



Impacts of the EU-Mercosur trade agreement on the Dutch economy

Caitlyn Carrico, Siemen van Berkum, Andrzej Tabeau, Jakob Jager, Nora Plaisier

COURTESY COPY

Impacts of the EU-Mercosur trade agreement on the Dutch economy

Caitlyn Carrico,¹ Siemen van Berkum,¹ Andrzej Tabeau,¹ Jakob Jager,¹ Nora Plaisier²

1 Wageningen Economic Research

2 Ecorys Rotterdam

This study was carried out by Wageningen Economic Research and Ecorys, as commissioned by the Government of the Netherlands. Funding was provided by the Ministry of Foreign Affairs.

Wageningen Economic Research

Wageningen, September 2020

REPORT
2020-065
ISBN 978-94-6395-685-7

Carrico, C., S. van Berkum, A. Tabeau, J. Jager, N. Plaisier, 2020. *Impacts of the EU-Mercosur trade agreement on the Dutch economy*. Wageningen, Wageningen Economic Research, Report 2020-065. 54 pp.; 23 fig.; 11 tab.; 27 ref.

Deze studie beoordeelt de economische effecten van de overeenkomst EU-Mercosur voor Nederland. Op macro-economisch niveau wordt de potentiële winst van de bbb-groei geschat op 0,03%, wat neerkomt op 287 miljoen euro, uitgaande van een volledige uitvoering van de overeenkomst in 2035. Op sectorniveau verslechtert de Nederlandse bilaterale handelsbalans met Mercosur voor landbouwproducten (behalve zuivel), maar een substantiële groei van de handelsbalans in de verwerkende industrie en de dienstensector resulteert in een algehele positieve netto handelswinst voor Nederland. Op bedrijfsniveau zijn de geschatte inkomenseffecten positief voor varkens- en pluimveebedrijven, vrijwel nul voor melkvee- en akkerbouwbedrijven en negatief voor rund- en kalfsvleesbedrijven.

This study assesses the economic effects of the EU-Mercosur Agreement for the Netherlands. At the macroeconomic level, potential gains in GDP growth are estimated to be 0.03%, amounting to 287m euros, assuming a full implementation of the Agreement by 2035. At the sectoral level, the Dutch bilateral trade balance with Mercosur contracts for agricultural products (except for dairy), but substantial growth of the trade balance in the manufacturing and service sectors results in an overall positive net trade gain for the Netherlands. At the farm level, estimated income effects are positive for pig and poultry farms, close to zero for dairy and arable farms, and negative for beef and veal farms.

Key words: Trade, agrifood, Netherlands, EU, Mercosur, Brazil, Argentina, Uruguay, Paraguay

This report can be downloaded for free at <https://doi.org/10.18174/539424> or at www.wur.eu/economic-research (under Wageningen Economic Research publications).

© 2020 Wageningen Economic Research
P.O. Box 29703, 2502 LS The Hague, The Netherlands, T +31 (0)70 335 83 30,
E communications.ssg@wur.nl, <http://www.wur.eu/economic-research>. Wageningen Economic Research is part of Wageningen University & Research.



This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.

© Wageningen Economic Research, part of Stichting Wageningen Research, 2020
The user may reproduce, distribute and share this work and make derivative works from it. Material by third parties which is used in the work and which are subject to intellectual property rights may not be used without prior permission from the relevant third party. The user must attribute the work by stating the name indicated by the author or licensor but may not do this in such a way as to create the impression that the author/licensor endorses the use of the work or the work of the user. The user may not use the work for commercial purposes.

Wageningen Economic Research accepts no liability for any damage resulting from the use of the results of this study or the application of the advice contained in it.

Wageningen Economic Research is ISO 9001:2015 certified.

COURTESY COPY Wageningen Economic Research Report 2020-065 | Project code 2282500386

Cover photo: Shutterstock

Contents

	Executive Summary	5
1	Introduction	8
2	Dutch trade relations with Mercosur under current trade conditions and expectations of Agreement impacts on bilateral trade with Mercosur	10
2.1	Dutch trade relations with Mercosur countries	10
2.1.1	Importance of trade in goods and services with Mercosur	10
2.1.2	Dutch bilateral trade relations: major products imported	11
2.1.3	Re-exports of imports from Mercosur countries	12
2.1.4	Dutch exports to Mercosur countries	13
2.2	Current trade conditions in bilateral trade between the EU and Mercosur	14
2.2.1	Tariff structures	14
2.2.2	Import Tariff Rate Quotas	14
2.3	Expectations of possible impacts of changes in trade conditions due to the agreement in principle	16
2.3.1	Future TRQs	17
2.3.2	Main non-tariff measures affecting EU-Mercosur bilateral trade and stakeholders' expectations on how the Agreement may reduce trade barriers from non-tariff measures	18
3	Impacts of the trade agreement on the Dutch economy	21
3.1	Description of the scenario assumptions, data used, and NTM trade costs reductions applied	21
3.2	Macroeconomic results	23
3.3	Sector specific results	27
3.4	Modelling conclusions	36
4	Income effects of the trade agreement on Dutch family farms	37
4.1	Introduction	37
4.2	Linking price changes to farm types	38
4.3	Effects of price and volume changes on farm incomes per farm type	39
5	Main findings	42
	References and websites	44
	Appendix 1 Motie Voordewind	46
	Appendix 2 Estimation of trade costs related to non-tariff measures: literature review on data sources, econometric estimations and implementation in CGE model simulations	47
	Appendix 3 Used concepts in calculating farm level effects in Chapter 4	52

Executive Summary

This study responds to the Voordewind et al. motion passed by the Dutch parliament on 4 July 2019, requesting the Government to provide a quantitative assessment of the expected effects of the EU-Mercosur Agreement for the Dutch economy. In response to this request, this study examines the effects of the Agreement on Dutch trade flows, national income and production, looking across agricultural, industrial, and services sectors. The analysis highlights effects on the following specific sectors: poultry meat, dairy, beef, pork, animal feed, sugar, ethanol, chemical, pharmaceutical, machinery, and trade and transport services. Farm level analysis is performed for Dutch family businesses in the meat and dairy sectors.

After twenty years of negotiations, the EU-Mercosur Agreement (hereafter referred to as the Agreement) was reached on 28 June 2019. The EU and Mercosur agreed to 91% and 95% tariff liberalisation, respectively, implemented over a 15 year period which is to begin from the ratification of the agreement. In addition, new tariff rate quotas (TRQs) are to be implemented, some of which expand upon existing TRQs. Further, there are provisions intended to facilitate market access, including those addressing Sanitary and Phytosanitary Standards (SPS) and Technical Barriers to Trade (TBT). The Agreement in Principle (the public document released by the European Commission outlining the Agreement) indicates that the Agreement will provide significant new opportunities for firms to provide services and to invest on both sides of the Atlantic, but details on services and establishment provisions are lacking at the time of writing the present report.

Current Dutch trade relations with Mercosur are limited, with Dutch exports to Mercosur comprising only 2.3% of its total non-EU-oriented exports in 2018. This is similar to the EU as a whole, for which exports to Mercosur comprise just 2.2% of total extra-EU trade. Imports from Mercosur are likewise proportionally low, with Dutch and EU imports from Mercosur comprising 2.7 and 2.0% of extra-EU imports, respectively.

In terms of current tariff structure, Dutch and other EU exporters currently face much higher tariffs to enter the Mercosur market, relative to Mercosur exporters entering the EU market. For example, the trade-weighted average of tariffs on Mercosur goods imported into the EU is 3%. However, the trade-weighted average of tariffs on EU goods into Mercosur ranges from 7 (for Paraguay) to 14.4% (for Argentina). Given, the difference in relative tariffs facing Dutch and EU exporters versus Mercosur exporters, Dutch and EU exporters would expect relatively larger gains from the tariff liberalisation under the Agreement.

The EU applies tariff rate quotas (TRQs) on beef, poultry, sugar, and garlic imports from Mercosur. While presently various TRQs are applied to beef from each of the Mercosur countries, TRQs on poultry and sugar are only applied on imports from Brazil, and TRQs on garlic are only applied on imports from Argentina. Under the Agreement, these TRQs are replaced by new Mercosur-wide TRQs for beef, poultry, pork, ethanol, rice, honey, sweetcorn, cheese, milk powders, and infant formula. TRQs on sugar are introduced for Brazil and Paraguay only. Mercosur, in turn, will introduce TRQs on cheese, milk powders, and infant formula coming from the EU. The TRQs implemented under the Agreement have quota levels often higher than current levels of trade and, as such, are anticipated to spur trade.

Beyond costs at the tariff-line, other important barriers to trade presently exist between the Netherlands (and the EU at large) and Mercosur, often arising from non-tariff measures (NTMs). The EU Market Access Database (MADB) reveals a number of SPS- and TBT-related issues which European exporters face when entering the Mercosur market, including insufficient protection of intellectual property rights (IPR) and geographical indications, and extraordinarily lengthy procedurals for instance to carry out phytosanitary checks (pest risk analysis) or to approve an export permit. While provisions in the Agreement are intended to improve upon many of these issues, the extent of the issues at hand suggest that amelioration may be a timely and intensive process.

Interviews with Dutch business representatives and stakeholders in agricultural, industrial and services sectors were performed to gain in-depth perspective into expectations around the Agreement. While stakeholders pointed to the expected trade increasing effects of reduced tariffs over time, they also corroborated an analysis of MADB, showing doubt as to whether the agreement will result in further alignment of SPS and TBT rules and implementation practices in a way that increasingly will facilitate trade. The current agreement text that is public mainly describes a process towards working together to achieve common standards rather than indicating what goals will be achieved when. Hence, it is far from certain whether this trade agreement will remove the main non-tariff trade barriers, as expressed by business representatives.

To quantitatively assess the impact of the EU-Mercosur Agreement, the MAGNET model, a global economic model with international trade linkages, was used to get insight into the macroeconomic and sectoral level effects from a hypothetical full implementation of the Agreement by 2035. From the changes in tariffs which are set at detailed product-level (at 8-digit tariff line), changes in composite tariffs and export taxes for aggregate commodities were computed. Further, the new TRQs were implemented. In addition, proposed reductions to trade barriers from NTMs are modelled using estimates of NTM related trade costs from the World Bank for goods and estimates from both the World Bank and the OECD for services.

Model results show very moderate estimated macroeconomic effects of the EU-Mercosur agreement for the Netherlands, with expected gains in GDP of 0.03%, amounting to 287m euros in 2035, assuming a full implementation of the Agreement by that year and compared to a baseline scenario in 2035 without the EU-Mercosur Agreement. The Rest of the EU27 is estimated to gain 0.02% in GDP, or 2.9bn euros. The relatively small percentage effects largely result from the economic composition in the Netherlands and EU, with the largest sectors in terms of output being services, accounting for more than two-thirds of total economic output in both. Therefore, the agriculture and industry sectors which are affected most from the price changes of liberalisation (through tariffs and TRQs) of the Agreement are in fact minority components of the Dutch and European economies.

At the sectoral level, there are positive and negative effects for the Dutch economy, driven largely by relative trade exposure across sectors. In the Netherlands, the highest production gains are estimated for the Other Transportation Machinery (not comprising motor vehicles) (1.42%), Pharmaceutical (1.16%), and Poultry Meat (0.93%) sectors. The Poultry Meat sectoral gains are driven by indirect effects of the Agreement. As the Poultry Meat sector in the Rest of the EU is expected to contract under competition from Mercosur, there is enough increasing demand that allows the competitive sector in the Netherlands to expand sales to the Rest of the EU27. The Other Transportation Machinery and Pharmaceutical sectors are driven by direct effects of the Agreement. As these sectors have the highest relative levels of export exposure to Mercosur, production expansion is driven by export growth. Sectoral changes in the real wage bill (the labour component of value-added) follow production effects.

The agricultural sectors in the Netherlands have the highest levels of import exposure, compared with the industrial or services sectors. Therefore, these sectors face relatively higher levels of competition from increased imports from the Mercosur Four after liberalisation under the Agreement. In particular, the Beef sector and the Fruit and Vegetables sector, which both face relatively high levels of import exposure, contract by 0.61 and 0.21%, respectively. As Beef sector contracts so does the accompanying livestock sector, the Cattle sector, by 0.49%. A caveat is that these sectors are aggregate, corresponding to a variety of underlying products, only some of which are traded at the HS line.

Another important note is, that due to current differences in veterinary standards (e.g. EU ban on the use of the feed-additive ractopamine and animal identification requirements) and a relatively small TRQ, it is not expected that EU pork imports from Mercosur will increase noticeably. Similarly, the increase in beef imports from Mercosur into Europe would be dependent upon compliance with SPS standards in accordance with EU regulations. Also in recent years Brazil's poultry export has failed at times to comply with EU food safety standards. Therefore, the projected increase of Mercosur poultry exports to the EU is highly conditional to further investments in production methods and food safety inspection systems in the Mercosur countries to meet EU regulations.

Overall, the net trade gains for the Netherlands are positive, as seen by the change in the sectoral trade balance for bilateral trade between the Netherlands and Mercosur in Figure ES.1. The bilateral trade balance contraction for agricultural products indicates higher import growth than export growth for these products (with the exception of dairy). However, the contraction is relatively small compared with the more substantial growth of the trade balance in the manufacturing sectors, and thus, in total across sectors, the growth in trade balance is positive.

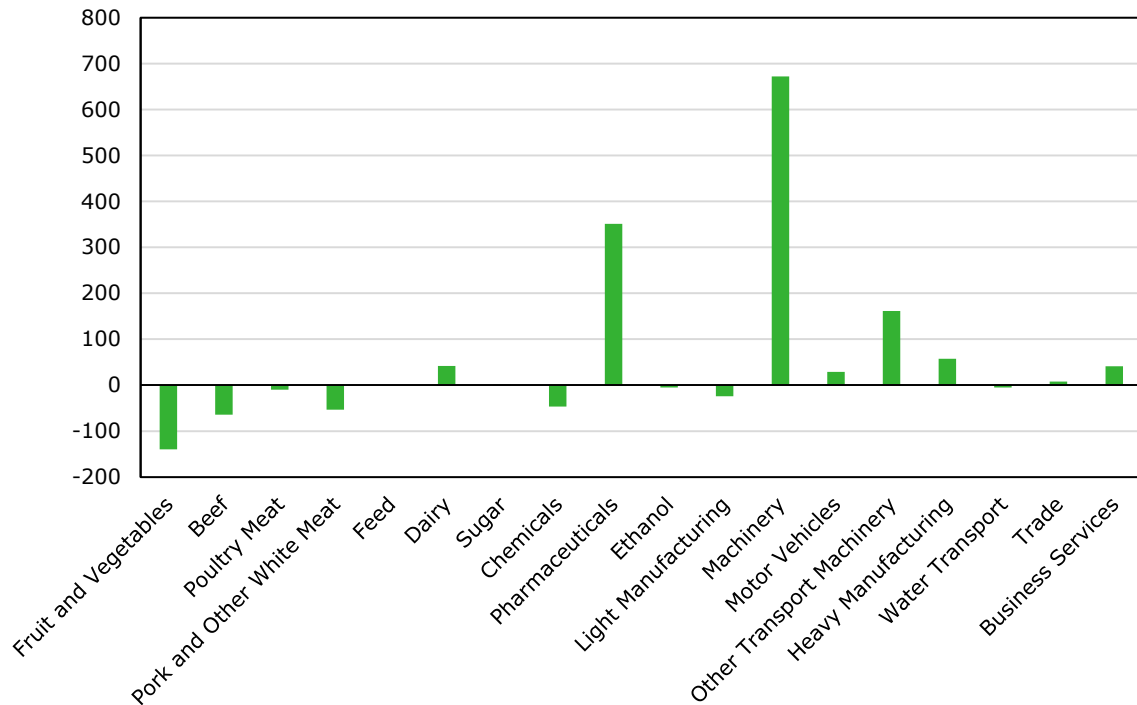


Figure ES.1 Change in Netherlands-Mercosur Trade Balance in 2035 under Mercosur Agreement, million €

Based on the macro-level price and volume changes for agricultural products, a farm-level model is used to estimate income effects to be positive for pig farms (on average 2,100 euros per farm) and poultry farms (700 euros for broiler farms; 1,200 euros per laying hens farm). Income effects for dairy and arable farms are close to zero. Poultry and pig farms benefit because of lower feed prices. Income effects are negative for beef and veal farms. The average income effect of 800 euros for veal farms translates into a 2% decline in the 2017-2019 average income level. Of these farms, especially income at the larger ones where adult cattle for beef is held as well will be negatively impacted. For beef cattle farms – a relatively small-scale farm type in the Netherlands with long-term negative income levels - the estimated negative effect of 700 euros results in a 5.4% decline in average income per farm. The caveat to these farm-level outcomes is that structural changes to the sector over time have not been taken into account. Therefore, while changes in returns are included, adjustments in scale and other costs are not included in farm level simulations.

1 Introduction

On 28 June 2019, the EU and the four founding members of Mercosur - Argentina, Brazil, Paraguay and Uruguay - reached an 'agreement in principle' on a free trade agreement (FTA) as part of a wider association agreement (AA). Following this agreement, the Dutch parliament passed the Voordewind et al. motion on 4 July 2019, requesting the government to 'quantitatively map out the advantages and disadvantages of trade with Mercosur countries under the trade agreement between the EU and Mercosur for the European agriculture and horticulture sector, and in particular for the Dutch (family) farms in the meat and dairy sector' (2018-2019, 34 952, no. 75; see full text of the motion in Appendix 1). In order to comply with the motion, the Ministry of Foreign Affairs (BZ), in collaboration with the Ministries of Agriculture, Nature and Food Quality (LNV) and the Ministry of Economic Affairs and Climate (EZK) assigned Wageningen Economic Research and Ecorys to investigate the effects of the EU-Mercosur trade agreement on the agricultural sector. The study should, in addition to the sectors specifically mentioned in the motion, also look into the possible consequences of the provisional negotiation result for the Dutch economy at both macroeconomic level and for the Dutch industry and services sector.

Therefore, the aim of this study is to provide insights into the expected effects of the EU-Mercosur trade agreement for the entire Dutch economy, and in particular for the Dutch agricultural and horticultural sector, with the greatest attention paid to the Dutch meat and dairy sector. Consequences for the EU agricultural sector will also be outlined. This translates into the following sub-questions that are addressed in this study:

- What is the expected effect of the agreement on trade flows from the Netherlands to the Mercosur countries and vice versa?
- What is the expected effect of the agreement on the Dutch national income, production and labour component of value-added in general and in the three main sectors agriculture, industry and services?
- What are the expected effects of the EU-Mercosur agreement on the EU's agricultural trade flows with Mercosur and what are the economic consequences for the (main) agricultural sectors (in terms of exports and imports, production, the labour component of value-added, and prices)?
- What is the expected effect on income and production in the specific Dutch agricultural sub-sectors of poultry meat and eggs, dairy, beef, pork, animal feed, sugar and ethanol, and the chemical, pharmaceutical, machinery (including equipment), and trade and transport services?
- What are the expected effects on the income of Dutch family businesses in the meat and dairy sectors?

The study is mainly of a quantitative nature, assuming a full implementation of the agreement in 2035 (taking into account a 15 year implementation period). The quantitative analysis of the macroeconomic and specific sub-sector effects for the Netherlands is based on MAGNET, an internationally scientifically supported model of the world economy. Sector results in agriculture are translated into effects on family income by an analysis at farm level using the farm-level data on economic performances collected and processed in the Business Information Network of Wageningen Economic Research. The quantitative analysis is supplemented with literature to explain the context of the trade agreement and important assumptions affecting the quantitative outcomes. Expert inputs, including those of business representatives are used for potential non-quantifiable aspects, and in particular, this refers to impacts of non-tariff measures and other non-reported restrictions to trade that need to be identified.

Although mainly focused on the consequences for the Netherlands, this study also includes estimated effects of the EU-Mercosur trade agreement for the (rest of the) EU. There are several other studies on the expected EU-wide effects of the EU-Mercosur trade agreement, including a LSE study commissioned by the European Commission in support of the association agreement negotiations between the EU and Mercosur (LSE, 2020). Comparison of this study with that of LSE is flawed

because, in addition to some methodical differences, the latter calculates two possible scenarios of an agreement while this study analyses the outcome of the negotiations. This study is also only focused on the economic effects and not on social and/or environmental consequences as in the LSE study.

The report is structured as follows. Chapter 2 describes Dutch current trade relations and conditions, and discusses the potential impacts of the newly agreed TRQs and what business representatives expect from the publicly available agreement texts that refer to issues of non-tariff trade barriers. Chapter 3 presents the economic macro- and sector results of the trade agreement, and Chapter 4 reports how price changes as a consequence of the trade agreement will translate into income effects for different farm types in the Netherlands. Main findings are summarised in Chapter 5.

2 Dutch trade relations with Mercosur under current trade conditions and expectations of Agreement impacts on bilateral trade with Mercosur

2.1 Dutch trade relations with Mercosur countries

2.1.1 Importance of trade in goods and services with Mercosur

The Netherlands is a trading country, with international trade as an important source of income (CBS, 2019).¹ Its main markets are in the EU, and, in particular, when it comes to exports, 75% find their way to other EU countries (see Table 2.1 below). Regarding Dutch imports (including transit of imports from non-EU countries to other EU countries), 55% originate from non-EU countries; this is in contrast with the other EU27 countries which import only 34% from non-EU countries. This shows the importance of the Netherlands as 'gateway' to the EU and also highlights that, for the Dutch economy, access to imports from outside the EU is highly important.

Trade with Mercosur countries is relatively modest, as indicated by the shares of the bilateral trade with the four Latin American countries in total Dutch exports and imports in Table 2.1 (respectively 2.3% and 2.7%). The relative importance of trading with Mercosur is proportionately similar for the Netherlands and EU27. Bilateral trade with Mercosur has a particular feature: EU27 and the Netherlands export mainly industrial goods to Mercosur, whereas imports are comprised nearly equally of agricultural and industrial products.

Table 2.1 Importance of bilateral trade in Agricultural and Industrial goods with Mercosur in Dutch and EU trade relations (billion euros, except where stated otherwise), 2018

	Netherlands	EU27 a)
Total export	611	4,846
Exports to non-EU	156	1,790
Exports to M	3.6	40
Share of Export to M in non-EU exports (%)	2.3	2.2
Exports of Agricultural products to M	0.5	5
Exports of Industrial products to M	3.1	35
Share of Exports to Mercosur in non-EU-exports (%)	2.3	2.2
Total import	542	4,869
Imports from non-EU	293	1,654
Imports from M	8.1	34
Share of Import from M in non-EU imports (%)	2.7	2.0
Imports of Agricultural products from M	4.2	16.4
Imports of Industrial products from M	3.9	17.7

Source: Eurostat COMEXT. Note: agricultural products include HS01-24, 29, 40-45, and 50-52.

a) EU27 is EU28 minus the Netherlands.

The services sector in the Netherlands accounts for 80% of Gross national income and 81% of employment (CBS). Exports of services (such as services in transportation, travel, finance and

¹ See <https://longreads.cbs.nl/nederland-handelsland-2019/nederlandse-verdiensten-aan-internationale-handel/>

telecommunications) are an important source of income as well. Table 2.2 shows Dutch and EU data on trade in services and the importance of the Mercosur countries both as export market and import source of services. Data show that in 2018 Dutch exports to the four Mercosur countries accounted for almost 11% of all exports to non-EU countries, making the region (in particular Brazil) an important export market for services. Transportation services (such as storage and services provided by forwarders and shippers), charges for the use of intellectual property rights (like patents and copyright), and technical, trade-related and other business services (among others waste treatment and depollution services) are the three main export categories. The latter category is by far the major category of services imported by the Netherlands from Mercosur countries (largely from Brazil).

Table 2.2 Importance of bilateral trade in services with Mercosur in Dutch and EU trade relations (billion euros, except where stated otherwise), 2018

	Netherlands	EU27
Total export of service	210	2,219
of which to EU	136	1,258
of which to non-EU countries	74	961
of which to Mercosur countries	8	23
Share of Export to M in non-EU exports (%)	10.9	2.4
Total imports of services	207	1,908
of which from EU	108	1,133
of which from non-EU	99	775
of which from Mercosur	2	11
Share of Import from M in non-EU imports (%)	2.2	1.4

Source: Eurostat International trade in services (since 2010) (BPM6), <https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

2.1.2 Dutch bilateral trade relations: major products imported

Figure 2.1. below shows the main product categories imported from the four Mercosur countries. Main agricultural product categories are Meat, Fruits, Soybeans, Prepared vegetables & Fruits, and Residues from food industry (i.e soybean oilcakes). Regarding meat imports, this concerns in particular beef of high quality ('Hilton beef') from Argentina and Uruguay, and poultry from Brazil. Fruits are mainly citrus and melons, most is from Brazil. Soybeans come largely from Brazil, and imports of Prepared vegetables & fruits mainly consist of fruit juices from Brazil. Imports of Residues and waste from the food industry are largely oil-cakes, resulting from the extraction of the soybean oil and are mainly from Brazil and Argentina. Imports of the latter account for almost 70% of all Dutch imports of this product category from non-EU countries (see right axis of figure below). In the industrial product categories, most important import flows are in Ores, Pulp of wood and Iron. These categories concern raw materials for further processing in the steel and wood & paper processing industries. A significant share of these imports appear to be in transit to Germany and other EU-countries.

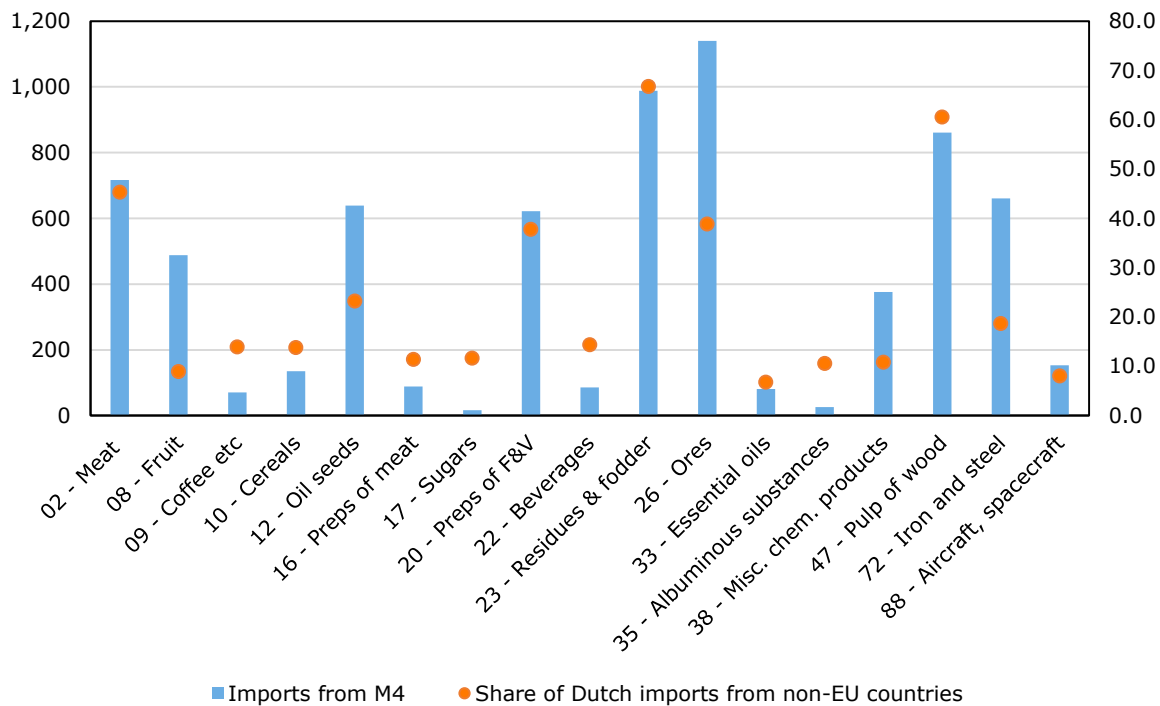


Figure 2.1 Dutch imports from Mercosur countries (in m. euros, left-hand axis; and as percentage of Dutch imports from non-EU countries, right-hand axis) data 2018) a)

a) This figure shows only imports from Mercosur that account for more than 5% of total Dutch imports from non-EU countries.

Source: Eurostat COMEXT.

2.1.3 Re-exports of imports from Mercosur countries

It is well-known that due to its geographical location, its quality infrastructure, logistical service efficiency and processing capacity, the Netherlands is a major gate for non-EU countries' exports to other EU member states, especially to a ring of countries around the Netherlands (Germany, Belgium, France and the UK in particular). Consequently, part of the Dutch imports from Mercosur is transit and/or re-exported² to EU27 markets.

An example is the operations of the soybean supply chain, in which crushers import (4.2m tonnes) soybeans (of which 24% is from Brazil) and produce soymeal for the feed industry, whereas the Dutch feed industry also imports (2.6m tonnes) soybean meal directly from non-EU countries (90% comes from Brazil and Argentina). Dutch exports of soybeans account for 1m tonnes and 3.1m tonnes of soybean meal (almost exclusively to EU member states; this amount is excluding compound feed that consist of a mix of various ingredients, including soybean meal).³

These figures show the interconnection of import and export flows on a globally operating value chain, linking businesses and traders from different countries and connecting many different industrial sectors as well. For instance, soybean oil is another product produced by soybean crushing companies, that is used in the food and in the chemical industry, among others. The complexity of the input- and output relationships between different industries makes it difficult to provide a complete and reliable insight into the extent exports consists of raw materials and/or intermediate goods previously

² Transit goods are goods that remain foreign owned and are not for the Dutch market. Imported goods that are (re)packed and/or processed before being re-exported are registered re-export.

³ Data refer to 2018 trade flows. Source: MVO, retrieved from <https://www.mvo.nl/media/handelspolitiek/mvo-soybean-infographic-final.pdf>

imported. CBS data indicate that next to soybeans and its products, imports of quality beef and orange juice from Mercosur countries are largely re-exported.⁴

2.1.4 Dutch exports to Mercosur countries

Figure 2.2 below presents Dutch exports to Mercosur of the product categories which value more than 30m euros in 2018. Major product categories are Mineral fuels (with major item 'Petroleum oils and oils obtained from bituminous minerals'), Pharmaceutical products (medicaments) and Nuclear reactors, boilers, machinery and mechanical appliances (consisting mainly of a wide variety of machinery), followed by Optical etc. instruments and apparatus (in particular, Instruments and appliances used in medical, surgical, dental or veterinary sciences) and Electrical machinery and equipment

Dutch exports of Agricultural and food products to Mercosur are modest, with major items being Prepared animal feed, Preparations of vegetables (mainly cooked potatoes, frozen) and Beverages.

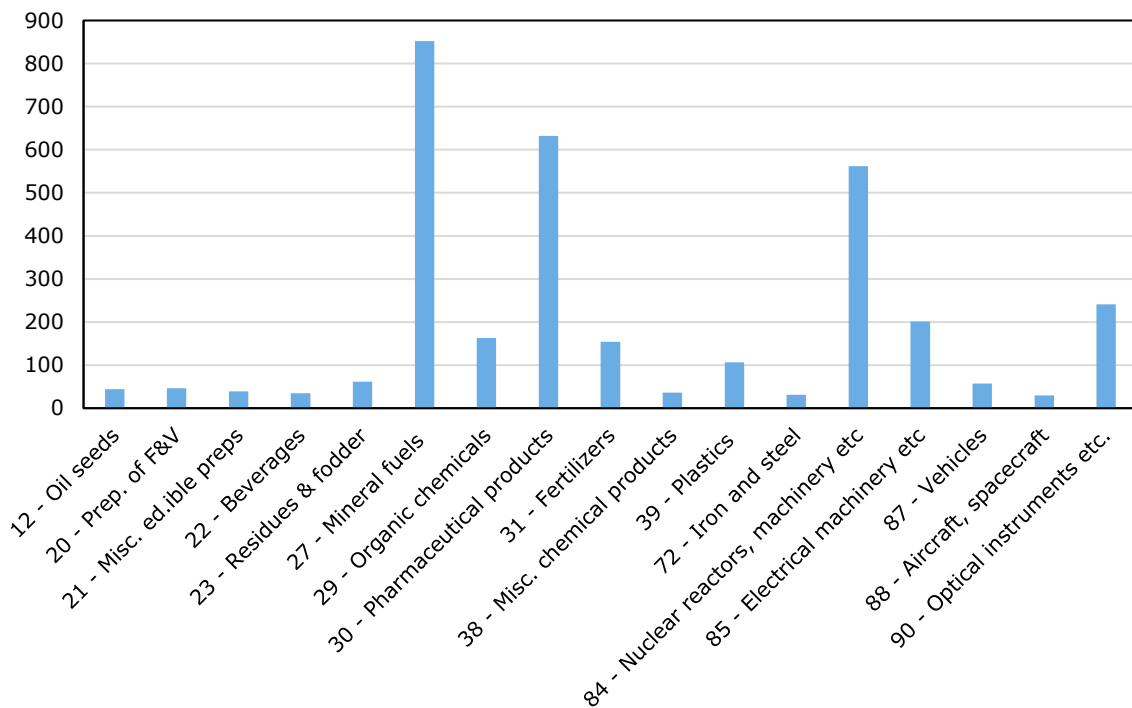


Figure 2.2 Dutch exports to Mercosur countries (in m euros, 2018) a)
a) The figure shows products with a value of 30m euros and more only.
Source: Eurostat COMEXT.

⁴ Data on re-exports of Dutch imports are on CBS Statline (<https://opendata.cbs.nl/statline/>) but only at a highly aggregated level. Data on country-specific imports (e.g. from Brazil) re-exported can only be viewed after a special request has been submitted to CBS.

2.2 Current trade conditions in bilateral trade between the EU and Mercosur

2.2.1 Tariff structures

Table 2.3 provides an overview of the protection rates of each of the four Mercosur countries and the EU. The duties referred to in the column 'Total' are an average of all products covered under HS chapter 01-97. The chapters 01-24 relate to 'Agriculture'. The tariff profiles presented in the table refer to schedules for 2018 (simple average) and 2017 (trade weighted average).⁵

Table 2.3 Applied MFN a) tariff profiles of Mercosur countries and the EU: simple average (S) and trade weighted (TW) average (in %)

	Total		Agriculture		Non-Agriculture	
	S	TW	S	TW	S	TW
Argentina	13.6	14.4	10.3	11.9	14.2	14.9
Brazil	13.4	10	10.1	13	13.9	9.8
Paraguay	9.8	7	10	13	9.7	6.4
Uruguay	10.3	10.4	9.9	12.2	10.4	10.1
EU	5.2	3	12	8.1	4.2	2.7

a) MFN = most-favoured nation. Under the World Trade Organisation (WTO) agreements, countries cannot discriminate between their trading partners. A MFN tariff is a generally applied tariff to imports according to WTO agreements. Exceptions are allowed, for instance when countries set up a free trade agreement (see www.wto.org).

Source: WTO ITC UNCTAD, World tariff Profiles 2019.

Figures in Table 2.3 show that:

- Overall, Mercosur countries have higher tariffs than the EU (calculated as 'simple' and 'trade weighted' average, see column 'Total');
- EU tariffs on agricultural products are relatively high in simple average terms (column S under 'Agriculture') whereas the trade-weighted average tariff is below those of the Mercosur countries. This is because almost 50% of EU's agricultural imports is duty-free imported and each of the Mercosur countries imports only a very small percentage of their agricultural imports duty-free⁶;
- EU tariffs on industrial goods are far below those in each Mercosur country.

Next to tariffs as a percentage of the import value, an import duty can be applied in the form of an absolute amount in euros per kg or tonne (called specific tariff). The EU applies a specific tariff for many products, such as for meat (186 tariff lines out of the 248 are linked to a specific rate), dairy (161 tariff lines out of the 172 tariff lines) and many other products. Despite this, on average (that is, when tariffs and specific tariffs are taken together) EU's tariffs are lower than those of Mercosur countries, except for HS 11 (milling industry products), HS 16 (meat preparations) HS 19 (preparations of vegetables and fruits) and HS24 (tobacco) (WTO, 2020).

2.2.2 Import Tariff Rate Quotas

Next to tariffs, the EU applies import quotas for a number of agricultural products as part of its agricultural trade regime. In its bilateral relations with Mercosur, the EU has granted the Latin American countries preferences which means that a country is offered an import quotas with reduced (or zero) import tariffs up to a maximum volume. These tariff rate quotas (TRQs) concluded with Mercosur countries are summarised in Table 2.4 below.

⁵ A 'simple average' of MFN duties is based on adding all tariffs for each lines with imports, and divide this number by the number of tariff lines, hence giving equal weight to every tariff line, no matter how much is traded under each tariff line. A 'trade-weighted' average tariff takes into account the value of import of each tariff line. A simple way of calculating the trade-weighted average tariff rate is to divide the total tariff revenue by the total value of imports.

⁶ Indeed, the tariff line with zero tariff generates no tariff revenue.

Table 2.4 The currently valid agricultural TRQs concluded with Mercosur countries

Sector	Name of TRQ	CN codes	Initial quantity	Import duty		Origin
				MFN rate	Preferential rate	
Beef	Buffalo high quality	0201 30 00 (20) + 0202 30 90 (65)	200	12.8% + 303.40 EUR/100 kg	20%	Argentina
	Beef high quality	0201 30 00 (10) + 0206 10 95 (10)	30,000	12.8% + 303.40 EUR/100 kg	20%	Argentina
	Beef high quality	0201 30 00 (10) + 0206 10 95 (10)	6,300	12.8% + 303.40 EUR/100 kg	20%	Uruguay
	Beef high quality	(ex) 0201 30 00 + (ex) 0202 30 90 + (ex) 0206 10 95 + (ex) 0206 29 91	10,000	12.8% + 303.40 EUR/100 kg	20%	Brazil
	Beef high quality	0201 30 00 (10) + 0202 30 90 (10)	1,000	12.8% + 303.40 EUR/100 kg	20%	Paraguay
	Beef - thin skirt	0206 29 91	700	12.8% + 304.10 EUR/100 kg	4%	Argentina
Poultry	Chicken boneless cuts (frozen)	0207 14 10 + 0207 14 50 + 0207 14 70	16,698	102.40 EUR/100 kg	0 EUR/tonne	Brazil
	Turkey cuts (frozen)	0207 27 10 + 0207 27 20 + 0207 27 80	4,910	85.10 EUR / 100 kg	0 EUR/tonne	Brazil
	Salted poultry	0210 99 39	170,807	1,024.00 EUR/1,000 kg	15.4%	Brazil
	Prepared chicken (cooked)	1602 32 19	79,477	2,765.00 EUR/1,000 kg	8%	Brazil
	Prepared chicken (uncooked)	1602 32 11	15,800		630 EUR/tonne	
	Prepared chicken	1602 32 30	62,905	2,765.00 EUR/1,000 kg	10.90%	Brazil
	Prepared chicken	1602 32 90	295	2,765.00 EUR/1,000 kg	10.90%	Brazil
	Prepared turkey	1602 31 11	92,300	1,024.00 EUR/1,000 kg	8.50%	Brazil
Sugar	Sugar CXL Brazil	1701 13 10 and 14 10	334,054	33.90 EUR/100 kg std qual...	98 EUR/tonne	Brazil
	Sugar CXL Brazil	1701 13 10 and 14 10	78,000	33.90 EUR/100 kg std qual	11 EUR/tonne	Brazil
Fruit & Vegetables	Garlic	0703 20 00	13,403	9.6% + 120.00 EUR/100 kg	9.60%	Argentina
	Garlic	0703 20 00	5,744	9.6% + 120.00 EUR/100 kg	9.60%	Argentina

Source: EU Commission websites.⁷ Note that beef and poultry TRQs are expressed in weight of boneless meat in tonnes.

To estimate the value of preferences granted by applying a TRQ, the numerical example for quality beef may serve as an illustration. Eurostat 2019 import data show that the EU's import price of high quality beef from Argentina was nearly 9,000 euros/tonne. Under non-preferential (MFN) rates, import duties would have been 4,186 euros/tonne (12.8% + 3,034 euros), that is 46% of the import value. As part of the in-quota quantity, a 20% import tariff is charged, which makes import duties 1,800 euros/tonne. The preference margin between MFN and the in-quota tariff is then nearly 2,400 euros/tonne.

Table 2.5 below shows that TRQs on (fresh, chilled, frozen) beef are fully utilised, indicating that trade in these types of meat is even attractive out-of-quota when the full (MFN) import duties have to be

⁷ For beef meat: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/beef-quota_en.pdf.
For poultry meat: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0398&from=EN>.
For sugar: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02009R0891-20171001>

paid. Figures indicate that trade in prepared and conserved poultry meat, sugar and garlic TRQs does not exceed the preferential volumes granted.

Table 2.5 *Import volumes of products subject to EU import TRQ regimes concluded with Mercosur countries*

Product	Product description	Mercosur exporting country	In-quota quantity granted (tonnes)	Actual volume imported by EU28 (in tonnes)			
Beef	Buffalo high quality		200	1,281	1,891	2,262	
	Beef high quality	Argentina	30,000	37,015	46,095	48,750	
		Uruguay	6,300	26,443	25,097	24,227	
		Brazil	10,000	22,917	22,435	20,932	
		Paraguay	1,000	3,857	2,951	2,432	
Poultry	Chicken boneless cuts (frozen)	Brazil	16,698	41,884	76,313	52,874	
	Turkey cuts (frozen)	Brazil	4,910	8,149	5,616	6,118	
	Salted poultry	Brazil	170,807	138,130	82,003	116,374	
	Prepared chicken (cooked)	Brazil	79,477	70,105	56,304	59,946	
	Prepared chicken (uncooked)	Brazil	15,800	9,999	3,337	3,075	
	Prepared chicken	Brazil	62,905	38,431	12,535	3,650	
	Prepared chicken	Brazil	295	21	0	0	
	Prepared turkey	Brazil	92,300	37,755	5,694	653	
	Sugar	Sugar CXL Brazil	Brazil	412,054	341,690	236,515	308,546
	F&V	Garlic	Argentina	19,147	2,397	2,957	3,914

Source: see Table 2.4; Eurostat actual import volumes in 2017, 2018 and 2019.

Note: Import sugar from Brazil refers to CN 17011410/90 (raw sugar for refining/not for refining) and 1701 9910 (white sugar in dry state).

2.3 Expectations of possible impacts of changes in trade conditions due to the agreement in principle

The Agreement in principle includes reductions of import tariffs, expansion of preferential import quotas, and rules around standards and technical regulations that affect trade between the EU and Mercosur. In addition, the agreement also concerns compliance with rules for the recognition of intellectual property rights including geographical indications, on services, public procurement and competition.⁸ According to the Commission document that summarises the agreement in principle (EC, 2020), Mercosur will fully liberalise 91% of its imports from the EU over a transition period of up to ten years for most products and up to 15 years for some of Mercosur's most sensitive products. The EU will liberalise 92% of its imports from Mercosur over the transition period of ten years (for more details, see Section 3.1).

Regarding agricultural goods, the EU will liberalise 82% of agricultural imports, with the remaining imports subject to partial liberalisation commitments including tariff-rate quotas for more sensitive products. The following sub-section takes a closer look at the negotiated TRQs for agricultural products and contextualises them, allowing for preliminary assessment of possible impacts on the EU market. In addition, we summarise interviews with the business community in which they indicate their expectations of this agreement, especially with regard to agreement articles that refer to standards and other non-tariff measures affecting trade.

⁸ See DG Trade website for more details on each of the topics subject to the Agreement in principle: <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2048>.

2.3.1 Future TRQs

Table 2.6 below compares currently valid TRQs with the in-quota volumes referred to in the Agreement in Principle that are granted to Mercosur countries (EC, 2020). Future TRQs are granted to Mercosur as a group – there will be no new individual country TRQs, except for sugar. In publicly available information, a detailed product description of the product to which the quota applies is not given; instead, broad product categories are defined. Further, TRQs might be conditional, for instance on complying with EU animal welfare regulations.⁹ Such terms, if applicable, have not been published yet. With these caveats in mind, the table shows that under the Agreement:

- *For beef, the EU offers Mercosur an additional TRQ of 75,000 tonnes (product weight), expanding the total TRQ quota level on beef up to 122,654 tonnes.*

Imports of (high quality) beef from Mercosur countries in recent years accounted for 90-100,000 tonnes (see Table 2.5), which is higher than the quota level of the current TRQ. This suggests that Mercosur countries are able to export quality beef beyond TRQ quota levels even though the amount beyond the quota level is charged with import tariffs. This leads to the expectation that the expanded TRQ will most likely lead to an increase in imports of more than 20,000 tonnes of beef (the difference between current imports and the new TRQ), given that Mercosur countries are able to offer quality beef at competitive prices and assumed there is demand for this type of beef in the EU. Of course, all imports from Mercosur are conditional to meeting EU standards, including food safety and SPS regulations.

- *For poultry, the TRQ is expanded by 153,000 tonnes. This brings the total TRQ for poultry at 590,000 tonnes.*

Recent years have shown an import of 250-300 thousand tonnes, which is a decline from previous years was due to lower demand in the EU for Brazilian meat following food safety concerns (DG Sante, 2018; Foodnavigator 2018).¹⁰ Brazil is a very competitive producer of poultry meat (Van Horne, 2019), and depending on how fast the Brazilian meat business and authorities can convince the EU that Brazilian poultry meat meets European food safety requirements, Brazil may be assumed to be able to export more to the EU than in recent years. However, EU imports from Brazil have been replaced by poultry meat coming from Ukraine. Ukraine is also a strong competitor internationally, and Ukraine benefits from a preferential treatment as part of the EU-Ukraine FTA – so it remains to be seen whether Brazil can fully use the preferential TRQ granted. On an estimated annual EU consumption level of 15m tonnes (for 2018: AVEC, 2020), imports from Brazil at the level of newly granted TRQ would be 4%. EU consumption of poultry meat is expected to grow steadily over the next decade (EC, 2019).

- *Pig meat is granted a TRQ of 25,000 tonnes (carcass weight). This is a newly granted preference to Mercosur suppliers.*

Currently, there are practically no imports of pork meat by EU member states from Mercosur countries. EU imports of pork have to be free from ractopamine, an animal feed additive that is banned in the EU. Brazil claims to produce ractopamine-free pork, but EU controls conducted in recent years still found a significant share of samples taken from pigs at slaughter which contain this substance. This led to the conclusion that the system in place is not yet sufficiently robust to guarantee that ractopamine is not being used (FVO, 2013; oral information from pork market expert).

- *Sugar imports are managed via a TRQ for refined sugar for Brazil (reducing the in-quota tariff rate for part of the current TRQ) and (a relatively small, new quota for) Paraguay.*

As regarding the TRQ for Brazil, the reduction of the in-quota rate tariff is relatively small and there is no expansion of the in-quota volume agreed, whereas the new TRQ for Paraguay is modest, expected additional inflow of sugar from Mercosur is small and so will be the anticipated impacts on the EU sugar market.

- *Ethanol imports are regulated via two TRQs, one for the chemical sector (e.g. for production of bioplastics) and one for other users of ethanol, such as for road transport fuel (in blends with fossil fuel).*

⁹ As an example can be referred to a TRQ-linked condition set on imports of eggs from Ukraine, as part of the EU-Ukraine trade agreement. In this agreement egg imports from Ukraine will only be duty-free if the hens are kept in line with EU standards.

¹⁰ See for instance <https://www.foodnavigator.com/Article/2018/04/23/EU-ban-on-Brazil-imports>. The decrease of imports from Brazil in 2018 and 2019 was a result of the scandal 'weak flesh'. Brazilian poultry was Salmonella-infected and many EU countries suspended imports from Brazil.

Demand for ethanol in the EU is expected to increase over the next decade, encouraged by the EU-set target for renewable energy use in transportation to increase from 10% in 2020 to 14% in 2030. As EU policy frameworks set limits for using agricultural feedstocks (such as wheat and maize) for ethanol and biodiesel, the increase in ethanol demand is expected to be supported by increased imports (OECD-FAO, 2020; EC, 2019; USDA, 2019).

- *New TRQs are granted, for rice, honey, sweetcorn, and dairy products.*

Concerning the dairy quotas (on cheese, milk powder and infant formula), these are reciprocal, meaning that EU exporters to Mercosur have a similar in-quota amount granted duty free.¹¹ Current EU exports to Mercosur are below the in-quota amounts Mercosur grants to EU exporters, which is also due to strict labelling requirements and Brazil's export listing system that requires detailed inspections at the companies' premises (see also Van Berkum, 2015). If the qualification procedures for exports to Mercosur were to be relaxed, EU export of high value added products such as cheese and infant formula food to Mercosur would be attractive, although it will remain a small market in relation to total EU (and Dutch) exports to third countries.

Table 2.6 Products subject to EU import TRQ regimes: currently concluded TRQs compared with future TRQs according to the EU-Mercosur Trade Agreement

Product	Current TRQ a)	TRQ at end of implementation period of the Agreement
Beef	47,500	Existing WTO TRQ of 47,500 tonnes at 20% tariff (Hilton beef, fresh beef produced according to grass-fed (extensive production) will have its duty cut. A new quota will be created with 75,154 tonnes of product weight at 7.5%, 55% fresh, 45% frozen.
Poultry	443,192	New TRQ of 153,000 tonnes at 0%, of which 90,000 tonnes bone-in, the remaining boneless.
Pig meat		25,000 tonnes at 83 euros/tonne
Sugar	334,054 tonnes at 98 euros/tonne plus 78,000 tonnes at 11 euros/tonne	Of Brazil's existing WTO TRQ of sugar for refining 180,000 tonnes will have its duties cut to 0%, and a new quota of 10,000 tonnes duty-free will be created for sugar for refining for Paraguay
Ethanol		450,000 tonnes at 0%, ethanol for chemical uses
Ethanol		200,000 tonnes at 1/3 MFN rate, for all uses,
Rice		60,000 tonnes at 0%
Honey		45,000 tonnes at 0%
Sweetcorn		1,000 tonnes at 0%
Cheese b)		30,000 tonnes at 0%
Milk powders b)		10,000 tonnes at 0%
Infant formula b)		5,000 tonnes at 0%

a) current TRQs specified in further product category details with in-quota conditions are explained in Table 2.4; b) Reciprocal tariff-rate quotas.

Source for future TRQs: EC, Agreement text summary July 2019. https://trade.ec.europa.eu/doclib/docs/2019/june/tradoc_157964.pdf.

2.3.2 Main non-tariff measures affecting EU-Mercosur bilateral trade and stakeholders' expectations on how the Agreement may reduce trade barriers from non-tariff measures

Non-tariff measures (NTMs) are policy measures, apart from tariffs or tariff rate quotas (TRQs), which can directly or indirectly have an economic impact on trade flows between countries. NTMs are so-called 'behind-the-border' regulations that affect trade and can have many different forms. Among these are the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) measures that respectively concern the application of food safety and animal and plant health regulations as well as the technical regulations, standards, testing, and certification procedures that are considered (by WTO agreement) to be created for legitimate purposes, such as consumer or environmental protection.¹² Although the WTO Agreements on SPS and TBT provide a general basis for a level playing field, the Agreements also give recognition to WTO members to protect legitimate interests according to own

¹¹ The dairy TRQs are the only bilateral TRQs introduced by the Agreement.

¹² See for the principles in WTO agreements: https://www.wto.org/english/tratop_e/sps_e/spsund_e.htm

regulatory authority. Therefore, SPS and TBT measures of the EU and Mercosur countries are not (perfectly) aligned or harmonised, which in case of bilateral trade implies trade costs to comply with a trade partner's requirements.

Below we use information from the EU Market Access Database (MADB) to present SPS and TBT issues relevant to assess effects of the EU-Mercosur trade agreement. The MADB reports on the SPS and TBT issues as well as other issues in bilateral trade with third countries that are unresolved and thus hamper trade from the EU perspective. The overall aim of the MADB is to bring more transparency in the trade issues facing EU exporters and to facilitate the efforts to resolve them.

The MADB consists of two datasets: the trade barrier database and the SPS database.¹³ The trade barrier database defines seven categories of measures that relate to traditional trade policy instruments (tariffs and duties, trade defence instruments), other export-related measures (investment-related barriers, intellectual property rights, service-related and other measures) and NTMs. In both the trade barrier database and the SPS database, information is given according to type of measure, product and export destination.

Several limitations of the MADB need to be considered. The database suffers selection bias in the reporting of the trade barriers (either by companies, their representative organisations or by government officials). Only reported trade barriers are included, listed after an evaluation by the EC. The MADB does not provide information on the importance of the trade barriers reported since information on the trade volume and/or value affected is not available. However, the information is useful to point out trade barriers relevant for EU exporters, indicating the difficulties that EU exporters have been facing when supplying foreign markets.

The MADB shows a variety of barriers to trade which EU exporters indicate that they face in trade with Mercosur, from the claim of insufficient protection of intellectual property rights (IPR) and geographical indications to non-automatic import licensing with long approval procedures, differences in labelling, marking and packaging requirements of wines, and pre-establishment requirements for services (in particular for the engineering, telecom and insurance sectors). Regarding SPS measures, there is the complaint of EU exporters of plant and plant products that the Pest Risk Analysis (PRA) procedures necessary to enter the Brazilian market take a very long time. PRA is the main phytosanitary pre-requisite that the Brazilian Ministry of Agriculture implements to authorise imports of plants and their products into Brazil. PRAs have been subject to serious delays – 10 years in some cases. Speeding up such procedures is expected to enhance trade relations of EU horticultural sector (fruits and vegetables, and floriculture) with Brazil (Van Berkum, 2015). In addition, the backlog of evaluations of the inspection and certification systems of EU Member States by the Brazilian Ministry of Agriculture is considered a serious obstacle to exports of EU meat and dairy to that country. In trade with Argentina, the main bottlenecks reported are the lack of IPR protection and the non-automatic import licensing procedures that hold for a wide list of products (such as chemicals and machinery) and imply more administrative work and, hence, higher trade costs (more details are on <http://madb.europa.eu/madb/indexPubli.htm>).

The above issues of barriers to trade were discussed in consultations held with business representative from Dutch companies in the Netherlands and in Brazil.¹⁴ The consultations – some by phone, others via email in response to a structured list of questions – led to a number of important observations.

¹³ While overlapping to a certain extent, the trade barrier database and the SPS database report different types of information on NTMs from the EU exporters' perspective. The trade barrier database collects complaints that individual EU exporters, groups or associations of producers or the EU member states report to the EC. Note that the complaints must clearly demonstrate evidence that the respective measure does not conform to international rules and causes commercial harm to European operations, either within the EU or in third countries. After an investigation by the EC, relevant measures are listed in the trade barrier database. In contrast, the SPS database is not based on individual complaints. The SPS database contains information reported by the agrifood industry, the EU member states, services and delegations of the EC, and also covers relevant SPS notifications from the WTO.

¹⁴ The research team has received information from 22 companies (out of which four Dutch subsidiaries in Brazil – no responses from companies in other Mercosur countries unfortunately – and 10 business representative organisations through a mix of written inputs and interviews). As the number of consultations has only been limited, the views expressed cannot be taken as fully representative for the entire Dutch private sector that has experience with doing business in the Mercosur countries.

First of all, stakeholders have pointed to the Dutch trade structure, which has traditionally been focussed on Germany and other close countries in Europe. The Netherlands has no cultural links or historical trade relations with the four Mercosur countries. Combined with the distance and language barriers, this trade structure means that current interest in the Mercosur markets of Dutch companies is rather limited. These factors are more determining than the absence or existence of a trade agreement. As long as companies can do sales and generate profits relatively nearby, they are generally not inclined to spend significant time and efforts to expand activities more far away. In case one would like to boost the opportunities for Dutch companies on the Mercosur markets and increase trade flows, a trade agreement is not sufficient in itself and should be complemented with other trade promotion activities.

Dutch companies that have actually taken the decision in the past to become active on the Mercosur markets generally experience challenges with the countries' legal and fiscal situations. The markets are described as 'rather complex', especially Brazil. Some entrepreneurs have also indicated to have stopped exporting due to the lack of trade facilitation and high transaction costs. In particular, small and medium enterprises (SMEs) seem to be discouraged by these issues.

When looking at the differences between sectors, it is clear that Dutch industrial companies see the current import tariffs of Mercosur countries as the most important barrier to trade. For Brazil specifically, it is mentioned that industrial companies with significant (potential) sales often prefer to open a production facility in Brazil instead of exporting from the Netherlands, to work around the substantial import tariffs. As the trade agreement will eliminate the tariffs to a large extent, the potential for industrial goods that are currently hindered by the tariffs is clearly present.

Dutch trade in services with Mercosur is modest. The few responses from the service sector indicated it is mainly countries with ties to the region (Spain, Italy, France) that are active in Mercosur. Proximity is usually even more important with services than with goods. It is also important to establish that specific service schedules are not yet public, so companies have few concrete insights into real opening of markets.

Companies in the agricultural sector point more towards custom procedures and standards as the most important hindering factor to trade. The trade agreement will include provisions regarding a process of working towards common standards, but the extent to which such situation with common standards will actually be achieved remains to be seen, as the current agreement text that is public describes a process towards working together to achieve common standards rather than indicating what goals will be achieved and by when. Hence, it is far from certain whether this trade agreement will remove the main barrier as expressed by the agricultural sector representatives.

In terms of import competition, the meat sector in particular is concerned about the market impacts which additional imports from Mercosur (due to the expanded preferential TRQs) may have. Business representatives fear that increased imports could very probably have a negative impact on the price for EU beef and poultry farmers. At the same time, as poultry meat is imported frozen (for use by the food processing and food service industry) and not allowed to be sold in the fresh segment, price impacts may be somewhat mitigated. Interviewees point out incidents of Mercosur beef, poultry, and pork meat producers not complying with EU food safety requirements, which would indicate systematic deficiencies in Mercosur countries' track and tracing systems to guarantee food safety. If these problems persist, it would slow down the expected increase of imports of meat from Mercosur countries resulting from this Agreement.

Responses from Dutch companies with subsidiaries in Brazil are positive about the agreement mainly because of the reduction of import tariffs, taxes, and trade facilitation costs (easing imports from EU into Mercosur). Further there is an expectation that the SPS and TBT chapters of the agreement will induce better alignment of Brazil's goods (in particular, agricultural products) with EU standards (encouraging exports from Mercosur to EU). It is believed, however, that improvements in these areas will take time, implying that perceived market opportunities will be exploited only slowly.

3 Impacts of the trade agreement on the Dutch economy

3.1 Description of the scenario assumptions, data used, and NTM trade costs reductions applied

The impact of the Mercosur Agreement is quantified using the macroeconomic model MAGNET (Woltjer et al. 2014). The MAGNET model is a multi-regional, multi-sectoral, computable general equilibrium (CGE) model based on neo-classical microeconomic theory (Nowicki et al. 2009, Van Meijl et al. 2006, Woltjer et al. 2014). The core of the MAGNET database is the GTAP dataset (Aguiar et al. 2019). MAGNET assumes perfect competition meaning that producers are price takers. Further, producers are assumed to choose the cheapest combination of imperfectly substitutable labour, capital, land, natural resources and intermediates. The core of MAGNET is an input-output model, which links industries in value added chains from primary goods, over continuously higher stages of intermediate processing, to the final assembly of goods and services for consumption. In addition to manufacturing and services markets, MAGNET has further refined agriculture and food markets and assumes that products traded internationally are differentiated by country of origin (Armington 1969).

Crucial for this study is the modelling of production factor markets, including land and labour. MAGNET includes a land supply function (Van Meijl et al. 2006, Dixon et al. 2016) which specifies the relation between total agricultural land supply and the real land price given constraints related to biophysical availability (potential area of suitable land) and institutional factors (agricultural and urban policy, conservation of nature). In MAGNET, factor markets are divided (segmented) into agricultural and non-agricultural labour and capital. This reflects empirical evidence on imperfect mobility of labour (De Janvry et al. 1991), and is thus an improvement over other CGE models that assume perfect mobility.

MAGNET is a global model, capturing macroeconomic and sectoral effects, and, like all models, it is not possible to perfectly replicate the entire economy. Therefore certain caveats have to be made, such as the fact that commodities and sectors are aggregations. For example, the Pork and Other White Meat sector is an aggregate sector which captures rabbit meat and other meats in addition to pork meat. Further, as a global model, the database for the model relies on various sources of official statistics which may sometimes differ from micro-level sources due to varying factors such confidentiality. For example, global ethanol production data comes from the International Energy Agency (IEA), which does not report any production for ethanol in the Netherlands. Therefore, as the modelling is reliant on data inputs, ethanol production is not modelled for the Netherlands.¹⁵

For the purposes of this assessment, a hypothetical situation is simulated in which the Mercosur Agreement is assumed to have been ratified and implemented beginning in 2020. The Agreement would come to full implementation within 15 years, meaning that all market access changes (tariffs and TRQs) are fully phased in. Therefore, in the model, we consider economic changes over the period between 2020 and 2035. For the initial year of 2020, we assume a pre-COVID scenario so as not to obscure the economic effects of the Mercosur Agreement with the complex, dynamic, and largely uncertain economic impacts of the COVID situation. We further take into account the implementation of the EU-Japan Economic Partnership Agreement, the EU-Ukraine Deep and Comprehensive Free Trade Area, and the EU-Canada Comprehensive and Economic Trade Agreement. In order to best isolate the effects of the Mercosur agreement, we make another hypothetical, simplifying assumption which is that the UK continues to partake in a shared market with the EU27 (27 members).¹⁶ With this

¹⁵ Hence, because there is no production data for ethanol, there is no available measure of trade exposure for ethanol, and results for production as well as changes in the labour component of value-added will be zero.

¹⁶ This assumption is not intended to reflect any political outcome, but rather to focus the study on the impact of Mercosur. Further, the exact nature of the UK trade and economic relationship with the EU27 was not explicit at the time of writing the report.

set-up, we run two scenarios: the base scenario which is the 'business as usual' scenario and the policy scenario which is the Mercosur Agreement scenario. Comparing these two scenarios, we measure the estimated economic impact of the Mercosur Agreement between 2020 and 2035.

To translate the agreement into the model, we rely on the Market Access schedule negotiated by the European Commission and Mercosur. This schedule was released in confidentiality to EU member states of the Trade Policy Committee on 29 October 2019. The schedule provides changes to trade protection measures in place at the 8-digit tariff line. At the 8-digit level, tariffs are unchanged, decreased in portion, or totally eliminated. In other cases TRQs are implemented or adjusted. Export tax measures for Mercosur are also provided at the 8-digit tariff line. We use trade value data to aggregate these measures to estimate tariff and export tax effects at the aggregate sectoral level.

Text Box 1. Tariffs reductions according to the Agreement in a nutshell

According to the Commission Agreement in Principle document that summarises the agreement (EC, 2020), Mercosur will fully liberalise 91% of its imports from the EU over a transition period of up to 10 years for most products, and up to 15 years for some of Mercosur most sensitive products. The EU will liberalise 92% of its imports from Mercosur over a transition period of up to 10 years. In terms of tariff lines, Mercosur will fully liberalise 91% and the EU 95% of lines in their respective schedules.

Concerning market access for industrial goods, the EU will eliminate duties on all industrial goods over a transitional period of up to 10 years. Mercosur will fully remove duties in sectors such as cars, car parts, machinery, chemicals and pharma.

Mercosur will increase market access for EU agricultural goods by gradually eliminating duties on 93% of tariff lines of EU agri-food exports to the region. These lines correspond to 95% of the export value of EU agricultural products to Mercosur. The EU will liberalise 82% of agricultural imports, with the remaining imports subject to partial liberalisation commitments including tariff-rate quotas for more sensitive products (see Section 2.2.3 above) with a very small number of products excluded altogether. Duties that Mercosur currently imposes on exports to the EU of products such as soybean products (feed for EU livestock) will be reduced or eliminated.

For topics such as rules of origin, customs and trade facilitation, SPS, Services and establishments (investments) and any more aspects of the agreement, the summary document highlights the main issues and refers to additional documents that can be consulted. However, the publicly available documents at the DG Trade website do not provide detailed and concrete indications of how trade barriers related to these non-tariff measures will be reduced or eliminated.

We account for TRQs within the model at the aggregate sectoral level, and therefore this is an approximation based on the TRQs specified at the underlying 8-digit tariff line. We incorporate (1) TRQs in existence in the base scenario (prior to Mercosur Agreement), (2) the introduction of new TRQs (as part of the Mercosur Agreement), (3) changes to in-quota tariff rates (as part of the Mercosur Agreement), and (4) changes to the total quota level (as part of the Mercosur Agreement). Details on these TRQs are presented in Table 2.4-2.6 in the previous chapter.

Lastly, we consider non-tariff measures (NTMs) affecting goods and services trade entering the Mercosur market from the EU. We consider levels of standards and international cooperation within the European Economic Area (EEA) to be largely harmonised, and therefore we take this as the base level of NTMs. We then consider how much reduction in trade costs Mercosur exporters would have to make per traded product to decrease, moving towards the EEA level of NTMs.

For NTMs affecting goods trade, we use trade cost estimates from the World Bank (Kee and Nicita 2017), and for NTMs affecting services trade, we use trade cost estimates for Mercosur from the World Bank (Jafari and Tarr 2015) and for EEA from the OECD (Benz and Jaax 2020). From the reduction in trade costs resulting from reduced trade barriers via changes to NTMs, we estimate efficiency gains in terms of price and quantity effects which we implement in MAGNET. In Appendix 2, we provide a literature review on data on NTMs and further details on how this data is used in CGE model simulations.

The basic assumption is that under the Agreement, trade barriers from NTMs in Mercosur are reduced, moving towards the EEA levels, but the levels of these trade barriers will not decline to EEA levels. Therefore, following Disdier et al. (2016), the assumption is that 10% of the NTM-associated trade costs are actionable, meaning that the current gap between the relative EEA NTM trade costs and Mercosur NTM trade costs would be reduced by 10%. For example, trade barriers (from NTMs) on imports of Fresh Fruits and Vegetables from the EU to Argentina would have to lower by 53% to reach the intra-EEA level of trade barriers (from NTMs) in the intra-EEA Fresh Fruits and Vegetables market. As we assume that Mercosur countries will make improvements to reduce the gap with intra-EEA levels of trade barriers (from NTMs) by 10%, then we consider that there would be a 5.3% reduction in trade barriers (from NTMs) on Fresh Fruits and Vegetables imported from EU into Argentina. This is considered to be equivalent to a 5.3% increase in import efficiency.

For the 10% actionability assumption, in addition to the literature, we further find evidence from interviews with industry stakeholders. In majority, business representatives pointed to the long-term procedures for gaining access to the Mercosur markets. In particular, in case of agricultural and food products, there were large differences in food safety and quality requirements.

For goods trade, NTMs are country specific and bilateral so a reduction to trade barriers (from NTMs) on goods follows the example above of trade barriers on Fruits and Vegetables from EU to Argentina decreasing by 5.3%. However, for NTMs in services trade, when a country is assumed to reduce barriers, it is assumed to do so for all partners. Therefore, a liberalisation of the services market by each of Mercosur members will open up within Mercosur as well as to Europe and other trading partners.

3.2 Macroeconomic results

The macroeconomic effects of the EU-Mercosur trade agreement in this section are summarised below in terms of changes in GDP growth, in percent change (Figure 3.1) and million euros (Figure 3.2). The sectoral composition is presented for the Dutch and the Rest of the EU27 economies (Figures 3.3-3.4). Lastly, trade exposure (imports and exports) is discussed, providing insight into GDP outcomes (Figures 3.5-3.6).

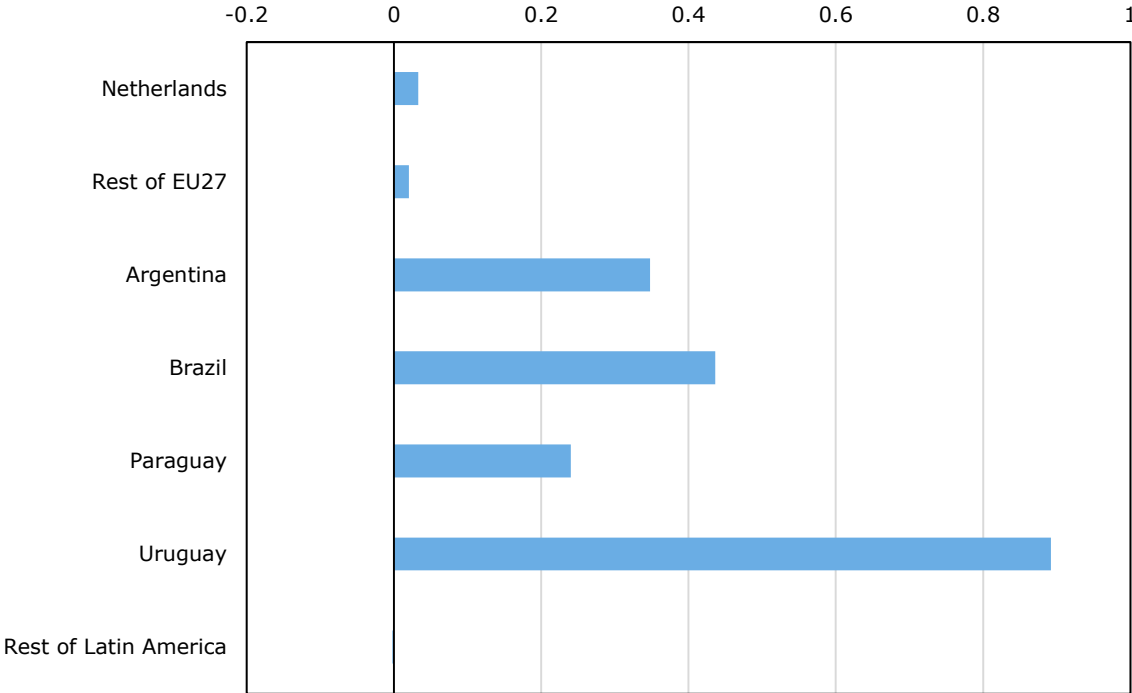


Figure 3.1 Difference in GDP Growth under Mercosur Agreement from 2020 to 2035, %Δ

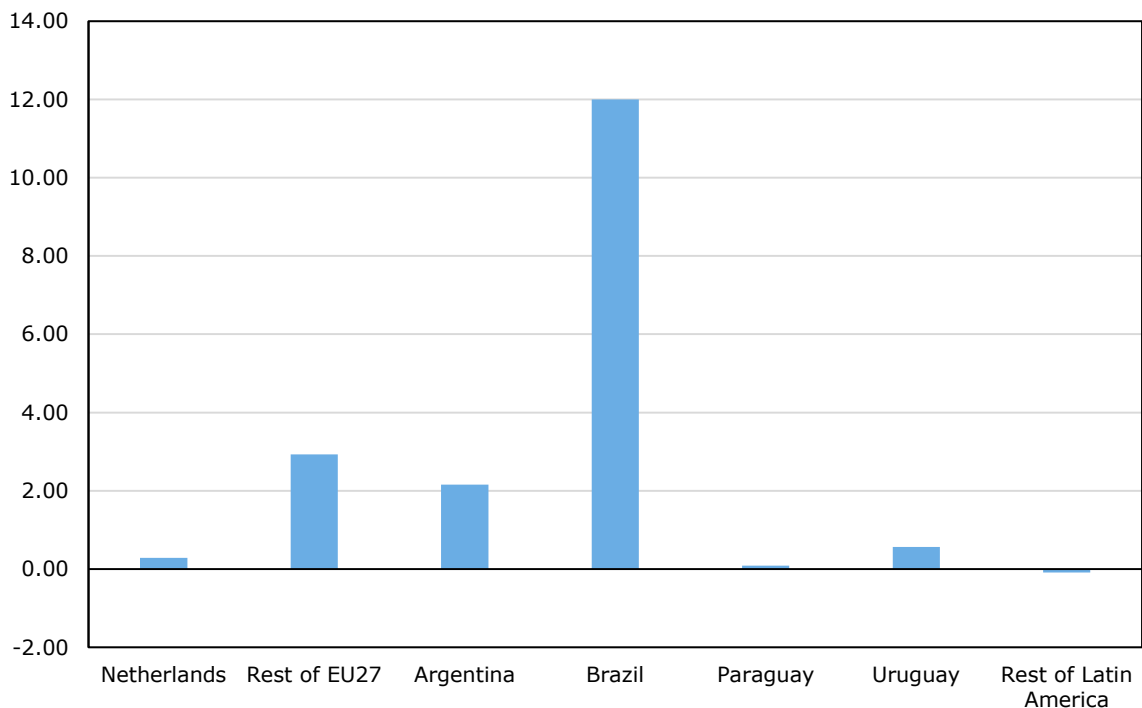


Figure 3.2 Real GDP Growth in 2035 under Mercosur Agreement, billion €

The macroeconomic implications of the Mercosur Agreement are estimated to be small, with limited effects for GDP growth. In Figure 3.1, the difference in GDP growth is presented for the period 2020 to 2035, being the period during which the Mercosur Agreement is assumed implemented. The projected growth in GDP (recall the pre-COVID assumption) is slightly higher under the Mercosur Agreement for the Netherlands (0.03%) and the Rest of the EU27 (0.02%), though it is the Mercosur Four countries which would be expected to see the highest economy-wide gains from the Agreement, though still below 1% gains in GDP.

Figure 3.2 shows the additional gains in GDP in year 2035 due to the Mercosur Agreement in billion euros. Here, we see that the Netherlands is anticipated to gain 287m euros in 2035 and the Rest of the EU27 is supposed to gain 2.93bn euros. The largest gains are anticipated for Brazil with estimated gains of 12bn euros in 2035.

The GDP results have to do with the sectoral output composition. The Mercosur Agreement is comprised of product- and sector- level policies to be implemented over a 15 year timespan. Therefore the importance of the impact of the sector-level effects of these policies for the economy as a whole, depends on a given sector's relative importance, or share of economy-wide output.

Figure 3.3 shows the sectoral composition of the Netherlands' economy-wide output. We see that the Services sectors are by far the most important compositionally for the economy, comprising 67.5% of the Dutch economy-wide output. This means that the most important sector for the economy is the aggregate services sector, followed by manufacturing and agri-food sectors which comprise 25% and 7.5% of economy-wide output, respectively. Likewise Figure 3.4 shows a similar economy-wide sectoral composition for the Rest of the EU27, with the services sector comprising 68% of the economy, followed by manufacturing and agri-food sectors comprising 26 and 6% each of the economy, respectively.¹⁷

¹⁷ Data for Figures 3.3 and 3.4 is from the MAGNET Database.

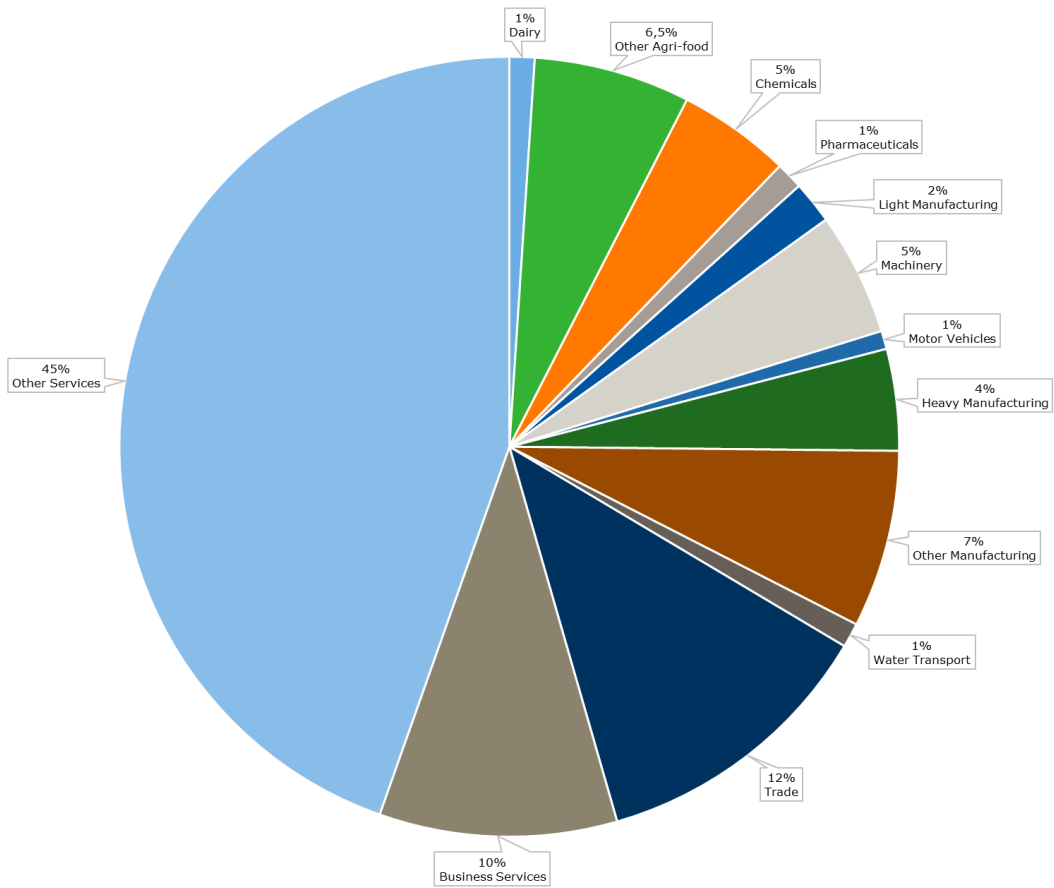


Figure 3.3 Economy-wide Sectoral Output Composition for the Netherlands

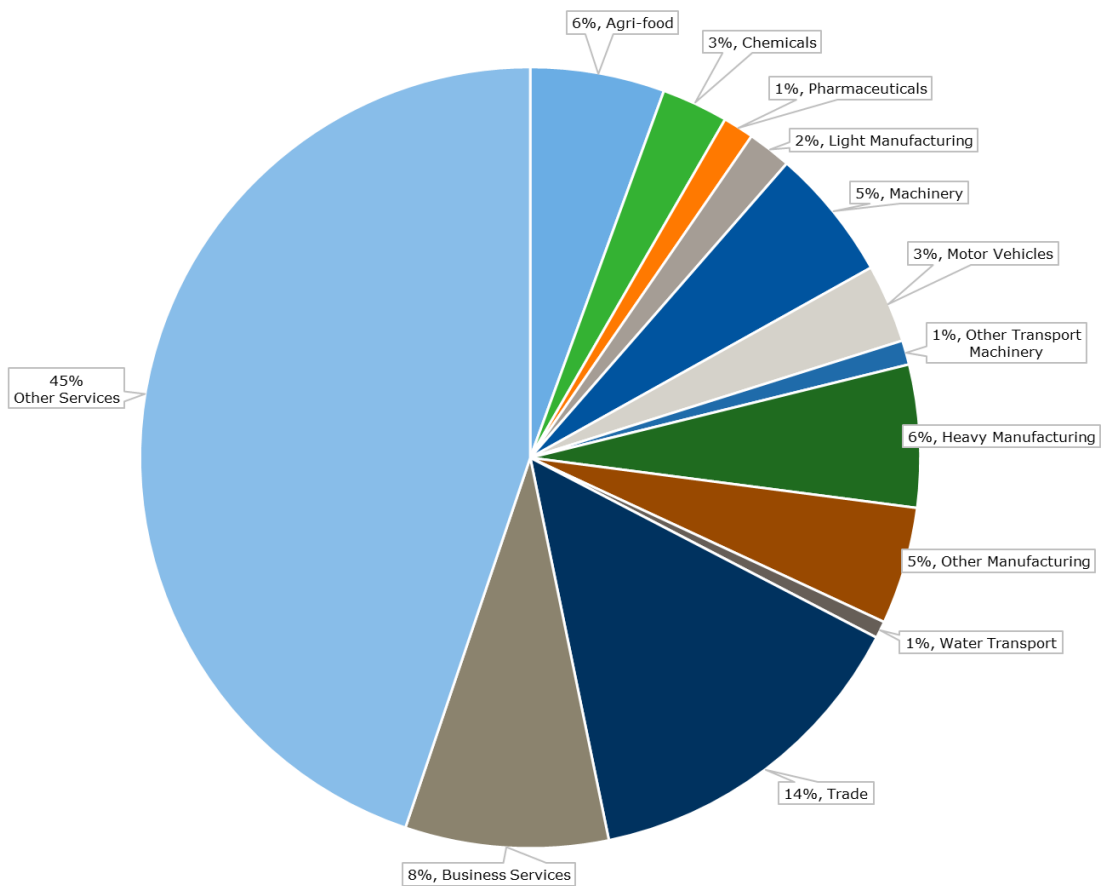


Figure 3.4 Economy-wide Output Sectoral Composition for the Rest of the EU27

In the Mercosur Agreement, policy changes are anticipated for tariffs (affecting manufacturing and agricultural products), TRQs (affecting agri-food products), and NTMs (affecting all products). Therefore, the majority of policy changes (tariffs and TRQs) only affect 32.5% of the Dutch economy in terms of share of output. Further, the precise impact on these sectors depends on the Mercosur-trade exposure of sectors and so the possibility for the policy changes at the product level to translate to Dutch sectoral-level effects.

Figures 3.5 and 3.6 show the trade exposure of a selection of economic sectors of the Netherlands and the Rest of the EU27 to Mercosur, as measured by the ratio of the value of trade flow to the total value of sectoral output. Overall, agri-food sectors face higher levels of import exposure while manufacturing and services face higher levels of export exposure.¹⁸ While overall levels are relatively low, the sectors facing highest levels of trade exposure for the Netherlands include Beef and Poultry Meat (import exposure) as well as Pharmaceuticals and Other Transportation Equipment (export exposure). Compared with the Rest of the EU27, the Netherlands faces higher levels of trade exposure for these key sectors, though for other sectors the exposure is lower (e.g. chemicals and water transport).

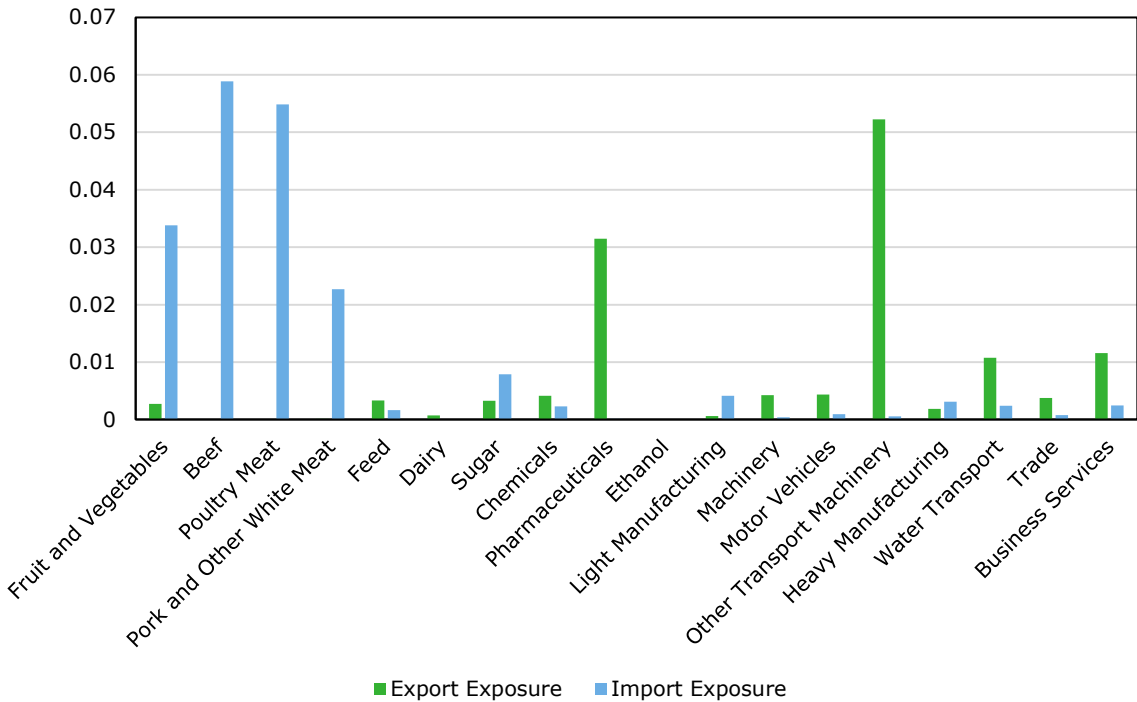


Figure 3.5 Dutch Trade Exposure to Mercosur (ratio of the value of trade flow to the total value of sectoral output)

¹⁸ As aforementioned, the sectors presented are aggregate sectors in a global model which therefore abstracts away from a certain level of detail. As an example, in the case of the Fruit and Vegetables sector, imports are largely comprised of citrus fruits, which are not produced in the Netherlands.

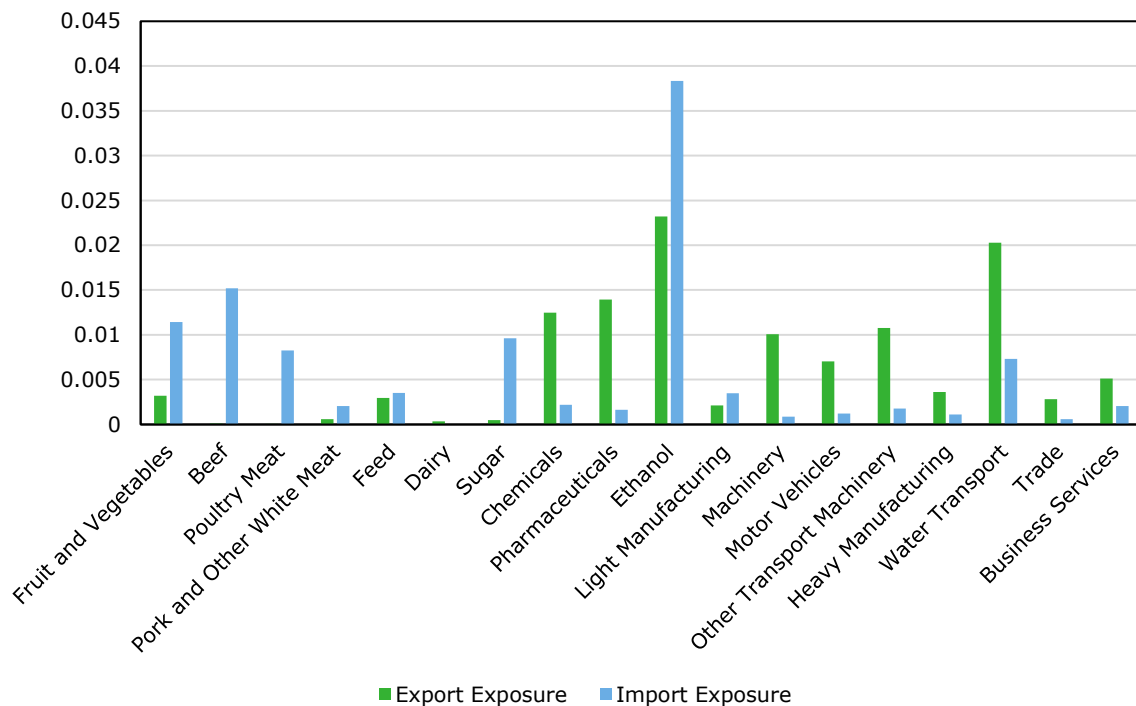


Figure 3.6 Rest of the EU27 Trade Exposure to Mercosur (ratio of the value of trade flow to the total value of sectoral output)

3.3 Sector specific results

Figures 3.7 and 3.8 show sector level production results of a selection of sectors for the Netherlands and the Rest of the EU27, respectively. Generally, the sectors with higher levels of import exposure and their associated primary sector (e.g. Cattle associated with Beef sector) are the sectors which are negatively impacted due to import competition. On the other hand, the sectors with the highest export exposure are the sectors which are positively impacted due to expansion into the Mercosur market through export growth.¹⁹ Of course, other factors also come into play, including relative import to export growth (Figures 3.11 through 3.18) for corresponding products, the type of trade measure being introduced (e.g. TRQs), as well as changes through indirect effects.

In the Netherlands, the highest production gains are estimated for the Other Transportation Machinery (1.42%), Pharmaceutical (1.16%), and Poultry Meat (0.93%) sectors (Figure 3.7). Poultry Meat production increases as the Netherlands increases its production to meet European demand. The Other Transportation Machinery and Pharmaceutical sectors grow due to increasing export growth (Figures 3.11 and 3.12).

In the Rest of the EU27, the largest production expansion occurs in the Machinery sector (1.52%). Only slight (<0.5%) gains occur in the Motor Vehicles (0.43%), Heavy Manufacturing (0.26%), and Chemicals (0.13%) sectors (Figure 3.8). The gains for Machinery, Motor Vehicles, and Heavy Manufacturing are driven by increasing export growth to Mercosur (Figures 3.15 and 3.16).

¹⁹ Because of model aggregation, trade exposure may appear to more strongly affect production than micro-level evidence suggests. Continuing with the example of the Fruit and Vegetables sector, given that, at the micro-level, imports are largely comprised of citrus fruits and other products not produced in the Netherlands, then production in the Fruits and Vegetables in the Netherlands may differ from what modelling results suggest. Therefore, model results may be considered as potential industry-wide effects. For example, the model results would be indicative of a situation in which consumers switch away from domestic fruit and vegetables towards imported fruit and vegetables from Mercosur (even if not identical products) due to price effects.

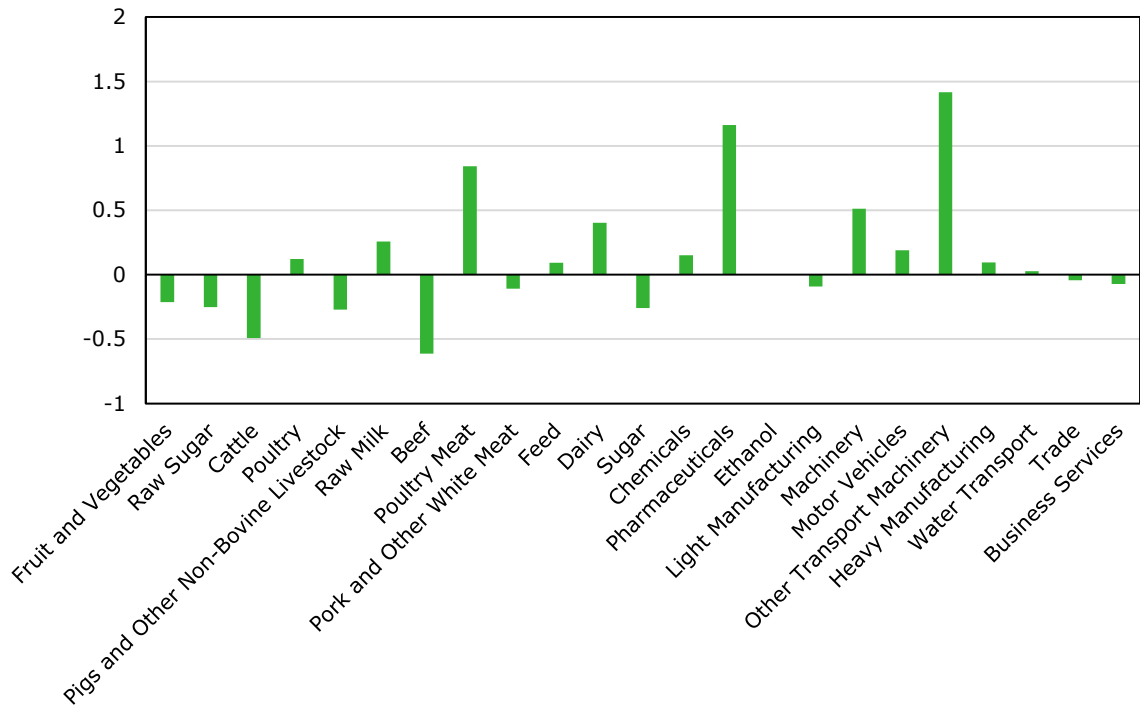


Figure 3.7 Difference under Mercosur Agreement in Dutch Production Growth in 2035, %Δ

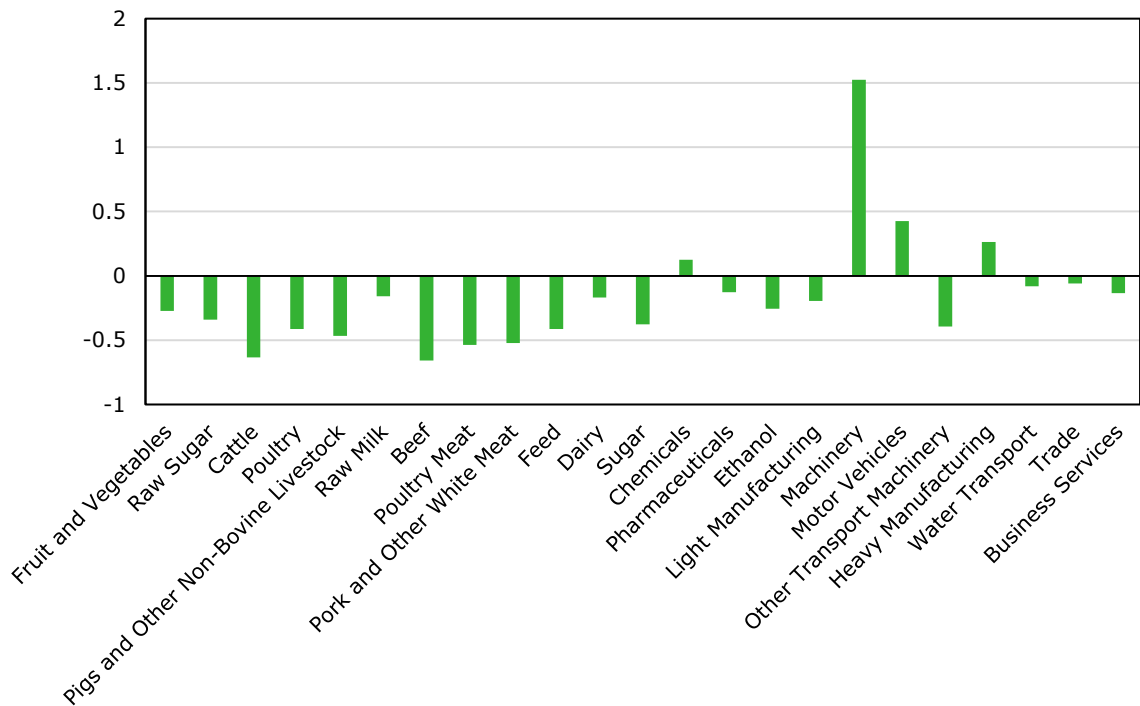


Figure 3.8 Difference under Mercosur Agreement in Rest of the EU27 Production Growth in 2035, %Δ

Figures 3.9 and 3.10 show estimated labour market outcomes for the Netherlands and the Rest of the EU27, respectively, in terms of estimated changes in the sectoral real wage bill in year 2035 due to the Agreement. The wage bill is the value of labour comprising all wages across all employees and is therefore the labour component of value-added.²⁰ Under constant labour productivity, wage bill effects

²⁰ In theoretical terms, the wage bill is comprised of two components being (1) wages and (2) workers. The MAGNET model, being a global model, does not have individual workers in the model; only the wage bill is explicit in the model. Therefore, we include the effects on the wage bill.

follow production effects, with contracting sectors anticipated to reduce the real wage bill, and with expanding sectors anticipated to increase the real wage bill to support increased output. For the Netherlands, gains in the real wage bill are anticipated for the Other Transportation Machinery (1.43%), Pharmaceutical (1.18%), and Poultry Meat (0.85%) sectors (Figure 3.9). For the Rest of the EU27, the largest gains are anticipated in the Machinery sector with the real wage bill estimated to increase by 1.52% (Figure 3.10).

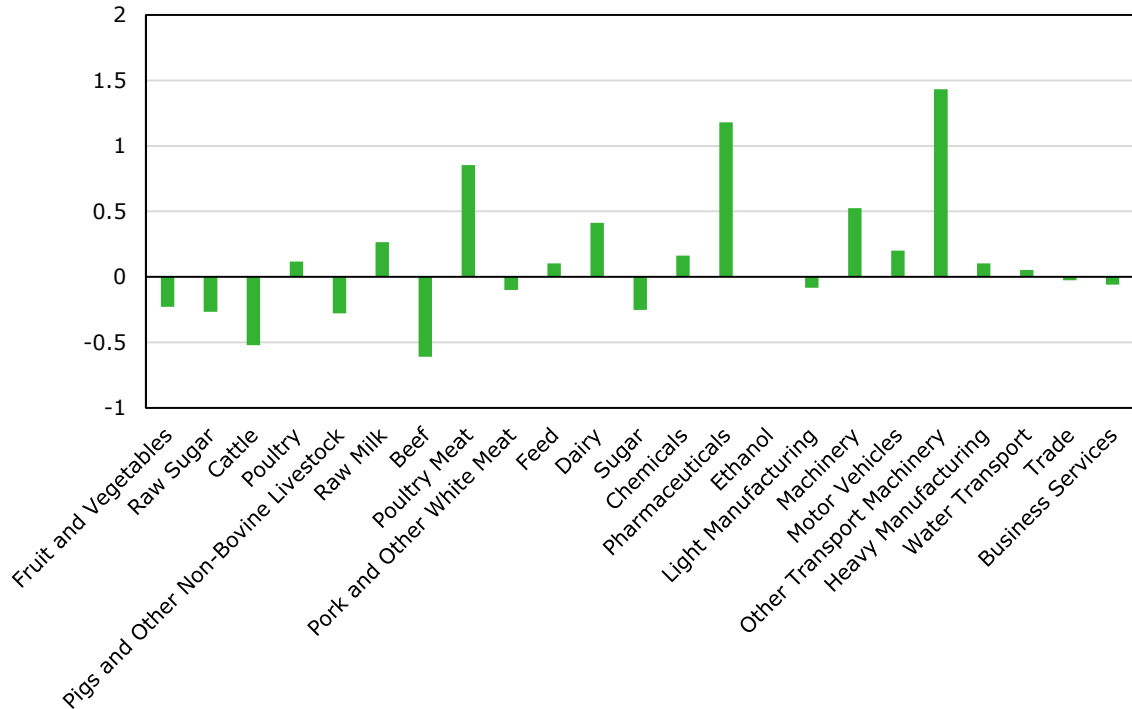


Figure 3.9 Dutch Sectoral Real Wage Bill Effects in 2035 under Mercosur Agreement, %Δ

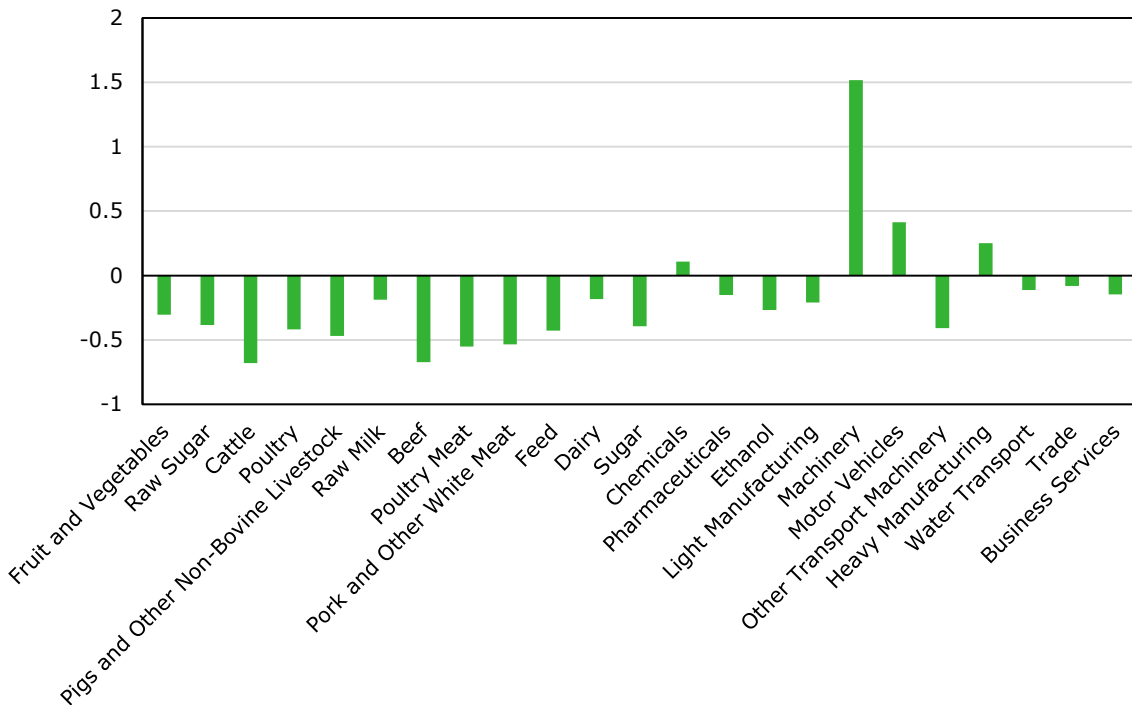


Figure 3.10 Rest of the EU27 Sectoral Real Wage Bill Effects in 2035 under Mercosur Agreement, %Δ

Figures 3.11 through 3.14 show the estimated export and import effects for Dutch trade with the Mercosur Four countries in terms of percent change as well as million euros. Export growth is the direct result of the liberalisation of the Mercosur market for Dutch exporters whereas import growth is the direct result of the liberalisation of the Dutch market for Mercosur exporters to the Netherlands. Export growth is directly expected for sectors which have high export exposure (Figure 3.5). Indirect effects of the EU-Mercosur Agreement on the Netherlands include effects through Dutch trade linkages with the Rest of the EU27.²¹

Overall the highest levels of export growth in Figure 3.12 are for Machinery (690m euros) followed by Pharmaceuticals (352m euros). In Figure 3.14, the highest levels of import growth are for Fruit and Vegetables (143m euros), Chemicals (142m euros), Heavy Manufacturing (93m euros). While manufacturing and services products have both export and import growth, agri-food products only see significant levels (measured in million euros) of import growth. This is because there are relatively low levels of agri-food exports to Mercosur from the Netherlands at present whereas there are relatively higher levels of agri-food imports to the Netherlands from Mercosur.

In Figure 3.15, net trade effects are presented as the change in sectoral trade balance for bilateral Netherlands-Mercosur trade. This is the increase in exports expected under the Agreement (Figure 3.12) minus the expected increase in imports under the Agreement (Figure 3.14). The Machinery and Pharmaceuticals sectors have the highest growth in bilateral trade balance of 672 and 351m euros, respectively. Considering the sectors in total, export growth exceeds import growth, and there is a net positive growth in the trade balance across sectors.

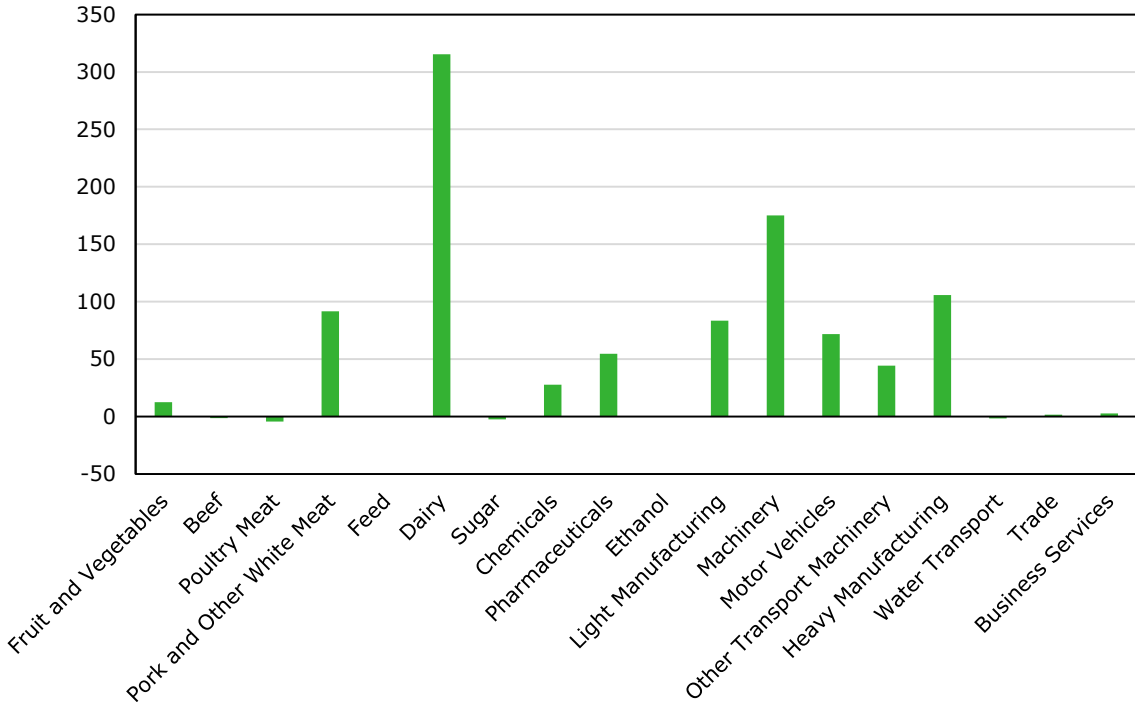


Figure 3.11 Difference in Dutch Export Growth to Mercosur Four from 2020-2035 under Mercosur Agreement, %Δ

²¹ In particular, the Rest of the EU27 is directly affected by the EU-Mercosur Agreement, and the Rest of the EU27 is the majority trading partner for the Netherlands. Therefore, as trade, demand, and supply patterns change for the Rest of the EU27 as a direct result of the Agreement, Dutch trade (exports and imports) with the Rest of the EU27 adjusts.

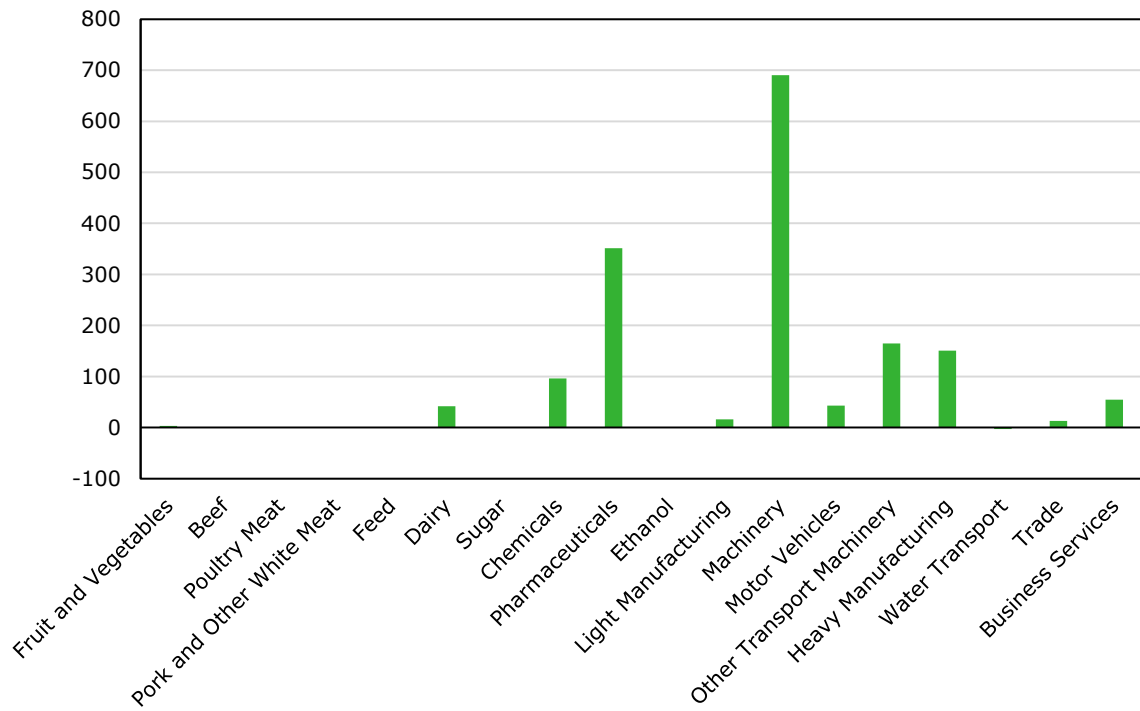


Figure 3.12 Dutch Export Growth in 2035 to Mercosur Four under Mercosur Agreement, million €

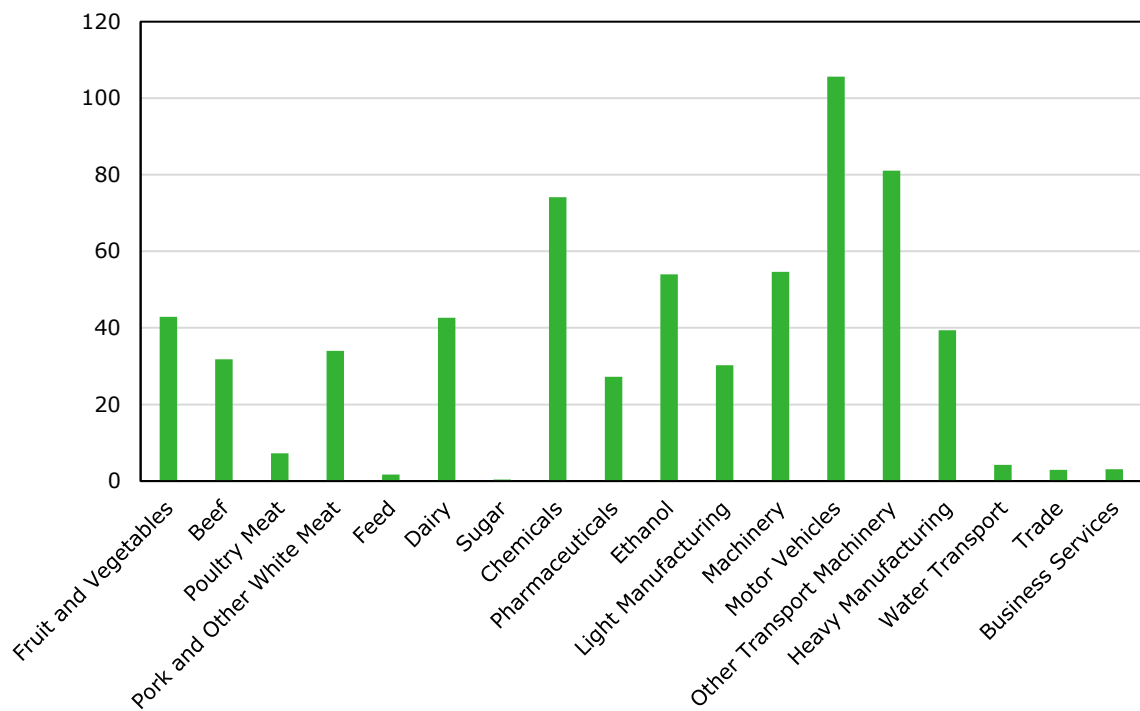


Figure 3.13 Difference in Dutch Import Growth from Mercosur Four from 2020-2035 under Mercosur Agreement, %Δ

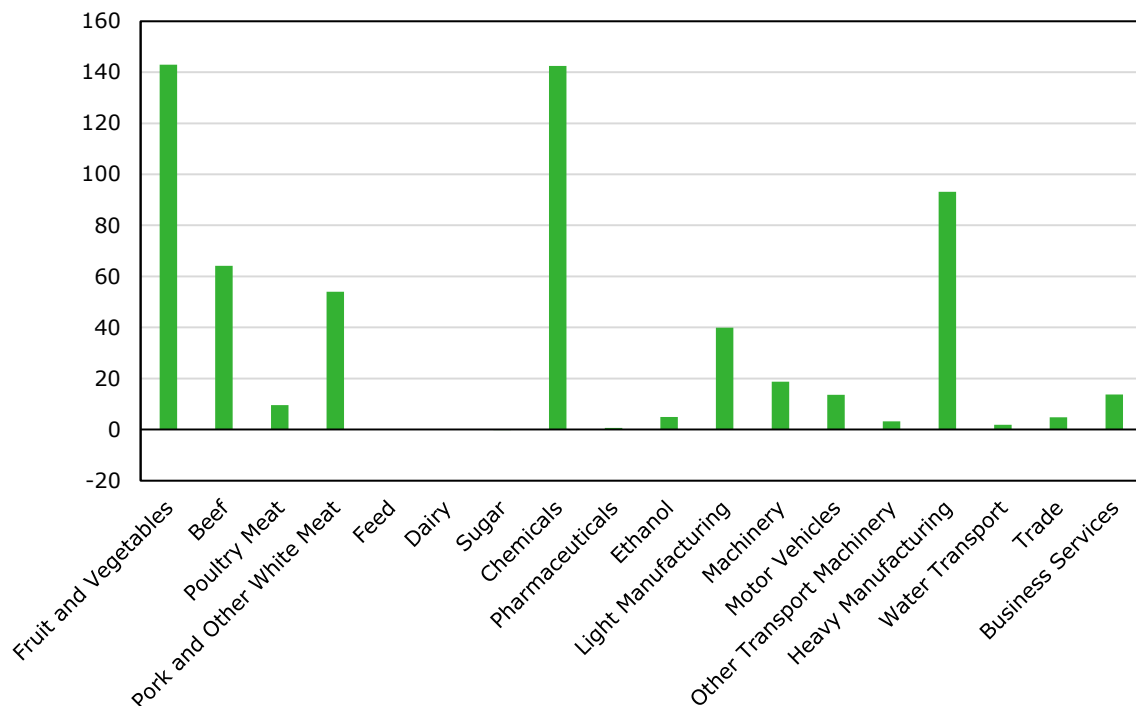


Figure 3.14 Dutch Import Growth in 2035 from Mercosur Four under Mercosur Agreement, million €

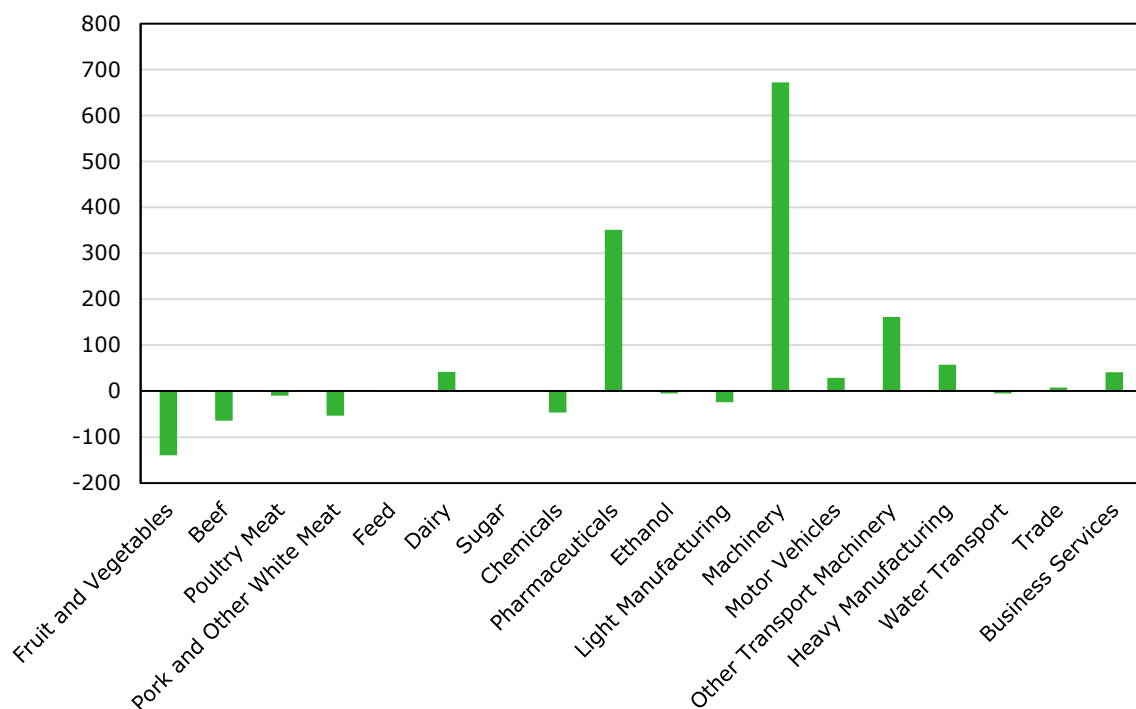


Figure 3.15 Change in Netherlands - Mercosur Trade Balance in 2035 under Mercosur Agreement, million €

Similarly, Figures 3.16 through 3.19 show the estimated export and import effects for the Rest of the EU27 trade with the Mercosur Four countries in terms of percent change as well as million euros. Likewise, the liberalisation of the Mercosur market spurs Rest of the EU27 exports to Mercosur (export growth) and liberalisation of the Rest of the EU27 market spurs Mercosur exports to Rest of the EU27 (import growth). Again, manufacturing and services products have both export and import growth, whereas agri-food products have only relatively significant import growth (as measured in millions of euros).

In the Rest of the EU27, the greatest gains in terms of export growth are for the Machinery sector (27,73bn euros), followed by gains for the Motor Vehicles (8,33bn euros) and Heavy Manufacturing sectors (7.71bn euros) (Figure 3.17). The greatest increases in import growth to the Rest of the EU27 are for the Chemicals (1.15bn euros) and the Motor Vehicles (1.12bn euros) sectors (Figure 3.19). The import growth for these two sectors is reflective of sectoral expansion and these are inputs feeding into expanded production as these sectors are anticipated overall to grow (Figure 3.8).

The change in the sectoral trade balance for bilateral Rest of the EU27-Mercosur trade shows the expected net trade gains from the Agreement. Trade balance growth is highest for the Machinery sector, at 26.9bn euros, followed by growth for the Motor Vehicles and the Heavy manufacturing sectors of 7.2 and 7.0bn euros, respectively. Across all sectors, the total trade balance is net positive for the Rest of the EU27.

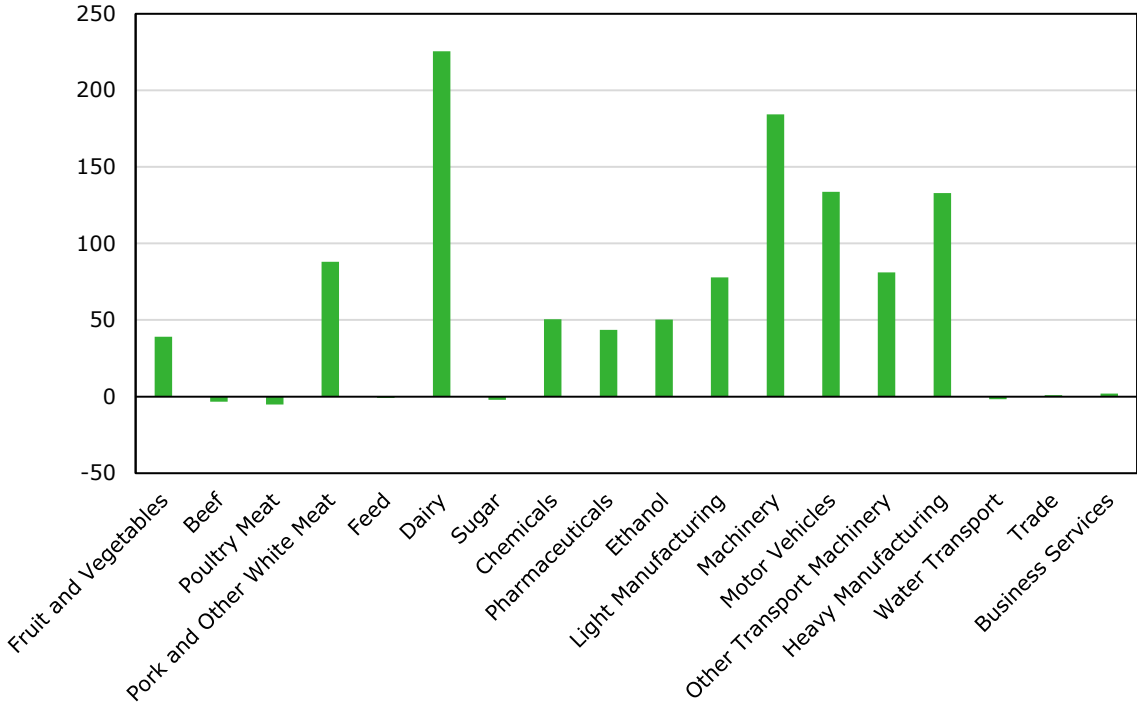


Figure 3.16 Difference in Rest of the EU27 Export Growth to Mercosur Four from 2020-2035 under Mercosur Agreement, %Δ

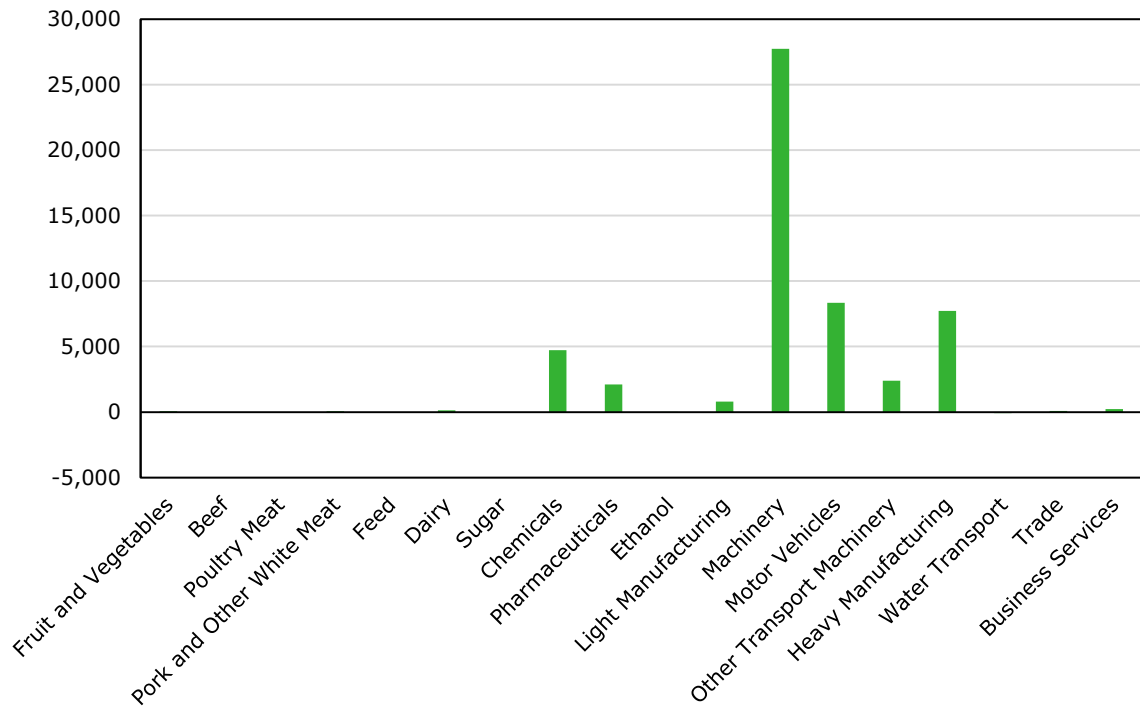


Figure 3.17 Rest of the EU27 Export Growth in 2035 to Mercosur Four under Mercosur Agreement, million €

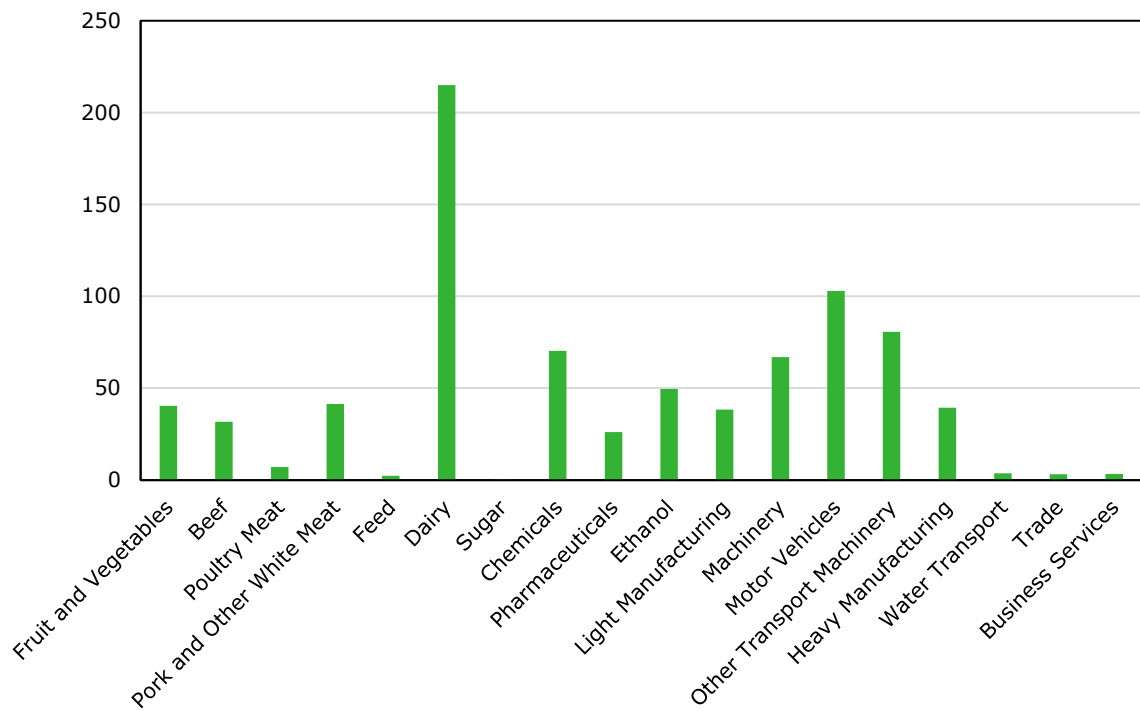


Figure 3.18 Difference in Rest of the EU27 Import Growth from Mercosur Four from 2020-2035 under Mercosur Agreement, %Δ

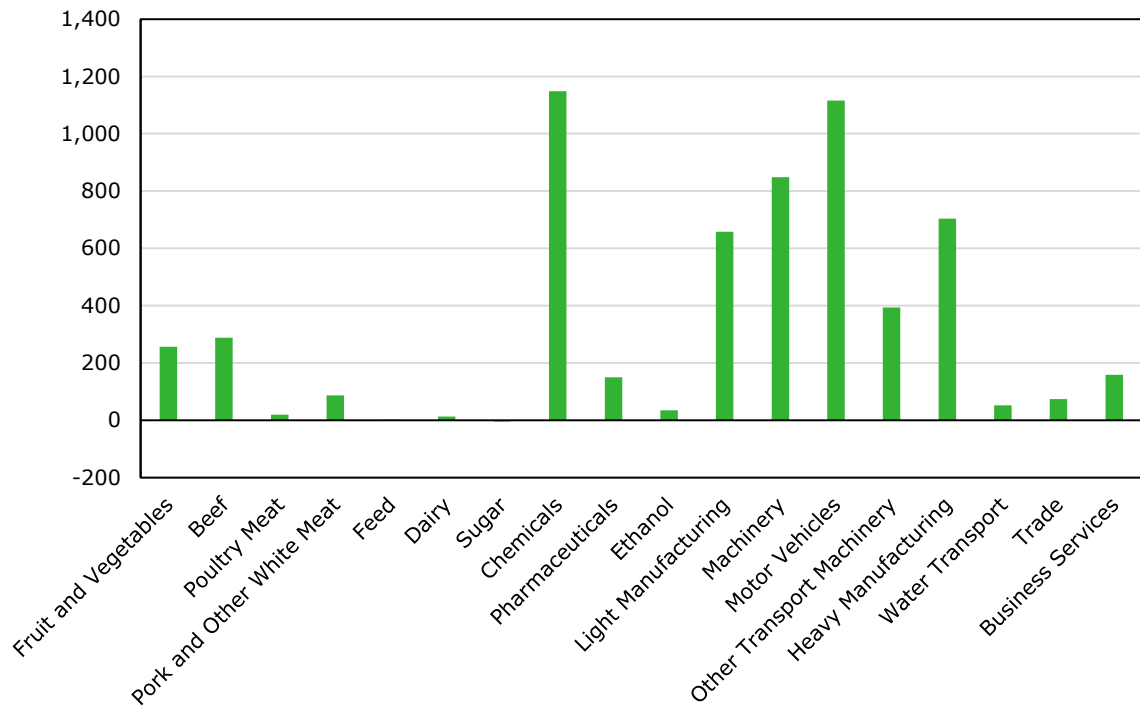


Figure 3.19 Rest of the EU27 Import Growth in 2035 from Mercosur Four under Mercosur Agreement, million €

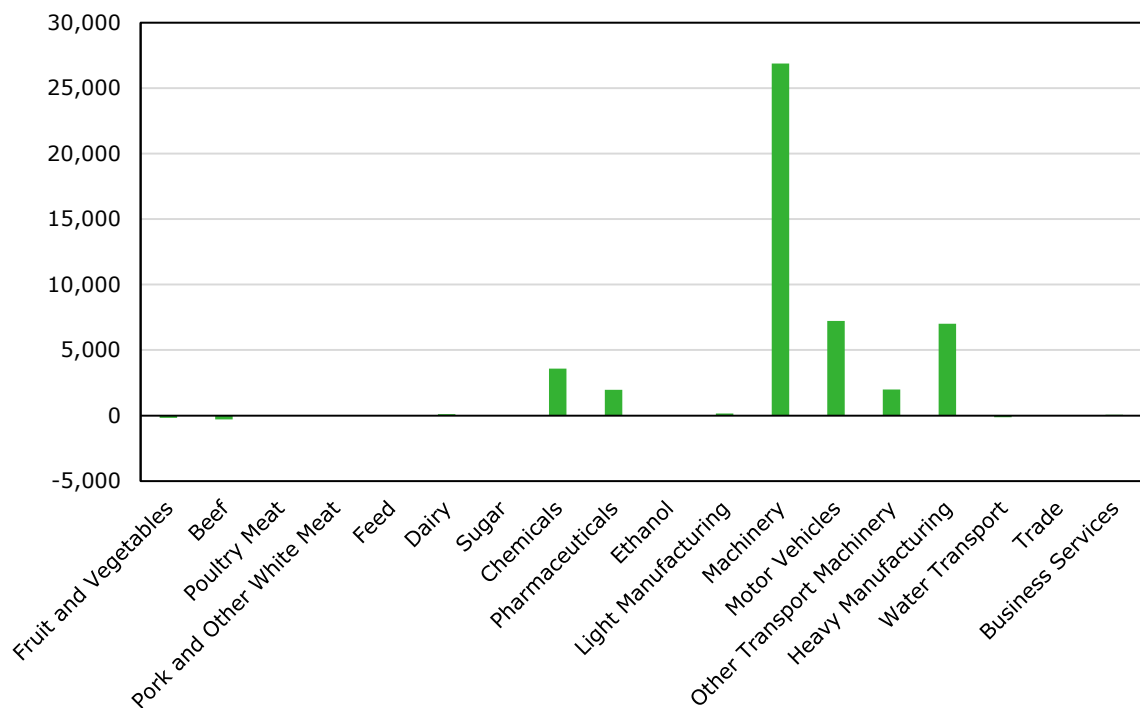


Figure 3.20 Change in Rest of the EU27 - Mercosur Trade Balance in 2035 under Mercosur Agreement, million €

3.4 Modelling conclusions

At the macro level, there is minimum expected effects of the EU-Mercosur agreement for either the Netherlands or the Rest of the EU27, as estimated in light of tariff reductions, TRQ changes, and NTM trade barrier reductions. The overall minimal macroeconomic effects are largely resultant from the economic composition in Europe with the largest sectors in terms of output being services, accounting for more than two-thirds of total economic output in Europe and the services sectors are not expected to expand due to the agreement. While services are a large proportion of Dutch economy, there is limited projected growth in trade to Mercosur as intra-Mercosur services trade increases. These findings are in line with the limited macroeconomic effects presented in the LSE (2020) Mercosur Agreement Impact Assessment.

At the sectoral level, however, there are effects, which are relatively more important for agri-food sectors as compared with the manufacturing or services industries. The effects are especially important for the Beef sector in the Netherlands which initially faces the relatively highest levels of import exposure across industries compared. Therefore, after liberalisation, this sector faces higher levels of import competition from increased import growth from the Mercosur Four, and as the Beef sector contracts so does the accompanying primary livestock sector, the Cattle sector.

All products which enter the EU market must comply with EU standards regarding food safety as well as with EU veterinary and phytosanitary standards. Because of differences in SPS standards²², there is currently no pork trade coming into Europe from Mercosur, and, therefore, the import growth of the Pork and Other White Meat aggregate commodity is reflective only of increases in Other White Meats imports. For this reason, the sectoral contraction is only expected in the Other White Meats components of this aggregation. Likewise, the estimated increase in Beef imports from Mercosur into Europe would also be dependent upon SPS standards being upheld in accordance with EU guidelines. In other words, if Mercosur exporters failed to comply with EU standards, these meat imports would not enter the EU.

Meanwhile manufacturing sectors gain foothold in the Mercosur market, increasing Dutch and European Exports, with strong exports growth to Mercosur anticipated for the Machinery sector. Yet, at the same time, results show that stronger Mercosur competition is anticipated to emerge as well as a result of the agreement. In particular, for non-tariff barriers to be reduced, Mercosur countries would need to undertake regulatory reform, which would be an important change in reality. While such regulatory reform would open up the Mercosur market to European exporters, reform could also be expected to strengthen intra-Mercosur competition.

²² In Brazil the use of ractopamine, an animal feed additive used to promote leanness and increase food conversion efficiency is allowed whereas it is banned in the EU. Brazil claims to produce ractopamine free pork, but EU controls conducted in recent years still found a significant share of samples taken from pigs at slaughter to contain this substance, leading to the conclusion that the system in place is not yet sufficiently robust to guarantee that ractopamine is not being used (FVO, 2013). Moreover, the FVO report shows that Brazilian legislation does not contain rules on pig identification and that control and sampling procedures for the production of ractopamine-free pork destined for EU exports do not cover the entire production chain.

4 Income effects of the trade agreement on Dutch family farms

4.1 Introduction

The Parliamentary motion of 2019 explicitly requested insights into the income effects of the Agreement on family farms²³ in the meat and dairy sectors. In this chapter the results at sector level of the trade agreement scenario are used to estimate farm-level income effects for the main farm types included in the Bedrijveninformatienetwerk (Farm Accountancy Data Network)²⁴ of the Wageningen Economic Research. In order to estimate the income effects, farm price and volume changes resulting from the implementation of the Mercosur trade agreement according to the MAGNET model simulation in the previous chapter are implemented within a farm-level model.²⁵

As indicated earlier, the analysis results in first order effects only, and does not include impacts of possible changes in the behaviour of farmers (e.g. by changing their cultivation plan or increasing yields), nor changes in land or capital prices, or structural changes in the sector (that is, changes in size of operation, structure – i.e. what crops they produce and how much – and technologies used) over time. In this simplified approach, we do not simulate a farm level income in the baseline scenario for 2035 as this would require a number of important assumptions on the issues mentioned in the previous sentence, which is beyond the scope of this study. Alternatively, income effects due to the Mercosur agreement are related to the current income situation, showing the effects as if the Mercosur agreement is directly and fully implemented, or – to put it differently – as if farm income levels in 2035 in the baseline scenario (without a Mercosur Agreement) were the same as the average of 2016-2018 (our current starting situation).

Farm level price changes due to the Mercosur Agreement are relatively small, ranging from 0.0 to -0.8% for all (13) primary products included in the MAGNET model simulation in Chapter 3, which subsequently lead to minor changes in production as well. The combined price and volume changes of the product categories our analysis on income effects is focused on, are summarised in Table 4.1. Changes are highest for cattle farmers producing beef and/or veal, whereas the changes for dairy and pig farms are nil, given that expected imports from Mercosur of these products are negligible (see section 3.4 for the explanation). Animal feed prices slightly fall due to lower or eliminated export taxes on soybean meal charged by Argentina.

Table 4.1 *Applied price and volume change (%) per product category*

Sugar beet	-0.38
Cattle livestock (beef)	-0.82
Cattle livestock (veal)	0.00
Poultry livestock (poultry meat and eggs)	-0.14
Pork livestock	0.00
Raw milk	-0.05
Animal feed	-0.29

Source: own calculations with MAGNET.

²³ Farms to which the price and volume effects relate are almost all family businesses except for a few mega companies. Only in greenhouse horticulture one finds (many) companies being a legal entity with employees.

²⁴ The Farm Accountancy Data Network (FADN) is a stratified sample in which farms are recruited per size per farm class (strata). See for more information <https://www.wur.nl/nl/Onderzoek-Resultaten/Wettelijke-Onderzoekstaken/Centrum-voor-Economische-Informatievoorziening-1/Land-en-tuinbouw.htm> The Farm Accountancy Data Network from A to Z.

²⁵ This is a calculation tool that is based on individual FADN farm-level data on prices and volumes. The tool can simulate the effect of changes in prices and volumes on revenues, costs and incomes, per farm and farm type.

An important note has to be made with regard to price effects simulated for the cattle livestock sector. Beef and veal are one aggregate sector in the MAGNET model, which leads to one estimated price effect for the two products which in reality are highly distinct meat types. For instance, white veal meat is a high quality (luxury) product that is sold at much higher prices than 'average' beef, whereas also rosé veal meat is relatively expensive compared to beef. The veal meat market differs strongly from the beef market in terms of market segment and export focus - Italy and France are major markets - where quality is the distinguishing factor more than price. Moreover, veal production is highly vertically integrated, which helps the sector to benefit from economies of scale and absorb price shocks (Bakker et al., 2012; Berkhout et al., 2019).²⁶ In addition, Mercosur countries do not export veal meat to the EU and are not expected to do so as a consequence of the trade agreement with the EU. Effects of the agreement on the veal market in the EU will therefore be indirect via impacts on the beef and other meat markets affecting demand for veal meat in the EU. Based on these factors, veal meat selling price levels are assumed not to be affected by the EU-Mercosur trade agreement.

4.2 Linking price changes²⁷ to farm types

The price effects link to meat (beef, veal, pigs and poultry), milk, sugar and animal feed. That is, the price effect of different types of meat on the turnover of beef, pork and poultry meat of each individual farm is applied as well as the price effect of milk, sugar and fodder on the turnover from milk and sugar beets and on costs of purchased fodder. These effects are translated into (specialised) so-called NSO farms types²⁸ where they will have most effect. These types are arable farms, dairy farms, pig farms, broiler farms, laying hen farm, veal calf farms, and beef cattle farms (cattle kept for meat primarily, not for milk) In addition, a residual group is distinguished, that includes sheep, horses and goat farms, mixed farms (not captured in the other crop and animal farm types), and horticulture companies (greenhouse and open ground).

Table 4.2 provides an overview of the number of farms per farm type in the Netherlands. For each farm type, a normalised revenue is indicated, which indicates the size of an average company in 1000 euros and represents a standardised output (SO) on an annual basis. This allows comparison of the economic performance of different farm types. In the table below, the term 'Income from farming per annual working unit (AWU) unpaid' is also used. This is the remuneration that the farmer and their households have received for the use of their labour and capital in the company. It also indicates the number of unpaid annual work units per farm type on an average farm. This is relatively high for dairy farming and laying hen farms, which indicates that compared to other farm types, more family members contribute to the operating result on these farms. A three-year average is used as reference because incomes can fluctuate strongly from year to year. This flattens out major incidental differences between the farm types.

²⁶ About two-thirds of veal meat production is produced under contract, with farmers getting a fee for housing the animals, energy, manure disposal etc, whereas the integrator owns the calf and supplies the feed. Farmers fees remained rather stable over the years, while selling prices have fluctuated and EU subsidies declined, indicating that price changes of veal meat are mainly absorbed by the integrator's margin. Veal meat price developments not produced under contract are assumed to follow the price developments for meat produced under contract.

²⁷ In this and the next section, we use the term 'price effect' to indicate the changes in price and volume together as shown in Table 4.1. This total turnover change (price + volume effect) is important because the income is about price and volume.

²⁸ NSO = the Dutch variance of the European Standard Output typology. See Appendix 3 for a clarification of the farm types.

Table 4.2 *Income per annual working unit (AWU) unpaid, number of AWUs, Standard output (SO) and number of farms; averages of 2016, 2017 and 2018; for selected farm types*

	Number of farms	SO (x 1,000 euros)	Income from farming per AWU unpaid	Number of AWUs unpaid	Income per farm (x 1,000 euros)
Arable farms	7,330	236	52	1.1	58
Dairy farms	16,040	433	39	1.6	61
Pigs farms	2,220	907	82	1.1	93
Broiler farms	480	1,298	114	1.2	136
Laying hens farms	640	839	75	1.6	121
Veal calf farms	1,230	669	31	1.3	40
Beef cattle farms	3,480	75	-14	0.9	-13
Other farms	13,850	780	97	1.4	139
Total	45,270	524	59	1.4	81

Source: Bedrijveninformatienet Wageningen Economic Research. See Appendix 3 for an explanation of the terms business type, SO, income per annual working unit unpaid and annual working unit.

The table shows that:

- the size in SO measured on land-based farms (arable farming, dairy cattle and beef cattle farms) is the smallest.
- the income from farms varies considerably between the types: for example, the income on broiler farms is relatively high and that on dairy farms and veal calf farms is relatively low.
- the income in the group 'beef cattle farms' is even negative. This group mainly consists of hobby farms with some meat and pasture livestock, such as originally dairy farms that have sold a large part of their farm (land and milking cows) and continue to hold cattle for slaughter on a small scale.

4.3 Effects of price and volume changes on farm incomes per farm type

Price and volume changes that will result from the implementation of the EU-Mercosur trade agreement will lead to changes in revenues. For the animal sectors, changes in animal feed cost due to price changes in cereals and oilseeds (both are important feed ingredients) are also taken into account. The animal sectors benefit from slightly cheaper animal feed (see also Table 4.1).

Table 4.3 summarises the consequences for incomes (changes in income, taking into account changing costs of animal feed but other costs remain unchanged). Negative income effects can be seen on veal calf farms and beef cattle farms, where the effects occur on the former farms because they also have adult cattle for beef. In absolute amounts, negative effects are 800 euros for an average veal farm and 700 euros for an average beef cattle farm. Almost all poultry and pig farms benefit slightly, due to lower feed prices; on average, however, the income effect is small at 700 euros for broiler farms, 1,200 euros for laying hens farms and 2,100 euros for pig farms, on average (See Table 4.3, upper part).

Table 4.3 Income effects and distribution of farms according to income class effects
(x 1,000 euros) per farm type category

	Average income effect (changes compared to average income 2017-2019)	Income effects in intervals: average income effect of farms whose income effect falls within the interval				
		Positive effect	No effect	-2.5 - 0	-5 - -2.5	<-5
Income effect (x 1,000 euros)						
Arable farms	-0.2	na	0	-0.2	na	na
Dairy farms	-0.1	0.2	na	-0.1	na	na
Pigs farms	2.1	2.1	0	-0.1	na	na
Broiler farms	0.7	0.8	na	-0.2	na	na
Laying hens farms	1.2	1.5	0.0	0.0	na	na
Veal calf farms	-0.8	0.4	na	-1.0	-3.7	-6.9
Beef cattle farms	-0.7	0.1	0.0	-0.4	-3.9	-6.6
Other farms	0.1	0.9	0.0	-0.2	na	na
Total	0.2	1.1	0.0	-0.2	-3.6	-6.9
Distribution of farms (horizontal = 100%)						
Arable farms	100	0	15.4	84.6	0	0
Dairy farms	100	16.6	0	83.4	0.9	0
Pigs farms	100	87.6	5.4	6.8	0	0
Broiler farms	100	99	0	1	0	0
Laying hens farms	100	84.3	15.6	0	0	0
Veal calf farms	100	54.1	0.0	36.5	5.5	4.1
Beef cattle farms	100	8.0	0.3	91.3	0.3	0.3
Other farms	100	26.2	57.5	16.4	0.0	0.0
Total	100	22.0	20.6	56.6	0.2	0.1

Source: Bedrijveninformatienet Wageningen Economic Research. na = not applicable.

The size of farms varies by farm type and also the incomes. Larger farms usually have a greater disadvantage if prices of their product fall and the costs do not (or decrease less than the revenues). In order to provide insight into which companies are most affected by the trade agreement, Table 4.3 also shows the income effect for a number of intervals in addition to an average income effect for the farm type, and how many farms have to deal with loss of income that fall within an interval. The table shows that:

- 88% of pig farms have a positive effect with an average gain of 2,100 euros, and there are no farms with an income loss bigger than 2,500 euros.
- Almost all broiler farms show a positive result. Next, 84% of laying hen farms have a positive effect with an average gain of 1,500 euros, whereas the rest of the eggs producing farms do not experience an income effect.
- 36% of the veal calf farms have an income loss of 1,500 euros on average and 10% have a negative income effect that is higher than 2,500 euros on average. The rest - 54% - has a very small positive result.
- The majority (91%) of beef cattle farms face a small loss of EUR 700 per farm on average; 8% of the farms even show a positive effect (due to lower feed costs), although very minor in absolute terms;
- On dairy and arable farming, the negative effects on almost all farms are 100 euros and 200 euros, respectively.
- Across all business types, there are on average no negative income effects.

Table 4.4 shows once more what the differences are between large or larger and small or smaller farms. The aforementioned concept of SO (the normalised revenue per farm) is used to determine the boundary between large and small (see footnote of the Table). From Table 4.4, it appears that for arable, dairy, pig, poultry and beef cattle farms the differences are small between the smaller and larger farms, but the larger farms in the veal calf sector show clearly greater negative income effects because these farms also keep a significant number of adult cattle for beef for which negative price effects are estimated as result of the trade agreement.

Table 4.4 Distribution of income effects over specified intervals, for small and large farms, per farm type (%)

	Average income effect	Positive effect	No effect	-2.5 - 0	-5 - -2.5	<-5
Share small farms a)						
Arable farms	100	0	17	83	0	0
Dairy farms	100	16	0	84	0	0
Pigs farms	100	82	8	10	0	0
Broiler farms	100	100	0	0	0	0
Laying hens farms	100	88	11	1	0	0
Veal calf farms	100	49	0	45	5	1
Beef cattle farms	100	8	0	91	0	0
Other farms	100	na	na	Na	na	na
Total	100	29	54	17	0	0
Share large farms a)						
Arable farms	100	na	na	Na	na	na
Dairy farms	100	0	9	91	0	0
Pigs farms	100	100	0	0	0	0
Broiler farms	100	98	0	2	0	0
Laying hens farms	100	78	18	5	0	0
Veal calf farms	100	74	0	2	9	15
Beef cattle farms	100	16	72	12	0	0
Other farms	100	21	21	58	0	0
Total	100	na	na	na	na	Na

a) for arable farming, dairy cattle, veal and beef cattle farms, the limit is 300,000 euros SO and for the other types 1m euros.

Source: Bedrijveninformatienet Wageningen Economic Research.

In summary, average income effects per farm are positive for pigs and poultry farms, and for dairy and arable farms close to zero. Income effects are negative for beef and veal farms, with an average income effect of 800 euros per farm for veal farms translating into 2% decline of the 2017-2019 average income level, and for beef cattle farms the estimated negative effect of 700 euros resulting in a 5.4% decline in average income per farm (Table 4.5).

Table 4.5 Income per farm (2017-2019), income effects due to the Agreement and Share of income effect in average Income per farm (average 2017-2019), per farm type

	Income per farm (1,000 euros)	Income effect (1,000 euros)	Share of income effect in Average Income 2017-2019 (%)
Arable farms	58	-0.2	-0.3
Dairy farms	61	-0.1	-0.2
Pigs farms	93	2.1	2.3
Broiler farms	136	0.7	0.5
Laying hens farms	121	1.2	1.0
Veal calf farms	40	-0.8	-2.0
Beef cattle farms	-13	-0.7	-5.4
Other farms	139	0.1	0.1
Total	81	0.1	0.1

Source: Bedrijveninformatienet Wageningen Economic Research.

5 Main findings

Responding to the Voordewind et al. motion passed by the Dutch parliament on 4 July 2019, this study provides a quantitative analysis of the EU-Mercosur Agreement, which was signed on 28 June 2019. In the Agreement, the EU and Mercosur agreed to: liberalise tariffs by 91% and 95%, respectively, within 15 years; to implement new TRQs; and to facilitate market access through other provisions. While current Dutch trade relations with Mercosur are limited (exports to Mercosur are 2.3% of total EU-external exports), Dutch exporters are anticipated to gain in particular from the tariff liberalisation as all EU exporters face relatively higher tariffs to enter the Mercosur market. In addition, new Mercosur TRQs on cheese, milk powders, and infant formula implemented under the Agreement have quota levels higher than current levels of trade and, as such, are anticipated to spur trade.

While tariff liberalisation and new TRQs are important aspects of the Agreement, the extent to which the Agreement will be able to address NTMs remains uncertain. A number of significant SPS- and TBT-related issues EU exports currently face in the Mercosur market are present in the EU Market Access Database (MADB). Further, in interviews, Dutch business representatives and stakeholders in agricultural and industrial sectors also reported on the barriers to trade from issues surrounding SPS and TBT requirements in the Mercosur market, though showed doubt over how much improvement could be made under the Agreement.

The MAGNET model was used to quantify the macroeconomic and sectoral level of the EU-Mercosur Agreement, under a hypothetical full implementation by 2035. Macro-level tariff and export tax changes were calculated from the Market Access schedule, new and updated TRQs were implemented, and NTMs were modelled using estimates from the World Bank and the OECD. Macro-level price and volume changes from MAGNET were implemented in a farm level model to assess impacts on farm income.

At the macro level, expected effects of the EU-Mercosur agreement for both the Netherlands and the Rest of the EU27 are very small with the Netherlands gaining 0.03% in GDP and the Rest of the EU27 gaining 0.02% in GDP. These results are reflective of the economic composition in Europe with the largest sectors in terms of output being services, accounting for more than two-thirds of total economic output in Europe. The main price gains from the agreement are from tariff liberalisations and TRQs. However, the beneficiary sectors of this tariff-line liberalisation (agriculture and manufacturing) are the minority components of the total economic output of the Netherlands, and, changes in these sectors will only accrue proportionally to the economy-wide effects.

At the sectoral level, however, the effects are more varied, with gains and losses driven by relative sectoral trade exposure. In the Netherlands, manufacturing sectors have higher relative levels of export exposure to the Mercosur market whereas agricultural sectors face higher relative levels of import competition. The Other Transportation Machinery (not comprising motor vehicles) and Pharmaceutical sectors, which have the highest relative export exposure, expand production by 1.42 and 1.16%, respectively, following increases in exports to Mercosur. In contrast, the Beef sector and the Fruit and Vegetables sector both face relatively high levels of import exposure, and production in these sectors contracts by 0.61 and 0.21%, respectively. Likewise, production in the Cattle sector contracts by 0.49%, following the Beef sector contraction. An important note is, that due to current differences in SPS standards in the EU and Mercosur, the increase in imports from Mercosur into Europe would be dependent upon compliance with EU legislation on food safety and SPS standards. Overall, while trade gains vary by sector, in net, the trade balance between the Netherlands and Mercosur grows positively from the Agreement, indicating that overall export growth to Mercosur outpaces import growth from Mercosur.

Farm-level income effects are estimated to be negative for specialised veal (calf) farms (-800 euros) and beef cattle farms (-700 euros on average, with the negative effects of the former occurring at the larger farms that also hold a significant number of adult cattle for beef. Poultry and pig farms may benefit because of lower feed prices, with income effects for laying hens, broiler and pig farms of 1,200 euros, 700 euros and 2,100 euros per farm on average. For these outcomes, the caveat is that changes in the structure of the sector over time have not been taken into account, so that changes in returns are included but not adjustments in scale and costs.

References and websites

- Aguiar, A., M. Chepeliev, E. Corong, R. McDougall, and D. van der Mensbrugghe (2019). 'The GTAP Data Base: Version 10'. *Journal of Global Economic Analysis*, 4(1), 1-27.
- Armington, P. (1969). A Theory of Demand for Products Distinguished by Place of Production. Staff Papers (International Monetary Fund), 16(1), 159-178.
- AVEC (Association of Poultry Processors and Poultry Trade in the EU Countries) (2020). Annual report 2019. AVEC, Brussels
- Bakker, T., W. Baltussen and B. Doorneweert (2012). 'Competitive position of the white veal meat sector'. LEI report 2012-025. LEI-Wageningen UR. The Hague.
- Benz, S., and A. Jaax (2020), 'The costs of regulatory barriers to trade in services: New Estimates of Ad Valorem Tariff Equivalents', OECD Trade Policy Papers, No. 238.
- Berkhout, P., J. Jager and B. Smit (2019). Inkomenseffecten van de GLB-aanpassingen per 2020; Een quick scan. Wageningen, Wageningen Economic Research, Rapport 2019-114. 42 blz.; 5 fig.; 8 tab.; 12 ref.
- Berkum, S. van (2015). Prospects of an EU-Mercosur trade agreement for the Dutch agrifood sector. LEI Wageningen UR report 2015-036.
- De Janvry, A., M. Fafchamps, and E. Sadoulet (1991). 'Peasant Household Behavior with Missing Markets: Some Paradoxes Explained', *Economic Journal*, 101: 1400-1417.
- DG (SANTE), (2013). Final report of an audit carried out in Brazil from 02 May 2017 to 12 May 2017 in order to evaluate the operations of controls over the production of beef, horse and poultry meat, and products derived therefrom intended for export to the European Union. Ref. Ares(2017)4608632 - 21/09/2017. DG(SANTE) 2017-6261
- DG (SANTE), (2018). Final report of an audit carried out in Brazil from 22 January to 05 February 2018 in order to follow up the implementation of the actions taken by the Brazilian authorities to address the recommendations of audit report DG(SANTE)/2017-6261. Ref. Ares(2018)3139259 - 14/06/2018. DG(SANTE) 2018-6460
- Disdier, A.-C., C. Emlinger, and J. Fouré (2016), 'Interdependencies between Atlantic and Pacific agreements: Evidence from agri-food sectors', *Economic Modelling*, Vol. 55: 241-253.
- Dixon, P., H. van Meijl, M. Rimmer, L. Shutes, and A. Tabeau (2016). 'RED versus REDD: Biofuel policy versus forest conservation', *Economic Modelling*, 52: 366-374.
- EC (2020). New EU-Mercosur trade agreement. The agreement in principle. Brussels, 1 July 2019. European Commission. DG Trade.
https://trade.ec.europa.eu/doclib/docs/2019/june/tradoc_157964.pdf
- EC (2019), EU agricultural outlook for markets and income, 2019-2030. European Commission, DG Agriculture and Rural Development, Brussels.
- FVO (Food and Veterinary Office). (2013). Final report of an audit carried out in Brazil from 15 to 28 October 2013 in order to evaluate the operations of control over the production of fresh bovine meat destined for export to the European Union as well as certification procedures. European Commission. Health and Consumers Directorate-General. DG(SANCO) 2013-6886 - MR FINAL. Ref. Ares(2014)1109368 - 09/04/2014
- Horne, P van (2018). Competitiveness of the EU poultry meat sector. Wageningen UR. Report 2018-116.
- Jafari, Y., and D. Tarr (2015), 'Estimates of Ad Valorem Equivalents of Barriers Against Foreign Suppliers of Services in Eleven Services Sectors and 103 Countries', *World Economy*, Vol. 40(3): 544-573.
- Kee, H. L., and A. Nicita (2017), 'Trade Frauds, Trade Elasticities and Non-Tariff Measures', Mimeo.
- LSE (2020), 'Sustainability Impact Assessment in Support of the Association Agreement Negotiations between the European Union and Mercosur', Draft Final Report July 2020.
- Nowicki, P., V. Goba, A. Knierim, H. van Meijl, M. Banse, B. Delbaere, J. Helming, P. Hunke, K., Jansson, T. Jansson, L. Jones-Walters, V. Mikos, C. Sattler, N. Schlaefke, I. Terluin, and D. Verhoog (2009). 'Scenar 2020-II - Update of Analysis of Prospects in the Scenar 2020 Study', European Commission, Directorate-General Agriculture and Rural Development, Brussels.

-
- OECD/FAO (2020), *OECD-FAO Agricultural Outlook 2020-2029*, FAO, Rome/OECD Publishing, Paris, <https://doi.org/10.1787/1112c23b-en>.
- UNCTAD (2013). *Non-tariff measures to trade: Economic and policy issues for developing countries*. UNCTAD New York and Geneva
- UNCTAD, 2017. *Non-tariff measures in Mercosur: deepening regional integration and looking beyond*. UNCTAD, New York and Geneva
- USDA (2019). *EU biofuels Annual 2019*. GAIN Report Number:NL9022. 7/15/2019
- Van Meijl, H., T. van Rheenen, A. Teabeau, and B. Eickhout (2006). 'The impact of different policy environments on agricultural land use in Europe', *Agriculture, Ecosystems & Environment*, 114(1): 21-38.
- Woltjer, G., M. Kuiper, A. Kavallari, H. van Meijl, J. Powell, M. Rutten, L. Shutes, and A. Teabeau (2014). 'The MAGNET model - Module description', LEI, Wageningen University & Research. LEI Report 14-057.
- WTO (2020). WTO Tariff download facility. www.tariffdata.wto.org

Appendix 1 Motie Voordewind

Tweede Kamer der Staten-Generaal

Vergaderjaar 2018-2019

34 952 Investeren in Perspectief - Goed voor de Wereld, Goed voor Nederland Nr. 75

MOTIE VAN HET LID VOORDEWIND C.S.

Voorgesteld 4 juli 2019

De Kamer, gehoord de beraadslaging,

- constaterende dat er een politiek akkoord bereikt is over het handelsverdrag tussen de EU en Mercosur-landen;
- overwegende dat in maart 2011 de motie-Koopmans/Snijder-Hazelhoff (21501-32, nr. 460) is aangenomen, die de regering onder andere verzocht niet in te stemmen met een associatieakkoord tussen de Europese Unie en de Mercosur-landen zolang de effecten voor de land- en tuinbouw niet kwantitatief in kaart zijn gebracht;
- constaterende dat Nederlandse boeren, met name in de rundvlees- en pluimveesector, hard getroffen kunnen worden wanneer het nu voorliggende associatieakkoord met de Mercosur-landen in werking treedt;
- overwegende dat in het regeerakkoord is afgesproken dat Nederland internationaal met andere koplopers streeft naar verbetering van het dierenwelzijn en dat bij handelsverdragen niet wordt getornd aan de Europese standaarden voor voedselveiligheid en consumentenbescherming;
- constaterende dat het toelaten van producten tot de Europese markt die niet aan onze duurzaamheids- en dierenwelzijnsmaatstaven voldoen, kan leiden tot oneerlijke concurrentie;
- constaterende dat de Europese Unie toegezegd heeft de markt in deze gevoelige sectoren te monitoren op marktverstoringen en middelen heeft toegezegd voor flankerend beleid;

verzoekt de regering, zodra de geconsolideerde teksten beschikbaar zijn, maar uiterlijk voor de behandeling in de Raad van de Europese Unie, de voor- en nadelen van de handel met de Mercosur-landen onder dit handelsverdrag voor de Europese land- en tuinbouw en in het bijzonder voor de Nederlandse (gezins)bedrijven in de vlees- en zuivelsector, kwantificeerbaar in kaart te brengen;

verzoekt de regering tevens, om in de debatten in de Raad van de Europese Unie erop aan te dringen dat de Europese Unie tot vastlegging komt van de huidige EU/VN-standaarden in het trade and sustainable development chapter, inclusief voedselveiligheid, dierenwelzijn, het Klimaatakkoord en het tegengaan van ontbossing, alsook zal aandringen op de effectieve uitvoering ervan in de Mercosur-landen;

verzoekt de regering vervolgens, om in debat te gaan met de Kamer over de finale verdragstekst alvorens de regering het verdrag namens Nederland zal accorderen,

en gaat over tot de orde van de dag.

Voordewind, Amhaouch, Bouali, Van Haga

Tweede Kamer, vergaderjaar 2018-2019, 34 952, nr. 75 2

bron: <https://www.parlementairemonitor.nl/9353000/1/j9vvij5epmj1ey0/vkzxbmccoetz#p1>

Appendix 2 Estimation of trade costs related to non-tariff measures: literature review on data sources, econometric estimations and implementation in CGE model simulations

1. Introduction

Non-tariff measures (NTMs) are policy measures, apart from tariffs or tariff rate quotas (TRQs), which can directly or indirectly have an economic impact on trade flows between countries. Trade agreements, such as the negotiated EU-Mercosur Trade Agreement, have substantial provisions which aim to directly affect non-tariff measures, either by implementing more stringent regulatory requirements (e.g. SPS and TBT) or by liberating regulatory barriers (e.g. opening markets up to foreign competition). While NTMs can have significant impacts on trade in goods, NTMs on services trade are especially important to capture as services do not face tariff-based trade barriers.

When assessing trade agreements, thorough analyses will aim to capture effects not only from changes to tariff rates and TRQs but further from changes to NTMs. While tariff rates are inherently numerical, NTM measures are not directly numerical. Therefore, econometric estimation is necessary to determine the estimated effects of NTMs on trade flows, and subsequently, this effect on trade flows is subsequently translated into an ad-valorem equivalent (AVE), being the tariff equivalent trade cost.

A common tool for trade agreement assessments is the computable general equilibrium (CGE) model, a class of models which link international trade flows to individual country economies (consisting of consumption and production). To account for changes to NTMs in a CGE trade agreement assessment, two key elements are necessary: (1) numerical estimates for NTMs, and (2) a mechanism for implementation in the model. The numerical estimates (1) available as well as the model code itself both influence the options available for model implementation (2).

In this appendix, we review NTM literature and data sources used to inform the modelling of NTMs in the MAGNET model (Modular Applied GeNeral Equilibrium Tool) as part of an assessment of the EU-Mercosur Trade Agreement. In Section 2, we review data sources and econometrics estimation for both goods and services NTMs. Further, in Section 3, we review the implementation of NTMs modelling for both goods and services. In Section 4, based on our findings in terms of estimations and modelling techniques, we make recommendations for NTM implementation in the MAGNET model.

2. Data sources and estimations

In this section, we review the data sources and econometric estimations implemented to develop AVE estimates for NTMs. For goods, the principal NTM data source used for estimations is the United Nations Conference on Trade and Development (UNCTAD). The two most prominent sources of AVE econometric estimations are the World Bank and the Organisation for Economic Co-operation and Development (OECD). For services, the World Bank and the OECD collect their own data on NTMs and perform their own estimations. There has been a more recent World Bank initiative joint with the

World Trade Organization (WTO) to collect new services data; however, the most recent World Bank NTM estimates predate this, relying on the original World Bank initiative.

a. Goods

UNCTAD

UNCTAD collects NTMs data according to the International Classification of Non-Tariff Measures (UNCTAD 2019), which was most recently revised in 2017. This classification system was agreed upon by the Multi-Agency Support Team (MAST) Group,²⁹ a group of experts from eight multilateral institutions. The data is disseminated at the Harmonized System (HS) 6-digit product classification in the UNCTAD Trade Analysis and Information System (TRAINS) database.³⁰ The classification of NTMs at the tariff line (HS) level facilitates the examination of the effects of NTMs on the trade flows for a given HS line. This data is used as the principal input into the estimations of NTM AVEs by both the World Bank and the OECD.

World Bank

Kee et al. (2009) is a seminal paper in NTM AVE estimation. The authors produce unilateral measures of AVEs for goods NTMs for 93 importing countries and for 4941 HS codes at the 6-digit level of classification. From their econometric model, they compute two types of AVEs: (1) a 'core' AVE, and (2) an agricultural domestic support AVE. Data used in the estimation for the core AVE is obtained from UNCTAD TRAINS, and represents non-tariff barriers comprising: price control measures, quantity restrictions, monopolistic measures, and technical regulations. Domestic support information is from WTO member's notifications between 1995 and 1998.

Kee and Nicita (2017) produce bilateral measures of NTM AVEs for 41 importing countries from 152 countries of origin and for 40 GTAP codes (classification version 9). They produce two measures of estimates: (1) AVEs of technical measures and (2) AVEs of non-technical measures. In accordance with the International Classification of Non-Tariff Measures, technical measures capture: sanitary and phytosanitary measures; and technical measures. Further, non-technical measures capture: contingent trade measures, quantitative restrictions, price controls, and finance measures.

OECD

Cadot et al. (2018) produce bilateral measures of goods NTM AVEs for 86 countries and for over 5000 HS codes at the 6-digit level of classification. In addition to the estimated AVEs (price effects), the authors additionally estimate volume effects, indicating the effects of NTMs on unit values of trade. In addition to the HS level of detail, estimates are also available for 41 GTAP sectors (classification version 9). For both price and volume effects, they produce four measures of estimates: (1) sanitary and phytosanitary (SPS) measures, (2) technical barriers to trade (TBT), (3) border control measures (BCM), and (4) quantitative restrictions (QRs).

b. Services

OECD

Since 2014, the OECD's Services Division annually collects extensive information on trade restrictions and behind the border regulations affecting services trade and provided quantitative measures of these policies in the OECD Services Trade Restrictiveness Index (STRI). The STRI provides a measure of the relative levels of and differences between policies affecting services trade, and, in 2019, coverage included nearly 98 000 regulatory items across 22 sectors and in 46 countries. Regulations are classified under five broad policy areas: (1) restrictions on foreign entry, (2) restrictions on movement of people, (3) other discriminatory measures, (4) barriers to competition, and (5) regulatory transparency (OECD 2020).

Based on the STRI, OECD research (Benz and Jaax, 2020) estimates AVEs for services barriers to trade for 44 importing countries and 5 GTAP codes (classification version 9). The STRI score measures the relative barrier of domestic regulations across foreign competitors, and, therefore, the AVEs are

²⁹ <https://unctad.org/en/Pages/DITC/Trade-Analysis/Non-Tariff-Measures/MAST-Group-on-NTMs.aspx>

³⁰ <https://unctad.org/en/Pages/DITC/Trade-Analysis/Non-Tariff-Measures/NTMs-Data.aspx>

unilateral measures of trade costs across an importer's trade partners. The exception to this is for European Economic Area (EEA) members, where there are two sets of estimates: (1) for EEA trade partners and (2) for non-EEA trade partners.

World Bank - WTO

The World Bank STRI was initially compiled for 2008 based on (1) questionnaires completed by local law firms for 79 non-OECD countries and (2) publicly available information for 24 OECD countries, including WTO, OECD, and International Monetary Fund (IMF) reports. For these 103 countries, data was collected across five broad sectors: telecommunications, finance, transportation, retail and professional services (Borchet et al., 2012).

In collaboration with the WTO, the World Bank STRI was updated for 68 WTO members for the year 2016. For the 25 non-OECD economies, data was again gathered from questionnaires completed by local law firms. For the 43 OECD economies, the data was sourced directly from the OECD STRI database. The new World Bank – WTO STRI covers the same five broad sectors as the original World Bank STRI, and additionally reports scores at a further disaggregate level of 23 sectors (Borchet et al., 2019).

Based on the 2008 World Bank STRI, Jafari and Tarr (2015) estimate services barriers AVEs for all 103 countries. They provide estimates for 11 services sectors: accounting, legal, air transport, rail transport, road transport, maritime transport, insurance, banking, fixed line telecommunications, mobile telecommunications, and retail distribution. The AVE estimates are unilateral, for the same reasons described above.

3. Modelling implementation

In this section, we review methods of introducing NTMs into CGE models. In particular, we consider NTM modelling methods implemented with the purpose of analysing prospective trade agreements. We discuss NTM implementation for both goods and services sectors.

The implementation of NTMs in CGE simulation models first relies on the representation within the model. The most common representation of NTMs in CGE models is a depiction with an efficiency parameter, termed the 'iceberg effect'. Through this mechanism, both import prices and quantities are affected (Sanjuan Lopez et al., 2019).

Another approach is to depict NTMs in CGE models as pure price effects through taxes on imports or exports which could be considered indicative of the rent-generating effects of NTMs (Fugazza and Maur, 2008). Disdier et al. (2016) implement such an approach in tandem with the 'iceberg' approach. A drawback, whether implemented alone or in tandem with the 'iceberg effect', is that without empirical evidence on rents from NTMs, numerical implementation is at risk of depending on arbitrary choices.

Other approaches rely on theoretical innovations not standard in most CGE models. For example, Walmsley and Minor (2019) introduce new mechanisms to allow for consumers to demand higher priced goods. The intuition is that consumers are willing to pay higher prices for certain standards as implemented through certain NTMs (e.g. SPS).

Given the representation of NTMs in the theory of the CGE model, the second key element is the interpretation and, accordingly, the application of available estimations of the effects of NTMs. Historically, trade agreement analysis has considered the opening of trade and, hence, the reduction of NTMs. In recent times, there has been research considering increases to NTMs, such as for analyses of BREXIT (Arriola et al., 2018; Smith et al., 2019). In the context of the EU-Mercosur trade agreement, we consider analysis of NTM reduction.

The standard approach to NTM interpretation and application relies on the 'iceberg representation' in the CGE model as well as on estimated AVEs of NTMs. First, the desired reduction must be specified.

This could be assigned generically, such as through assuming a 10% decrease in trade costs from NTMs equates to a 10% increase to the 'iceberg efficiency' (LSE, 2020). A more detailed approach would be to perform a similar approach in translating trade cost decreases to efficiency increases for each bilateral product flow using estimated AVEs for NTMs.

To specify the relative levels of changes in efficiency, variations in the NTM AVE estimations can be exploited. For example, an illustrative study by the OECD (2019) uses the OECD services AVEs to examine a potential services liberalisation across the G20. The OECD makes use of the difference between AVEs for EEA members versus those for non-EEA members, considering the mean intra-EEA AVE level to be the benchmark reflective of decades of regulatory cooperation between members. To model this scenario, they consider the per-country, per-sector difference in AVE estimate relative to the EEA benchmark to be the 'iceberg efficiency' improvement necessary to impose to reach the benchmark.

An additional consideration to consider feasibility of policy changes to affect the trade restrictiveness of NTMs or the 'actionability'. Francois et al. (2015) for example consider that only 50% of NTM-imposed restrictions can feasibly be reduced, and they implement a 25% reduction to NTMs levels in their own modelling. Disdier et al. (2016), however, consider that even a 25% improvement may not be feasible and impose only a 10% improvement to NTM trade restrictiveness.

4. Implementation with MAGNET

Based on our findings in the literature, we implemented NTMs in the MAGNET model for the assessment of the EU-Mercosur agreement. We specify the implementation in terms of (1) estimates of NTM AVEs, for both goods and services, and (2) modelling methods implemented. We considered data availability as well as data requirements for the assessment of the EU-MERCOSUR agreement.

In terms of NTM AVE estimates for goods, the OECD database as estimated by Cadot et al. (2018) is the richest in terms of country coverage (86 importers with bilateral flows) and estimates presented (four types of AVEs plus volume effects). However, the OECD estimates have not been made available at the bilateral level. Therefore, the Kee and Nicita (2017) estimates were used. The results are available at the GTAP sectoral level which we map to the sectors in MAGNET.

For services, there are tradeoffs between databases, and a combined approach is necessary. The OECD STRI is the clear current benchmark for information on services trade restrictions, with the World Bank – WTO STRI initiative drawing directly from the OECD source. The OECD 2020 estimates (Benz and Jaax, 2020) are the most recent source of services barriers AVE estimates. However, for the MERCOSUR countries, these estimates are only available for Brazil. Nonetheless, they provide an important and rich source of information for the Netherlands and Europe with AVEs for both EEA and non-EEA partners. Therefore, we used both the OECD services barriers estimates as well as the World Bank estimates which include Argentina, Paraguay, and Uruguay (Jafari and Tarr, 2015).

In terms of application, we implement the standard CGE modelling approach, combining AVE NTM estimates with the 'iceberg efficiency' approach, as in OECD (2019). We exploit the difference between Mercosur country-specific levels of NTMs and the intra-EEA levels, for the same commodity. Therefore, if we consider that the agreement will result in some degree of standards alignment, then we would consider that Mercosur level of NTMs is approaching the EU level. This of course differs by country and product (and partner for the goods NTMs), as opposed to implementing a flat 10% change to NTMs across countries and products. Further, following Disdier et al. (2016), we consider a 10% level of 'actionability'.

References to Appendix 2

Arriola, C., C. Carrico, D. Haugh, N. Pain, E. Rusticelli, D. Smith, F. van Tongeren, and B. Westmore (2018), 'The Potential Macroeconomic and Sectoral Consequences of Brexit on Ireland', OECD Economics Department Working Papers No. 1508.

-
- Benz, S., and A. Jaax (2020), 'The costs of regulatory barriers to trade in services: New Estimates of Ad Valorem Tariff Equivalents', OECD Trade Policy Papers, No. 238.
- Borchet, I., B. Gootiiz, and A. Mattoo (2012), 'Guide to the Services Trade Restrictions Database', World Bank Policy Research Working Paper 6108.
- Borchert, I., B. Gootiiz, J. Magdeleine, J. Marchetti, A. Mattoo, E. Rubio, and E. Shannon (2019), 'Applied Services Trade Policy: A Guide to the Services Trade Policy Database and Services Trade Restrictions Index', WTO Staff Working Paper ERSD-2019-14.
- Cadot, O., J. Gourdon and F. van Tongeren (2018), 'Estimating Ad Valorem Equivalents of Non-Tariff Measures: Combining Price-Based and Quantity-Based Approaches', OECD Trade Policy Paper No. 215.
- Disdier, A.-C., C. Emlinger, and J. Fouré (2016), 'Interdependencies between Atlantic and Pacific agreements: Evidence from agri-food sectors', *Economic Modelling*, Vol. 55: 241–253.
- Fugazza, M. and J.-C. Maur (2009), 'Non-Tariff Barriers in Computable General Equilibrium Modelling', United Nations Policy Issues in International Trade and Commodities Study Series No. 38.
- Francois, J., M. Manchin, H. Norberg, O. Pindyuk, and P. Tomberger (2015), 'Reducing transatlantic barriers to trade and investment: An economic assessment', Working Paper, No. 1503, Johannes Kepler University of Linz, Department of Economics, Linz.
- Jafari, Y., and D. Tarr (2015), 'Estimates of Ad Valorem Equivalents of Barriers Against Foreign Suppliers of Services in Eleven Services Sectors and 103 Countries', *World Economy*, Vol. 40(3): 544-573.
- Kee, H.L., A. Nicita, and M. Olarreaga (2009), 'Estimating Trade Restrictiveness Indices', *Economic Journal*, Vol. 119(534): 172-199.
- Kee, H.L., and A. Nicita (2017), 'Trade Frauds, Trade Elasticities and Non-Tariff Measures', Mimeo. LSE (2020), 'Sustainability Impact Assessment in Support of the Association Agreement Negotiations between the European Union and Mercosur', Draft Final Report.
- OECD (2019), 'Trade Policy and the Global Economy – Scenario 4: Addressing Barriers to Services Trade', OECD Trade and Agriculture Directorate Policy Brief.
- OECD (2020), 'OECD Services Trade Restrictiveness Index: Policy trends up to 2020', OECD Trade and Agriculture Directorate Brochure.
- Sanjuan Lopez, A., M. Rau, and G. Woltjer (2019), 'Exploring alternative approaches to estimate the impact of non-tariff measures and further implementation in simulation models', JRC Technical Report N° JRC113883.
- Smith, D., C. Arriola, C. Carrico, and F. van Tongeren (2019), 'The potential economic impact of Brexit on the Netherlands', OECD Economics Department Working Papers No. 1518.
- UNCTAD (2019), *International Classification of Non-Tariff Measures: 2019 Version*, United Nations Symbol: UNCTAD/DITC/TAB/2019/5.
- Walmsley, T., and P. Minor (2019), 'Demand shifts and willingness to pay in applied trade models', *World Economy*, early view.

Appendix 3 Used concepts in calculating farm level effects in Chapter 4

NSO typology

The degree of specialisation of a farm, the NSO (New Standard Output) business type, is calculated from shares of Standard Output (SO) per group of products in the total. This grouping is initially divided into five sectors: Arable farming, Horticulture, Permanent crops, Grazing animals, and Livestock.

Depending on the shares of the SO of the groups of products of the farm, the NSO main type is determined. For each of the five sectors mentioned above, we define a farm to be specialised in one of them if the share of that sector in the farm's SO is greater than 2/3. If none of the individual sectors has a greater share than 2/3, the company is classified in one of the three groups of combined companies. This ratio of 2/3 also applies to the subtypes within the pigs and poultry. At the broiler farms, at least 2/3 of the total size in SO measured must consist of broilers.

SO norms

The definition of the Standard Output corresponds to that of the Standard Output used in European statistics (including FSS (Farms Structure Survey) and Farm Accountancy Data Network (FADN)) from 2010 onwards. It is an amount in euros per farm and represents a standardised annual output (production volume x price). The Standard Output (in euros per farm) is the total size of a farm and is calculated as a sum of the standard output of all crops and animals. The total farm size does not take into account revenues from, for example, subsidies, direct farm payments and multifunctional activities.

Income from farming per unpaid annual working unit

The remuneration that the entrepreneurs and their households have received for the use of their labour and capital in the farm. Income is calculated by subtracting the total revenues of the business by the expenses and depreciation paid and adding the balance of extraordinary income and expenses. The index is usually expressed in euros per unpaid annual work unit (ao), with which it is linked to the amount of labour deployed and is therefore more comparable across farms.

Annual working unit

The AWU (annual working unit) is a measure of labour input. One AWU corresponds to 2,000 hours worked, where 1 person can be a maximum of 1 AWU. The hours used to calculate the number of AWU have been corrected for 'full worthiness': corrections are made for the young and the elderly.

SO versus income by farm type

Compared to land-based farms, intensive livestock farms have a large size in SO measured (Table 4.1 in the main body of the text). The narrower margins (much allocated costs) leave an income that is comparable over a longer period to other business types. In the period 2016-2018, the income on most intensive livestock farms is higher than on land-based farms. This has to do with the fact that prices were above average in that period.

Other principles

For the veal calf farms on contract, 400 euros per sold calf is charged as feed costs and is linked to the price change of the milk from the MAGNET model. The yield of veal calves on contract is set at 650 euros per sold calf. Because these animals are kept on a contract, these companies receive a net contract payment in which, among other things, these parts are netted and the veal farmer ultimately receives compensation for the labour and capital employed.

Wageningen Economic Research
P.O. Box 29703
2502 LS The Hague
The Netherlands
T +31 (0)70 335 83 30
E communications.ssg@wur.nl
www.wur.eu/economic-research

Wageningen Economic Research
REPORT 2020-065

The mission of Wageningen University & Research is “To explore the potential of nature to improve the quality of life”. Under the banner Wageningen University & Research, Wageningen University and the specialised research institutes of the Wageningen Research Foundation have joined forces in contributing to finding solutions to important questions in the domain of healthy food and living environment. With its roughly 30 branches, 6,500 employees (5,500 fte) and 12,500 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.



To explore
the potential
of nature to
improve the
quality of life



Wageningen Economic Research
P.O. Box 29703
2502 LS Den Haag
The Netherlands
T +31 (0)70 335 83 30
E communications.ssg@wur.nl
www.wur.eu/economic-research

Report 2020-065
ISBN 978-94-6395-685-7

The mission of Wageningen University & Research is "To explore the potential of nature to improve the quality of life". Under the banner Wageningen University & Research, Wageningen University and the specialised research institutes of the Wageningen Research Foundation have joined forces in contributing to finding solutions to important questions in the domain of healthy food and living environment. With its roughly 30 branches, 6,500 employees (5,500 fte) and 12,500 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.

