

- Our gravity model of international manufacturing trade estimates different changes in trade for different industries. For the Netherlands and the EU, these differences are small with total export and imports effects ranging between +0.00 per cent and +0.01 per cent. For New Zealand, the total effects of the FTA are larger and for exports range between +0.22 and +2.87 per cent. For Mexico export effects range between +0.02 and +0.13 per cent, for Chile this range in export effects is between +0.01 and +0.17 per cent. As for our other estimates, these results are based on a simulation that expands the scope of counterfactual trade agreements without directly simulating changes in tariffs.
- Previous impact assessments also estimated heterogenous sectoral impacts. The previous EC reports predicted
  increases in EU exports to New Zealand in sectors that the Netherlands has a comparative advantage in,
  including dairy, machinery, and motor vehicles. The EC impact assessments of the updated EU-Chile FTA also
  predicted increases in EU dairy, machinery, vehicle, and oil exports to Chile, among others. Similarly, the
  previous EC reports estimated increases in EU dairy, automotive, and chemicals exports to Mexico as a result of
  the modernised EU-Mexico FTA.
- Consulted experts and market participants highlight export and import opportunities for specific industries, yet these were found to be small. For the Netherlands, export opportunities in the three countries could include sectors such as horticulture, dairy, meat, machinery, and maritime services. For New Zealand, export opportunities mainly include agricultural products, in particular dairy. Whilst these New Zealand export opportunities may imply increased competition for Dutch producers in this industry, interviewees also highlighted that New Zealand and Dutch exporters cater to different markets (Asia and the European mainland respectively). As such, interviewees do not expect large shifts in New Zealand exports towards the European market. Chile could further benefit through potentially increased exports of fresh fruits and vegetables as well as that of lithium and copper. Export opportunities for Mexico could arise in the sectors of beef, grains and oilseeds. However, the expected effects for the three countries in the mentioned sectors were found to be small. Moreover, no significant increase in competition for Dutch and EU market operators from these countries was found for these countries in the context of the (modernised) FTAs.
- Highlighted export opportunities for Dutch, New Zealand, Chilean, and Mexican exporters by interviewees commonly correspond to established comparative advantages for these economies based on existing trade data. Relative to New Zealand, the Netherlands has comparative advantages in sectors such as dairy, machinery, and vehicles. For Dutch exports to Chile, these comparative advantages include dairy, beer, medicaments, and ethers, and relative to Mexico non-crude petroleum oil. For New Zealand relative to the Netherlands, these comparative advantages include dairy and meat amongst others. Lithium and copper belong to Chile's comparative advantages, whilst Mexico has comparative advantages in the automotive and machinery industries amongst others. Given the comparatively modest impact of the three EU FTAs, we deem it unlikely that these comparative advantages are structurally and significantly impacted by the (modernised) FTAs. Theoretically, it is expected that the removal of trade barriers may deepen current (revealed) comparative advantages even further. However, the gravity model predicts that the effects in these sectors will be small.

We estimate the effect of the EU-New Zealand FTA on non-treaty-partners to be small. We base this assessment predominantly on our gravity model of trade, which suggests effects between (rounded) -0.00 per cent and +0.00 per cent on the rest of the world (ROW) and Least Developed Countries (LDCs).

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## 1 Introduction

The Dutch Ministry of Foreign Affairs commissioned SEO Amsterdam Economics to assess the potential impact of the Free Trade Agreements between the EU and New Zealand, Chile, and Mexico. Our assessment is based on desk research, interviews, data analysis and econometric estimates.

In recent years, the European Union (EU) has actively engaged in trade negotiations with various countries across the globe, including New Zealand, Chile, and Mexico. These new or modernised Free Trade Agreements (FTAs), encompassing a wide range of sectors and provisions, have the potential to generate economic benefits for consumers and producers, including via lower prices for imports and enhanced market access for exports. A comprehensive analysis conducted by SEO Amsterdam Economics (SEO) sheds light on the potential impact of these agreements on the Dutch economy. This report provides a summary of the key findings, including an assessment of existing bilateral trade patterns, a summary of prior assessments of the agreements, estimations of trade and GDP effects, industry-level analyses, and insights gathered from interviews with a wide set of stakeholders. By delving into these aspects, the report offers valuable insights into the potential implications of these trade agreements for the Netherlands.

Between April and June 2023, we performed desk research, conducted interviews, and conducted statistical and econometric analyses to gather evidence on the agreements' effects. In the remainder of this report, we present our findings. Specifically, we

- chart current bilateral trade between the Netherlands (NL) and New Zealand, Chile, and Mexico respectively;
- summarise prior assessments of the effects of the FTAs on the Dutch and/or EU economy;
- report gravity model estimates on the effects of the FTAs on (bilateral) trade and real GDP;
- offer complementary quantitative analyses on the sensitivity of industry-level trade to trade agreements; and
- present qualitative assessments of the effects of the FTAs gathered through interviews with embassy staff, industry association representatives, foreign trade chamber representatives, individual firms, and other experts.

#### New Zealand

**On 9 of July the agreement between New Zealand and the EU was signed.** Negotiations took place from June 2018 to June 2022 divided over twelve negotiating rounds. For the FTA to enter into force, it must still pass through internal approval processes of the EU and New Zealand. After it is approved by the European Parliament, the European Council must then finalize the deal. The draft EU-New Zealand FTA, amongst others,

- eliminates or reduces tariffs on bilateral trade;
- opens both the EU and New Zealand services market in industries for example financial services, telecommunications, and maritime transport;
- ensures non-discriminatory treatment of EU investors in New Zealand and vice versa;
- improves access for EU companies to New Zealand government procurement contracts for goods, services, and works and works concessions;
- reduces compliance requirement and procedures to facilitate faster flows of goods;
- commits New Zealand and the EU to protect and enforce intellectual property rights; and
- reinforces Paris Climate Accord objectives and buttresses core labour rights including the commitment to respect and promote the principles on core rights at work embodied in the fundamental International Labour Organisation (ILO) conventions.

#### Chile

On 9 December 2022 the European Union (EU) and Chile reached an agreement in principle for the Advanced Framework Agreement, a modernised version of the EU-Chile Association Agreement that came into effect in 2003.<sup>3,4</sup> The updated agreement on Geographical Indications (GIs) for wines and spirits, which will include five additional Dutch spirits, came into force on 9 March 2023.<sup>5,6</sup> The modernised FTA is currently still undergoing verification, before the start of the ratification process. The new FTA:

- liberalises 96 per cent of tariff lines on Chili's side and 66 per cent on the side of the EU, over a maximum of 7 years, effectively making 95 per cent of EU-Chile trade duty-free;<sup>7</sup>
- opens the EU market to Chile in industries such as financial services, telecommunications, delivery, and maritime transport to Chile;
- ensures non-discriminatory treatment and expands opportunities for EU service providers and investors, including in the energy and raw material sector, in Chile and vice versa;
- improves access for EU companies to Chilean government procurement contracts for goods, services, and works and works concessions, and vice versa;
- reduces technical barriers to trade and increases regulatory alignment by agreeing on a predefined list of international standardisation bodies, as the basis for technical regulations and conformity assessment methods;
- includes sanitary and phytosanitary measures, provisions on the rule of origin, as well as clarity and legal certainty for operations relating to the use of bilateral safeguards and World Trade Organisation (WTO) instruments (anti-dumping, anti-subsidy and global safeguards), and;
- includes provisions on sustainable food systems, sustainable development, small and medium enterprises (SMEs), gender equality and transparency, as well as provisions on subsidies, competition, state-owned enterprises and digital trade.

#### Mexico

Following two years of negotiations, the EU and Mexico concluded a new trade deal reached an agreement in principle on 21 April 2018 on a modernised version of the General Agreement (GA) that came into effect in 2000. 8 Negotiations have not been finalised yet and ratification procedures have not yet started. 9 The modernised FTA:

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European Commission. (2022). Commission Decision of 26 July 2022 on the conclusion of an Agreement in the form of an Exchange of Letters between the European Union and the Republic of Chile concerning amendments to Appendix I to the Agreement on Trade in Spirit Drinks and Aromatised Drinks (Annex VI), annexed to the Association Agreement between the European Community and its Member States, of the one part, and the Republic of Chile, of the other part 2022/C 287/04. Retrieved from <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C</a> .2022.287.01.0004.01.ENG&toc=OJ%3AC%3A2022%3A287%3ATOC

- eliminates 99 per cent of tariffs between the two parties, including 85 per cent of tariffs for agricultural goods 10;
- opens both EU and Mexico's service and investment market;
- protects additional geographical indications (GIs) mainly for distinctive food and drink products from the EU;
- ensures the preservation of both parties' regulatory authority, while also incorporating the EU's advanced investment protection provisions;
- establishes the EU's new Investment Court System (ICS);
- includes provisions on rules of origin, technical barriers to trade, customs and trade facilitation, trade remedies, as well as sanitary and phytosanitary measures;
- removes barriers in Mexico for EU public procurement bidders; and
- includes chapters on SMEs, trade and sustainable development, anti-corruption, and transparency, as well as provisions on animal welfare

LSE Consulting. (2020). Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the global agreement with Mexico: Final report. European Commission: Directorate-General for Trade. Retrieved from <a href="https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1</a>

## 2 Current trade between the Netherlands and Chile, New Zealand, and Mexico

The trade relationship between the Netherlands and New Zealand, Chile, and Mexico was found to account for a small share of Dutch trade. However, trade between these countries within certain sectors was found to be significant. For the Netherlands, exports of machinery, metals, chemicals and dairy have been among the most prominent exports to these countries. In terms of imports, lamb (from New Zealand), copper and blueberries (from Chile), as well as various machinery and medical appliances (from Mexico), have been amongst the largest imports.

#### **Aggregate Trade Balances**

New Zealand

New Zealand was found to be a modest trading partner for the Netherlands, although the Netherlands has run a small, positive trade balance with New Zealand in recent years. As Figure 2.1 shows, the proportion of Dutch total imports originating from New Zealand is less than 0.13 per cent. Similarly, the proportion of Dutch total exports directed towards New Zealand was found to be less than 0.11 per cent. Nevertheless, since 2019, the Netherlands has run a relatively small, positive trade balance with New Zealand, of around USD 58 million in 2022. Additionally, New Zealand is a modest trading partner for the EU, with less than 0.11 per cent of EU imports and exports coming from/going to New Zealand.

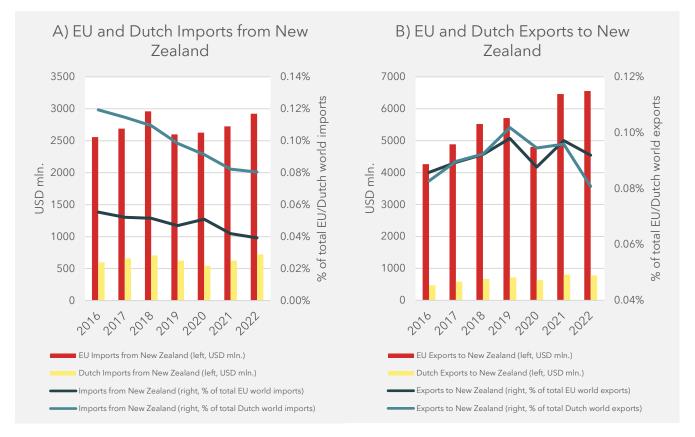


Figure 2.1 The Netherlands had a small, positive trade balance with New Zealand

Source: SEO Amsterdam Economics based on IMF data.

#### Chile

Chile was found to be a modest trading partner for the Netherlands, where the Netherlands runs a small, negative trade balance with Chile. As Figure 2.2 shows, the proportion of Dutch total imports originating from Chile was, on average, around 0.3 per cent. Similarly, the proportion of Dutch total exports directed towards Chile averaged around 0.11 per cent. Additionally, the Netherlands has run a small, negative trade balance with Chile, of around USD 1.4 billion in 2022. Chile is also a modest trading partner for the EU, with less than 0.2 per cent of EU exports and imports going to/coming from Chile. However, the EU runs a small, positive trade balance with Chile.

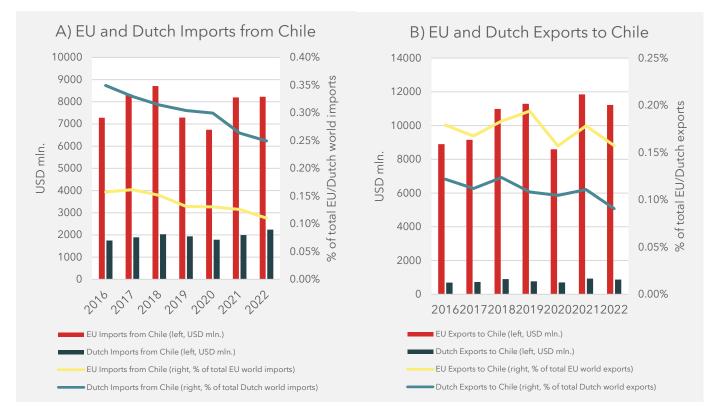


Figure 2.2 The Netherlands had a small, negative trade balance with Chile.

Source: SEO Amsterdam Economics based on IMF data.

#### Mexico

Although Mexico conducted more trade with the Netherlands compared to New Zealand and Chile, it remained a modest trading partner for the Netherlands. As Figure 2.3 shows, the proportion of Dutch total imports originating from Mexico was on average around 0.6 per cent. Similarly, the proportion of Dutch total exports directed towards Mexico averaged around 0.4 per cent. Additionally, the Netherlands has run a negative trade balance with Mexico in most years since 2016 but achieved a positive trade balance of USD 532 million in 2022. Additionally, Mexico is also a modest trading partner for the EU, where the EU has run a small, positive trade balance with Mexico.

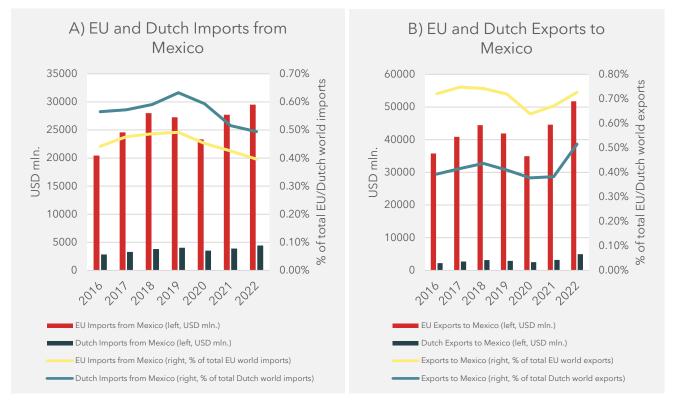


Figure 2.3 The EU had a small, negative trade balance with Mexico in most years.

Source: SEO Amsterdam Economics based on IMF data.

#### **Exports from the Netherlands to New Zealand, Chile, and Mexico**

New Zealand

**Dutch exports to New Zealand made up around 0.1 percent of its total exports in 2022.** In 2022, the value of Dutch exports to the global market amounted to around USD 770 billion, most of which were exports to other European countries such as Germany, Belgium, and France. In 2022, the total value of goods exported by the Netherlands to New Zealand amounted to approximately USD 738 million, accounting for around 0.1 per cent of its total exports. Nevertheless, Dutch exports to New Zealand have increased at an annualised rate of 5.16 per cent over the past 26 years.<sup>11</sup>

Thus far, Dutch exports to New Zealand largely consisted of machinery and food products. <sup>12</sup> As Figure 2.4 shows, the top two Dutch export products to New Zealand in 2022 were machinery (USD 290 million) and animal, vegetable and food products (USD 133 million). Regarding food products, the Netherlands largely exported sugar products, dairy and meat products, and beverages to New Zealand. As for machinery exports, the Netherlands largely exported food and agriculture-related machinery to New Zealand. These included machinery for manufacturing food and drinks, agricultural machinery, and harvesting and threshing machinery.

Based on data compiled by the Observatory of Economic Complexity (OEC).

Export figures based on UN COMTRADE data include re-exports.

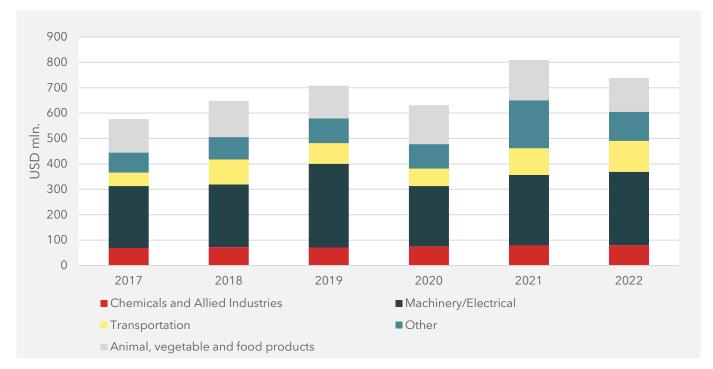


Figure 2.4 In recent years, top Dutch exports to New Zealand were transport, machinery goods, and food.

Source: SEO Amsterdam Economics based on UN COMTRADE.

In 2022, the Netherlands was the fourth biggest exporter of dairy to New Zealand. The Netherlands played an important role as a supplier of dairy to New Zealand. Approximately 6 per cent of New Zealand's dairy imports came from the Netherlands, primarily in the form of milk and cream products.

The Netherlands had a revealed comparative advantage (RCA)<sup>14</sup> in several of its key export products to New Zealand. The Netherlands had a revealed comparative advantage in the production of dairy, machinery, and several vehicle goods. In recent years, these have also been among the top Dutch exports to New Zealand.

#### Chile

**Dutch exports to Chile accounted for only around 0.1 per cent of total Dutch exports in 2022.** <sup>15</sup> The Netherlands exported around USD 793 million worth of goods to Chile in 2022. With total Dutch exports amounting to around USD 770 billion, this only accounted for around 0.1 per cent of total Dutch exports in 2022. However, Dutch exports to Chile grew at an annualised rate of over 6 per cent in the past 26 years. <sup>16</sup>

The largest Dutch exports to Chile in 2022 consisted of machinery, chemicals, and food products. <sup>17</sup> The largest export flows at the product level came from the machinery sector, contributing USD 240 million (around 30

$$RCA = \frac{Export\ of\ product\ X\ by\ country\ A}{Total\ exports\ of\ country\ A} / \underbrace{\frac{Other\ countries'\ exports\ of\ product\ X}{Other\ countries'\ total\ exports)}}$$



Based on UN COMTRADE data.

Revealed Comparative Advantage (Balassa, 1965) assesses the relative export strengths of a country through the following calculation:

Based on International Trade Centre (ITC) data.

Based on data compiled by the Observatory of Economic Complexity (OEC).

<sup>17</sup> Based on UN COMTRADE data.

per cent of total Dutch exports to Chile in 2022). As shown in Figure 2.5, the chemicals sector - medicaments, human blood and ethers - accounted for USD 176 million of Dutch exports to Chile. <sup>18</sup> Food products, largely consisting of dairy and vegetables, was the third largest sector with exports amounting to USD 145 million (see Figure 2.5).

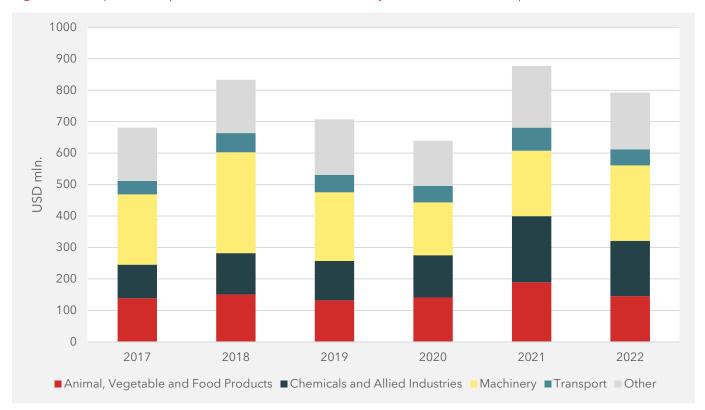


Figure 2.5 Top Dutch exports to Chile have been machinery, chemicals, and food products

Source: SEO Amsterdam Economics based on UN COMTRADE.

The Netherlands was among Chile's top suppliers of dairy (mainly cheese) and preserved potatoes. <sup>19</sup> In 2022, the Netherlands exported around USD 20 million worth of cheese to Chile, accounting for 7.5 per cent of all Chilean cheese imports. This made the Netherlands the sixth largest supplier of cheese to Chile. In the same period, Chile imported USD 26 million worth of preserved potatoes from the Netherlands, accounting for 19 per cent of all Chilean imports of these products. Preparations of a kind used in animal feeding, such as pet food, were the Netherlands' fifth largest export product (at the HS-4 category) to Chile. Chilean imports were worth USD 24 million and made the Netherlands the fourth largest supplier of these products to Chile.

Data-processing technology, medicaments, medical appliances and tractors were among the Netherlands' top exports to Chile in 2022. <sup>20</sup> Dutch exports of data-processing technology<sup>21</sup> in 2022 were worth USD 49 million and made the Netherlands the third largest supplier of these products to Chile, after China and the United States.

Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus (HS-6 851762). This can include equipment used for communication purposes, such as telephones, radios, televisions, computers, and network infrastructure components like switches and routers.



Ethers, ether-alcohols, ether-phenols, ether-alcohol-phenols, alcohol peroxides, and ether peroxides are a diverse group of chemical compounds with various applications in industrial, pharmaceutical, and scientific fields.

<sup>19</sup> Based on International Trade Centre (ITC) data.

<sup>&</sup>lt;sup>20</sup> Based on International Trade Centre (ITC) data.

<sup>22</sup>The Netherlands' second largest export product to Chile - medicaments - amounted to USD 40 million in 2022, while Dutch exports of medical appliances and tractors to Chile (third and fourth largest export group, respectively) amounted to USD 30 million and USD 25 million, respectively. Dutch exports of orthopaedic appliances were worth USD 19 million and made the Netherlands the second largest supplier of these products to Chile in 2022.

Similar to the pattern we observed for trade with New Zealand, the Netherlands largely exported goods to Chile that it had a (revealed) comparative advantage in. The Netherlands had a revealed comparative advantage in the production of dairy, beer, medicaments, and ethers, which have in recent years also been among the top Dutch exports to Chile.

#### Mexico

**In 2022, 0.55 per cent of Dutch exports were directed towards Mexico.** The Netherlands exported over USD 4 billion worth of goods to Mexico in 2022 - the largest value since 2014.<sup>23</sup> The past 26 years have seen a large positive trend, as indicated by an annualised growth rate of 9.6 per cent in Dutch exports to Mexico.<sup>24</sup>

**Top Dutch exports to Mexico included mineral products, metals, chemicals and machinery.** As seen in Figure 2.6, mineral products accounted for the Netherlands' largest exports to Mexico – almost all of which can be attributed to exports of non-crude petroleum oils. Dutch exports of metals, chemicals and machinery to Mexico in 2022 were worth USD 275 million, USD 591 million and USD 439 million, respectively. Exports of iron and steel, and pharmaceutical products were among the largest export products in the metals and chemicals sectors.

According to mirror (exporter) data.

Based on International Trade Centre (ITC) data.

Based on data compiled by the Observatory of Economic Complexity (OEC).

Based on UN COMTRADE data.

HS-2 product clusters, respectively part of the metals and chemicals groups.

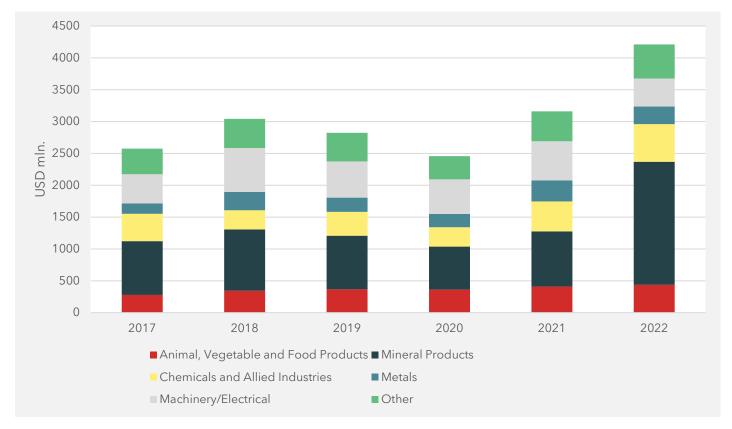


Figure 2.6 Top Dutch exports to Mexico have thus far been mineral products, chemicals, metals and machinery.

Source: SEO Amsterdam Economics based on UN COMTRADE.

The Netherlands was the third largest exporter of dairy to Mexico, but thus far accounted for only 2 per cent of Mexican dairy imports.<sup>27</sup> As of 2022, around 84 per cent of Mexico's dairy imports came from the US. Dutch exports of dairy to Mexico amounted to around USD 75 million and largely consists of cheese exports.

Non-crude petroleum oil, vegetable seeds and medicaments were the Netherlands' top exports to Mexico.<sup>28</sup> In 2022, petroleum was the Netherlands' top export product to Mexico, with an export value of USD 2 billion. While this accounted for only around 5 per cent of Mexico's petroleum imports, it placed the Netherlands as Mexico's second largest supplier of petroleum, following the USA. While the Netherlands has a revealed comparative advantage in the export of non-crude petroleum oil, the share of re-exports in the total number of exports is unknown. The Netherlands was also the second largest supplier of vegetable seeds, with exports worth USD 173 million in 2022, accounting for 40 per cent of Mexico's imports of these products. Exports of medicaments, the third largest Dutch export product to Mexico, were worth USD 72 million.

#### Imports from New Zealand, Chile, and Mexico to the Netherlands

New Zealand

In 2022, the value of Dutch imports from New Zealand accounted for around 0.08 per cent of its total imports. Total Dutch imports in 2022 were USD 713 billion<sup>29</sup>, largely originating from Germany, China, Belgium, and the



Based on UN COMTRADE data.

Based on International Trade Centre (ITC) data.

<sup>&</sup>lt;sup>29</sup> International Monetary Fund Direction of Trade Statistics (DOTS)

United States of America. Imports from New Zealand in 2022 reached USD 577 million,<sup>30</sup> accounting for around 0.08 per cent of total Dutch imports.

More than half of Dutch imports from New Zealand consisted of animal products, largely meat. As Figure 2.7 shows, Dutch imports from New Zealand historically consisted of animal and vegetable products, chemical and allied industries products, and metals. In 2022, 37 per cent of Dutch imports from New Zealand consisted of meat products, primarily sheep meat. New Zealand was an important provider of sheep meat to the Netherlands, as 66 per cent of Dutch sheep meat imports came from New Zealand in 2022. This is probably because New Zealand had a revealed comparative advantage in the export of meat, with (sheep) meat comprising a large part of New Zealand's trade with the world.

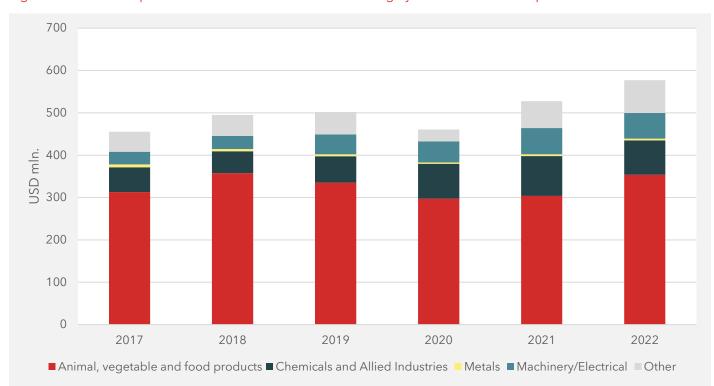


Figure 2.7 Dutch imports from New Zealand have thus far largely consisted of animal products.

Source: SEO Amsterdam Economics based on UN COMTRADE.

While New Zealand is an important world supplier of dairy products, the Netherlands thus far has not imported much dairy from New Zealand.<sup>31</sup> New Zealand is the largest exporter of dairy to the world and, like the Netherlands, has a revealed comparative advantage in the export of dairy. Nevertheless, less than 1 per cent of Dutch dairy imports thus far originated from New Zealand. Despite the Netherlands and New Zealand being major producers and exporters of dairy, they largely specialise in the export of different dairy products. New Zealand



Some cumulative figures show discrepancies because of the use of different sources. For example, here IMF statistics were used while later COMTRADE data was used, leading to a lower import figure here.

Based on UN COMTRADE data.

largely exports milk and cream products, especially whole milk powder, <sup>32</sup> while the main dairy export of the Netherlands is cheese. <sup>33</sup>

#### Chile

In 2022, 0.2 per cent of total Dutch imports came from Chile.<sup>34</sup> Chilean exports to the Netherlands amounted to USD 1.6 billion in 2022. Chile has also regularly achieved a positive trade balance with the Netherlands. Chile's exports to the Netherlands have grown at an annualised rate of 5.8 per cent in the years 1995-2021.<sup>35</sup>

In 2022, Dutch imports from Chile mostly consisted of fruits and vegetables, chemicals, and metals.<sup>36</sup> Fruits and vegetables made up around a third of all Dutch imports from Chile in 2022. Imports of chemicals and metals (mostly copper) amounted to USD 457 million and USD 218 million respectively. (Refined) copper was also the product that accounted for most of Dutch imports from Chile (10 per cent in 2022).

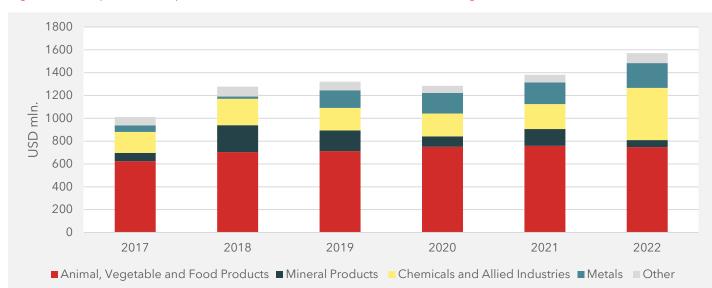


Figure 2.8 Top Chilean exports to the Netherlands have been fruits and vegetables, chemicals, and metals.

Source: SEO Amsterdam Economics based on UN COMTRADE.

**Chile was an important supplier of metals and chemicals to the Netherlands.** In 2022, 15 per cent of Dutch refined copper imports came from Chile.<sup>37</sup> With a value of USD 158 million, Dutch imports of Chilean refined copper trailed only those from Russia. Imports of nitrates, chemical compounds used for food preservation and a component of fertilisers, were worth USD 139 million and accounted for 58 per cent of all Dutch imports of this product, which made Chile the largest supplier of these goods to the Netherlands.



Statista. Dairy industry in New Zealand - statistics and facts. <a href="https://www.statista.com/topics/6069/dairy-industry-in-new-zealand/#topicOverview">https://www.statista.com/topics/6069/dairy-industry-in-new-zealand/#topicOverview</a>

UN COMTRADE data

Based on International Trade Centre (ITC).

Based on data compiled by the Observatory of Economic Complexity (OEC).

Based on UN COMTRADE data.

Based on UN COMTRADE data.

The Netherlands imports a significant amount of its fruit products from Chile. In 2022, Chile's fourth largest export product to the Netherlands<sup>38</sup> were avocados, with exports amounting to USD 101 million.<sup>39</sup> Imports from Chile accounted for 11 per cent of all Dutch avocado imports, making Chile the Netherlands' second largest supplier, after Peru. Moreover, Dutch imports of Chilean berries (mostly blueberries) were worth the same amount in 2022, making Chile the third largest supplier of these fruits to the Netherlands, accounting for 15 per cent of the Dutch berry imports. Grapes and apples were important as well, with Chilean exports to the Netherlands amounting to USD 88 million and USD 39 million, respectively. In addition to fruits, Chile exported a considerable number of wines to the Netherlands. In 2022, Chile exported USD 99 million of wines to the Netherlands, accounting for 6 per cent of all Dutch wine imports.

Additionally, Chile was the biggest supplier of lithium carbonate to the Netherlands. In 2022, almost 80 per cent of total Dutch imports of lithium carbonate came from Chile, as Chile was the world's largest exporter of lithium carbonate. The Netherlands was also one of the fastest growing markets for Chilean lithium carbonate since 2019, with the Netherlands being the seventh biggest importer of lithium carbonate from Chile in 2022.

#### Mexico

**Imports from Mexico were worth around 0.2 per cent of all Dutch imports in 2022.** <sup>40</sup> Mexican exports to the Netherlands amounted to USD 1.7 billion. Despite some stagnation in recent years, Dutch imports of Mexican products have grown at an annualised rate of 5.8 per cent throughout the years 1995-2021. <sup>41</sup> The Netherlands also ran a positive trade balance with Mexico in 2022.

The majority of Dutch imports from Mexico come from the machinery sector. Machinery and electrical machinery products made up almost 60 per cent of all Dutch imports from Mexico. <sup>42</sup> These were followed by imports of food products, and other goods (mostly medical appliances). Telephone sets were among Mexico's top export product to the Netherlands in 2022, with an export value of USD 501 million. <sup>43</sup>

<sup>38</sup> At the HS-6 product cluster.

Based on data from the International Trade Centre (ITC).

Based on International Trade Centre (ITC) data.

Based on data compiled by the Observatory of Economic Complexity (OEC).

Based on UN COMTRADE data.

Based on UN COMTRADE data.

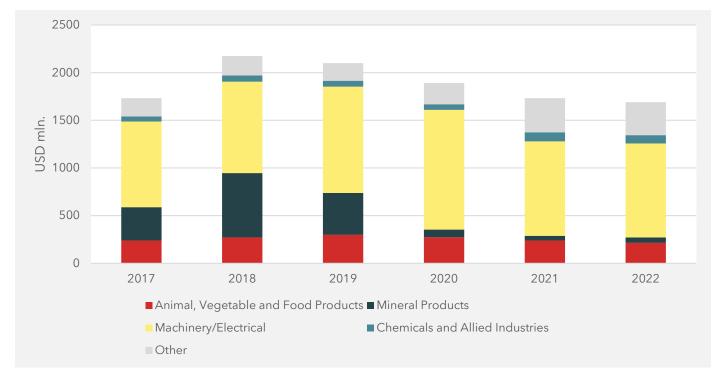


Figure 2.9 Dutch imports of Mexican products largely consist of machinery products.

Source: SEO Amsterdam Economics based on UN COMTRADE.

The Netherlands was not overly reliant on its top imports from Mexico. While telephone sets, data-processing machines, and various medical appliances were Mexico's top export products to the Netherlands, Dutch imports from Mexico of these products accounted for less than 5 per cent of total Dutch imports of these products. <sup>44</sup> In 2022, Dutch imports of fruits such as dates, figs, pineapples, avocados, and mangoes from Mexico were the Netherlands' sixth largest import product from Mexico. However, they made up only 0.7 per cent of total Dutch imports of these products. Juices are among the largest Dutch imports from Mexico, totalling USD 36 million, making up almost 3 per cent of all Dutch juice imports.

While the Netherlands has thus far not imported a significant amount of motor vehicles from Mexico, Mexico was the world's fifth biggest exporter of motor vehicles. In 2022, only around 2 per cent of Dutch imports from Mexico were vehicles, and less than 1 per cent of Dutch imports of motor vehicles were from Mexico, making it a relatively insignificant supplier of vehicles to the Netherlands historically. However, Mexico is an important world supplier of motor vehicles, and has a revealed comparative advantage in the supply of motor vehicles. Nevertheless, the US imported almost three quarters of all motor car and vehicle exports from Mexico.

Sum of three HS-4 product cluster codes 9018, 9019 and 9021. Based on International Trade Centre (ITC) data.



# 3 Prior assessments of the effects of the three FTAs on the Dutch and/or EU economy

Prior impact assessments report small but positive welfare increases as a result of the three proposed FTAs.

New Zealand

Prior assessments of the effects of the EU-New Zealand FTA on the (Dutch or EU) economy all suggest positive but small increases in real GDP. Table 3.1 reports the estimates presented in SEO (2016), European Commission (EC) (Impact Assessment, 2017) and EC (SIA, 2020).

Table 3.1 Small but positive increases in real GDP have been reported in response to the EU-New Zealand FTA

			Treaty partners	
		NL	EU	NZ
Real GDP	EC (2020a)		+0.00%	+0.00%
	EC (2017)		+0.01-0.02%	+0.28-0.52%
	SEO (2016)	+0.01%		
Bilateral exports	EC (2020a)		+13.5%	+10.2%
	EC (2017)		+14.2%	+10.5%
	SEO (2016)	+62.6%		
Bilateral imports	EC (2020a)		+10.2%	+13.5%
	EC (2017)		+10.5%	+14.2%
	SEO (2016)	+21.0%		

Source: SEO Amsterdam Economics based on EC (2020), EC (2017) and SEO (2016).

**SEO (2016) predicted that an EU-New Zealand FTA would boost Dutch-New Zealand trade.** The previous study predicted that an EU-New Zealand FTA would increase Dutch exports to New Zealand by 62 per cent and Dutch imports from New Zealand by 21 per cent. However, it predicted a near zero percentage impact on real GDP and domestic price levels. Published in an earlier stage of the FTA negotiations between EU and New Zealand, this report from 2016 estimated significantly larger trade effects of the FTA than the 2017 and 2020 EC impact assessments. <sup>45</sup>

According to a European Commission (2017) impact assessment carried out by LSE Consulting, bilateral exports from the EU to New Zealand were expected to increase by 14.2 per cent following the FTA. This impact assessment predicted EU exports to New Zealand to increase by 14.2 per cent in a conservative scenario. 46

The previous SEO gravity model analysis of the impact of an EU-New Zealand FTA estimated a larger bilateral effect than our current analysis due to methodological differences. The previous SEO analysis used a different trade dataset, a simpler depth index for the FTA as opposed to the more specific FTA depth variable used in this study, a more liberal FTA counterfactual, and a different gravity model / econometric model.

The conservative scenario in this impact assessment refers to full liberalisation by the EU for all industrial products and most agricultural products, apart from selected sensitive products (rice, cereal, sugar, fruit and vegetables, ruminant meat and dairy), full liberalisation by New Zealand for all products, and no change in NTBs. This scenario (as opposed to the ambitious scenario) seems to be most in line with the latest proposed FTA, as selected agricultural products are

New Zealand bilateral exports to the EU were expected to increase by 10.5 per cent following the FTA. EC (2017) also predicted a positive impact on EU exports for several sectors, including several that the Netherlands has a revealed comparative advantage in: dairy, machinery, and motor vehicles. For example, it predicted that EU dairy exports to New Zealand would increase by around 27 per cent, and in the machinery sector by 20 per cent. Given that the Netherlands is among the top dairy producers in the EU, such an increase in EU dairy exports could be expected to benefit Dutch dairy exporters.

The trade Sustainability Impact Assessment (SIA) prepared by BKP Development Research & Consulting for the European Commission (2020) predicted a 13.5 per cent increase in EU bilateral exports in a conservative scenario. In a conservative scenario, the impact assessment predicted a 13.5 per cent increase in EU bilateral exports and a 10.2 per cent increase in New Zealand's bilateral exports. Percentage changes in GDP were predicted to be near zero. This report confirmed the sectoral findings of the 2017 EC report - predicting an approximate increase of 27 per cent in EU dairy exports, 19.5 per cent increase in EU machinery exports and 22 per cent increase in motor vehicle and transport equipment exports. The impact assessment also predicted that EU exports of financial, communication and other services would increase by around 7 per cent each because of the FTA.

An assessment conducted by the Commission's Joint Research Centre (JRC) suggests that the NZ-EU FTA will lead to larger agriculture exports for New Zealand than for the EU.<sup>47</sup> Exports of EUR 37-47 million are projected for the EU, while estimates for New Zealand range from EUR 124 million to EUR 245 million. Dairy exports are likely to be the most significant for both sides. The EU is projected to increase its exports of dairy by EUR 14 million as a result of the agreement, while for New Zealand these figures range from EUR 35 million to EUR 102 million, in the ambitious scenario. Moreover, EU imports of fruit and vegetables from New Zealand are estimated to increase by EUR 49-66 million, while imports of beef are also projected to rise, with estimates ranging from EUR 21 million to EUR 55 million. The most significant increase for EU exports to New Zealand is expected in the 'other food' category - a change of EUR 13-17 million from baseline.

The 2020 EC report predicted a limited social and human rights related impact and a mixed environmental impact. Employment effects of the FTA were expected to be limited in most sectors. However, employment in the EU was expected to shift from some agricultural sectors (vegetables, fruits and nuts, ruminant meat etc.) and the coal sector to motor vehicles, transport equipment, and gas. Additionally, under a conservative scenario, a net decrease in non-CO2 greenhouse gas emissions was expected. However, the expected increase in New Zealand production of meat, fruits, and vegetables as a result of the FTA was predicted to have a negative impact on land use in New Zealand.

#### Chile

Prior assessments suggested a slight increase in GDP as a result of the modernised EU-Chile FTA - 0.001 per cent for the EU, 0.01 per cent for the Netherlands and 0.084 per cent for Chile. Table 3.2 reports the estimates presented in EC (2019) and SEO (2016).

European Commission's Joint Research Centre. (2021). Cumulative economic impact of future trade agreements on EU agriculture: 2021 update. Retrieved from:

<a href="https://datam.jrc.ec.europa.eu/datam/mashup/FTA">https://datam.jrc.ec.europa.eu/datam/mashup/FTA</a> 2021/index.html?fbclid=lwAR0i3gjsJUVPlaeTrfFqYl5tmcbiPc-p1W4Ou0wiwWPVw4AWJmdfeG3etNw</a>



exempt from the EU liberalisation. Accordingly, all the numbers presented from the EC reports are those that align with the conservative scenario.

Table 3.2 Prior assessments report small but positive increases in real GDP in response to the EU-Chile FTA

			Treaty partners	
		NL	EU	CL
Real GDP	EC (2019)		+0.001-0.002%	+0.084-0.168%
	SEO (2016)	+0.01%		
Bilateral exports	EC (2019)		+9.75-21.30%	+1.40-2.30%
	SEO (2016)	+18.58%		
Bilateral imports	EC (2019)		+1.40-2.30%	+9.75-21.30%
	SEO (2016)	+16.67%		

Source: SEO Amsterdam Economics based on BKP (2019) and SEO (2016).

**Both studies predicted an increase in bilateral exports, on both sides.** SEO (2016) estimated that the modernised agreement will result in Dutch exports to Chile increasing by 18.58 per cent, while the SIA conducted by BKP suggest EU exports to Chile will increase by 9.75 per cent (under the conservative scenario). 48 While more spread out, estimates for Chile were positive as well – SEO (2016) reported a 16.67 per cent increase in exports to the Netherlands, while EC (2019) estimated that exports to the EU will increase by 1.4 per cent.

The agreement will have a mixed effect on production in the EU agricultural sector. As predicted by the SIA conducted by BKP<sup>49</sup> and the Commission's cumulative impact assessment,<sup>50</sup> the EU dairy industry was projected to increase its bilateral exports to Chile by a modest EUR 8 million and its output by EUR 23 million. The same is true for poultry and pork, with increases in exports and output estimated at EUR 1.25 million and EUR 12 million, respectively, with pork driving this increase. However, the fruits, vegetables and nuts sector was projected to decrease its output by EUR 66 million, despite a modest increase in exports to Chile. The same is true for oilseeds, vegetable oils, and fats, which were projected to increase bilateral exports by EUR 3.8 million but reduce their output by EUR 28 million.

European Commission's Joint Research Centre. (2021). Cumulative economic impact of future trade agreements on EU agriculture: 2021 update. Retrieved from:

<a href="https://datam.jrc.ec.europa.eu/datam/mashup/FTA">https://datam.jrc.ec.europa.eu/datam/mashup/FTA</a> 2021/index.html?fbclid=IwAR0i3gjsJUVPlaeTrfFqYI5tmcbiPc-p1W4Ou0wiwWPVw4AWJmdfeG3etNw</a>



The conservative scenario in this impact assessment refers to full liberalisation by the EU for all industrial products and most agricultural products, apart from selected sensitive products (sugar, beef, lamb, pig, turkey, and poultry) and full liberalisation by Chile for all products. Moreover, NTBs in goods trade are reduced by 5 per cent in Chile, and trade costs for EU exports of services to Chile are reduced by 1 per cent. This scenario (as opposed to the ambitious scenario) seems to be most in line with the latest draft FTA of 2022, as selected agricultural products are exempt from the EU liberalisation. Accordingly, all the numbers presented from the EC reports are those that align with the conservative scenario.

European Commission. (2019). Sustainability Impact Assessment in Support of the Negotiations for the Modernisation of the Trade Part of the Association Agreement with Chile. European Commission. Retrieved from https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/1b9340d6-ce09-4be8-b501-7ec753cc70ce/details?download=true

Many sectors in the EU were projected to increase their output as well as their exports to Chile as a result of the agreement.<sup>51</sup> Most notably, these included the machinery sector (EUR 476 million increase in output, 707 million increase in bilateral exports), motor vehicles and transport (EUR 402 and 435 million), wood and paper products (EUR 150 and 113 million), metal products (EUR 83 and 89 million) and oil (EUR 42 and 116 million). However, Chile's output in all these sectors was projected to decrease.

The services sector is likely to experience an increase in output on both sides.<sup>51</sup> Estimates ranged from EUR 100 million to almost EUR 800 million on the EU side. Bilateral exports to Chile of these services were projected to increase by EUR 25-70 million, depending on the services category. The utilities sector was projected to benefit on both sides as well, with an increase in output in the EU estimated at EUR 373 million.

As a result of the agreement, some sectors were projected to reduce their output both in the EU and Chile.<sup>51</sup> Despite a sizable increase in bilateral exports of electronic equipment (EUR 57 million), as well as textiles, apparel, and leather (EUR 29 million), both EU sectors were projected to decrease their output as a result of the agreement – by EUR 50 million and EUR 25 million, respectively. Respective Chilean sectors are likely to reduce their output as well.

#### Mexico

Prior assessments suggested that GDP will increase on both sides as a result of the modernised agreement. Table 3.3 reports the estimates reported in EC (2020) and SEO (2016).

Table 3.3 Prior assessments report small but positive increases in real GDP in response to the EU-Mexico FTA

			Treaty partners	
		NL	EU	Mexico
Real GDP	EC (2020b)		+EUR 500-1800M	+EUR 1800-6400M
	SEO (2016)	+0.02%		
Bilateral exports	EC (2020b)		+17-75.1%	+9.3-32.5%
	SEO (2016)	+24.88%		
Bilateral imports	EC (2020b)		+9.3-32.5%	+17-75.1%
	SEO (2016)	+29.80%		

Source: SEO Amsterdam Economics based on LSE (2020) and SEO (2016).

The agreement is projected to benefit both sides in terms of aggregate bilateral exports. SEO (2016) predicted that Dutch exports to Mexico will increase by 24.88 per cent, with imports from Mexico increasing by 29.8 per cent, as a result of the agreement. The SIA conducted by LSE (EC, 2020b) estimates that EU bilateral exports will increase

BKP Development Research & Consulting. (2019). Sustainability Impact Assessment in Support of the Negotiations for the Modernisation of the Trade Part of the Association Agreement with Chile. European Commission. Retrieved from <a href="https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/1b9340d6-ce09-4be8-b501-7ec753cc70ce/details?download=true">https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/1b9340d6-ce09-4be8-b501-7ec753cc70ce/details?download=true</a>



by 75.1 per cent (under the ambitious scenario<sup>52</sup>). On the other hand, Mexican exports to the EU were projected to increase by 32.5 per cent under the same scenario.

**Certain agricultural sectors, including the EU dairy industry, were projected to benefit greatly from the FTA.** <sup>53,54</sup> The EU dairy industry stands to gain a lot from the agreement, with a projected 200-400 per cent increase in bilateral exports, amounting to an absolute increase of over EUR 250 million. Both partners were projected to increase their bilateral exports of products from the 'other food' category by around 20-40 per cent, or EUR 85-115 million, with Mexico occupying the upper bound. EU bilateral exports of pork are likely to increase by around EUR 20 million, as are its imports of live animals from Mexico.

Some of the EU's biggest sectors in terms of trade with Mexico were projected to increase their bilateral exports and output. <sup>55</sup> The automotive industry, which is the largest sector in terms of bilateral trade, was projected to increase its output in both the EU (0.1 per cent) and Mexico (1.2 per cent) as a result of the agreement. Bilateral exports and imports to and from Mexico in the automotive industry were projected to increase by 104 per cent and 75 per cent, respectively. The chemicals sector, responsible for most of the EU's bilateral exports to Mexico (21.1 per cent), was projected to increase its output by 0.3 per cent as a result of the agreement and increase bilateral exports by over 140 per cent. The petrochemicals sector, comprising 3.8 per cent of bilateral exports, is likely to increase output by 0.2 per cent and bilateral exports by over 220 per cent. Mexico is set to lose out in both sectors, with output decreasing by 2 and 1 per cent for chemicals and petrochemicals, respectively.

**Estimates suggested that output in the machinery sector is likely to decrease on both sides, as a result of the agreement.** The electrical machinery and 'other machinery' sectors, comprising 0.4 and 13.3 per cent of the EU's bilateral exports to Mexico, were projected to decrease their output by 0.3 and 0.1 per cent respectively, as a result of the agreement. Despite this, EU exports to Mexico of products from the other machinery category were projected to increase by 64 per cent, while exports of electrical machinery to Mexico were projected to decrease by 41 per cent. A decline in output of 1.3 per cent is estimated for both Mexican sectors, despite an increase in bilateral exports.

LSE Consulting. (2020). Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the global agreement with Mexico: Final report. European Commission: Directorate-General for Trade. Retrieved from <a href="https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1</a>



The ambitious scenario in this impact assessment refers to substantial decreases of NTBs in manufacturing, services, and other non-agricultural goods and services as a result of the Modernised GA. This scenario (as opposed to the conservative scenario) seems to be most in line with the draft agreement of 2018, as it assumes the removal of these NTBs. Accordingly, all the numbers presented from the EC reports are those that align with the ambitious scenario.

LSE Consulting. (2020). Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the global agreement with Mexico: Final report. European Commission: Directorate-General for Trade.

Retrieved from <a href="https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1</a>
European Commission's Joint Research Centre. (2021). Cumulative economic impact of future trade agreements on EU agriculture: 2021 update. Retrieved from:
<a href="https://datam.jrc.ec.europa.eu/datam/mashup/FTA\_2021/index.html?fbclid=lwAR0i3gjsJUVPlaeTrfFqYI5tmcbiPc-p1W4Ou0wiwWPVw4AWJmdfeG3etNw">https://datam.jrc.ec.europa.eu/datam/mashup/FTA\_2021/index.html?fbclid=lwAR0i3gjsJUVPlaeTrfFqYI5tmcbiPc-p1W4Ou0wiwWPVw4AWJmdfeG3etNw</a>

LSE Consulting. (2020). Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the global agreement with Mexico: Final report. European Commission: Directorate-General for Trade. Retrieved from <a href="https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1</a>

## 4 Gravity model estimates

Gravity model estimates suggest small but positive welfare increases for the Netherlands as a result of the New Zealand, Mexico, and Chile FTAs. Mexico and Chile can also expect small but positive welfare increases due to their (amended) FTAs. Welfare effects are larger for New Zealand, because New Zealand currently does not have any agreement with the EU.

#### Methodology

We estimate the welfare gains from the FTAs with a gravity model of international trade. The gravity model of international trade is a standard model in international economics. It is used extensively and frequently to estimate and assess the effects of FTAs and other trade policies (see, e.g., Yotov et al., 2019), including by the CPB Netherlands Bureau of Economic Policy Analysis (see, e.g., CPB, 2020). For a detailed exposition of the gravity model of international trade, see, e.g., Anderson (2011), Head & Mayer (2014) or Yotov, Piermartini & Larch (2016).

The gravity model of international trade relates bilateral trade to country-level characteristics ("GDP") and bilateral trade costs ("distance"). As a shorthand, the gravity model typically implies that nominal bilateral trade is increasing with the size of either trading partners' economy ("GDP") but decreasing with bilateral trade costs (resulting from, for example, countries being far away from each other; or "distance" resulting from other trade barriers). FTAs have the potential to reduce bilateral trade costs (i.e., reducing the "distance" between countries). Our gravity model then first estimates the trade cost reduction of the FTAs, and then estimates the resulting change in trade.

Our gravity model accounts for both trade creation and trade diversion in response to the introduction of the FTAs. For example, a reduction in bilateral trade costs between the EU and New Zealand could spur bilateral trade between the EU and New Zealand (trade creation). However, some of this increase in bilateral trade may reduce trade between the EU and other trading partners as it becomes more favourable to trade with New Zealand relative to other trading partners (trade diversion). Our gravity model corrects for this by counterbalancing trade creation with a trade diversion effect.

The balance of trade creation and trade diversion implies welfare effects. Welfare effects are measured in terms of real GDP. Our gravity model estimates such welfare changes subject to several assumptions, including that there is no (immediate) change in output or reallocation of factors of production, consumers consider goods imperfect substitutes, and industries are separable (no spillovers between industries or countries). Whilst gravity models then yield consistent estimates of welfare effects, these effects typically are smaller than the effects estimated by models that include, for example, reallocation of factors of production, capital investments, or sectoral spillovers (see CPB 2020 for an example).

To consistently estimate trade creation, trade diversion, and welfare effects, the gravity model requires data on both bilateral trade as well as domestic output. Data on domestic output is needed to fully account for trade diversion, as not all output is exported. We use the CEPII's TradeProd dataset on manufacturing trade and output. Like CPB (2020) then, our gravity model estimates trade and welfare effects associated with changes in manufacturing trade. For trade other than manufacturing trade, there is no similarly comparable and balanced



(including all bilateral observations) dataset readily available. This limits the scope of our main specification to manufacturing trade. As an auxiliary specification, we manually construct a secondary sample covering trade in non-manufacturing animal products based on FAOSTAT agricultural export and production data (see Box 1).

We estimate the effects of the FTAs as follows. First, for every industry in our dataset, we estimate the effect of historical FTAs on bilateral trade. <sup>57</sup> Our data on FTAs is due to Hofmann et al. (2017). Hofmann et al. (2017) provides data on 381 FTAs, disaggregated into 52 provisions (topics covered by trade agreements). We construct an FTA-index to capture differences in trade agreement depth. We estimate the effect of FTAs on trade using a standard Poisson Pseudo Maximum Likelihood estimator that includes country-year and country-pair fixed effects. Second, together with the MFA we determine counterfactual FTAs. These counterfactuals represent scenarios in which countries have already implemented any proposed (changes to) trade agreements. Given our dataset, our counterfactuals are expansions of the scope of an FTA in terms of coverage of topics, and not directly simulated changes in tariffs for individual products, industries, and/or countries. The estimated effects then illustrate what trade would look like in a given year if the counterfactual policies had been in place. We estimate effects based on the last year available in our dataset. This estimated effect is based on our own estimate of the effects of historical FTAs on bilateral trade (see above), combined with a default trade elasticity derived from the literature. For an outline of technical details on the estimation strategy, we refer to, e.g., CPB (2020).

#### Results

New Zealand<sup>58</sup>

The EU-New Zealand FTA slightly increases Dutch GDP, total exports and total imports. As shown in Table 4.1, the rounded effect on Dutch GDP is +0.00 per cent, the effect on total exports is +0.00 per cent and the effect on total imports is +0.00 per cent. As a result of the FTA, New Zealand experiences a positive impact on its GDP, estimated at 0.17 per cent. Additionally, the FTA results in a growth of 0.49 per cent in total exports and a 0.45 per cent increase in total imports for New Zealand. For the EU, the rest of the world, and least developed countries, the effects on GDP, exports, and imports are 0 per cent (rounded). This shows that in terms of economic gains, New Zealand benefits most from the FTA, but this gain is not offset by losses in other countries or regions.

Table 4.1 Small but positive welfare increases for the Netherlands and New Zealand

		Treaty partners		Rest of the world		
	NL	EU	NZ	ROW	LDC	
	0.000	0.000/	0.470/	0.000/	0.000/	
Real GDP	0.00%	0.00%	0.17%	-0.00%	-0.00%	
Total exports	0.00%	0.00%	0.49%	0.00%	0.00%	
Chemicals	0.00%	0.00%	0.32%	0.00%	0.00%	
Food	0.01%	0.01%	0.50%	-0.01%	-0.02%	
Machines	0.00%	0.00%	0.29%	0.00%	0.00%	
Metals	0.00%	0.00%	0.19%	0.00%	0.00%	
Minerals	0.00%	0.00%	0.86%	0.00%	0.00%	

For a digression on the heterogeneity of estimated effects by industry and trade elasticities, see Annex 1.

The results presented here are an update of our note 2023-55 Expected economic effects of the EU Free Trade Agreement with New Zealand.



	Treaty partners			Rest of the world		
	NL	EU	NZ	ROW	LDC	
Textiles	0.00%	0.01%	1.37%	0.00%	0.00%	
Vehicles	0.01%	0.01%	2.87%	-0.01%	0.00%	
Wood-Paper	0.00%	0.00%	0.22%	0.00%	0.00%	
Other	0.00%	0.00%	0.97%	0.00%	0.00%	
Total imports	0.00%	0.00%	0.45%	0.00%	0.00%	
Chemicals	0.00%	0.00%	0.13%	0.00%	0.00%	
Food	0.01%	0.02%	2.79%	-0.01%	-0.01%	
Machines	0.00%	0.00%	0.08%	0.00%	0.00%	
Metals	0.00%	0.00%	0.13%	0.00%	0.00%	
Minerals	0.00%	0.00%	0.11%	0.00%	0.00%	
Textiles	0.00%	0.00%	0.50%	0.00%	0.00%	
Vehicles	0.01%	0.01%	0.15%	0.00%	0.00%	
Wood-Paper	0.00%	0.00%	0.42%	0.00%	0.00%	
Other	0.00%	0.00%	0.15%	0.00%	0.00%	

Source: SEO Amsterdam Economics. The industries correspond to ISIC3. Specifically, for Food ISIC3 15-16, for Textiles 17-19, for Wood-Paper 20-22, for Minerals 26, for Metals 27-28, for Machines 29-33, for Vehicles 24-25, and for Other 36. Note that Food here is considered food manufacturing. In ISIC3, this is a broad category, ranging from the production, processing, and preservation of meat, to the manufacturing of, e.g., cocoa products, pasta, and soft drinks.

Box 4.1 Auxiliary estimates for non-manufacturing animal products

Our headline estimates cover manufacturing industries, but exclude (non-manufactured) agriculture, mining, and services. This is the result of a scarcity of comparable and balanced (i.e., including all [bilateral] country-industry pairs per year) data in non-manufacturing trade and output. Specifically, such data is not readily available for a wide range of countries.

As a robustness exercise, we collect data on trade and output in non-manufacturing animal products from FAOSTAT. Non-manufacturing animal products are animal products not covered by the category Food in Table 4.1. Products included here in non-manufactured animal products are, for instance, milk, eggs, and honey. Manufactured animal products such as meat, butter and cheese are included in Food in Table 4.1. The dataset based on FAOSTAT is significantly smaller than the TradeProd dataset employed in our headline estimates. As such, we report the estimated effects for non-manufacturing animal products as an auxiliary exercise. We base this exercise on estimated coefficients for the effect of FTAs in agriculture due to Weidner & Zylkin (2021). The estimates for welfare changes in response to trade liberalisation in non-manufactured animal products are small, namely 0.00 per cent for the Netherlands and +0.01 per cent for New Zealand. These effects on the aggregate will be smaller because non-manufactured animal products are only a component of total trade and output.

Services are typically less tradable than goods, given that they often require some proximity for their delivery (although this proximity burden has decreased since the 1980s). The direct effect of trade liberalisation on trade in services then likely is comparatively small (see also Annex 1), as is the direct welfare gains-from-trade-

effect. Indirectly, services trade liberalisation may have larger effects. Domestic service providers that facilitate international trade directly are likely to see increased demand for their services. In a review article, Francois & Hoekman (2010) further note that services liberalisation can further support growth by fostering productivity gains in manufacturing and the coordination of activities both between and within firms, and that the development of the service sector also is a determinant of trade volumes, economic performance, and the distributional effects of trade liberalisations.

Source: SEO Amsterdam Economics.

#### Mexico

**The EU-Mexico FTA is estimated to have small but positive effects, both for the Netherlands, the EU, and Mexico.** This is because there is a pre-existing agreement between the EU and Mexico. In the counterfactual, we then only estimate the effect of the marginal changes relative to the existing FTA. Table 4.2 shows that for the Netherlands and the EU, the marginal effect of this marginal deepening of this FTA is small in the aggregate, but positive. This holds both for the effect of the FTA on real GDP, as on total exports and imports. Effects for Mexico are slightly larger, with Mexico gaining +0.01 per cent in real GDP. Total trade effects for Mexico are slightly larger as well (+0.03 per cent for total exports, and +0.04 per cent for total imports).

Table 4.2 Small but positive welfare increases for the Netherlands and Mexico

		Treaty partners			Rest of the world		
	NL	EU	MEX	ROW	LDC		
Real GDP	0.00%	0.00%	0.01%	0.00%	0.00%		
Total exports	0.00%	0.00%	0.03%	0.00%	0.00%		
Chemicals	0.00%	0.00%	0.03%	0.00%	0.00%		
Food	0.00%	0.01%	0.13%	0.00%	0.00%		
Machines	0.00%	0.00%	0.02%	0.00%	0.00%		
Metals	0.00%	0.00%	0.02%	0.00%	0.00%		
Minerals	0.00%	0.00%	0.04%	0.00%	0.00%		
Textiles	0.00%	0.00%	0.02%	0.00%	0.00%		
Vehicles	0.00%	0.01%	0.05%	0.00%	0.00%		
Wood-Paper	0.00%	0.00%	0.06%	0.00%	0.00%		
Other	0.00%	0.00%	0.06%	0.00%	0.00%		
Total imports	0.00%	0.00%	0.04%	0.00%	0.00%		
Chemicals	0.00%	0.00%	0.02%	0.00%	0.00%		
Food	0.00%	0.01%	0.15%	0.00%	0.00%		
Machines	0.00%	0.00%	0.02%	0.00%	0.00%		
Metals	0.00%	0.00%	0.01%	0.00%	0.00%		
Minerals	0.00%	0.00%	0.03%	0.00%	0.00%		
Textiles	0.00%	0.00%	0.01%	0.00%	0.00%		

	Treaty partners			Rest of the world		
	NL	EU	MEX	ROW	LDC	
Vehicles	0.00%	0.01%	0.12%	0.00%	0.00%	
Wood-Paper	0.00%	0.00%	0.02%	0.00%	0.00%	
Other	0.00%	0.00%	0.05%	0.00%	0.00%	

Source: SEO Amsterdam Economics. The industries correspond to ISIC3. Specifically, for Food ISIC3 15-16, for Textiles 17-19, for Wood-Paper 20-22, for Minerals 26, for Metals 27-28, for Machines 29-33, for Vehicles 24-25, and for Other 36. Note that Food here is considered food manufacturing. In ISIC3, this is a broad category, ranging from the production, processing, and preservation of meat, to the manufacture of, e.g., cocoa products, pasta, and soft drinks.

#### Chile

Similar to the EU-Mexico agreement, we estimate small but positive effects of the EU-Chile FTA as a result of a pre-existing agreement between the EU and Chile. The counterfactual FTA is a comparatively small change in the current agreement. As such, effects typically are small. As shown in Table 4.3, changes in real GDP, total exports and total imports for the Netherlands and the EU are positive, but approach zero after rounding. Again, similar to the EU-Mexico agreement, we estimate slightly larger effects for Chile. Specifically, we estimate a +0.01 per cent gain in real GDP for Chile, and +0.05 per cent and +0.04 per cent for total exports and imports.

Table 4.3 Small but positive welfare increases for the Netherlands and Chile

		Treaty partners			the world
	NL	EU	CL	ROW	LDC
Real GDP	0.00%	0.00%	0.01%	0.00%	0.00%
Total exports	0.00%	0.00%	0.05%	0.00%	0.00%
Chemicals	0.00%	0.00%	0.03%	0.00%	0.00%
Food	0.00%	0.00%	0.16%	0.00%	0.00%
Machines	0.00%	0.00%	0.04%	0.00%	0.00%
Metals	0.00%	0.00%	0.01%	0.00%	0.00%
Minerals	0.00%	0.00%	0.11%	0.00%	0.00%
Textiles	0.00%	0.00%	0.17%	0.00%	0.00%
Vehicles	0.00%	0.00%	0.15%	0.00%	0.00%
Wood-Paper	0.00%	0.00%	0.05%	0.00%	0.00%
Other	0.00%	0.00%	0.09%	0.00%	0.00%
Total imports	0.00%	0.00%	0.04%	0.00%	0.00%
Chemicals	0.00%	0.00%	0.01%	0.00%	0.00%
Food	0.00%	0.00%	0.27%	0.00%	0.00%
Machines	0.00%	0.00%	0.00%	0.00%	0.00%
Metals	0.00%	0.00%	0.06%	0.00%	0.00%

	Treaty partners			Rest of the world		
	NL	EU	CL	ROW	LDC	
Minerals	0.00%	0.00%	0.01%	0.00%	0.00%	
Textiles	0.00%	0.00%	0.01%	0.00%	0.00%	
Vehicles	0.00%	0.00%	0.00%	0.00%	0.00%	
Wood-Paper	0.00%	0.00%	0.13%	0.00%	0.00%	
Other	0.00%	0.00%	0.00%	0.00%	0.00%	

Source: SEO Amsterdam Economics. The industries correspond to ISIC3. Specifically, for Food ISIC3 15-16, for Textiles 17-19, for Wood-Paper 20-22, for Minerals 26, for Metals 27-28, for Machines 29-33, for Vehicles 24-25, and for Other 36. Note that Food here is considered food manufacturing. In ISIC3, this is a broad category, ranging from the production, processing, and preservation of meat, to the manufacture of, e.g., cocoa products, pasta, and soft drinks.

# 5 Qualitative assessments of the effects of the three FTAs gathered through interviews

Stakeholder interviews and desk research confirmed our general finding that the FTAs with Chile, Mexico, and New Zealand offer positive but small export potential. This is because these markets are distant, and in the case of Chile and New Zealand, relatively small. While overall competition concerns were expected to be small, Dutch dairy producers mostly expected to face increased competition from their New Zealand counterparts.

#### Introduction

To validate and deepen the quantitative analysis described in the previous chapter, SEO conducted in-depth interviews with a wide range of stakeholders. The interviews provided an important source of information to validate and further explore the impact of the (modernised) EU FTAs with New Zealand, Chile, and Mexico. During the interviews, SEO asked stakeholders to express their views on the export and import barriers currently encountered by Dutch companies, as well as on the potential opportunities and challenges arising from the FTAs. Through these discussions, the research team gained a greater understanding of the mechanisms through which the FTAs were expected to impact the Dutch economy.

### Methodology

The evaluation team conducted the interviews in two rounds, informed by background research and model outcomes (see Figure 5.1). The first interview round included conversations with relevant experts from Dutch embassies in New Zealand, Chile, and Mexico as well as associations representing Dutch businesses in these countries (e.g., employers' organisation). This round served two primary purposes: a) to assess stakeholder views on the overall expected impact of the EU FTAs with New Zealand, Chile, and Mexico on the Dutch economy, and b) to identify specific sectors that were expected to be most affected by the FTAs. The second round of interviews subsequently focused on the sectors highlighted in the first-round interviews, as well as sectors identified as important by our quantitative analysis (descriptive statistics and gravity model).<sup>59</sup>

#### In the end, the evaluation team conducted 24 interviews with three main stakeholder groups:

- Embassies of the Kingdom of The Netherlands in New Zealand, Chile, and Mexico, and government representatives (4)
- Dutch employer organisations and business associations with links in New Zealand, Chile, and Mexico (7)
- Individual companies in highlighted sectors trading with New Zealand, Chile, and Mexico (13)

The evaluation team subsequently also supplemented and validated certain interview findings with desk research. We conducted desk research on the key sectors identified to 1) explain gravity model results, 2) prepare

The evaluation team conducted interviews with sectors identified as "important" based on the gravity model, interviews, or existing trade statistics. Consequently, not all sectors were included in the second round of sector-specific interviews.

questions for interviewees, 3) expand on insights provided by interviewees, and 4) uncover alternative views (in the media or by other studies) on the potential sector impacts of the FTAs.

Figure 5.1 We conducted the interview in two phases, informed by background research and model outcomes



Source: SEO Amsterdam Economics.

## Main findings

#### **Exports to New Zealand, Chile, and Mexico**

New Zealand

Interview partners broadly agreed that opportunities for increasing Dutch exports to New Zealand are limited. Many of them did not perceive New Zealand as a compelling market for exporting goods and services, due to the large geographical distance and the relatively small size of the country and population. Some stakeholders also noted that, except for some larger companies, the small market size of New Zealand may also serve as a deterrent for establishing local subsidiaries, as the limited potential for turnover could fail to justify the start-up and operational costs. Many interviewees also highlighted the importance of other barriers in preventing Dutch companies from exporting to New Zealand. For example, interviewees active in the flower bulb sector cited stringent safety requirements as a significant non-trade barrier influencing their exporting decisions. In addition, interviewees active in the dairy sector mentioned the conservative production practices in New Zealand, and the lack of innovation-fostering subsidies from the government. Interviewees noted that the interest in becoming a supplier to the New Zealand dairy sector was hindered by the above-mentioned existing limitations within the enabling environment. It is important to note that these limitations fall outside the scope of any FTA.

While the Netherlands is known to have a comparative advantage in horticulture, most interview partners did not expect the new FTA to have much impact on Dutch horticulture exports to New Zealand. Interviewees in this sector noted that the trade relationship between the Netherlands and New Zealand is primarily marked by Dutch enterprises establishing subsidiaries in New Zealand to leverage the advantages of year-round production. Due to the opposite seasons, tulips, flower bulbs, and seeds are already produced in New Zealand by Dutch subsidiaries and re-exported to third countries. According to trade data from the International Trade Centre, the Netherlands already accounts for most of the flower bulbs produced for international trade. Although transit times and import duties will be reduced with the new FTA, interview partners did not expect a noteworthy increase in

For example, dairy farmers in New Zealand usually do not make use of robotic cow milking systems and machinery.



New Zealand has a relatively small population size of around 5 million people.

demand from New Zealand because of the stringent safety measures, such as biosecurity and phytosanitary requirements that make exporting to New Zealand less appealing for Dutch companies.

Multiple interviewees suggested that the new FTA might give rise to additional opportunities for Dutch businesses in the transport and machinery sectors. This FTA will lead to a reduction in duties on machinery imports from 5 to 0 per cent, <sup>62</sup> creating a more favourable trading environment. Furthermore, there is already a significant volume of machinery exports from the Netherlands to New Zealand (see Chapter 2), indicating the presence of established trade networks and existing demand. Additionally, the Netherlands has a technological advantage over New Zealand in terms of harvesting and agricultural equipment, presenting an opportunity for Dutch businesses to export their advanced technologies to the New Zealand market. Similarly, Dutch companies already export a large volume of vehicles (e.g., trucks and ships) to New Zealand, implying existing trade relations and local demand (see Chapter 2). These firms will also face lower import barriers and can be more competitive in New Zealand because of the FTA.

#### Chile

Multiple interview partners suggested that the modernisation of the FTA with Chile brings forth opportunities for several Dutch sectors, including dairy and horticulture. Notably, Chile stands out as one of the wealthier countries in the region, granting its population greater purchasing power to acquire higher-end Dutch products. Also, many interviewees viewed Chile as a stable country in terms of policies with business-friendly regulations. Moreover, as confirmed by country level data, interviewees noted that the Netherlands and Chile have divergent areas of expertise and production capabilities. This contrast could open up greater opportunities for mutually beneficial trade. However, most interview partners stated that there are also several barriers to trading with Chile such as strict phytosanitary requirements, language barriers, and the relatively small market size.

Representatives from the Dutch dairy sector acknowledged the (small) positive aspect of tariff elimination on dairy products. According to interviewees, there are two main factors that contribute to the favourable conditions for Dutch dairy exporters to explore and potentially expand their presence in the Chilean market: 1) the dairy sector in Chile is relatively small, and 2) there is notable demand for dairy products in Chile driven by consumer preferences and the higher spending capabilities of the Chilean population (relative to other countries in the region). Consistent with the projected growth at the EU level, <sup>64</sup> interviewees noted that they foresee the largest benefits in the dairy sector among cheese exporters. Currently, cheese already constitutes the largest dairy export product from the Netherlands to Chile (see Chapter 2) and interview partners expected this to increase with the elimination of the tariff. Nevertheless, the initial tariff was already relatively low at 6 per cent, as noted by interviewees, meaning that the potential benefits from tariff elimination are not expected to be substantial. Therefore, although multiple interviewees recognised the potential of the Chilean dairy market, they also perceive the potential for Dutch dairy exports to be relatively limited in scale.

BKP Development Research & Consulting. (2019). Sustainability Impact Assessment in Support of the Negotiations for the Modernisation of the Trade Part of the Association Agreement with Chile. European Commission. Retrieved from <a href="https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/1b9340d6-ce09-4be8-b501-7ec753cc70ce/details?download=true">https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/1b9340d6-ce09-4be8-b501-7ec753cc70ce/details?download=true</a>



European Commission (June 30, 2022). <u>Key elements of the EU-New Zealand trade agreement (europa.eu)</u>.

Chile's GDP per capita is 50 per cent higher than the Latin America and Caribbean average (World Bank Development Indicators, 2022)

Despite flower bulbs already being exempt from import tariffs, 65 interviewees emphasised the importance of this FTA to focus on the significant bilateral trade relations in flower bulbs between Chile and the Netherlands. Interview partners viewed Chile as an interesting market for Dutch flower (bulb) producers (e.g., lilies and tulips) and they noted that the bilateral relation in the flower bulbs sector is twofold. On the one hand, Dutch producers directly export flower bulbs to Chile. On the other hand, there are subsidiaries of Dutch companies in Chile that cultivate and export flower bulbs to third countries. Interviewees indicated that these subsidiaries use Dutch inputs and therewith contribute to Dutch exports as well. Multiple interviewees also pointed Chile out as an interesting country for flower production, mostly due to the opposite seasons (as compared to the Netherlands) and the diverse set of ecosystems in the country. Furthermore, interviewees highlighted that the stability of plant health regulations in Chile adds to the country's appeal as an attractive market for flower production/exporting. Additionally, interviewees stressed the significance of incorporating plant breeder's rights provisions into the FTA and checking the compliance of these rules. Chile's duration of plant breeder's rights is generally shorter than in the EU, 66 making it less favourable for Dutch horticulture firms to be active in Chile. Interviewees hoped this FTA would play a role in addressing this issue. 67 Considering that the new FTA is not expected to bring significant changes for this product, interview partners did not anticipate a substantial impact on trade in flower bulbs.

**Multiple interviewees anticipated that the FTA would lead to a growth in machinery exports as tariffs are eliminated**. Interview partners highlighted that the Dutch machinery sector, especially in areas such as dredging, soil infrastructure, and logistics solutions for the mining sector, was already an important sector for exports to Chile. Additionally, interviewees noted that the tariff elimination will make it more interesting for Dutch machinery manufacturers serving the dairy and agricultural sectors to export their products to Chile. Whilst the Netherlands exports a high volume of machinery, these trade flows between Chile and the Netherlands are sporadic, with exports occurring a few times per year dependent on demand.

However, interviewees emphasised several common obstacles with Chile, including protectionism, relatively small market size and language barriers. Firstly, interviewees perceived Chile as a protectionist country due to non-tariff barriers, particularly stringent hygiene and health standards imposed on agricultural products that are not all addressed in the FTA. Secondly, the limited size of the Chilean market constrains overall opportunities for Dutch companies seeking to export to Chile. Lastly, interviewees mentioned that the language barrier can complicate business operations and interactions in the Chilean market.

#### Mexico

Interviewees also saw opportunities for several sectors as a result of the modernisation of the FTA with Mexico, including dairy, meat, horticulture, machinery, and the automotive industry. However, multiple interview partners noted that there are several barriers to trade with Mexico such as the small market, the language

Annex II - Section 2 Chile's Tariff Elimination Schedule. (2022). Foreign Trade Information System. http://www.sice.oas.org/trade/chieu\_e/anex2B.pdf



The 2002 FTA between the EU and Chile had already eliminated tariffs on flower bulbs either immediately upon the Agreement's enforcement in 2003 or following a transitional period of four years (EU - Chile FTA, 2002)

Through the EU Plant Variety Rights system, plant breeders in the EU are typically protected for a period ranging from 25-30 years, depending on the species, as per the Chilean law No. 19.342, the duration is typically around 20 years.

Furthermore, interviewees expressed their disappointment with the current arrangement of plant health regulation discussions being held at the EU level. They advocated for national-level negotiations, highlighting the Netherlands' expertise in the field. However, Chile favours engaging in these negotiations with the EU due to the free trade between EU countries, acknowledging the potential for disease spread across the region.

barrier, complex customs regulation, and established connections with producers in the US and Canada because of the tripartite agreement "USMCA" and its predecessor "NAFTA".<sup>69</sup>

According to most interviewees, eliminating tariffs on dairy products could create small opportunities for Dutch dairy farmers exporting to Mexico, mainly considering (Gouda) cheese and milk powder. Despite strong competition from the United States and Canada, many interviewees still saw Mexico as a potential market for Dutch dairy exporters, after the increase of duty-free import quotas. This is in line with observations for the EU-level. However, interview partners pointed out that it is important to note that a large part of these opportunities for the Netherlands are contingent upon the growth in demand for high-end Dutch cheeses. Interviewees indicated that, presently, the demand for such cheeses is relatively low in Mexico, as consumers predominantly utilise cheaper cheese for processing purposes, prioritising affordability over quality and taste according to interview partners. Interviewees perceived these divergent consumer preferences and the strong connection to suppliers from the US as significant barriers to fully capitalising on the advantages provided by this FTA.

Interviewees did not foresee substantial changes in the Dutch horticulture exports to Mexico, due to already existing preferential provisions and the limited importance of price competition for Dutch producers. Interviewees mentioned that the potential opportunities for Dutch exports to Mexico in the horticulture sector mainly lie in the areas of flower bulbs and vegetable seeds. Vegetable seeds are exported to Mexico for the cultivation of vegetables which are then exported to the US. The Netherlands already exports flower bulbs to Mexico, predominantly lilies, which are planted locally for sale in the domestic market. However, interviewees did not foresee a substantial increase in exports, because Dutch flower bulbs and seeds producers already dominate the world market and therefore hardly engage in price competition. Moreover, Dutch producers were already able to export at zero tariffs before the draft modernisation of the FTA. Therefore, interviewees foresaw limited overall impact on the export of Dutch flower bulbs.

Persistent non-tariff barriers related to food safety hamper the export of pork to Mexico, but interviewees highlighted the potential niche market in the export of mechanically separated meat. The modernised FTA presents an opportunity for the Dutch meat sector as it eliminates tariffs on pork, <sup>73</sup> and Mexico is one of the largest importers of pork. However, according to interviewees, Dutch meat producers are unable to comply with a non-tariff barrier related to food safety regulations that remains in place. This implies that no pork or any other type of meat can be exported to Mexico regardless of tariff elimination. That being said, representatives from the poultry sector viewed Mexico as a potential niche market for selling mechanically separated meat (MSM) products, which is a waste product that is not consumed within the Netherlands and is currently only used as an export product.

According to interviewees, the FTA modernisation would place Dutch exporters of machinery more at equal footing with competition from, for example, the US. The largest trading partner of Mexico, the US, does not face

Before the modernisation, the tariff for pork meat stood at 20 per cent.



E.g., the United States accounts for 80 per cent of Mexico's cheese imports, as opposed to 9 per cent for the Netherlands (USDA, 2021)

LSE Consulting. (2020). Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the global agreement with Mexico: Final report. European Commission: Directorate-General for Trade. Retrieved from <a href="https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/7db179f8-18cc-11eb-b57e-01aa75ed71a1</a>

The US Department of Agriculture also indicated in its annual report on the Mexican dairy market that "Imported cheeses do not directly reach most consumers; rather, they are used for ingredients in other food products (e.g., pizza). For direct cheese purchases, consumers still rely heavily on local cheeses, which are available at affordable prices" (USDA, 2021)

In 2022, the Netherlands accounted for 81 per cent of all flower bulbs exported from within the EU (Eurostat, 2023)

any barriers regarding machinery, and consequently, the removal of any import tariffs and taxes that are currently levied would place Dutch exporters at equal footing. Interviewees noted that one key aspect of the agreement is the ability to become an approved exporter which could allow exporters to benefit from reduced tariffs when exporting goods. Once authorised, the agreement could hence generate substantial cost savings for Dutch machinery firms operating in Mexico, creating opportunities to shift a major part of the supply chain from US to Dutch companies exporting machinery to Mexico according to interviewees. At EU-level, earlier research expected a decrease of exports of electrical machinery by 41 per cent, whilst exports of 'other machinery' was projected to increase by 64 per cent.<sup>74</sup>

However, interview partners did not perceive Mexico as a compelling market for exporting goods due to trade barriers such as the strong established relations with the US, its relatively small size, and a language barrier. Other (non-tariff) barriers for Dutch companies exporting to Mexico included transparency differences in import customs procedures and internal corruption issues. The language barrier further complicates import customs procedures and trade certifications for Dutch companies in Mexico. Whilst the FTA modernisation would contribute to transparency, accountability, and good governance in trade-related activities, enhancing the overall trade environment between Mexico and the EU, it is important to note that it may not comprehensively address all existing barriers. Overall, expected (increased) opportunities for exporting to Mexico are therefore limited. Many interviewees did find the EU FTA with Mexico most interesting in terms of opportunities for the Netherlands, compared to Chile and New Zealand.

#### Imports from New Zealand, Chile, and Mexico

New Zealand

The EU is an interesting market for New Zealand dairy exporters, according to interviewees. The EU and New Zealand are significant players in the global dairy industry, with both regions having a prominent role in dairy production. New Zealand, in particular, relies heavily on dairy as its main exporting sector. Yet, the current volume of dairy exports from New Zealand to both the EU and the Netherlands remains relatively low, accounting for less than 2 and 1 per cent of total dairy imports, respectively. Hence, there is considerable room for expansion in this regard. In addition, interviewees highlighted that New Zealand is also known for producing high quality products, and especially butter imports could increase competition for Dutch companies. Considering dairy, the FTA mostly also focused on reducing the rates for butter, milk, and milk powders. With the implementation of the FTA, interviewees anticipated that New Zealand's competitiveness in the EU dairy market would strengthen, therewith potentially affecting the Netherlands and other dairy-producing countries within the EU.

Interviewees expected a positive but slight increase of the imports of lamb meat from New Zealand, as a result of the increased quota. This situation increases competition for Dutch sheep meat producers, especially when considering that New Zealand lamb meat is widely renowned for its high quality. However, interviewees noted that the Dutch sheep meat market is relatively small, with only a limited number of producers and low overall domestic consumption. As a result, interviewees expected the potential gains for Dutch consumers and losses for Dutch producers to be relatively modest.

However, the entry of New Zealand exporters could be limited by the quota regulations outlined in the FTA, according to interviewees. Interviewees did not anticipate a significant impact from these tariff reductions as the

LSE Consulting. (2020). Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the global agreement with Mexico: Final report. European Commission: Directorate-General for Trade.



tariff rate quotas limit the potential imports from New Zealand. Interviewees also described the FTA as one with 'mixed emotions' when it comes to dairy. Whilst some interviewees reflected on concerns about increased competition, others highlighted the benefits of market access. Interviewees suggested that the existing dairy quotas already often remained underutilised, as is also shown by the data. Furthermore, interviewees noted that while Dutch dairy exporters primarily cater to the European mainland, New Zealand predominantly targets the Asian market, particularly China. According to interviewees, the elimination of trade barriers would enhance the appeal of exporting to the European Union for New Zealand dairy exporters. Also, multiple interviewees in the dairy sector mentioned that Dutch dairy is also being exported to Asia and China, so the Netherlands and New Zealand are partly catering the same market.

#### Chile

Most interviewees did not perceive increased competition from Chile as a significant risk for Dutch producers. In line with the data in Chapter 3, interviewees mostly see Chile's export opportunities mostly in goods such as lithium, fresh fruits, and copper. Since Chilean producers specialise in fresh fruits that differ from those produced by Dutch producers, and Dutch firms are not involved in the production of lithium and copper, no significant increase in competition was anticipated by the interviewees. However, Dutch consumers may benefit from a slightly lower overall price level.

However, interviewees saw a potential risk for the poultry sector, particularly regarding the unequal adherence to standards and regulations. Interviewees active in the poultry sector voiced criticism on the modernisation of the agreement, expressing concerns about the provision of additional market access for Chilean poultry products through duty-free quotas. They highlighted the potential issue that this modernised agreement could allow Chile to trade without having to comply with the same standards and regulations that Dutch processors are bound by. The cost savings resulting from the non-compliance could influence Chile's cost competitiveness compared to Dutch poultry products.

#### Mexico

**Similarly, interviewees did not foresee significant competition coming from Mexico, except potentially in the case of beef.** The Netherlands primarily imports raw materials and fruits from Mexico and has a rather defensive interest in beef, grains, and oilseeds according to interviewees. While the meat sector foresees an increase in beef imports, interviewees did not expect it to be substantial.

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## Appendix A

#### Box A.1 Sensitivity of industry-level trade and welfare to trade liberalisation

Whilst our gravity model can only assess the general equilibrium welfare effects for manufacturing trade and output, we can get a feeling for the relative responsiveness of industry-level trade liberalisation by investigating two key parameters of our gravity model: the direct effect of FTAs on bilateral trade and the elasticity of substitution. The direct effect of FTAs reflects the changes in bilateral trade resulting from trade liberalisation, without accounting for trade diversion or price adjustments. It is therefore strictly a partial equilibrium effect. The higher this effect, the higher the impetus for trade to increase (decrease) when the depth of an FTA increases (decreases). The depth of an FTA is determined by, for example, the number of issues and industries addressed. The direct effect of greater FTA depth is practically always positive: countries are encouraged to trade more bilaterally thanks to reduced trading costs. In the short run, supply of goods is generally fairly sticky and cannot change drastically overnight. The size of the direct effect depends partly on the elasticity of substitution, and partly on the effect of an FTA on trade costs. The bigger the direct effect is, the greater the need for trade diversion and price changes to keep the system balanced, both of which are general equilibrium effects. A low elasticity of substitution implies that the trade diversion effects are modest. Hence, if supply cannot or does not immediately change according to the shifts in demand, and trade diversion does not offset the direct effects (fully), then prices must increase to bring supply and demand back into equilibrium. The lower the elasticity, the less sensitive demand is to changing prices. A low elasticity of substitution therefore suggests that prices must change more after trade liberalisation to restore equilibrium between supply and demand than if the elasticity were high (CPB, 2020).

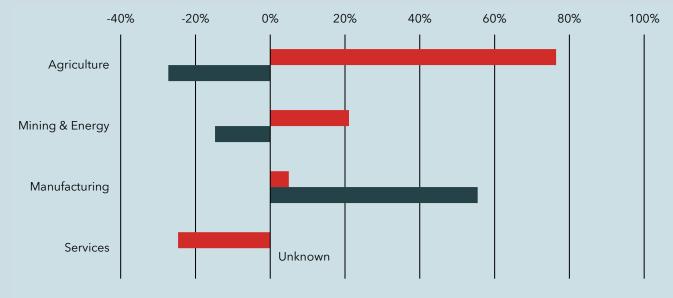


Figure A.1 Services less responsive to trade liberalisation

■ Percentage deviation from mean FTA estimate ■ Percentage deviation from trade elasticty from baseline

Source: SEO Amsterdam Economics based on Borchert et al. (2022) and Fontagné et al. (2022). Our baseline trade elasticity is 4, which is a default value in the literature (see also CPB, 2020).

Compared to the average effect, the direct effects from FTAs are larger than average (in decreasing order) for agriculture, mining & energy, and manufacturing, and less than average for services (see Figure A.1). Borchert et al. (2022) estimate direct FTA-effects for 170 industries and summarise their estimates by broad

industry groups (agriculture, mining & energy, manufacturing, and services). Figure A.1 reports these broad industry estimates relative to the estimate for the average (across all industries) direct effect of FTAs. This suggests that agriculture is the most sensitive to trade liberalisation, having the highest direct effect of FTAs on bilateral trade. This means that bilateral trade can be expected to increase the fastest for agriculture (compared to other industries). Mining and manufacturing trade also increase faster than average, but not as fast as agriculture. Trade in services increases less than average. This sluggish direct effect of trade liberalisation on services trade matches the insights from the literature that services typically are less tradable. Services are generally less tradeable than goods, due to often being location-bound. Note that these direct effects cannot be directly interpreted as total effects. Trade diversion effects could strengthen or dampen these direct effects, but without an explicit (gravity) model, we cannot say in what direction and to what extent.

**Substitution elasticities are lower for agriculture than they are for mining & energy, and manufacturing (in that order).** Fontagné et al. (2022) estimate elasticities for disaggregated products and product groups. We manually match and/or average product group estimates to the direct FTA effect industry groups. Fontagné et al. (2022) report comparatively low elasticities for agriculture, and mining & energy, and comparatively high elasticities for manufacturing trade. Fontagné et al. (2022) generally exclude services from their estimations. However (and once more), given that services are commonly supplied locally, we would expect relatively low elasticities.

We emphasise that without an explicit model of bilateral trade and retained output, the relative differences in the direct effects of FTAs on trade or the elasticities of substitution cannot be interpreted as welfare effects or total effects on (bilateral or total) trade. We leave the extension of our gravity model to structurally incorporate agriculture, mining & energy, and services for future research.