Dutch Trade in Facts and Figures

Exports, imports & investment

2022

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Explanation of symbols

Empty cell	figure not applicable
.	figure is unknown, insufficiently reliable or confidential
*	provisional figure
**	revised provisional figure
–	(between two numbers) inclusive
0 (0.0)	less than half of unit concerned
2016–2017	2016 to 2017 inclusive
2016/2017	average for the years 2016 up to and including 2017
2016/'17	crop year, financial year, school year etc., beginning in 2016 and ending in 2017
2004/'05–2016/'17	crop year etc. 2004/'05 up to and including 2016/'17

Due to rounding, some totals may not correspond to the sum of the separate figures.

Colophon

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Contents

Executive Summary

Dutch Trade in Facts and Figures provides main trends and figures of the Dutch trade in goods and services, trading enterprises and foreign direct investment.

The fact that the Netherlands, as a small and open trading nation, is highly interconnected with other countries becomes particularly clear during a crisis. Global lockdown measures, travel restrictions and other measures to curb the spread of coronavirus had an immediate impact on production, consumption, trade, transport and investments in 2020. Shortages of critical components such as chips and semiconductors continued to worsen as 2020 and 2021 progressed, and an imbalance between supply and demand in the global economy caused supply chain problems, higher transport costs and a sharp increase in prices of raw materials and especially energy. The blockade of the Suez Canal by container ship Ever Given in March 2021 was a telling example of how efficient and yet vulnerable world trade can be. It caused a huge pile-up of container ships on one of the world's most important waterways. Economic advisers to the US president aptly christened 2021 the year in which supply chains and interdependencies between countries became dinner table conversations (Council of Economic Advisers, 2022).

By early 2021, the Netherlands' international trade in goods had returned to its pre-crisis level. Growth continued strongly thereafter. In March 2021, almost €52bn worth of goods were exported: a record month. Compared to the pre-pandemic year 2019, in 2021 the value of goods exports was 14% higher and the volume 7% larger. Services trade suffered for a longer period of time in the coronavirus pandemic, particularly due to recurring lockdowns and travel restrictions. In 2021, service imports and exports were still lower than in 2019 by 15% and 11%, respectively. The Netherlands ended the year 2021 under lockdown once again, due to the impending Omicron variant. This had an unfavourable impact on travel and international traffic, stalling the further recovery of the Dutch economy (0.7% GDP growth in Q4). In hindsight, the sharp rise in prices of raw material and energy at the end of 2021 was modest compared to the explosive price increases of natural gas, oil, food and commodities since Russia's invasion of Ukraine. The year 2022 has turned out to be another eventful one, characterised so far by sky-high inflation, an extremely tight labour market with a record number of vacancies per unemployed person, parity between the euro and the US dollar, and a war on the eastern border of the EU. The latest news and other reports on globalisation, such as the Internationalisation Monitors, can be found in our Globalisation dossier.

Dutch Trade in Facts and Figures 2022: Exports, imports and investments is a publication developed by the CBS Expertise Centre for Globalisation at the request of the Dutch Ministry of Foreign Affairs. It aims to provide a broad target group with objective information on internationalisation trends in the Dutch business economy and the national economy in a broad sense. Furthermore, it offers independent data for trade policy decisions by the Ministry of Foreign Affairs. Apart from the data tables with annually recurring key figures, this publication contains an outline of the main current events behind the figures.

The years 2020 and 2021, and even 2022, are to some extent atypical because of the coronavirus pandemic, Brexit, the high consumer price inflation and Russia's invasion of Ukraine. In order to do justice to all these developments, the so-called corona box of the previous editions has been dropped and replaced by a new chapter which addresses such

recent developments in more detail. Where possible, glimpses of the aforementioned four developments are also being offered in other chapters.

Listed below are some of the main findings presented in this edition[1)]:

Chapter 2: Major developments in 2021 and 2022

- Dutch exports to Ukraine and Russia have decreased significantly since the Russian invasion of Ukraine on 24 February 2022. Imports from Russia, particularly mineral fuels but also metals like copper, nickel and iron, have increased significantly in value due to steep price increases. Imports of maize and sunflower seed oil from Ukraine have also increased sharply in price, but the decrease in import volume has been proportionally larger during the war.
- Inflation has surged since the end of 2021: in April 2022, consumer prices were almost 10% up on April 2021; manufacturing output prices were even up by 29% on average.
- In 2020, many import prices were still falling due to lower demand at the start of the coronavirus pandemic, overcapacity and low oil prices. In 2021 and 2022, prices of key products went up sharply, with commodity prices rising to unprecedented levels. For example, the import price of vegetable oils was already 60% higher in April 2021 than in the same month a year earlier; and in April 2022 another 50% higher than in 2021. Aluminium was 17% more expensive in 2021 than in 2020; it was another 61% more expensive in 2022. This was due to much higher import prices, which many industrial producers (such as in the petroleum industry, chemical industry and food industry) incorporated into their selling prices.
- The volume of Dutch trade in both goods and services contracted rapidly at the beginning of the coronavirus crisis. Q2 2020 was the low point for goods trade with both goods imports and exports about 11% smaller in volume than in Q4 2019. A relatively quick recovery followed, and by Q4 2020, import and export volumes already exceeded pre-pandemic levels. Despite new pandemic waves at home and abroad, the volume of goods trade continued to grow steadily throughout 2021.
- Initially, the impact of the coronavirus crisis on international service trade was within the same order of magnitude as its impact on international goods trade. In Q2 2020, the volume of service exports was almost 13% lower than at the end of 2019. The volume of imports was 11% lower. However, unlike goods trade, trade in services did not recover in 2020 and 2021, but sank even deeper. Travel restrictions and other measures to combat coronavirus were an important reason for this decline, along with decreased services trade as a result of new tax regulations in the Netherlands.
- Brexit mainly affected re-exports and quasi-transit good flows from the Netherlands to the UK which originate from non-EU-countries; Brexit has made it unattractive for e.g. Asian enterprises to use the Dutch route, as goods that are not produced in the EU or in the UK will be taxed and checked twice (when entering the Netherlands and when entering the UK). The value of Dutch domestic exports with a UK destination is so far hardly being affected by Brexit, but this may still change as not all Brexit measures have been implemented.

1) Chapter 1 comprises a dashboard with the key findings from chapters 2–8 and is not included here.

Chapter 3: International trade in goods: composition and geography

- In 2021, Dutch goods imports and exports were higher than ever. The Netherlands exported goods worth close to €587bn; an increase of 13.8% on 2019. Imports of goods amounted to almost €527bn in 2021 or 14.5% more than in 2019.
- The record value of both imports and exports is mainly due to higher prices. Between 2019 and 2021, the volume of imports increased by 6.6% while the export volume rose by 5.7%.
- In exports, machinery was the largest product category in 2021. However, at over 26%, exports of chemical products increased most significantly between 2019 and 2021. In imports, machinery was also the largest category, just before manufactured products. In all product categories except transport equipment, the import value increased between 2019 and 2021. Passenger car imports did lag behind in 2021.
- Germany, Belgium and France were the largest export destinations for the Netherlands in 2021. Between 2019 and 2021, the value of exports to Poland and South Korea increased the most. The bulk of imports came from Germany, China and Belgium. Imports from China increased the most in value, but imports from Germany and Belgium also showed an above-average increase. The value of imports from the US and the UK increased less than average.
- Dutch goods exports in the period 1970–2020 generally followed patterns in global trade. The cumulative growth of Dutch exports in this period was slightly lower than the growth of world exports. This does not mean that the Netherlands performed (relatively) poorly. The Netherlands has always been an established trading country. The fact that the development of Dutch exports has continuously followed world exports very closely, despite the emergence of a number of major players such as China, means that the Netherlands has maintained its position as a prominent trading country.
- In recent years and since 2016 in particular, the Netherlands has even managed to expand its share in world exports of goods. This means that Dutch exports seem to have evaded the global trend of slowing growth. Although the reasons for this remain unknown, the figures show that the relatively good performance of Dutch exports stems not so much from changes in the structure of exports, but mainly from the fact that the Netherlands is active in markets with above-average growth. Exports to Germany, and to a lesser extent to the UK, Belgium, China and the US, determined the relative growth of Dutch trade in the period 2000–2020.
- In 2020, the Dutch share in worldwide exports of goods was 3.3%. The Netherlands was the fifth largest exporting country in 2020, after China, Germany, the US and Japan. The Netherlands is an important supplier of goods for many countries. This is the case, for example, for Belgium, Sweden, Germany, France, Denmark, Nigeria and Poland.
- In 2020, the Dutch share in worldwide imports was around 2.8%. Compared to 1970, the Netherlands' role in world imports had declined. Globally, the Netherlands was the seventh largest importing country in 2020; it ranked fourth among the group of European countries. The Netherlands is an important market for goods from many countries, including Belgium, Ivory Coast, Norway, Finland, Germany and the UK.

Chapter 4: International trade in services

- In 2021, the Netherlands exported services worth almost €211bn, i.e. a year-on-year increase of 5.7%, but still 10.5% (€25bn) less than in 2019. More specifically, exports of travel services and business services (mainly those provided by travel intermediaries) had not recovered yet.
- Exports of intellectual property decreased in 2020 and 2021, not only due to the COVID-19 pandemic, but also due to new tax regulations in the Netherlands that are less favourable for multinational enterprises.
- The UK was the most important export destination for Dutch services after Germany and the US.
- In 2021, Dutch imports of services amounted to over €200bn. This was 7% more than in 2020, but 15% less than in 2019. As for service imports, the largest contractions relative to 2019 took place in travel services, business services and intellectual property transactions.
- The main importers of Dutch services are the US, the UK and Germany.
- Almost half of all Dutch trade in services is conducted by enterprises in the Greater Amsterdam region. Together with Greater Rijnmond, Greater The Hague, South East Noord-Brabant and Utrecht, it covers over 70% of total Dutch services trade. Relatively the largest number of enterprises active in international services trade is located in the regions of Zeelandic Flanders, Mid Limburg and South Limburg.
- The Netherlands is the main trading partner for Belgium in both imports and exports of services; for Germany, it is the fifth largest. As for services trade with the UK and the US, the Netherlands is more dependent on these countries than vice versa.
- On the other hand, the Netherlands is a more important partner in services trade for Poland, Sweden, Iceland and Lithuania than vice versa.

Chapter 5: Characteristics of enterprises that trade internationally

- In 2020, 30% of the Dutch business economy (approximately 406,000 enterprises) was trading internationally. This represents an 8% decrease on 2019. The group of international traders comprises 64% one-way importers, 12% one-way exporters and 25% two-way traders. The share of one-way importers decreased significantly more than the shares of one-way exporters and two-way traders.
- A small group of international traders are responsible for the bulk of the trade value. A quarter of all trading enterprises (two-way traders) account for 97% of the total amount of imported and exported goods and services. Within this group of two-way traders, the bulk of the value is contributed by a small group of large enterprises.
- In 2021, both the export and import of goods recovered from a dip in 2020. The value of traded goods increased in almost all industries, with the biggest growth in transportation and storage (77%). Large enterprises exported over three times as much in value as independent SMEs.
- The number of service trading enterprises declined by 17% in 2020. The majority of service trading enterprises (92%) are independent SMEs without subsidiaries abroad; 3% are independent SMEs with foreign subsidiaries, and 5% are large enterprises. The average value of exported services is higher than the average value of imported services.
- In 2020, 37,000 enterprises started exporting goods or services, 3 thousand fewer than in 2019. Conversely, 21,000 enterprises withdrew from the international market as exporters, i.e. 2,500 more than a year earlier. One in five enterprises starting exports in 2020 was founded that same year; 33% of them is active in business services.

- There is hardly any difference between male and female entrepreneurs in terms of international trade activity. However, the median import and export value of female-led enterprises is lower than that of businesses led by male entrepreneurs.
- The vast majority (almost 80%) of full-time equivalents (FTEs) in the internationally active business economy is employed by enterprises with a share of imports in relation to turnover of up to 25%.
- Employees at enterprises with a relatively high ratio of goods imports or exports to turnover (high import/export intensity) earn higher wages on average. This might be because enterprises that are more dependent on direct imports or exports employ older workers on average. Differences between sectors and levels of education and training, for example, could also play a role in explaining the wage gap.

Chapter 6: Dutch earnings from international trade

- In 2020, the value added due to exports of goods and services amounted to €254bn. This is a share of 31.8% of GDP. Dutch exports were disproportionally affected by the coronavirus pandemic. In pre-pandemic 2019, 33.3% of GDP was driven by exports.
- Exports of domestically produced goods have generated the bulk of export earnings for the Netherlands (€120bn), followed by exports of services (€100bn) and re-exports (€34bn).
- Germany is traditionally the largest export destination for the Netherlands. The earnings from exports to Germany amounted to €48bn in 2020, much more than destination number two the United Kingdom (€25bn) and number three Belgium (€23bn).
- Dutch exports of goods and services rely on the import of goods and services. The greater the amount of imports that is required to produce a certain good or provide a certain service, the lower the value added will be for the Netherlands. Earnings per euro of exports vary from one export category to another. In 2020, the Netherlands earned the most for each euro – around 63 cents – from exports of services. For domestically produced exports, earnings were 56 cents per euro and for re-exports 14 cents.
- Due to the coronavirus pandemic, Dutch GDP decreased significantly, namely by 3.8%. Exports of goods and services contributed 2.2 percentage points to this decline, of which 1.6 percentage points came from service exports, 0.5 percentage point from domestic exports, and 0.2 percentage point from re-exports of goods. The coronavirus pandemic has disproportionally affected the export of services as many foreigners were not able to travel to the Netherlands, which meant a significant amount of lost income for Dutch enterprises.
- In 2020, 2.4 million FTEs were induced by exports of goods and services, 1.1 million of which were due to direct employment by exporting enterprises and 1.3 million to employment by enterprises that supply exporting enterprises.
- Most export-induced employment comes from goods and service exports to Germany (453,000 FTEs), followed by the UK (239,000 FTEs) and Belgium (208,000 FTEs).
- Agricultural occupations (e.g. farmers) involve relatively many hours worked due to foreign demand.
- Roughly 30% of the labour supply is related to exports. For the self-employed, this is 35%.

Chapter 7: Dutch participation in global value chains

- In 2020, imports amounted to €540bn, including €399bn in goods and €141bn in services. Relative to 2019, imports decreased by €52bn or 8.8%.
- Nearly half of the imported goods (€200bn) were intended for re-exports.

- Intermediate imports amounted to €278bn, of which the bulk (€100bn in goods and €83bn in services) was processed in the Netherlands during the production of goods and services that were subsequently exported.
- Petroleum and petroleum products (€14bn) and chemicals (€10bn) were the main imported goods used in export-oriented production processes. Germany (€14bn) and Belgium (€9bn) were the principal countries of origin for goods that were incorporated into Dutch exports.
- Business services (€24bn) and royalty fees for the use of intellectual property (€17bn) made up the largest inputs of foreign services in exports. The US (€15bn), the UK (€10bn) and Germany (€8bn) were the main countries of origin of services incorporated into Dutch exports.
- The Netherlands plays an important role in intra-regional trade in the European single market. A large share of the imports incorporated into exports (€47bn, accounting for 31% of the total) came from the EU-28 and went to another (or the same) EU-28 country.
- There is a high degree of dependence on the EU-28 for imports incorporated in exports when it comes to grain and grain products (76%), with the bulk of the remaining amount imported from Ukraine (18%). Imports of industrial products (75%) and chemical products (70%) to be processed in Dutch exports largely came from the EU-28 as well.
- Russia, the UK, the US and Norway accounted for 61% of all Dutch imports of petroleum, coal and natural gas incorporated in exports.
- Relative to 2019, the import of services from the EU and incorporated in Dutch exports has decreased more (by 14%) than the import of services from non-EU countries (–3%). The reverse is also true for the import of goods: imports from non-EU countries (–22%) decreased by much more than imports from EU countries (–7%), mainly due to lower imports (or lower prices) of fossil fuels.
- Outside Europe, the US and China remain major players in imports into the Netherlands which are processed by domestic enterprises. The Netherlands still required imports from the US that were more than four times the value (€18.5bn) of the imports from China (€3.9bn) in order to produce its exports.
- In general, exports of services relied more on foreign services inputs than was the case for goods exports. More than three-quarters (79%) of the imports used involved services. A similar pattern can be seen in goods exports, as 75% of total imports required for the exports of goods involved goods.

Chapter 8: Foreign direct investment and multinationals

- Direct cross-border investments are an important part of the economic interdependence that exists with other countries. By investing in foreign subsidiaries, enterprises can expand the scale of their production, employ cheaper or more efficient local production factors, but also fiscal benefits may be considered in setting up a subsidiary abroad.
- Worldwide, the Netherlands is one of the most important players in terms of foreign direct investment (FDI). However, similar to previous years, a significant part of the direct investment entering the Netherlands is channelled abroad. Around 65% of Dutch FDI is carried out by Special Purpose Entities (SPEs) and holding companies.
- Globally, a strong recovery in foreign direct investment (FDI) was observed in 2021 compared to 2020. Both the inward and outward FDI position of the Netherlands showed a solid recovery in 2021 and, apart from FDI by SPEs and holdings, exceeded the level of 2019. Compared to 2020, in 2021 inward FDI increased by 19% (excluding SPEs and holding companies) and outward FDI by 7%.

- Even when FDI through SPEs and holding companies in the Netherlands is excluded, the Netherlands was still the second largest player worldwide in terms of outward FDI in 2021, after the US. In terms of inward FDI, the Netherlands was the fourth largest country last year, after the US, China and the UK.
- In 2020, 24.3 thousand multinational enterprises were active in the Dutch business economy. This is equivalent to 1.8% of all enterprises in the Dutch business economy. Almost 60% of multinationals in the Netherlands were foreign-owned in 2020.
- Approximately 4 in 10 employed persons work for a multinational in the Dutch business economy, which amounted to 2.3 million people in 2020. Employment at multinationals decreased year on year in 2020, mainly in Dutch-owned multinationals active in food and accommodation services and other sectors that suffered most during the coronavirus crisis.
- In 2020, around 81% of the import value in the business economy consisted of imports by multinationals, down from 84% in 2018. Foreign-owned multinationals imported the most (€164.5bn), i.e. over two thirds of all imports by multinationals.
- Dutch multinationals showed the largest decline in goods imports relative to 2019 (–€16.7bn or –17%) in comparison with foreign multinationals (–€14.8bn or –8%). The decline in the value of goods imports among foreign multinationals in 2020 was mainly on account of the manufacturing sector (–€9.4bn), including foreign enterprises in the oil and chemical industry, the car and trailer industry and in machinery repair and installation. Imports of goods by Dutch multinationals declined across the board in 2020, but especially in manufacturing (oil industry), specialised business services, energy supply and wholesale and retail trade.
- Goods exports of the business economy decreased by €17bn in 2020 compared to 2019. The largest export contraction was seen in the manufacturing industry (–€12.8bn), of which €7.2bn was due to contracting goods exports by foreign multinationals (especially in the chemical and machinery industry, car and trailer industry, other transport equipment industry and basic metal industry). Dutch multinationals also lost €3.8bn in exports, mainly related to the oil industry.
- Multinationals play an even larger role in services trade than in goods trade. On average, over 90% of both imports and exports of services in recent years has been on account of multinationals, with once again foreign multinationals taking the lead. In 2020, foreign multinationals imported the highest amount worth of services (€106.2bn), followed by €32.9bn in services imported by Dutch multinationals and €10.3bn imported by non-multinationals. In 2020, multinationals saw the largest decline in service imports; foreign multinationals accounted for about 85% of the decline. These were also responsible for the largest decrease in service exports in 2020.
- In 2020, around 21% of the foreign-owned multinationals in the Netherlands were US-owned. The US, Germany, the UK, Belgium and France combined accounted for more than 65% of all foreign enterprises in the Netherlands. Compared to previous years, there was an increase in the number of British-owned enterprises in the Netherlands, possibly in the run-up to Brexit and thus to secure a presence in the European Union.
- Germany had the most enterprises under Dutch control in 2019: almost 2.9 thousand.

Dutch Trade in Facts and Figures 2022: Exports, imports and investment – An introduction

A small, open trading nation such as the Netherlands is strongly interconnected with the wider world, and a crisis such as the coronavirus pandemic throws that interconnectedness into sharp relief. The worldwide lockdowns, travel restrictions and other precautionary measures intended to halt the spread of the coronavirus had an immediate impact on output, consumption, trade, transport and investments in 2020. Shortages of crucial components such as microchips and semiconductors only grew more acute throughout 2020 and 2021, and an uneven recovery of supply and demand in the global economy triggered production chain supply problems, increased transportation costs and caused a sharp rise in the price of raw materials. When the Ever Given container ship ran aground in the Suez Canal in March 2021, it was a telling reminder of how global trade can be simultaneously both efficient and vulnerable. The situation in the Suez Canal caused several days of enormous congestion on one of the world's most important waterways, delaying thousands of just-in-time processes due to missing components and forcing buyers to watch as their wares rotted away (Vermeulen & Goslinga, 2021; RTL News, 2021). As the economic advisers to the US President noted, 2021 was the year when international production chains and mutual dependencies between countries became a topic of conversation around ordinary people's kitchen tables (Council of Economic Advisers, 2022).

By early in 2021, the Dutch trade in goods had recovered its pre-crisis level and was growing rapidly. Exports of goods totalled almost €52 billion in March 2021: a monthly record. The value of goods exports was 14% higher throughout 2021 compared to the pre-COVID year of 2019; in terms of volume, goods exports were up by 7%. The international trade in services took longer to recover from the global coronavirus pandemic, in particular due to recurring lockdowns and travel restrictions. In 2021, the import and export values of services were 15% and 11% below 2019 levels, respectively. The Omicron variant pushed the Netherlands into another lockdown at the end of 2021, which once again limited journeys and holidays (travel) and imposed a small setback on the further recovery of the Dutch economy (0.7% GDP growth in the fourth quarter). However, the admittedly strong increases in the prices of raw materials and energy towards the end of 2021 were nothing compared with the explosion in prices of natural gas, petroleum, food and raw materials that followed Russia's invasion of Ukraine. 2022 promises to be another eventful year, still characterised by sky-high inflation, a tight labour market with a record number of job vacancies per jobseeker, parity between the euro and the dollar and war on the eastern border of the European Union. The latest news and reports in the field of globalisation, such as the Internationalisation Monitor, can be found in our dossier.

Dutch Trade in Facts and Figures 2022: Exports, imports and investment has been developed by the Expertise Centre for Globalisation at Statistics Netherlands (CBS) and was commissioned by the Dutch Ministry of Foreign Affairs. It includes the latest trends and annually recurring key figures and indicators on the internationalisation of the Dutch economy and business economy. These key figures, indicators and descriptive trends offer rapid access to the most relevant data on international trade, enterprises that trade internationally and the role of the Netherlands in international production chains.

The publication consists of seven descriptive chapters, illustrated with many figures, infographics and tables. These chapters present the key trends, figures and developments for 2021 and sometimes 2020, and where possible we also look ahead to 2022. The datasets that form the basis of the figures, tables and infographics in these chapters are so extensive that they have not been included in full here; they can be accessed and downloaded from the home page of this publication. As in previous years, the publication begins with a dashboard showing a general overview of the important findings set out in the chapters. The dashboard and the chapters are in the following order:

- What are the latest developments (Chapter 2)?
- What goods and how much of them does the Netherlands trade, and with which countries (Chapter 3)?
- What services does the Netherlands trade, to what extent, and with which countries (Chapter 4)?
- Which firms trade internationally, and what characterises the owners and employees of these enterprises (Chapter 5)?
- How much do exports contribute to the Netherlands, and how much employment is involved in exports (Chapter 6)?
- How do goods and services from the rest of the world work their way through the Dutch economy (Chapter 7)?
- How much does the Netherlands invest internationally, and how much do other countries invest in the Netherlands (Chapter 8)?

What has changed since the 2021 edition?

Several changes have been made to 'Dutch Trade in Facts and Figures 2022' compared to the previous edition. This publication includes a separate chapter on developments in the value of the goods trade in 2021 (Chapter 3), a separate chapter on developments in the value of the trade in services in 2021 (Chapter 4), and a chapter that reviews the actors who drive this trade in goods and services (Chapter 5). Chapter 3, which deals with the goods trade, has been comprehensively expanded this year to include a Constant Market Share analysis. This analysis provides a detailed study of the Netherlands' share in total global trade and in the total trading value of specific partner countries. For the first time, Chapter 6 includes a description of the occupations most closely associated with Dutch exports of goods and services. The chapter on the link between emissions of CO_2, nitrogen oxides and particulate matter and international goods flows, which appeared in the 2021 edition, is not included this year.

Current developments

Many of the figures given in this publication concern the years up to and including 2021. However, due to the coronavirus pandemic, Brexit, inflation and Russia's invasion of Ukraine, 2020, 2021 and – to a certain extent – 2022 were atypical years. In recognition of this situation, the previous edition's 'corona box' has been replaced with a new chapter which outlines the latest developments and – insofar as the current figures allow – backs up those recent developments with data. Where possible, the four topics mentioned above also form a common thread throughout the other chapters.

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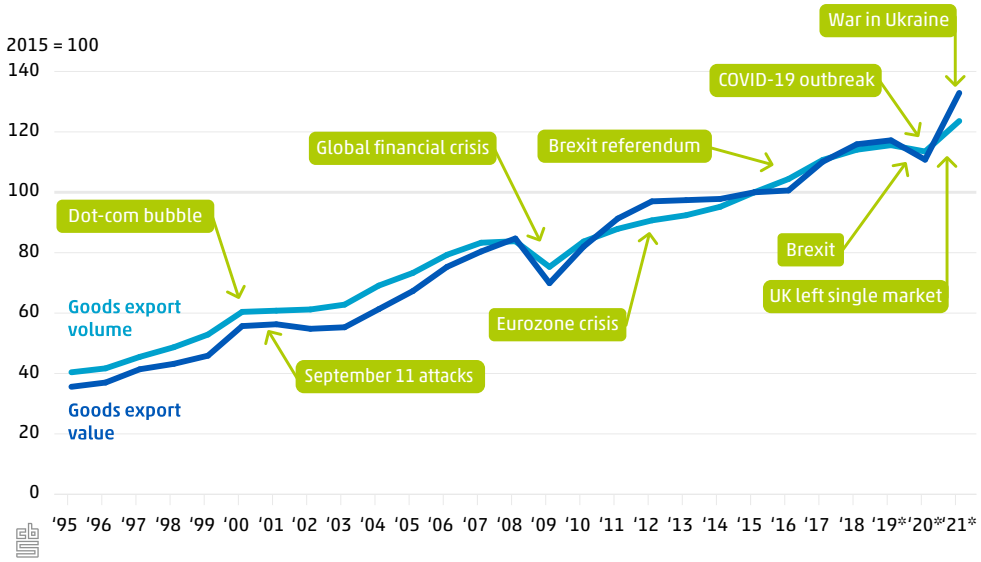
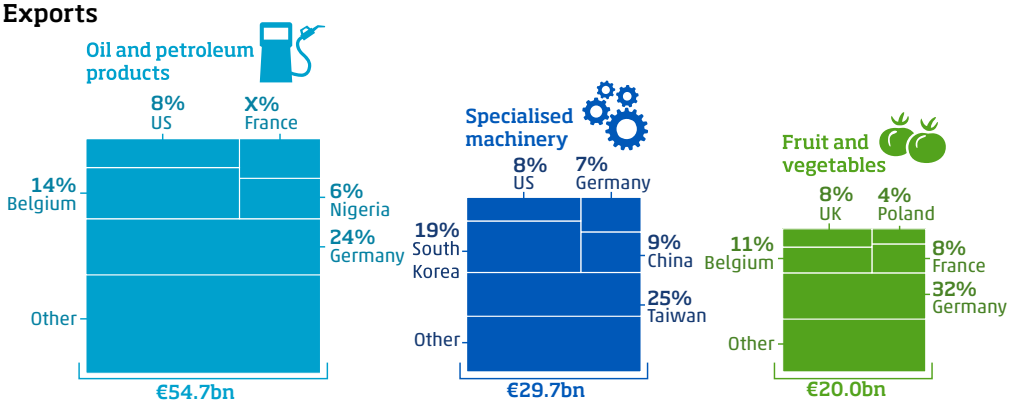
1 Dashboard

Chapter 2
Goods export value and volume since 1995, incl. external economic shocks

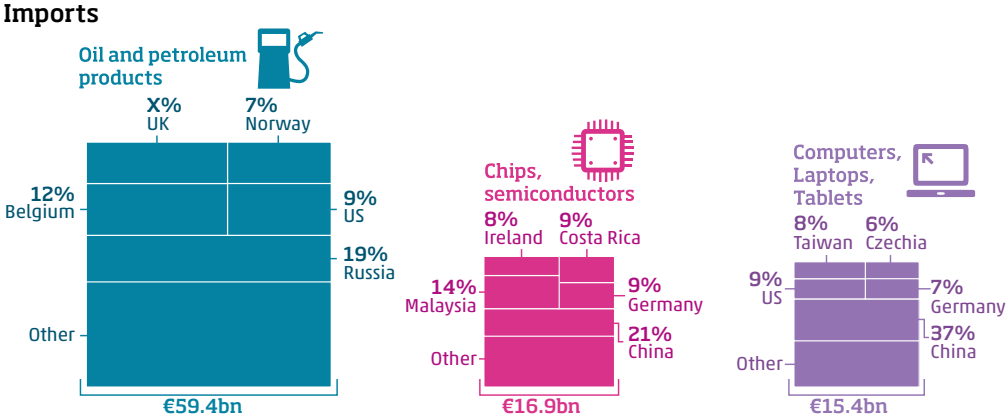


Chapter 3
Traded goods and top trading partners, 2021

Exports

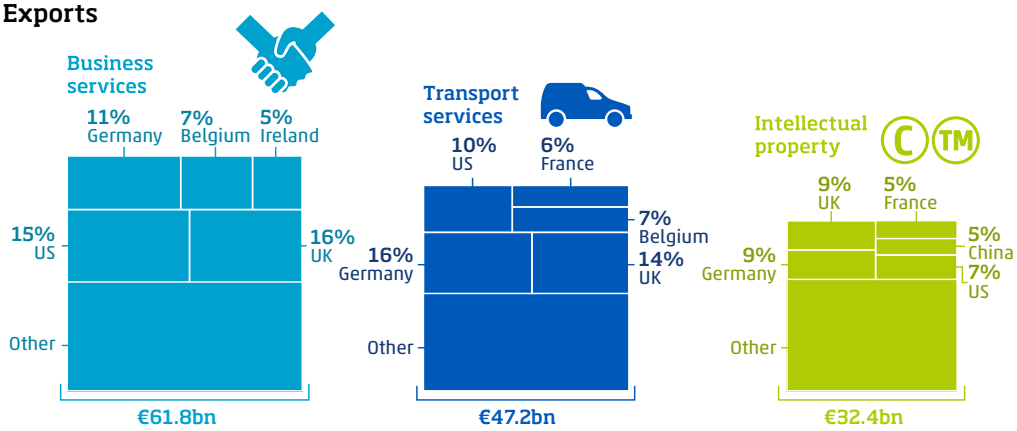


Imports

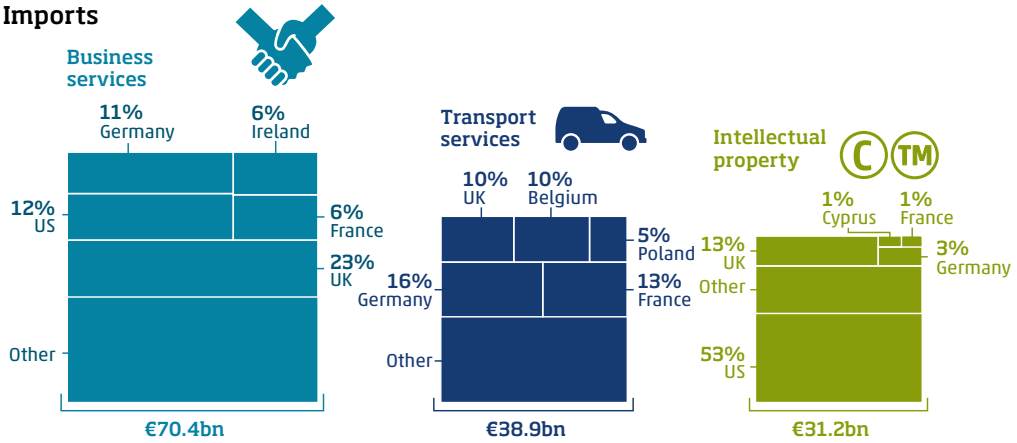


Chapter 4
Traded services and top trading partners, 2021

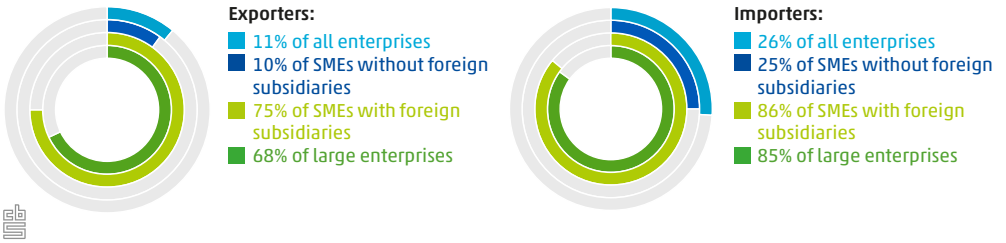
Exports



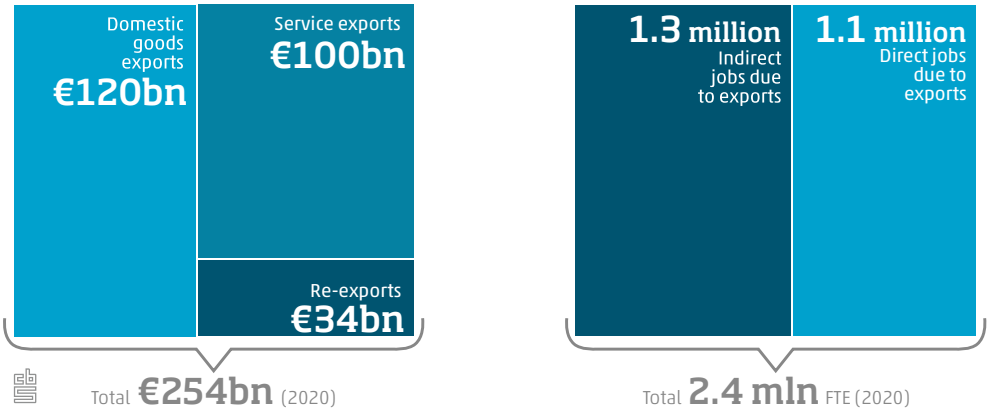
Imports



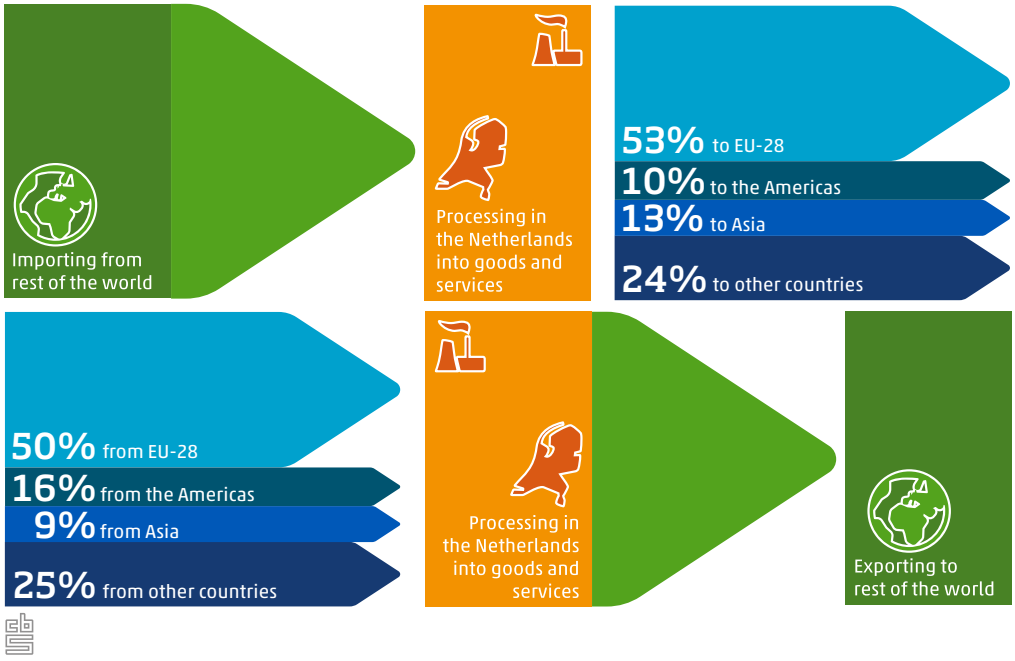
Chapter 5
Dutch international traders



Chapter 6
Dutch export earnings

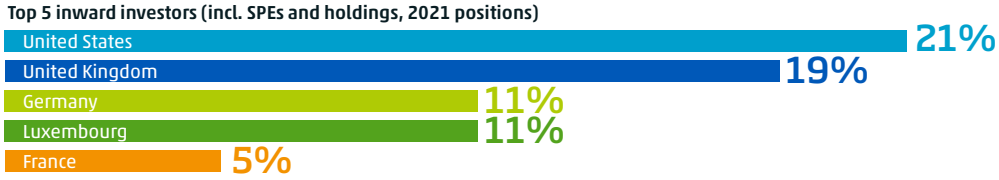


Chapter 7
Origin of imports needed for Dutch export production (2020)

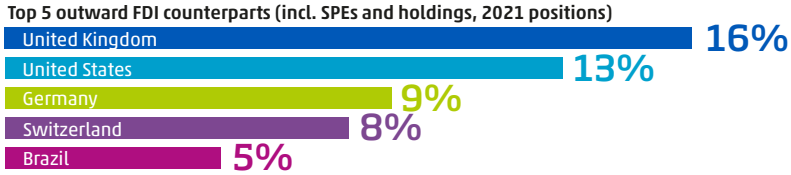


Chapter 8
International investments

Top 5 inward investors (incl. SPEs and holdings, 2021 positions)



Top 5 outward FDI counterparts (incl. SPEs and holdings, 2021 positions)



Source: DNB

2 Major developments in 2021 and 2022

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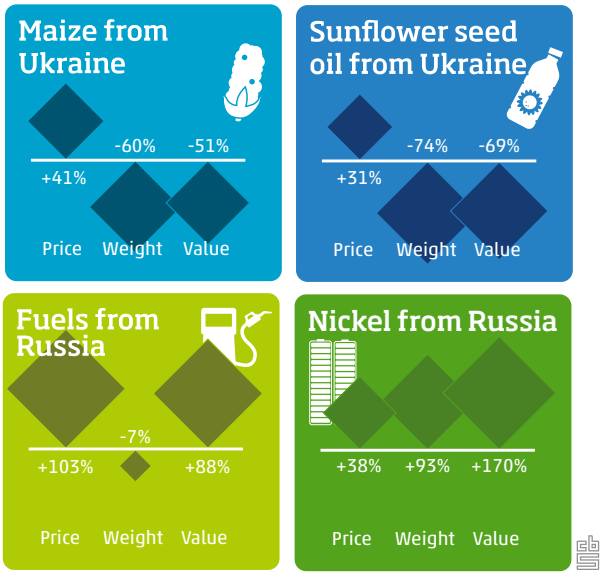
Developments in key imports, March-April 2022 vs. March-April 2021



This chapter focuses on important current developments; events and shocks that will have an impact on the Dutch economy in 2022. The war in Ukraine is the first striking news event. First and foremost, the war has dramatic consequences for the lives of people in Ukraine. As regards the economy, the whole world is feeling the effects of the war to a greater or lesser extent. In the first section, we discuss the effects of the war on the Dutch goods trade, and the second section deals with the high inflation in the Netherlands and worldwide, which is partly due to the war but also has other causes. Sections 2.4 and 2.5 look at economic shocks that have already affected the Dutch economy for some time: the coronavirus crisis and Brexit.

2.1 Key findings

War

Dutch goods exports to Ukraine and Russia have fallen sharply in value since March 2022. The value of exports to Ukraine in March was 84% lower than in the same month of 2021 and for Russia, the export value contracted by 67%. In April, this decline was smaller compared to April 2021, at 48% for Ukraine and 62% for Russia.

The value of imports from Ukraine also fell dramatically, by 10% in March and 79% in April 2022 compared to the same months in 2021. It is a somewhat different story for the import value from Russia, where decreasing import volumes have been strongly offset by sharply increasing import prices, especially of mineral fuels.

Prices

Shortages, disrupted value chains and strong demand for certain products following the coronavirus crisis have caused prices to soar worldwide. Inflation has surged since the end of 2021: in April 2022, consumer prices were almost 10% up on April 2021; manufacturing output prices were even up by 29% on average than a year earlier. These high output prices then push consumer inflation up further. Import prices were therefore much higher, which many industrial producers (such as in the petroleum industry, chemical industry and food industry) incorporated into their selling prices.

Coronavirus crisis

The coronavirus crisis, which broke out in March 2020, had an acute and major impact on the Dutch economy. GDP contracted severely and the international trade in goods and services also declined sharply. The recovery of the goods trade in particular was equally quick and robust. By Q4 2020, import and export volumes of goods already exceeded pre-pandemic levels. However, trade in services did not recover from the initial shock in 2020 and much of 2021, but sank even deeper. Travel restrictions and the resulting sharp drop in international travel, were an important reason for this decline, along with a decrease in specific flows of services as a result of changes in tax regulations in the Netherlands. See also Chapter 4 of this publication. Import and export volumes of the service trade improved in Q1 2022.

Brexit

Brexit has so far mainly affected transit good flows (re-exports and quasi-transit trade) via the Netherlands to the UK. In the first four months of 2022, the level of transit trade was as much as 27% below that of 2015. The picture is very different for domestic exports, which were no less than 30% above the level of 2015 in 2022.

2.2 Sharp decline in Dutch exports to Ukraine and Russia

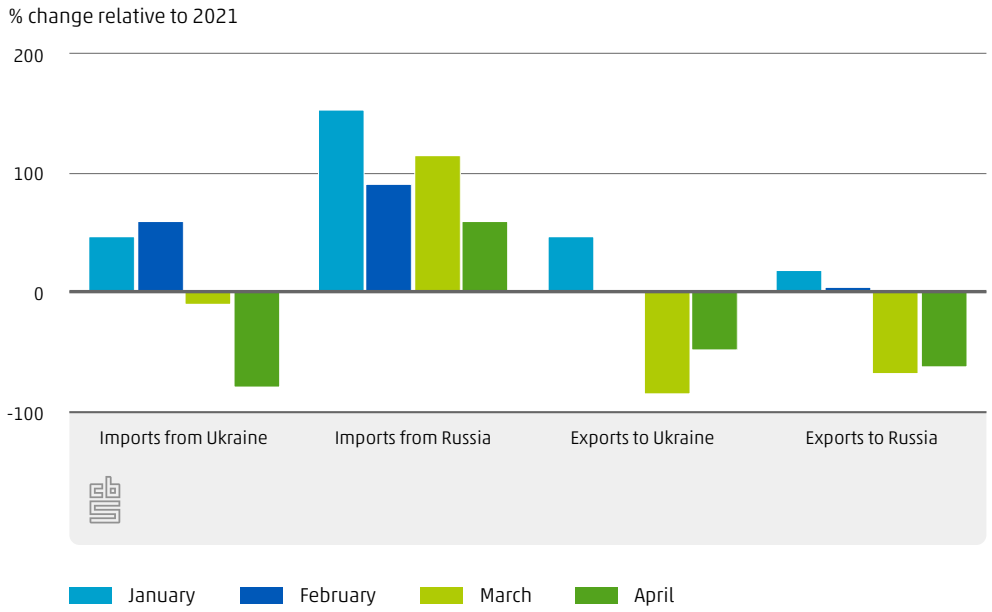
The war in Ukraine, which started on 24 February 2022, has clearly had an impact on the Dutch goods trade with both Ukraine and Russia. In March, Dutch goods exports to both countries plummeted. Exports to Ukraine were 84% lower in March 2022 than in March 2021, and exports to Russia were 67% lower (see also CBS, 2022a). In April, the declines were smaller: 48% lower for Ukraine and 62% lower for Russia, compared to April 2021 (Figure 2.2.1).

Value of imports from Russia actually considerably higher than in 2021

Imports from Ukraine and Russia simultaneously show reductions in import volume and sharp increases in import prices. Compared to March 2021, imports from Ukraine fell by 31% in weight in March 2022, but the value remained fairly stable due to the sharp price rises for maize and sunflower seed oil, for example. In April 2022, the import volume collapsed completely, which explains a 79% drop in the import value compared to April 2021.

The value of imports from Russia is still high, which can be explained by the high oil and gas prices. However, the increase in the import value in April (+61% compared to April 2021) was considerably lower than the increase in March (+115% compared to March 2021). This is also due to declining import volumes. The import from Russia in April 2022 was about 16% lower in weight than in April 2021; in March it was still 2% higher than in March of the previous year.

2.2.1 Import and export value 2022 relative to 2021[1)]

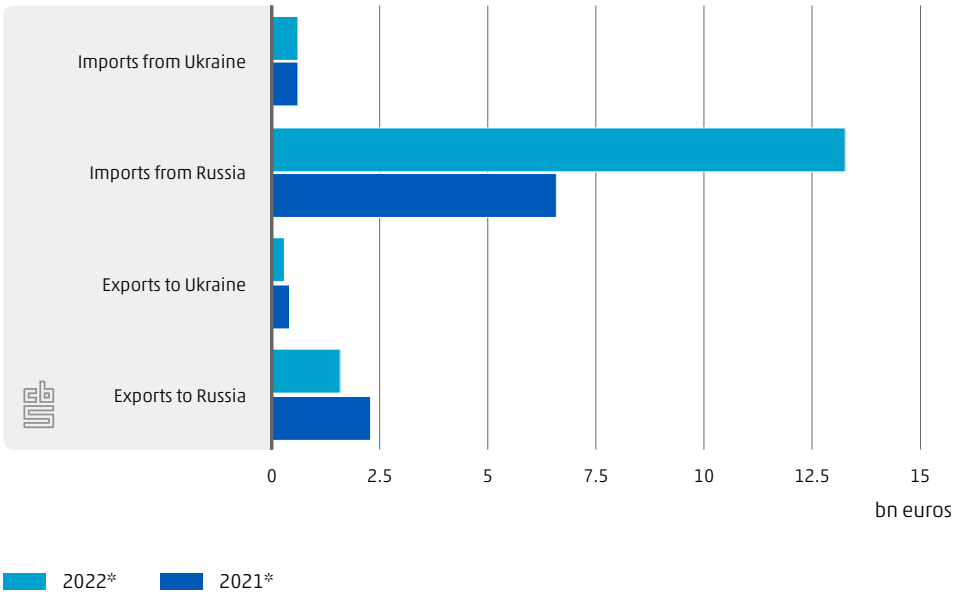


1) For the best possible comparison with 2021, quasi-transit trade is included here (trade excluding quasi-transit is available on CBS StatLine).

Imports from Russia much larger than the other three flows combined

In monetary value, the imports from Russia are many times larger than the value of all three flows combined (Figure 2.2.2). This is attributed to the very prominent share of mineral fuels in the imports from Russia. In 2021, no less than 87% of the total import value from Russia consisted of such products (CBS, 2022b). In the first four months of 2022, the Netherlands imported as much as €13.3 billion from Russia, almost double the imports in the same months of 2021. The second flow relates to exports to Russia worth €1.6 billion in the first four months of 2022, followed by imports from Ukraine (€0.6 billion) and exports to Ukraine (declined to €0.3 billion).

2.2.2 Trade value, first four months[1)]



1) For the best possible comparison with 2021, quasi-transit trade is included here (trade excluding quasi-transit is available on CBS StatLine).

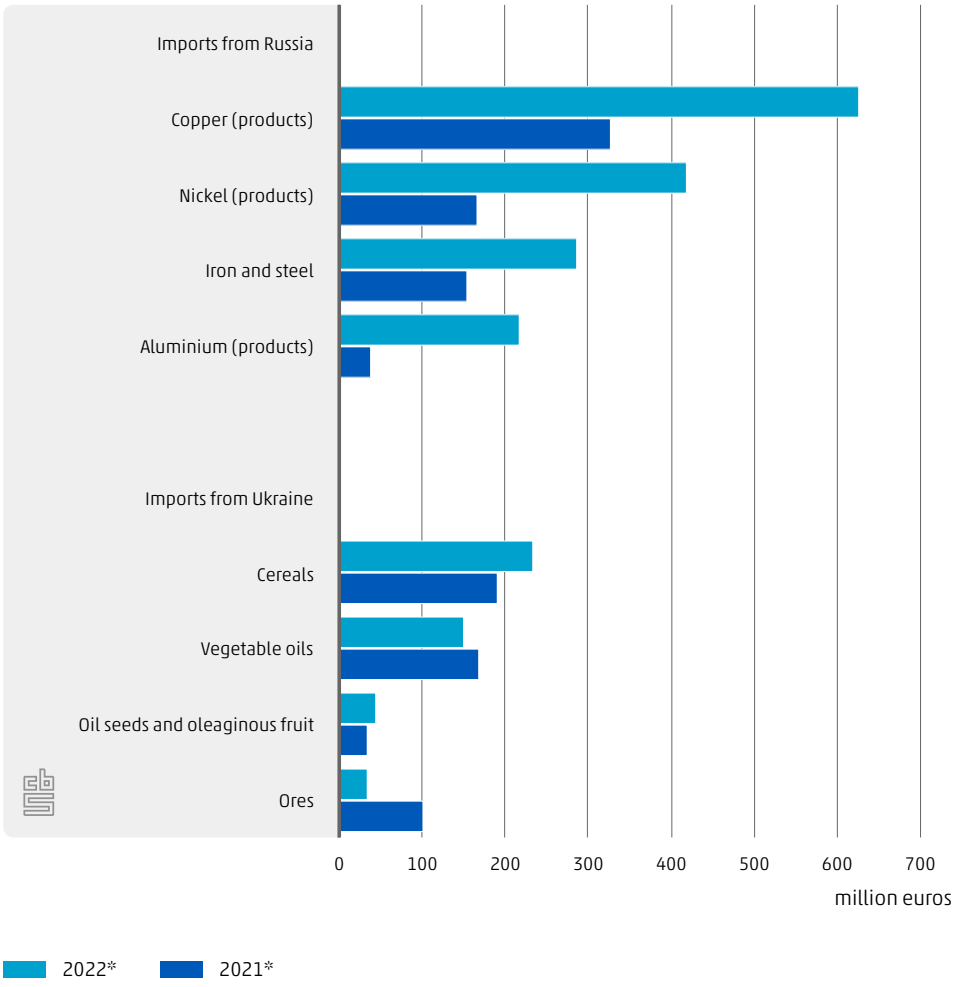
Metals from Russia have also risen sharply in price

Dutch imports from Russia are thus dominated by mineral fuels. These imports mainly consist of crude oil, but also significant quantities of natural gas, petroleum products and coal.
We also observed that the imports from Russia are by far the biggest flow in the goods trade with Russia and Ukraine. The logical consequence is that trade in goods other than mineral fuels is relatively limited. Still, there are other goods that are important for Dutch supply and food chains. Though at a great distance from mineral fuels, Dutch imports from Russia also include a relatively large amount of copper, nickel, aluminium, iron and steel. In the first four months, the import value of these metals from Russia increased considerably which is again related to significant price rises in 2022 (Figure 2.2.3).

Imports from Ukraine are dominated by cereals (mostly maize) and vegetable oils (mostly sunflower seed oil). In 2021, over half of the imports from Ukraine consisted of maize and sunflower seed oil (CBS, 2022c). In the first four months of 2022, the Dutch import value of maize was still well above the level of 2021, because the price increases were greater than the decrease in the weight of the imports.

However, if we look specifically at the two months of war in March and April 2022, we see that the weight of the imports of maize is about 60% below the import level of the same period in 2021 and the value at 51%. In fact, imports of sunflower seed oil from Ukraine even dropped by 74% in weight and 69% in value.
Imports from Russia have decreased much less during the two months of war. For mineral fuels, a 7% decrease applies to March and April in comparison with 2021 and for metals (copper, nickel, aluminium, iron and steel) from Russia it involves a decline of 17%.

2.2.3 Main imports from Russia and Ukraine, excluding mineral fuels, first four months[1)]

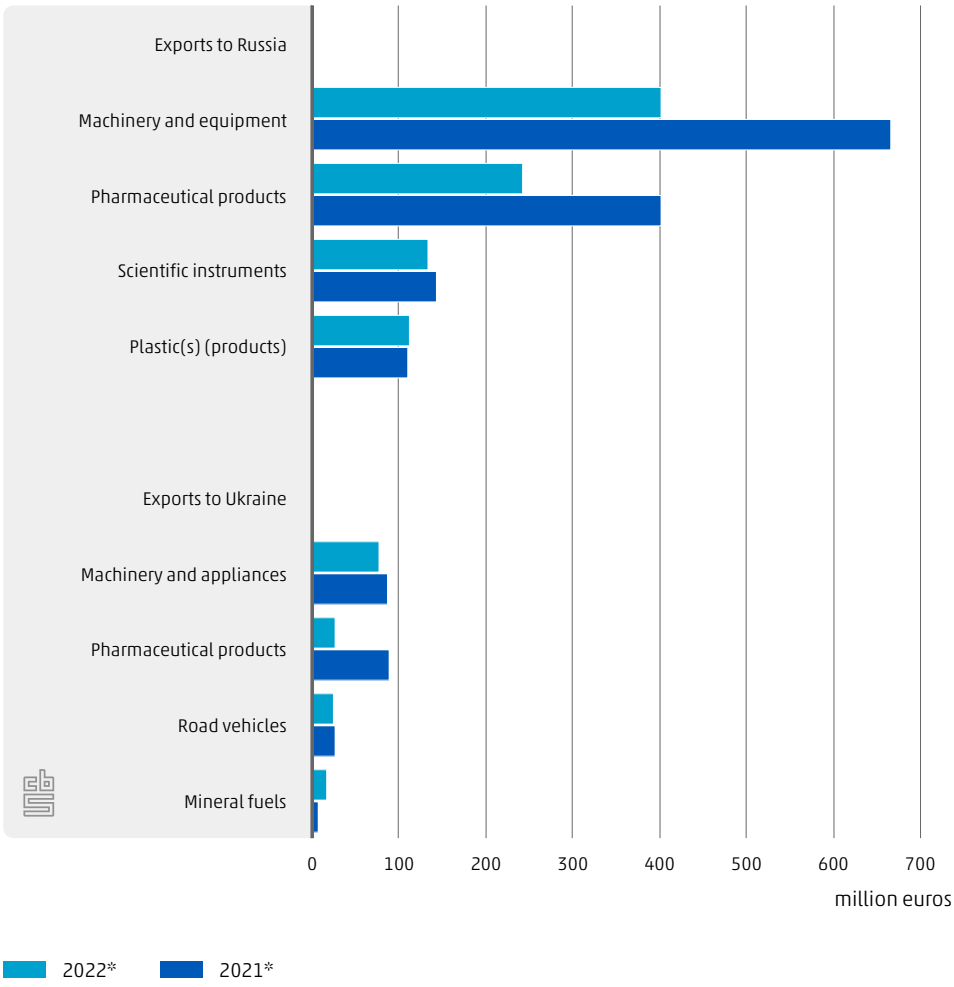


1) For the best possible comparison with 2021, quasi-transit trade is included here (trade excluding quasi-transit is available on CBS StatLine).

Sharp decline in exports of machinery and equipment

Dutch exports to Russia and Ukraine particularly include machinery and equipment and pharmaceutical products. Exports of these two goods fell sharply in value in the first four months of 2022 compared to 2021. The reason for this is partly due to the European sanctions against Russia.

2.2.4 Main exports to Russia and Ukraine, first four months[1)]



[1)] For the best possible comparison with 2021, quasi-transit trade is included here (trade excluding quasi-transit is available on CBS StatLine).

2.3 Development of trade prices

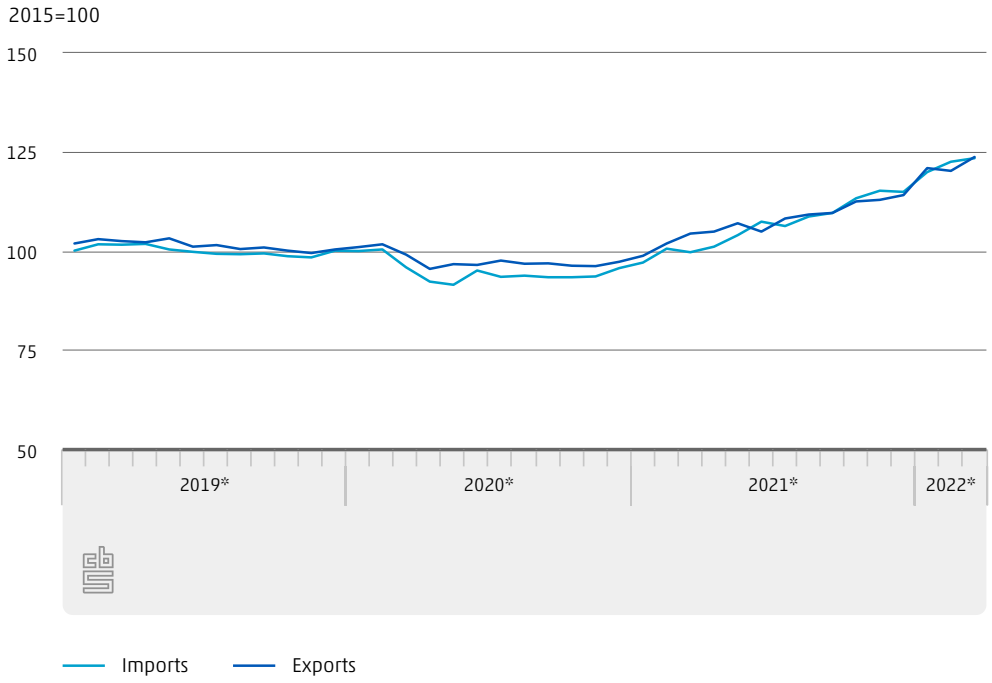
As a result of increasing demand after the pandemic waves subsided on the one hand, and due to supply difficulties on the other hand, global supply and demand for goods and services are no longer well matched and value chains are disrupted. Prices have risen dramatically in recent months due to new lockdowns in Chinese manufacturing cities and port cities, the war in Ukraine, the reduced cereal exports from that country, uncertainty surrounding future gas supplies, scarcity of food raw materials, chip and container shortages and trade disputes. Inflation has surged since the end of 2021: in April 2022, consumer prices were almost 10% higher than a year earlier (CBS, 2022g). High prices may reduce the purchasing power of consumers, thereby reducing the demand for goods and services and cooling the economy.

Inflation as a result of faltering trade flows, war violence and embargos on oil and gas

Globalisation has contributed to relatively low levels of inflation over the past 20 to 30 years. Today's upward inflationary pressures are high due to persistent supply difficulties, energy prices and geopolitical tensions, among other things (Meinema, 2022). For many countries, inflation has become a distinct and current issue. Even before the Russia-Ukraine war, the general price level skyrocketed due to the increasing prices of raw materials and imbalances between supply and demand (IMF, 2022; Gourinchas, 2022).

Figure 2.3.1 clearly shows the development of the trade prices. It shows that trade prices in 2020 were below the level of 2015, with the fall in import prices being the greatest. One of the reasons for this is that Dutch imports comprise a relatively large amount of petroleum and petroleum products. As many countries went into lockdown, the demand for petroleum fell and the price plummeted. Moreover, prior to that, there was disagreement among oil-producing countries that led to overproduction and unprecedentedly low prices (RTL News, 2020). Factories were only partially operational during the first pandemic wave, transport was severely curtailed and air traffic came to a virtual standstill. From mid-2021, import and export prices increased in a similar manner. Prices were nearly 25% higher in March 2022 than in they had been in 2015.

2.3.1 Development of trade prices



Raw material prices facing unprecedented levels

A severe shortage of certain raw materials has developed worldwide, partly because stocks were hardly built up during the coronavirus pandemic or were depleted when demand rose sharply again. Supply difficulties and higher transport costs also contributed to the shortage, which led to a price increase in several product groups (Figure 2.3.2). Industrial manufacturers in the Netherlands import a large amount of raw materials and fuels from

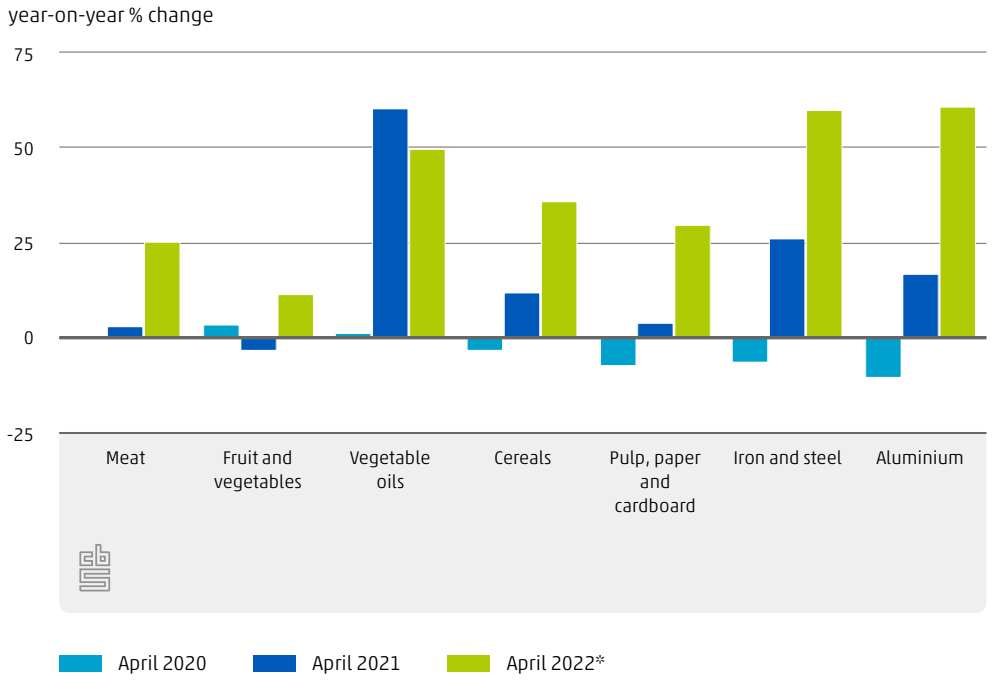
other countries for their output. While in 2020 many import prices fell due to overcapacity, lower demand caused by the coronavirus crisis and the low oil price, in 2021 and 2022 key imports experienced a sharp price increase. Meat, fruit and vegetables, vegetable oils, cereals, paper, iron and steel and aluminium are some examples of products that have become much more expensive on the global market. Consequently, countries rich in raw materials such as South Africa, Brazil and Russia see their exports and export value grow faster than Europe and the US (Nauta, 2022).

Dutch industrial producers paid 61% more for aluminium from other countries than a year earlier. The price of aluminium is being driven by high demand, among others. In addition, China has closed smelters as a result of lockdowns against local outbreaks of the coronavirus. China is the world's leading manufacturer of aluminium. In Europe, too, smelters have halted their production because it was no longer profitable to continue due to the high energy prices. Tensions surrounding Ukraine also play a role, as Russia is a major aluminium producing country and any conflict could jeopardise Russian supplies (Nieuws.nl, 2022; Bakker, 2022).

Also, the import of paper pulp became more expensive in 2021 and 2022. There is a shortage of paper pulp due to transport difficulties and the high demand for cardboard as a result of online shopping. Stocks of pulp have fallen sharply worldwide (RTL News, 2022). Pulp is used in diapers, toilet paper and books for example (NOS News, 2021). In April 2021, the import prices of paper pulp were up by 4% on the previous year. In 2022, the price of paper pulp from abroad increased by almost another 30% compared to the previous year.

Also, the price rise of vegetable oils continues: in April 2021, the import prices were up by over 60% on the previous year. In April 2022, Dutch manufacturers paid almost 50% more for vegetable oils from abroad than in April 2021. This price increase is mainly due to the worldwide production shortfall or difficult circumstances for harvesting and exporting (such as the war in Ukraine), low stocks due to previous poor harvests and the worldwide increased consumption of biodiesel (NU, 2021; Engwerda, 2021; Nieuwe Oogst, 2021).

2.3.2 Development of manufacturing import prices

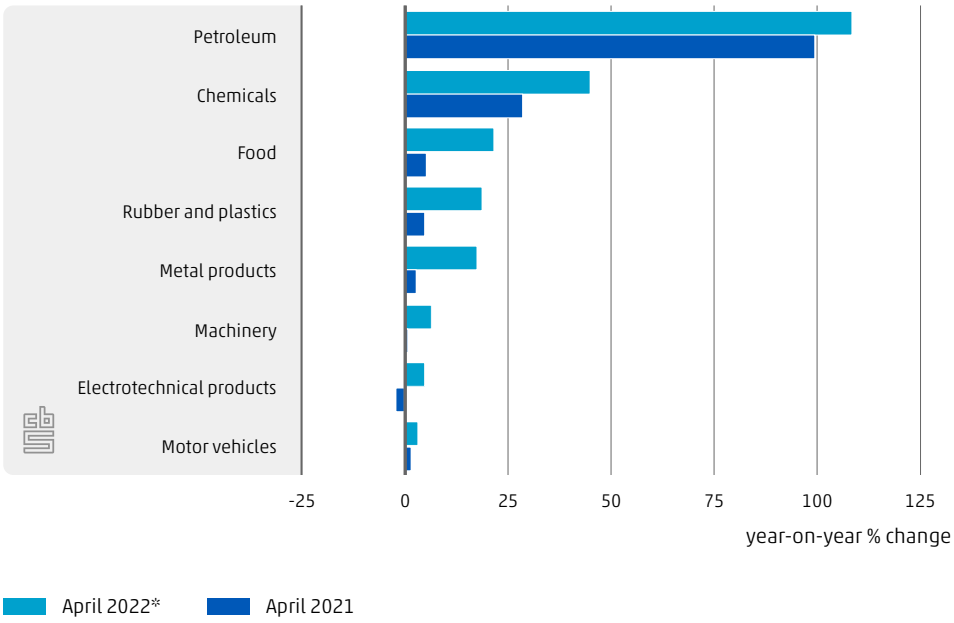


Manufacturing output prices up by 29 percent compared to April 2022

Prices of Dutch-manufactured products at home and abroad were on average 29% higher in April 2021. The increase in manufacturing output prices has been unprecedented since July 2021. In recent months, the war in Ukraine has put additional pressure on prices, on top of the price increases that resulted from the rapid recovery of the economy after the coronavirus crisis (CBS, 2022e). Higher manufacturer prices have also been driving up the inflation rate for consumers. The output prices abroad rose more rapidly than in the Netherlands.

Figure 2.3.3 shows the change in output prices in April 2021 and 2022 compared to the same month a year earlier for the leading industries. First, the prices of fuels and energy have increased substantially. In March 2022, the price of a barrel of North Sea Brent oil was 101 euros, well over 83 percent more than in the previous year (CBS, 2022e). This in turn affects processed products, like fuel for transport, heating of greenhouses or the production of fertilisers. Also in the chemical industry, price increases are strongly affected by changes in the oil prices. Manufacturers of food products, rubber and plastics, and metal products also made hefty increases in their output prices. The price increase was kept at a relative minimum in the machinery industry, the electrotechnical industry and the motor vehicle industry. The sharpest price increases were seen in 2022, but even in 2021 some industries already had significantly higher output prices compared to April 2020.

2.3.3 Output prices by type of industry[1)]

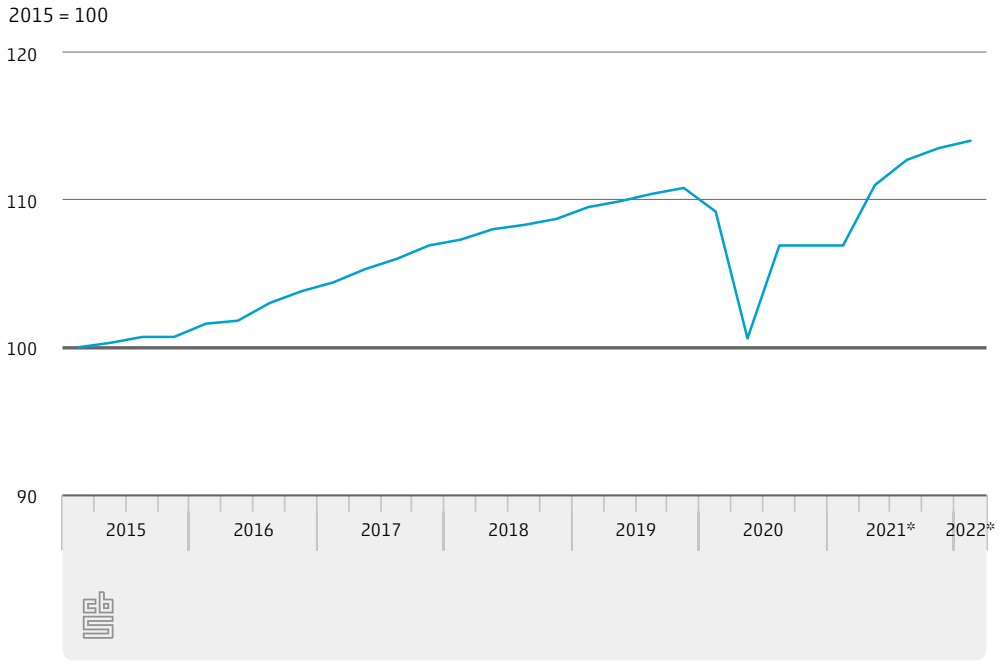


1) The eight industries mentioned account for almost 80 percent of the manufacturing industry.

2.4 Developments of the Dutch economy and the international trade since the coronavirus crisis

The year 2021 has turned out to be another eventful one for the Dutch economy and society. At the start of that year, the Netherlands was still under one of the severest lockdowns to curb the coronavirus pandemic. As early as 13 October 2020, new response measures to the coronavirus were imposed, which became progressively stricter over the course of autumn and winter and began to have an increasing impact on daily life. From 23 January to 28 April 2021, the Netherlands even went into a full lockdown with a nationwide curfew to further curb the spread of the virus. The full lockdown, the shutdown of entire industries, such as the accommodation and food services and culture sector as well as the travel restrictions, stalled the recovery of the Dutch economy in the winter of 2020/2021. There was no economic growth in the fourth quarter of 2020 compared to the previous quarter, and in the first quarter of 2021, GDP only showed a 0.1% growth. Thus, at the beginning of 2021, the economy was still 3.5% smaller than at the end of 2019, just before the outbreak of the coronavirus pandemic (Figure 2.4.1).

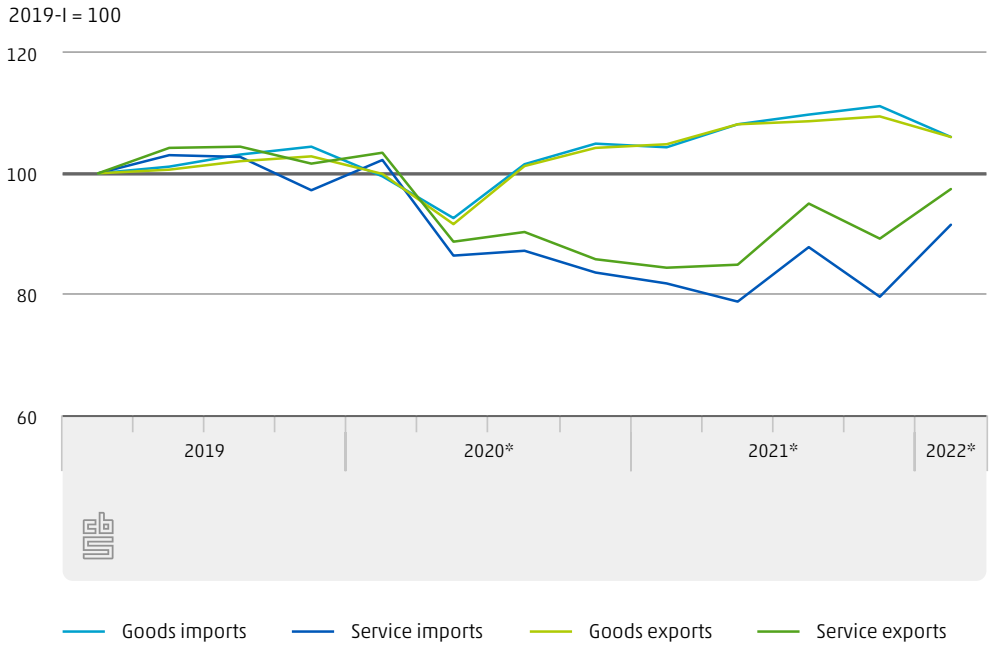
2.4.1 GDP development (volume, seasonally adjusted)



GDP nearly 3% more growth in Q1 2022 than before the coronavirus crisis

Q2 2021 was the final turning point in the economic recovery. The full lockdown was gradually being phased out and Dutch society opened up again. GDP saw a 3.8% growth in Q2, mainly owing to considerably higher consumer spending, government expenditure and a higher trade surplus. Consequently, the size of the Dutch economy in that quarter was again almost the same as before the coronavirus pandemic. During the next three quarters, the Dutch economy continued to grow at a steady pace. The GDP growth rate was nearly 3% higher in Q1 2022 than before the start of the pandemic. Of course, this did not apply to all industries. For example, in Q1 2022, the value added in the culture and leisure industry was still a fifth smaller than before the coronavirus crisis. In Q1 2022, the manufacturing industry was 6% larger than at the end of 2019, and for the business services industry this was nearly 3%.

2.4.2 Development of goods and service trade (volume, seasonally adjusted)



Sharp contraction and quick recovery of the goods trade

The volume of the Dutch trade in both goods and services contracted rapidly at the beginning of the coronavirus crisis, as shown by Figure 2.4.2. Q2 2020 was the low point for goods trade with both the goods imports and exports about 11% smaller in volume than in Q4 2019. The relatively quick recovery of the global trade in goods was also keenly felt in the Netherlands. By Q4 2020, import and export volumes already exceeded pre-pandemic levels. Despite new pandemic waves at home and abroad, the volume of the goods trade continued to grow steadily throughout 2021. The volume of the Dutch goods trade was under pressure during Q1 2022. A possible cause of this are the imbalances and the worldwide shortages and difficulties in logistics chains, high prices, new lockdowns in China and the economically unstable situation after Russia's invasion of Ukraine.

Big blow for the trade in services and slow recovery

The impact of the coronavirus crisis on the international trade in services was initially of a similar order to the goods trade. The volume of services exports was almost 13% smaller in Q1 2020 than at the end of 2019, the volume of imports being 11% smaller. Unlike goods trade, trade in services did not recover, but sank even deeper. Travel restrictions related to the coronavirus crisis and the resulting sharp drop in international travel, were an important reason for this decline, along with a decrease in specific flows of services as a result of changes in tax regulations in the Netherlands. See also Chapter 4 of this publication.
The volume of services exports was almost 6% smaller in Q1 2022 than before the start of the coronavirus crisis, and the volume of imports was 10% smaller. However, imports of services are already higher in value than in 2019 (CBS, 2022h).

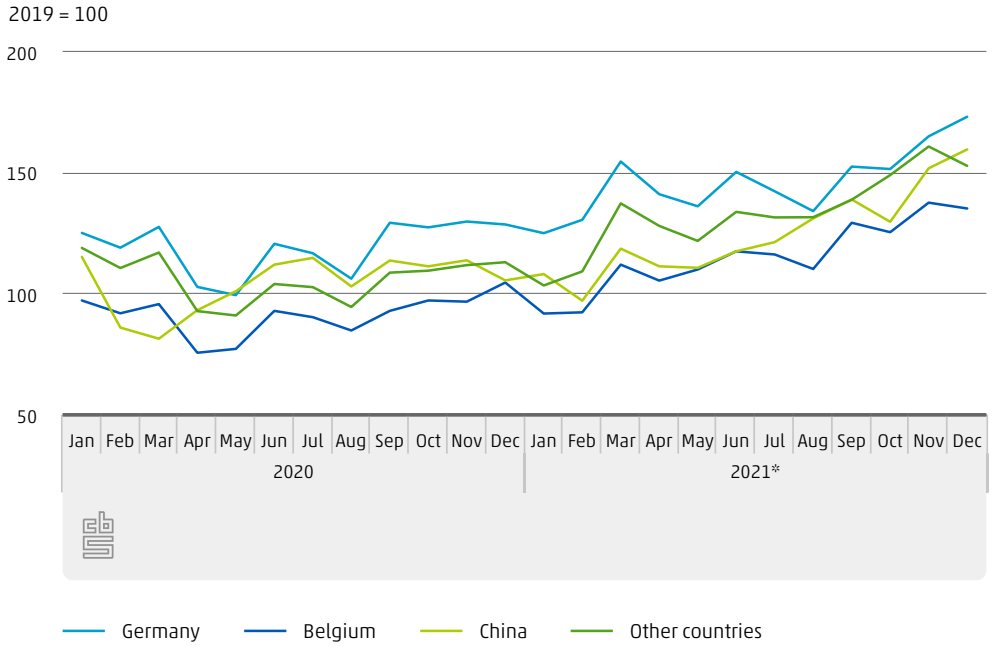
Import value from China in 2021 25% above level of 2019

Figure 2.4.3 shows the development of the Dutch import value of goods from the main importing countries since the start of the coronavirus crisis. Imports of goods from China developed differently from imports from neighbouring countries and other imports in both coronavirus years. The coronavirus outbreak began in China, and China responded by a full lockdown for all affected areas. Chinese exports, including to the Netherlands, contracted substantially, however, quickly recovered in the spring of 2020. By July 2020, the import value from China had already returned to its pre-crisis level (the average of the import values in 2019 has been taken for this). Like the Netherlands, our neighbouring countries were hit by the coronavirus crisis a little later in the winter and the lockdowns lagged a few months behind China. The contraction in goods imports from Germany and Belgium (and imports from all other countries) particularly decreased in April and May of 2020. These imports also quickly recovered afterwards, though still remained below the level of 2019. Even if not everyone actually went on holiday in 2020, August is a holiday month and is generally characterised by a lower level of trade.[1)]

In early 2021, imports from China were also under pressure, possibly due to resurgent coronavirus figures and added caution in the run-up to the Winter Olympics (Reuters, 2022). Europe's winter of 2020/2021 was also difficult with the emergence of the Delta variant of the coronavirus and renewed strict lockdowns. In March 2021, the recovery in trade finally took hold and goods imports picked up again. Over the whole of 2021, the import value from China was a quarter higher than in 2019, compared to 17% import growth from Germany, 15% growth in goods imports from Belgium and 12% growth in imports from the non-top 3 partner countries. In the winter and spring of 2022, China was again hit by mounting disease numbers, and the Zero-Covid policy was again depressing Chinese exports and now also economic growth (Bloomberg, 2022).

1) Month-on-month comparisons should be interpreted with caution as these figures are not price or seasonally adjusted.

2.4.3 Development of import value from Germany, Belgium, China and other countries



2.5 Brexit makes transit trade in goods less appealing

Imports incl. quasi-transit trade

Q1 2015	Q1 2022
1 Germany	1 China
2 Belgium	2 Germany
3 China	3 Belgium
4 UK	4 United States
5 France	5 Russia
6 United States	6 UK

Exports incl. quasi-transit trade

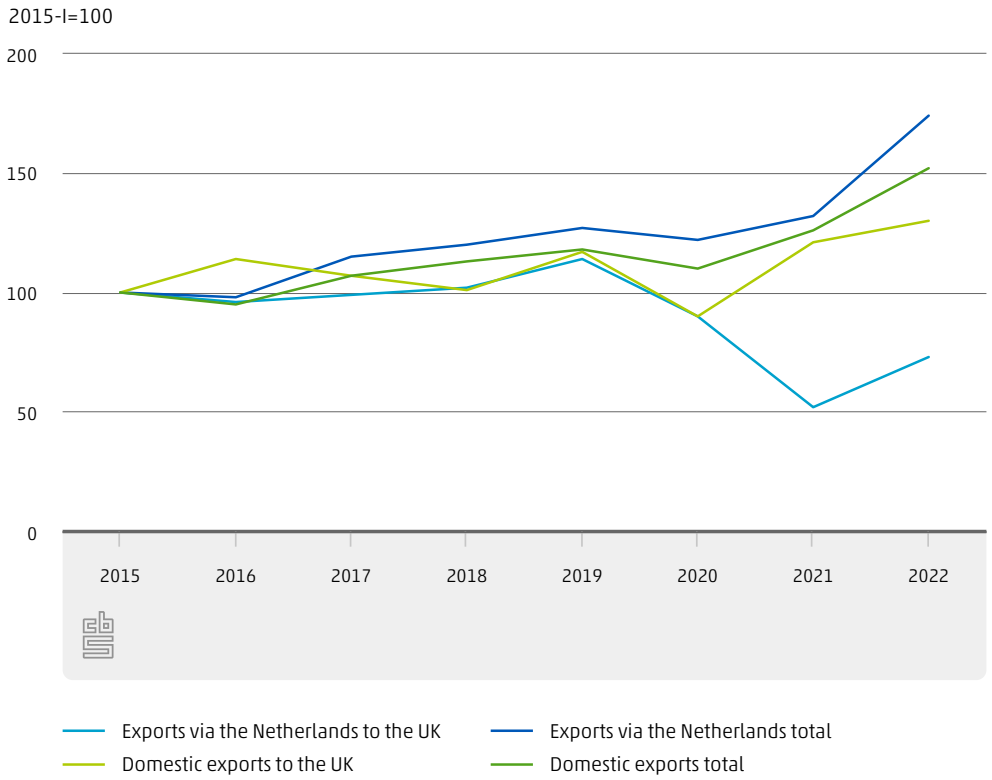
Q1 2015	Q1 2022
1 Germany	1 Germany
2 Belgium	2 Belgium
3 UK	3 France
4 France	4 UK
5 Italy	5 Italy
6 United States	6 United States

On 31 January 2020, the United Kingdom had already formally exited the European Union, followed by a transitional period during which the UK continued to comply with European trade rules. This decision was taken in order to avoid acute trade disruptions after Brexit and to have time available to lay down the new trade rules in a trade agreement. That transitional period ended on 31 December 2020. On 1 January 2021, Brexit became effective with the application of new rules on trade between the United Kingdom and the EU (European Commission, 2021).

Fewer goods via the Netherlands to the UK after Brexit...

UK's withdrawal from the EU has particularly affected goods originating from non-EU countries being transported via the Netherlands to other countries (see: re-exports and quasi-transit trade). In the first four months of 2022, these re-exports and quasi-transit goods flows are significantly below the level of the years 2015 to 2020 (Figure 2.5.1 Goods flow 'Via the Netherlands to the UK). In 2015, the year leading up to the Brexit referendum, 27% more goods in terms of value passed through our country across the North Sea than in 2022. Goods that are not produced in the EU or in the UK and which are shipped via the Netherlands to the United Kingdom will namely be taxed twice because of Brexit. Moreover, traders also have to deal with customs formalities and controls, if any, twice (CBS, 2021a). This has made it much more appealing for British companies to import goods directly without a stopover in the Netherlands. The total transit trade of goods via the Netherlands to all destinations has in fact increased significantly in value during the same period.

2.5.1 Development of goods trade, first four months[1)]



1) 'Exports via the Netherlands' is equivalent to the sum of re-exports and quasi-transit trade (for the best possible comparison over time).

... However more domestic exports to the UK

Domestic exports to the United Kingdom also lag behind the total domestic exports in terms of development (percentage growth), but the differences here are much smaller than for transit trade flows.[2)] In the first four months of 2022, the value of domestic exports to the UK was as much as 30% above the level of 2015, whereas this was 27% lower for transit trade.

2) We observe the same trend on the import side: import value from the UK in 2021 is 28% higher than in 2015; the total import value has increased by 42% in the same period.

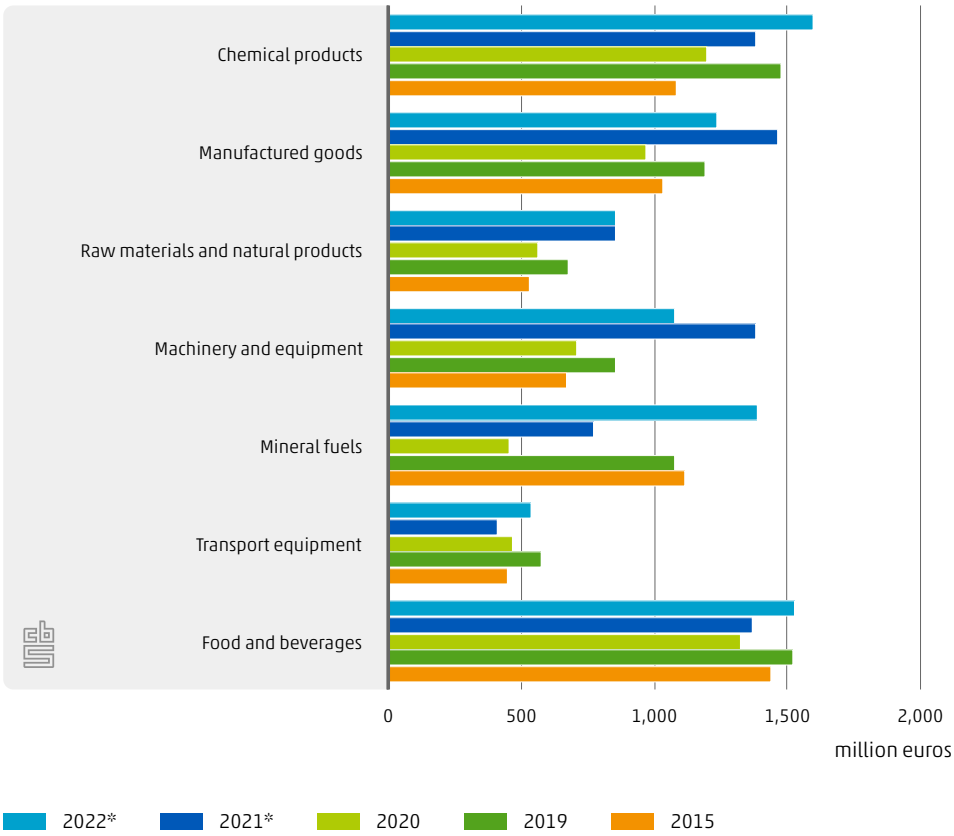
Possible explanations for the persistently high level of domestic exports to the UK in 2021 and 2022 are, on the one hand, the high prices for products sold to the UK (such as chemicals and mineral fuels) and, on the other hand, the fact that various trade-restrictive measures (especially in agriculture) will not be introduced until later this year (Jukema et al., 2022).

Hardly any growth in exports of food and beverages

Figure 2.5.2 shows that the export value of Dutch food and beverages to the United Kingdom was at a slightly higher level (+6%) in the first four months of 2022 than in the same period in 2015, the year leading up to the Brexit referendum. CBS previously reported that Dutch companies exported even fewer fresh fruit and vegetables and perishables, such as peppers, cucumbers, onions and pears to the UK in 2021 than in 2020 (CBS, 2021b). Now that the UK is no longer a member of the EU, Dutch exporters have to consider various non-tariff measures and inspections, aside from longer transit times (CBS, 2021a and 2021c). However, a higher value of processed foodstuffs, cattle feed and non-alcoholic beverages was shipped to the UK in the first four months of 2022 than in the same period in 2015, resulting in modest export growth for the food and beverage product group after all.

In the first four months of 2022, the export value of all other product categories was actually much higher than in the same period in 2015. The export value of Dutch chemical products such as medicines and plastics was about 47% higher in 2022 than in the same period in 2015. For manufactured goods (including paper and cardboard, medical instruments and devices, toys), this growth was 20%, for mineral fuels (such as refined petroleum products and electrical energy) this was 24%, for transport equipment (e.g. passenger cars or other motor vehicles) 19%, and for raw materials and natural products as well as machinery and equipment, this was as much as 61%. The product category of raw materials and natural products includes flowers and plants and vegetable oils and fats, for example. In the first four months of 2022, Dutch companies sold over twice as many flowers and plants in terms of value to the UK compared to the same period in 2015. For vegetable oils, it is even almost three times as much. Within the machinery and equipment group, we observe a particular growth in the export of chips and semiconductor elements, electromedical and radiological equipment and office machines to the UK.

2.5.2 Domestic exports to the UK, first four months



Twice as many business services to the UK as before the referendum

At the same time, the export value of services to the UK increased by 96% to €7.5 billion in Q1 2022 compared to the same quarter in 2015, the year leading up to the Brexit referendum. This is mainly explained by much higher exports of business services (including legal and accounting services) and transport services than in 2015. With a common share of 58%, these types of services are the principal forms of the trade in services to the UK. In comparison with Q1 2015, the expenditure of British tourists and business travellers during their stay in the Netherlands decreased by 60% in 2022.

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3 International trade in goods: composition and geography

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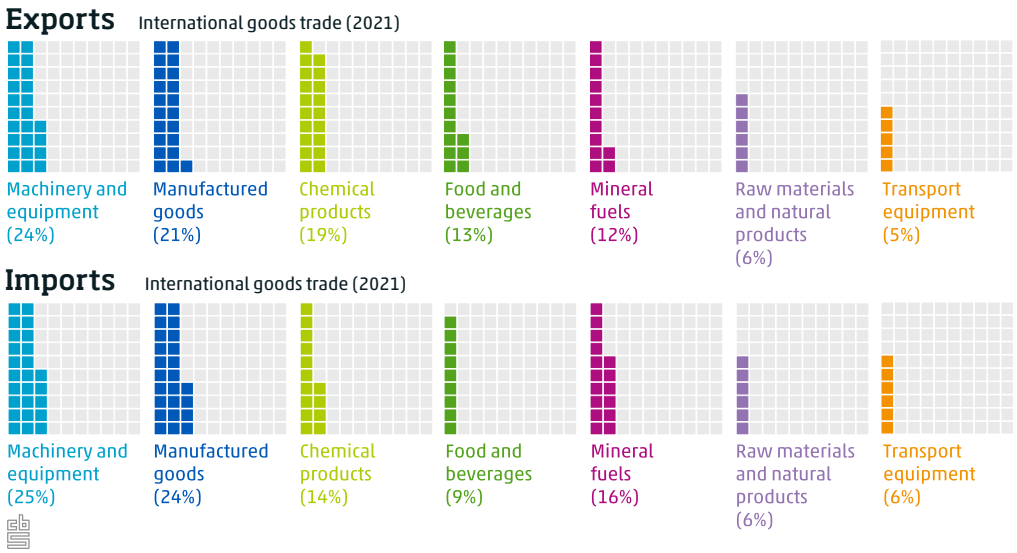


This chapter deals with the composition and geographical dimension of the Dutch goods trade. What did the trade portfolio of the Netherlands look like in 2021? Which goods saw falls in imports and exports and which experienced rises, compared with previous years? What are the main countries of origin and destination for Dutch trade in goods? How important is the Netherlands for the goods trade of all other countries in the world? How is the Dutch market share in global trade developing? In this chapter, we answer these and other questions by analysing the composition and geographical dimension of Dutch goods exports and imports.

3.1 Key findings

Outline

This chapter considers both the composition and geographical dimension of the Dutch goods trade. In sections 3.2 to 3.4, we look at these from a Dutch perspective. In section 3.2, we describe the key developments (in terms of value and volume) of the Dutch trade in goods, based on quarterly CBS figures. We also describe the importance of Europe, East Asia and North America for the Dutch goods trade. Dutch exports of goods are discussed in more detail

in section 3.3. What is the composition of Dutch exports? Which countries are major destinations for Dutch goods exports?

Section 3.4 gives details on Dutch goods imports. In sections 3.5 to 3.7, the roles are reversed and we look at the Dutch goods trade from the perspective of the rest of the world, using CEPII data.[1)] In section 3.5, we consider the relative export performance of Dutch goods traders, based on a Constant Market Share analysis. The importance of the Netherlands as a supplier of goods to other countries is addressed in section 3.6, and section 3.7 looks at its importance as a customer. The data and methods used in this chapter are discussed in section 3.8.

Goods trade in 2021 higher than in 2019

Dutch imports and exports of goods were higher than ever in 2021. Partly as a result of a strong economic recovery after the coronavirus crisis, goods exports totalled close to €587 billion, up by 13.8% from 2019, the last pre-COVID year. The value of imports was nearly €527 billion in 2021, up 14.5% compared to 2019. This strong growth was specifically due to high prices: export volume in 2021 was 6.6% higher than in 2019, and import volume rose by 5.7% between 2019 and 2021.

Machinery and equipment was the largest product category for exports in 2021, and the export value in this category increased by 10.5% compared to 2019. Growth in exports of chemical products was most significant, exceeding 26% between 2019 and 2021. Germany, Belgium and France are the main destinations for goods exports from the Netherlands. Export growth to Poland and South Korea was remarkably high at almost 37% (Poland) and almost 97% (South Korea) between 2019 and 2021. The bulk (56.0%) of goods exported from the Netherlands are domestic goods, while the rest are re-exports. The share of re-exports is relatively large in machinery and equipment, and manufactured goods. Relatively large amounts worth of re-exports go to nearby countries – Germany, Belgium and France – while many domestic goods are exported to the UK and the US.

In more detail, petroleum and petroleum products were the most important export goods for the Netherlands in 2021. Other key export goods are natural gas, specialised machinery, fruit and vegetables, chips and semiconductors, and flowers and plants. The export values of all these goods also grew between 2019 and 2021.

Machinery and equipment was also the most important product category for imports. Its share of 24.7% was just slightly larger than that of manufactured goods (24.2% of total import value). In all product categories, imports were higher in 2021 than in 2019, with the exception of transport equipment, where there was in particular a decline in the value of passenger car imports.

Most imports come from Germany, followed by China and Belgium as the largest suppliers of Dutch imports. The growth in imports from China was above average between 2019 and 2021, up by more than 24%, but imports from other important origin countries – Germany (+17.4%) and Belgium (+15.1%) – also grew rapidly. The list of the top 5 countries supplying

1) Information about specific goods is not available in the CEPII-data. In order to interpret the findings on the basis of CEPII, CBS figures (as a reflection of international trade flows) are used at product level in sections 3.6 and 3.7.

import goods to the Netherlands is completed by the US and the UK, but the import values from these countries grew less quickly, at 7.5% for the US and 6.5% for the UK.

Petroleum and petroleum products are not only key export goods, but also the most significant import goods for the Netherlands. Both petroleum and gas prices rose sharply, causing these product groups to increase in value and importance among Dutch imports. The import values of chips and semiconductors, computers, laptops and tablets, and clothing also increased between 2019 and 2021. In contrast, the import value of cars declined in that period.

Importance of the Netherlands in global exports and imports

The share of Dutch goods exports in global exports has been fairly stable since 1970. In 2020, the Netherlands accounted for 3.3% of global exports. Since 1970, the share in total global trade of many other countries, such as Germany, has declined more rapidly than that of the Netherlands. The Netherlands was the fifth-largest exporting country in 2020, behind China, Germany, the US and Japan. Globally, the Netherlands was the seventh-largest importer in 2020, and it was in fourth place in the group of European countries. In 2020, the Netherlands accounted for 2.8% of global imports. In relation to 1970, the Netherlands has seen its share in global imports contract.

Relative export performance of the Netherlands as a goods trader

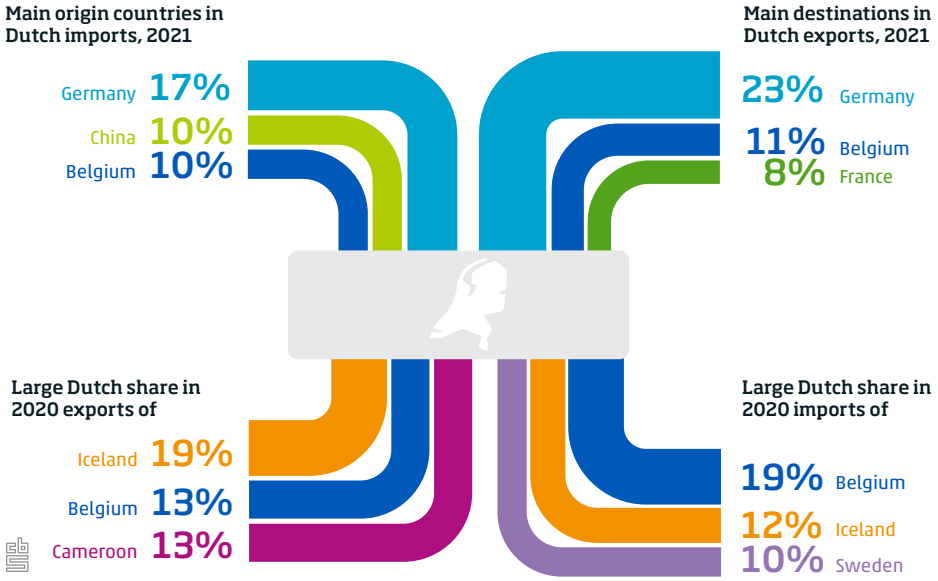
Dutch goods exports generally followed patterns in global trade in the period 1970–2020, but cumulative growth lagged behind that of global exports. This does not mean that the Netherlands performed relatively poorly in this period. The Netherlands has long been an established trading nation. The fact that the development of Dutch exports has followed global exports very closely, despite the emergence of a number of major players such as China, means that the Netherlands maintained its position as a prominent trading nation during the period 1970–2020.

In recent years, and since 2016 in particular, the Netherlands has actually managed to expand its share in global trade. Dutch exports therefore seem to be strongly bucking the global trend of slowing growth in global trade. Although the reasons for this remain unknown, the figures show that the relatively good performance of Dutch exports stems not so much from changes in the structure of exports, but mainly from the fact that the Netherlands is active in markets with above-average growth. Germany, and to a lesser extent the UK, Belgium, China and the US, were decisive for the relative growth of Dutch trade from 2020 onwards.

How important is the Netherlands to other countries as a trading partner?

The Dutch share in Belgian goods imports was 18.5% in 2020, making Belgium the country that is most dependent on goods originating from the Netherlands. For both Sweden and Germany, the Netherlands is the second most important supplier of goods. But it is also well positioned as an importer of goods from many countries. Examples are Belgium, Ivory Coast,

Norway, Finland, Germany and the UK. In 2020, 13.5% of all Belgian goods exports were destined for the Netherlands. This made the Netherlands the third-largest market for Belgium. Iceland and Cameroon are also very dependent on the Netherlands as an importer.



Source: CBS, CEPII

3.2 Key developments in the Dutch goods trade in 2021

Goods exports back above pre-COVID level in 2021

The Dutch goods trade achieved unprecedentedly high import and export values in 2021. Thanks in part to a sharp rise in output prices[2], exports peaked at almost €587 billion.[3] This was 21.5% more than in 2020. The value of goods exported in 2021 was 13.8% higher than in 2019 (€71.3 billion), when the COVID-19 pandemic had not yet broken out. The coronavirus crisis began in China in the first months of 2020. A lockdown was imposed in the country, which brought production chains to a standstill for several weeks. As the COVID-19 pandemic proceeded to take hold in Europe, production chains there also had to be partially or completely halted for an unspecified time. During the initial phase of the pandemic, there was reduced demand for goods and components. Because production chains were disrupted by lockdowns and container shortages, among other problems, products were not available or arrived late. When the COVID-19 pandemic broke out, demand for petroleum and petroleum products dropped and there was disagreement among the oil-producing countries, leading to overcapacity in oil, after which prices plummeted on the world market (RTL News, 2020). At the end of 2020, industry and the goods trade slowly recovered and Q4 of the year closed with modest growth in export volume compared to the same quarter

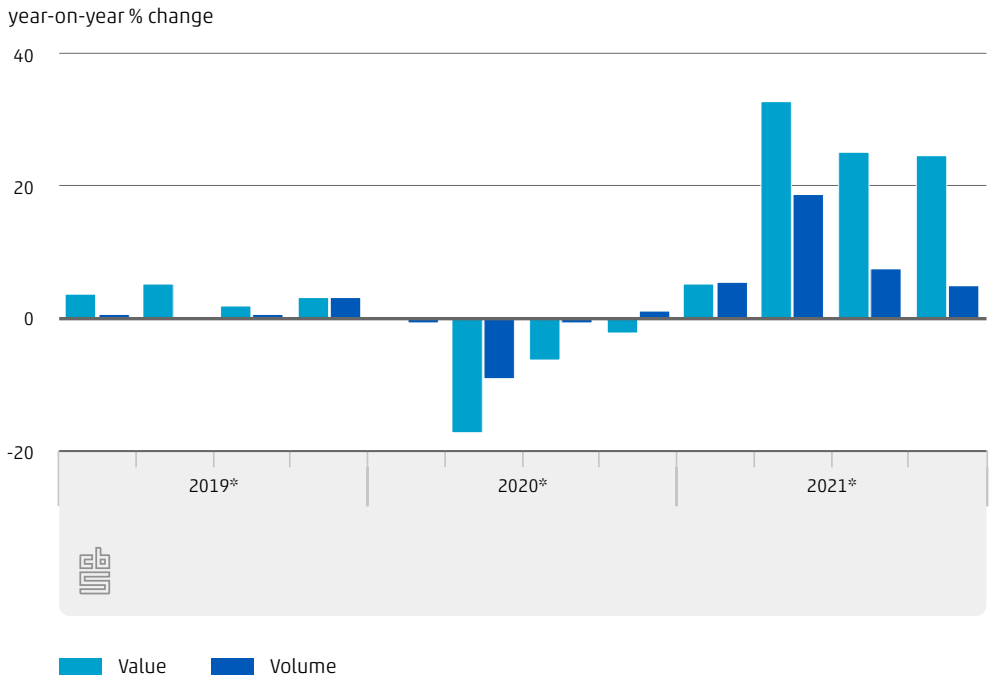
2) See Chapter 2 of this publication for further information on economic effects of the coronavirus crisis and trade prices.
3) The figures as presented in this chapter are based on the International Trade in Goods source statistics. Figures from the National Accounts are used in Chapters 6 and 7. The source statistics use different concepts from those of the National Accounts. For example, source statistics are based on cross-border trade in goods, while economic ownership is leading for the National Accounts. Integration into the National Accounts results in additional differences. In consequence, the figures in this chapter cannot be compared directly with those in Chapters 6 and 7. For more information on these differences, see 'CBS import and export statistics' (CBS, 2015).

of 2019 (Figure 3.2.1). In euro terms, however, exports were still lower than in the corresponding quarter of 2019, solely due to lower export prices. For the whole of 2020, the volume of exports was 2.1% lower than in 2019.

6.6% higher export volume in 2021 than in 2019; as a result of high prices, export value was actually 13.8% higher in 2021 than in 2019

In 2021, despite measures to contain the coronavirus, production chains around the world continued to forge ahead and were barely able to meet the exceptionally high demand for products. In the course of 2021, most countries eased their restrictive measures, giving a huge boost to the economy and, by extension, to international trade: growth in export value in April 2021 (compared to April 2020) was the strongest ever at 25.7% (CBS, 2021a). High demand led to ever-rising prices. In addition, manufacturers passed on the exceptionally high energy and raw material prices in the output prices. As a result of these events, export prices in 2021 were as much as 10.1% higher than in 2020 and 6.0% higher than in 2019 (CBS, 2022a). After the severe contraction in Q2 2020, there was extremely strong growth in export value in the same period of 2021, but export value was also considerably higher in Q3 and Q4 than in the same period of 2020, as can be seen in Figure 3.2.1. In terms of volume development, growth in 2021 was clearly lower, which indicates high prices.

3.2.1 Dutch goods exports, quarterly development

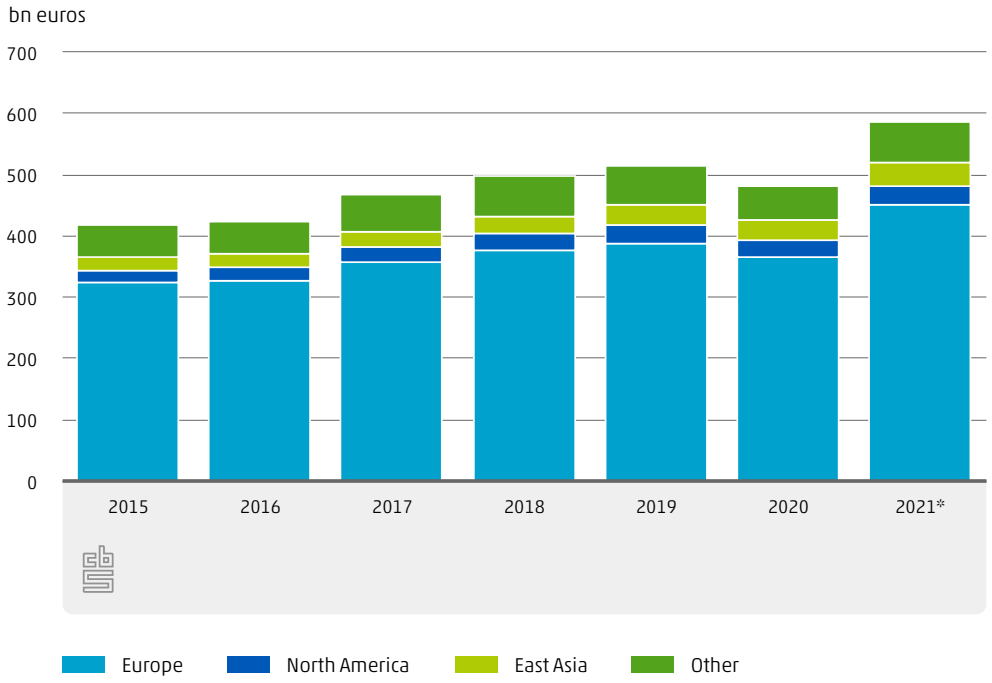


The extraordinary circumstances in 2021 pushed exports substantially higher than in previous years, to €586.6 billion. Export volume in 2021 was 8.9% larger than in 2020 and 6.6% larger than in 2019. The last time goods exports grew so strongly was in 2010, the year of recovery after the financial crisis.

Europe even more important as export destination in 2021

The share of total Dutch goods exports that went to Europe[4)] remained very stable in the period 2015–2021 (Figure 3.2.2). Almost every year, Dutch enterprises exported just over three-quarters of their goods to other European countries; in 2021 this share was 77.0%. The North America region's share in Dutch export value ranged from 4.9 to 6.0% between 2015 and 2021. Exports to the East Asia region, which includes countries such as China, South Korea and Japan, are increasing in importance. From 2015 onwards, this share grew steadily each year to reach 7.0% in 2020, at the expense of the importance of exports to the other regions (Central and South America, Other Asia, Oceania, Africa). In 2021, the share of exports to East Asia, at 6.6%, was slightly lower than in 2020: the European market was somewhat more important that year.

3.2.2 Exports by region



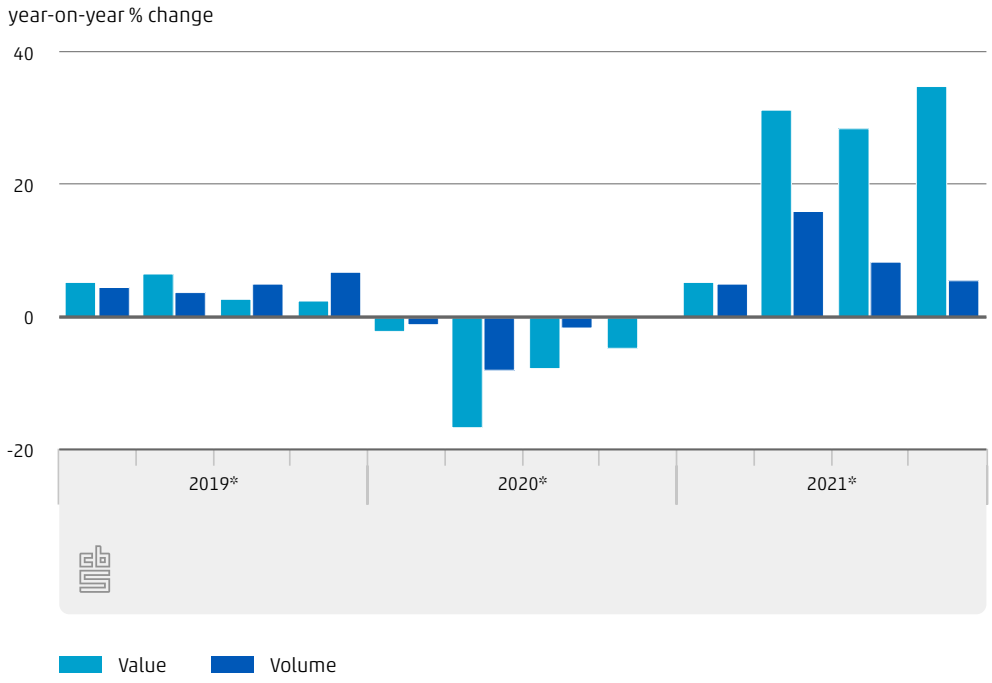
4) With the departure of the United Kingdom from the European Union, it is difficult to compare EU trade figures over the years. Therefore, in this chapter we have opted for a breakdown of trade into the three largest trading blocks: Europe, North America (Canada, Greenland, Saint-Pierre and Miquelon, and the United States) and East Asia (China, Hong Kong, Japan, Macao, Mongolia, North Korea, Taiwan and South Korea).

Import value in 2021 nearly 25% higher than the previous year

Dutch importers bought nearly €527 billion worth of goods from foreign suppliers in 2021. Substantially higher import prices caused the import value to rise by 24.3% from the previous year (Figure 3.2.3 for the development per quarter). Imports grew by 14.5% (nearly €67 billion) compared to the pre-COVID year 2019. This meant that import growth exceeded export growth (13.8%) in 2021. A significant part of the price increase was a rise in the price of petroleum, particularly in the second half of 2021. This is partly the reason for the import value growing so fast in Q3 and Q4 of 2021 compared to the same period a year earlier. Growth in the volume of goods imports was smaller from Q2 onwards (whereas Q2 of 2020 recorded a major contraction).

It was not only disruptions in demand, the coronavirus crisis, shortages of critical components and sharply fluctuating petroleum and natural gas prices in 2020 and 2021 that caused disquiet in the production chain. Trade conflicts and Brexit also caused a decline in the stability of trade relations, as well as problems related to the availability of containers that had an upward effect on trade prices.

3.2.3 Dutch goods imports, quarterly development



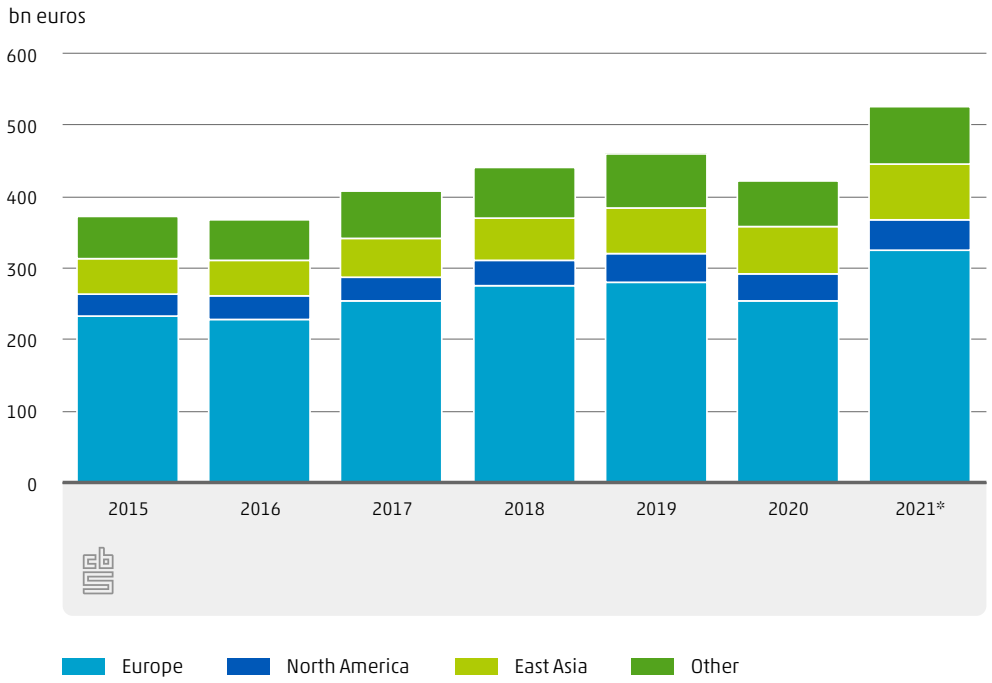
At €526.7 billion, imports were significantly higher in 2021 than in previous years. The volume of imports was 8.6% larger than in 2020 and 5.7% up compared to 2019.

East Asia less important as supplier of goods in 2021

The importance of Europe in total Dutch goods imports was stable at around 62% between 2015 and 2021 (Figure 3.2.4). Only 2020 was an outlier, with a smaller share of 60.2%. This decline in the importance of Europe as a supplier of Dutch imports is a direct consequence of the sharply lower crude oil prices on the global market, as the Netherlands mainly obtains

petroleum from Europe (Norway, Russia and the United Kingdom). Imports from North America were slightly more than 8% of the total almost every year in the period 2015 to 2021. The East Asia region is more dynamic. The share of Dutch imports from this region was 13.1% in 2015 and, with a small interruption in 2018, it rose steadily to 15.6% in 2020. East Asia's share decreased slightly to 14.8% in 2021. This was mainly due to more expensive petroleum coming from regions other than East Asia. The COVID-19 pandemic and associated lockdowns may have influenced the declining importance of East Asia for Dutch imports in 2021. It may also in part be an indirect consequence of Brexit. In some cases, trade flows between Asian countries and the United Kingdom no longer pass through the Netherlands but go directly to their destination. The share of imports from the other regions (Central and South America, Other Asia, Oceania and Africa) has been stable over the years, at 15 to 16%.

3.2.4 Imports by region



The following two sections focus on the comparison between trade in 2021 and in the last pre-COVID year, 2019, and in some cases with 2015.

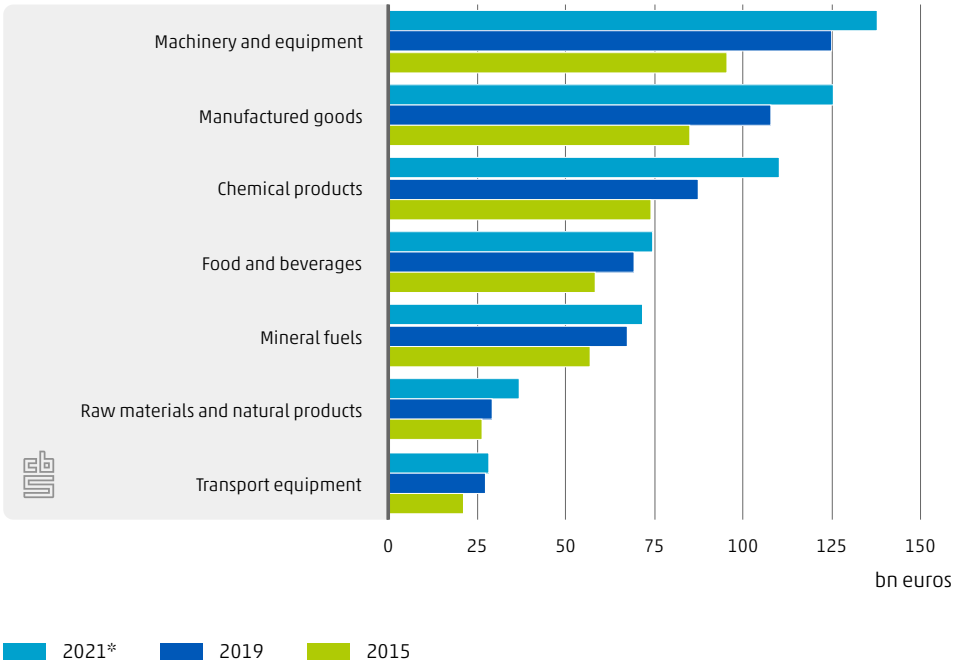
3.3 Dutch exports of goods in detail

Machinery and equipment main product category for exports

Dutch goods exports had a total value of around €587 billion in 2021. This was 13.8% more than in the pre-COVID year, 2019. As in previous years, machinery and equipment were the main export product for the Netherlands. Figure 3.3.1 shows that there was growth in all product categories. Exports of the three largest product categories in particular have increased substantially in recent years: machinery and equipment, manufactured goods (e.g., clothing, paper and board, iron and metal products) and chemical products together accounted for almost 64% of total exports in 2021. This was 1.6 percentage points more than

in 2019. Exports of chemical products (including medicaments, cosmetics and plastics) grew the fastest (by more than 26% between 2019 and 2021).

3.3.1 Exports by product category

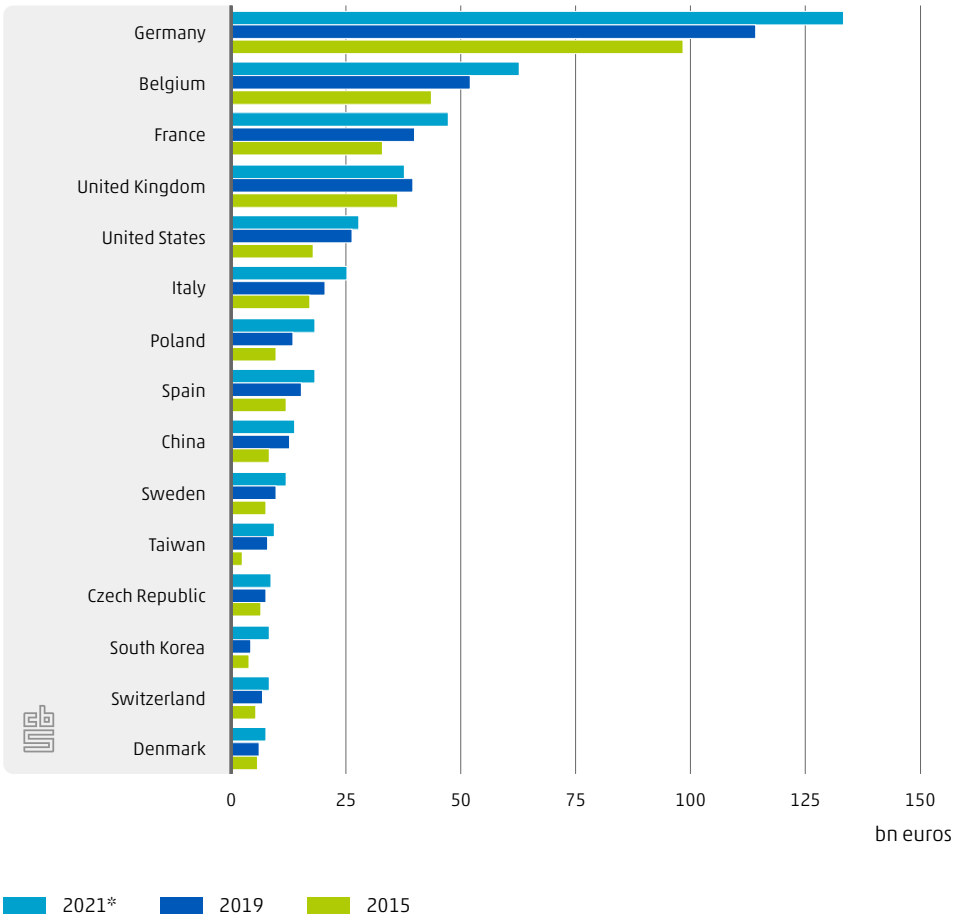


Significant growth in exports to Poland

As in previous years, Germany was the largest trading partner of the Netherlands, buying Dutch exports to a value of some €133 billion in 2021. This represents a 16.6% increase compared to 2019. The second and third-largest export partners of the Netherlands were Belgium (€63.0 billion, up by 21.0% growth) and France (€47.3 billion, up by 17.5% growth). Looking at the 15 largest export partners of the Netherlands in 2021 in Figure 3.3.2, we see that only the value of exports to the United Kingdom decreased compared to 2019. This is due to Brexit, which caused a sharp decline in the value of re-exports to that country, as already discussed in Chapter 2 of this publication (see also CBS, 2022b).

There was one change in the top 15 compared to 2019: Poland was the seventh-largest market for exports from the Netherlands in 2021, moving up one place. The country experienced strong growth of 36.9%. Spain dropped one place due to lower growth in export value from the Netherlands (18.1% growth compared to 2019). In 2021, Dutch enterprises exported goods to South Korea with a value almost twice as high as before the coronavirus crisis, for a total of €8.6 billion. The Netherlands mainly exported specialised machinery to South Korea. Nearly one-fifth of the export value of specialised machinery went to that country in 2021. As a result, South Korea was the second-largest buyer of this type of goods after Taiwan.

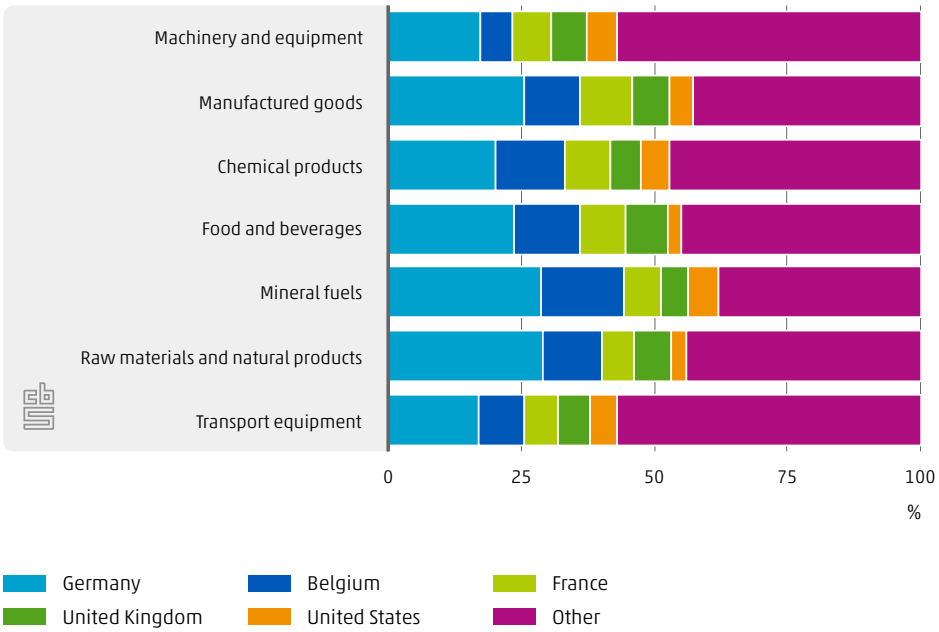
3.3.2 Exports by trading partner



Half of exports go to top 5 partners

The top 5 export partners of the Netherlands together account for nearly 53% of total goods exports. Figure 3.3.3 shows the share of exports of the top 5 export markets for each product category. We see that for all product categories – except machinery and equipment and transport equipment – the top 5 markets represent more than 50% of the value. In other words, more than half of the export value of these product categories goes to the top 5 markets. Germany has the largest share in each product category; in raw materials and natural products and in mineral fuels, it even accounts for almost 30% of total export value.

3.3.3 Share in exports by product category, top 5 destinations, 2021*

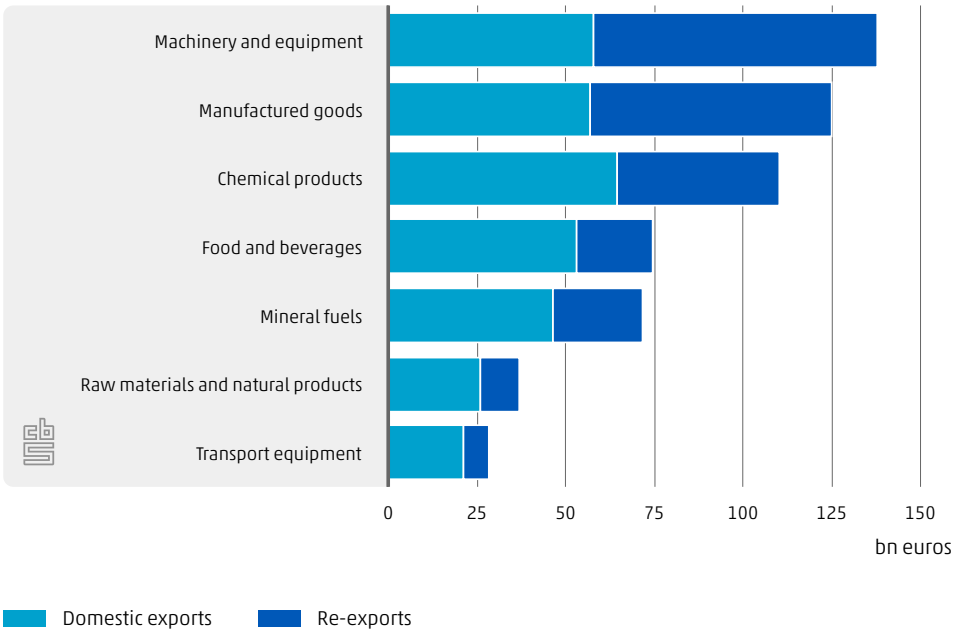


Shares of domestic goods and re-exports stable

More than half of Dutch exports consist of goods manufactured in the Netherlands (Figure 3.3.4). With a share of 56.0%, the value of domestic exports was €328.5 billion in 2021. This share remained virtually unchanged between 2015 and 2021: domestic exports increased in proportion to re-exports. Re-exports of goods accounted for €258.1 billion in 2021. Re-exports are goods that are imported by an enterprise based in the Netherlands and then sold abroad after undergoing little or no processing.

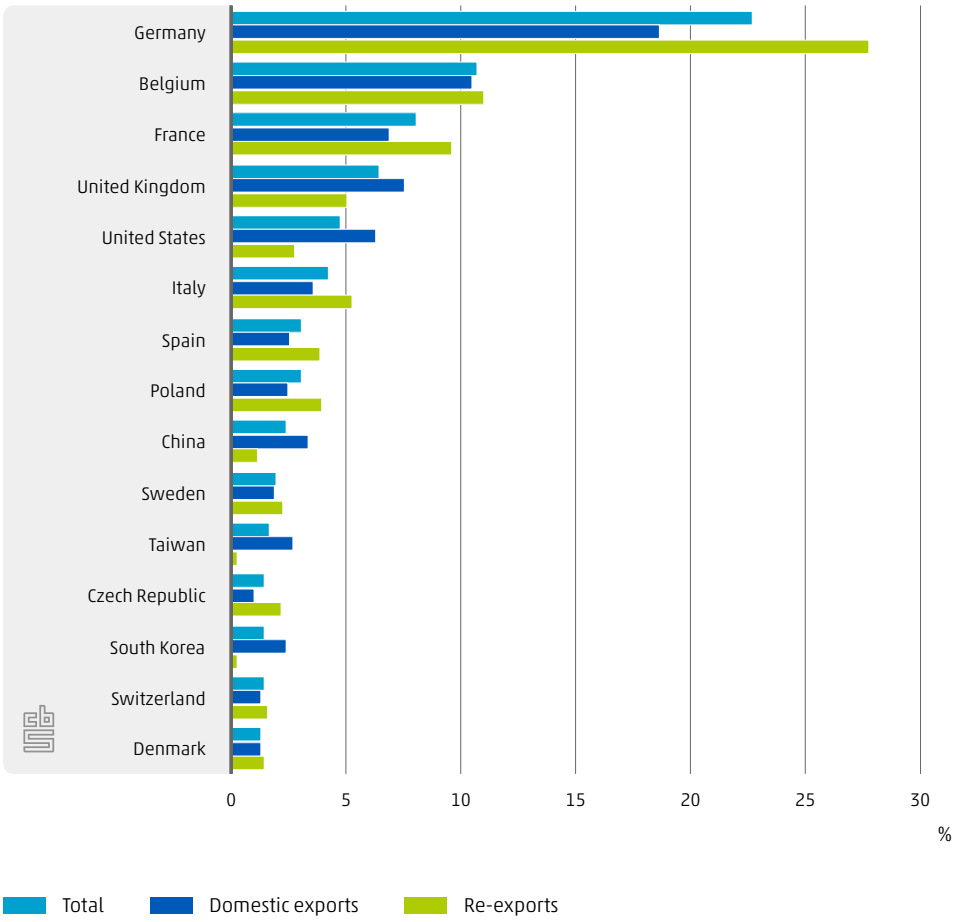
Machinery and equipment make up the largest share of total Dutch exports, accounting for 23.6%. This is mainly due to the large share of re-exports. The Netherlands imports large amounts worth of chips and computers, as well as peripheral devices such as modems and routers from the East Asia region, which quickly leave the country in the form of re-exports. Manufactured goods also account for a relatively large share of re-exports; these goods also usually come from the East Asia region. Half or more of the exports of other product categories are manufactured in the Netherlands.

3.3.4 Domestic exports and re-exports by product category, 2021*



If we look at the 15 largest export markets and their shares in total exports, domestic exports or re-exports in Figure 3.3.5, it is striking that a large proportion of re-exports go to nearby countries: Germany (27.8%), Belgium (11.0%) and France (9.6%). The Netherlands acts as a logistics hub: goods arrive here (especially at the Port of Rotterdam) and are subsequently transported to their final destinations in other European countries. These countries are therefore more important in relation to re-exports than domestic exports. For example, 27.8% of re-exports go to Germany, while the country receives only 18.8% of total domestic exports from the Netherlands. Relatively large amounts worth of domestic goods are exported to the US and the UK. Geographically, the Netherlands is not a convenient distribution centre for the US, and because of Brexit, it is no longer a logical stop-over for the British either. Relatively few re-exports go to markets in Asia (China, South Korea and Taiwan); many of the goods destined for re-export actually originate from those trading partners.

3.3.5 Export share by trading partner



Exports of petroleum and natural gas dominate

When we break down exports (re-exports and domestic exports) into more detailed product groups[5)], we see that petroleum and petroleum products are by far the most important product group for Dutch exports. In 2021, the trade value was €54.7 billion (Figure 3.3.6). However, the importance of petroleum and petroleum products as part of total exports was smaller, at 9.3%, than in 2019 (11.1%). The principal buyers of petroleum and petroleum products in 2021 were Germany, with an export share of 23.5%, and Belgium, with 14.5%. The five main customers further included the United States, France and Nigeria. It is striking that Nigeria is so important for the export of these goods: it is mainly important to the Netherlands as a supplier of crude oil because of the good quality of the oil. The country does not have any refineries, however, so a large amount of the oil extracted goes to the Netherlands for the production of high-quality petroleum products. A share of these petroleum products returns to Nigeria as petrol and diesel (see also Creemers & Draper, 2021). The export value of natural gas was also higher than ever in 2021. Compared to the pre-COVID year 2019, natural gas exports grew by 5.7 billion to a value of €14.7 billion. This growth was entirely due to price increases, as export volume fell during the same period.

5) See Figure 3.8.1 in section 3.8 for the composition of the product groups used here.

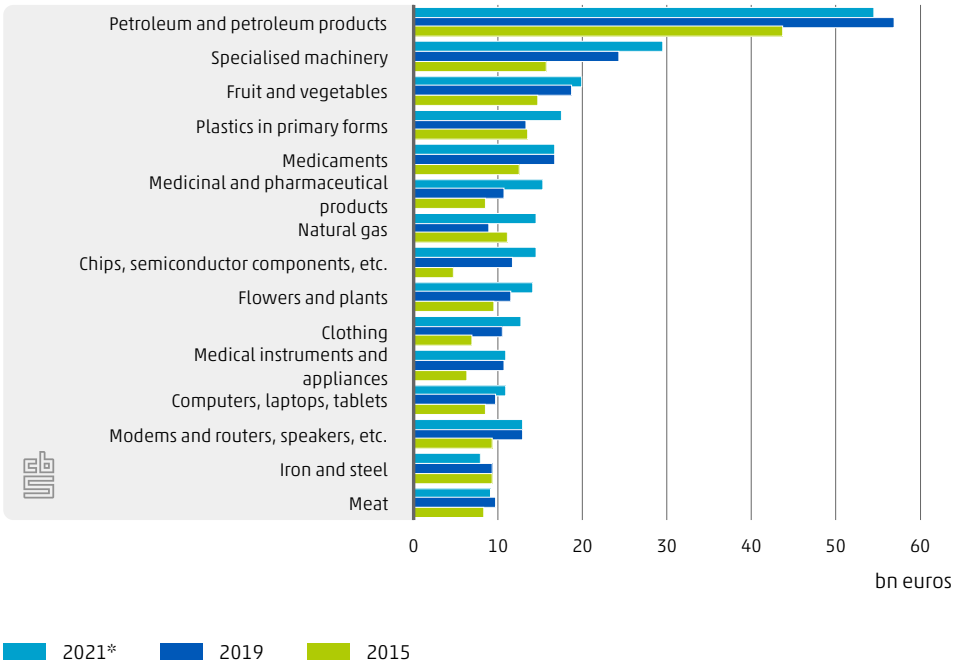
Exports of specialised machinery, including chip-making equipment (lithography machines), civil engineering and contractors plant and equipment, and agricultural machinery, accounted for €29.7 billion in 2021. The share of total Dutch export value represented by specialised machinery is 5.1%. The East Asia region, including South Korea and Taiwan, is a crucial market for these goods, with an export value of €16.0 billion (53.8% of the total export value of these goods).

Fruit and vegetables mainly exported to neighbouring countries

Exports of fruit and vegetables were higher than ever in 2021, with export value up by 5.8% compared to 2019, at €20.0 billion. With an export share of almost one-third, Germany is the biggest buyer of fruit and vegetables. In 2021, fruit and vegetables worth €6.5 billion were exported to Germany. Belgium, with a 10.6% share, and the United Kingdom, with 8.4%, complete the top 3 for this product group.

Chips and semiconductors have become increasingly important for Dutch exports. With a value of €14.6 billion, they represented 2.5% of total exports in 2021. This is almost 23% more than in 2019, and had never before been so high. Poland in particular is an important market for chip exports, taking nearly one-sixth of the export value of this product category. It was also a record year for exports of flowers and plants in 2021. A slightly higher volume, combined with significantly higher output prices, boosted exports to €14.2 billion: 22.4% more than in 2019. A quarter of flower and plant exports went to Germany. The UK and France also have a large share in the export value of this product group, with 12.1 and 8.8% respectively.

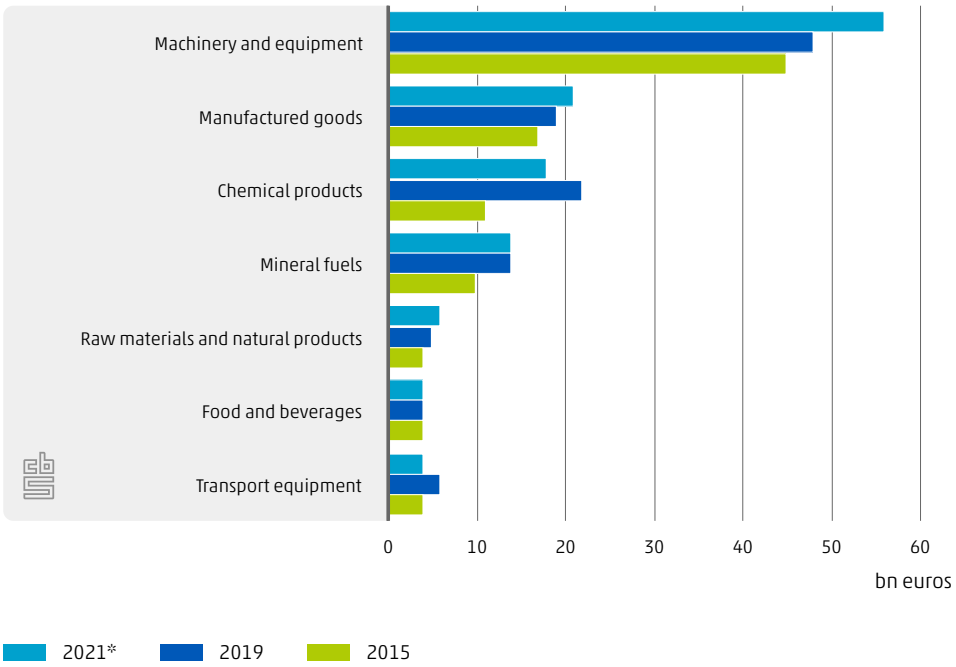
3.3.6 Main product groups, exports



Quasi-transit trade mainly involves machinery and equipment

In addition to domestic exports and re-exports, there is also quasi-transit trade, in which goods are imported by a foreign enterprise and undergo little or no processing, after which they are re-exported abroad.[6] The value of outbound quasi-transit trade was €122.6 billion in 2021. This is almost 4% more than in 2019. Figure 3.3.7 shows that foreign exporters mainly export substantial amounts of machinery and equipment such as consumer electronics via the Netherlands as quasi-transit trade (45.9% of the total value of outbound quasi-transit trade). These goods are mostly produced in East Asia and in most cases are then shipped via the Netherlands to European customers. Quasi-transit trade is not very lucrative: an average euro of transit trade generates only 1.3 euro cents for the Netherlands (CBS, 2021b). In comparison, re-exports earn 10 cents per euro of exports, and domestic exports earn 56 cents per euro. Additional information on this is provided in Chapter 6 of this publication.

3.3.7 Exports by product category, quasi-transit trade



3.4 Dutch imports of goods in detail

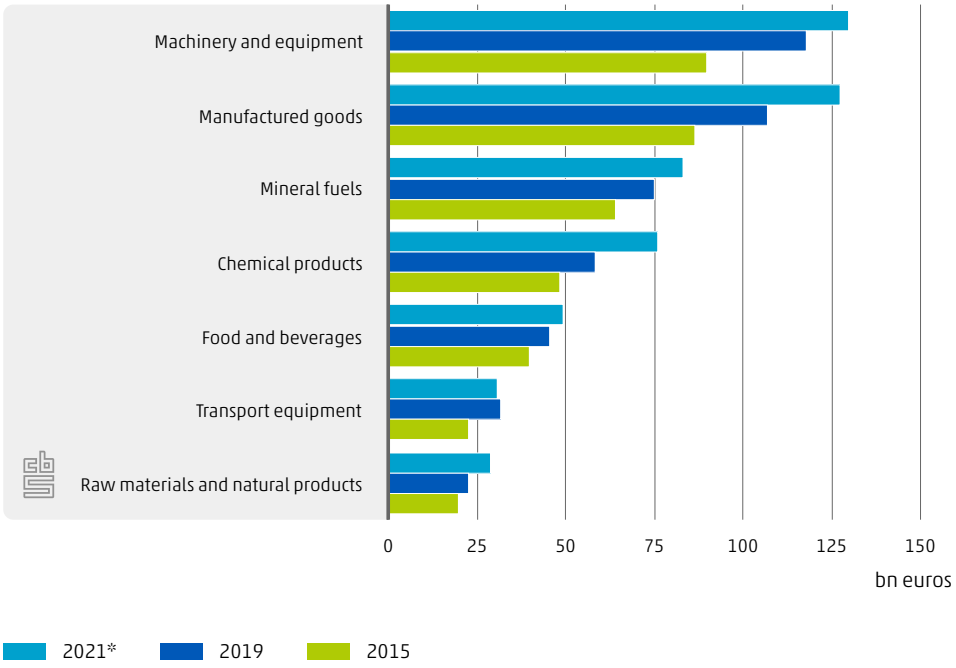
One-quarter of imports consists of machinery and equipment

Dutch importers purchased goods abroad worth nearly €527 billion in 2021. This was a rise of 14.5% compared to 2019, when the value of imports was almost €460 billion. Machinery and equipment make up 24.7% of total import value, just slightly more than manufactured goods

6) In international trade, quasi-transit trade is often referred to simply as 'transit trade'. However, in addition to quasi-transit trade, there is also transport transit trade and customs warehouse transit trade. These are goods that are not cleared by Dutch customs. They are therefore not included in the International Trade in Goods statistics (Lemmers et al., 2022).

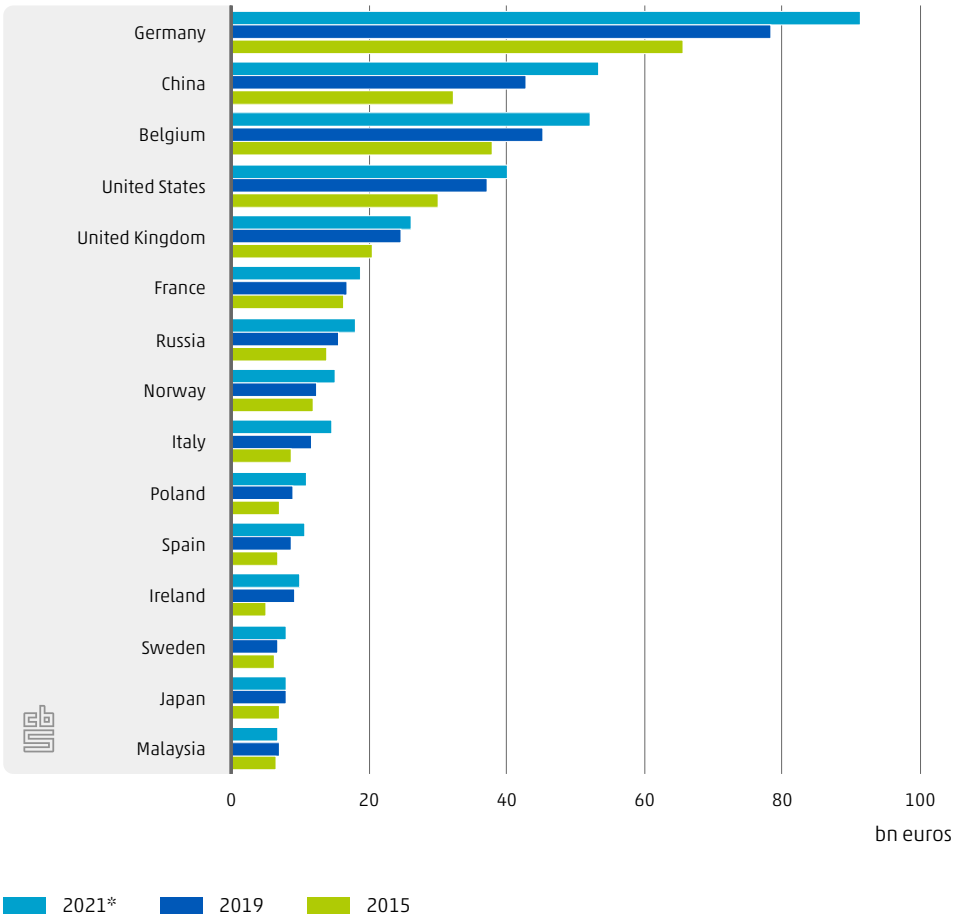
at 24.2% (Figure 3.4.1). Together, these two product categories therefore account for almost half of total imports. It is striking that imports of six of the seven product categories were higher than in 2019, but that imports of transport equipment (especially cars and car parts) in 2021 lagged slightly behind 2019. Cars were not always available in 2021 due to chip shortages and disruptions to production.

3.4.1 Imports by product category



In addition to being our largest export market, Germany was also our main import partner in 2021 (Figure 3.4.2). Growth in the value of imports from Germany between 2019 and 2021, at 16.5%, also exceeded total growth in import value (14.5%). However, imports from China increased even more strongly between 2019 and 2021: Dutch imports from that country rose by more than 24%. This made China our second-largest import partner, with Belgium in 3rd place. Imports from the US and the UK did grow compared to 2019, but at 7.5 and 6.5% respectively, the increases were considerably less than average.

3.4.2 Imports by country



Imports less concentrated among top 5 origin countries

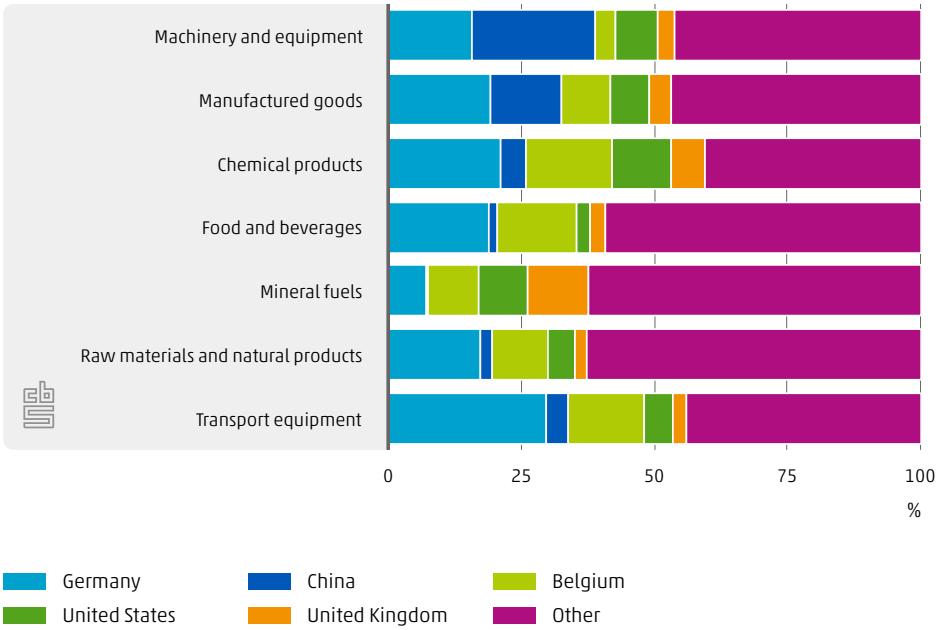
Imports by product category, as shown in Figure 3.4.3, are slightly less concentrated among the top import partners than among the export partners. The top 5 partners together accounted for 50% of total import value in 2021. Especially in the case of mineral fuels, food and beverages, and raw materials and natural products, the Netherlands has substantial imports from countries outside the top 5 (Figure 3.4.3). For example, we import relatively large amounts worth of food and beverages from Spain (4.7%) and Brazil (3.9%). Spain is the largest supplier of fruit and vegetables to the Netherlands. A relatively large share of raw materials and natural products, such as fruit juices, feeding stuff for animals and soya, comes from Brazil (6.0%) and Sweden (4.2%), including iron ore, cork, paper and wood. Significant shares of mineral fuels come from Russia (19.0%) and Norway (14.8%).

We also see that the top 5 import partners for the Netherlands play very varied roles. China, for instance, is a major supplier of manufactured goods, such as clothing, glassware and household goods and kitchenware (13.2%), and is even the most important partner for imports of machinery and equipment (23.2%). A large proportion of the goods imported by the Netherlands from China is ultimately destined for re-export (63.4% in 2020).[7)] China plays

7) Chapter 7 of this publication discusses what is done with imports from specific countries. A distinction is made between imports for domestic consumption and imports destined for the foreign market.

a much smaller role in the other product categories. Germany is the largest supplier of transport equipment (30.0%), which mainly concerns cars; chemical products such as medicaments and plastics (21.2%); food and beverages (dairy, meat, cereals, fruit and vegetables) (19.1%); raw materials and natural products (metal scrap and wood) (17.7%); and manufactured goods (19.4%), which include metal, iron and steel products, paper and paperboard. Belgium is the 2nd or 3rd import partner of the Netherlands for all product categories except mineral fuels and machinery and equipment. Large shares of goods imported from Germany (43%) and Belgium (40%) leave the Netherlands again in the form of re-exports.

3.4.3 Share in imports by product category, top 5 origin countries, 2021*



Natural gas imports up by 82%

Crude oil and petroleum products are, as Figure 3.4.4 shows, by far the most significant group in Dutch goods imports. The import value was close to €60 billion in 2021, almost half of it crude oil. Virtually all imported crude oil is processed by Dutch refineries into petroleum products, the most import of which are petrol, diesel, kerosene and fuel oil. In 2021, Russia was by far the largest supplier of crude oil, with a share of 28.3%. This is twice the share of imports from the United States. The United Kingdom is the third-largest supplier, with a 13.4% share. Norway is in 4th place, with a share of 12.1%. In contrast, almost a quarter of petroleum products come from Belgium, followed by Germany and Russia.

The value of natural gas imports rose by 82.3% to €20.6 billion in 2021 compared to 2019. This increase is entirely attributable to particularly sharp rises in trade prices.
The corresponding import volume decreased by 2.4%. A significant share of imported natural gas leaves the Netherlands as re-exports to other European countries. The Netherlands itself consumed less natural gas to generate electricity in 2021, and industrial users also purchased considerably less natural gas in the second half of 2021 (CBS, 2022c).

As with petroleum and natural gas, imports of chips and semiconductors grew strongly. In 2021, imports rose by €2.4 billion to €16.9 billion – an increase of 16.6%. East Asia in particular supplies a substantial share of the chips imported (30.8% of the import value of chips and semiconductors). The main chip-producing countries for Dutch imports are China, Malaysia and Costa Rica. Dutch traders subsequently sell many chips as re-exports to customers in other European countries.

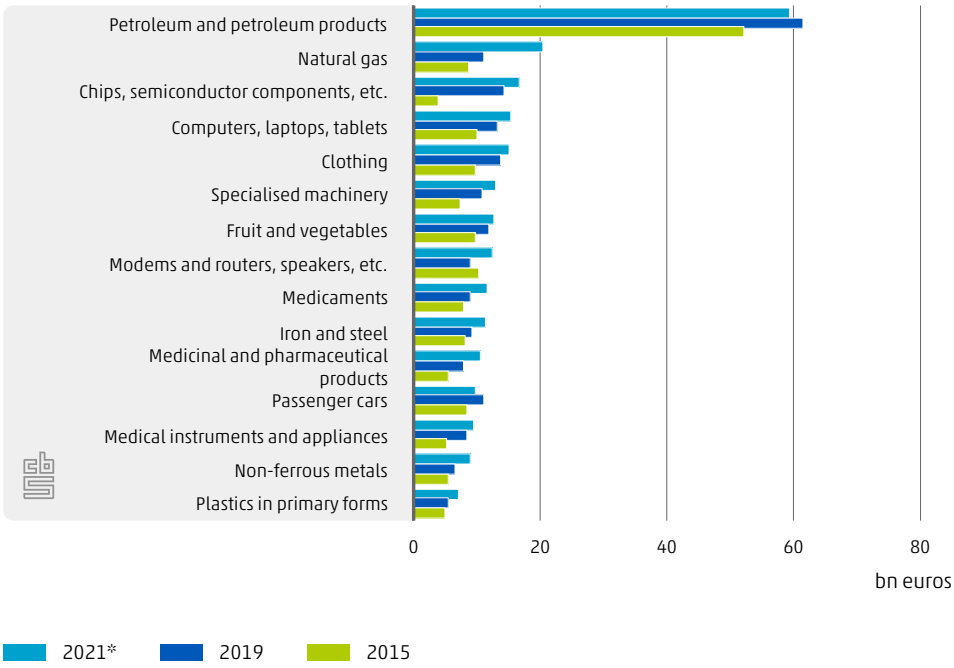
Demand for computers, laptops and tablets continued to increase in 2021, with imports totalling €15.4 billion in 2021. This was almost 15% more than two years earlier. With a share of 37.0%, China is the main partner for Dutch computer imports. The United States (8.9%) and Taiwan (7.6%) are some way behind in 2nd and 3rd place. A large share of imported computers also have a final destination abroad in the form of re-exports.

The Netherlands imported clothing worth €15.3 billion. This was €1.5 billion (10.9%) more than in 2019. The main producers of clothing worldwide are China, Bangladesh and Turkey. Less than half of Dutch clothing imports stays in the Netherlands, while 68.9% (in 2020) is sent as re-exports to other countries, especially in Europe (see also Aerts et al., 2021). The Netherlands imported most clothing from Germany in 2021. The clothing imported from Germany is predominantly of Asian manufacture.

Car imports decline in 2021

At €9.9 billion, the import value of passenger cars in 2021 remained 11.6% below the 2019 level. After the drop in demand for cars in 2020, it was supply problems specifically that limited imports in 2021. Many car manufacturers saw their production process disrupted by a shortage of chips and global logistics problems. Chip manufacturers were unable to meet the increased demand partly because of the growing need for electric cars as a result of the energy transition. Many more chips are processed in electric cars than in vehicles that run on petrol or diesel. The lack of containers and coronavirus outbreaks in various countries put additional pressure on the logistics chain. Passenger car production therefore lagged behind in 2021 for various reasons.

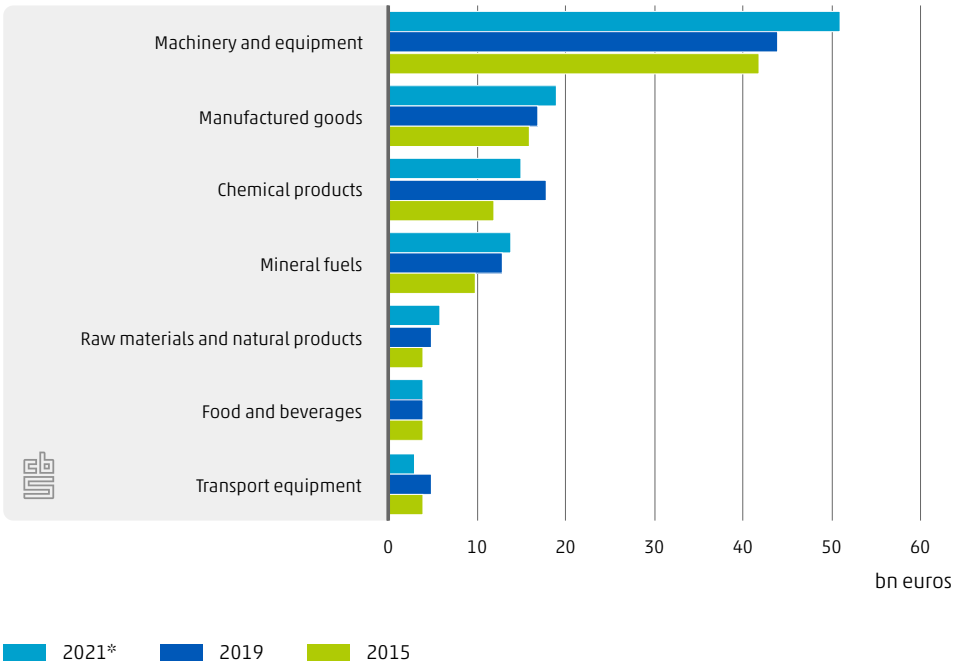
3.4.4 Main product groups, imports



Quasi-transit trade mainly from East Asia

In 2021, the Netherlands imported €112.1 billion worth of inbound quasi-transit trade goods. This was €5.4 billion (5.1%) more than in 2019. Figure 3.4.5 shows that these imports mainly consisted of machinery and equipment (45.8%), which included computers and modems, and routers. The lion's share of these products – 80.4% – comes from East Asia. The goods imported into the Netherlands are mainly destined for other European countries, especially Germany.

3.4.5 Imports by product category, quasi-transit trade



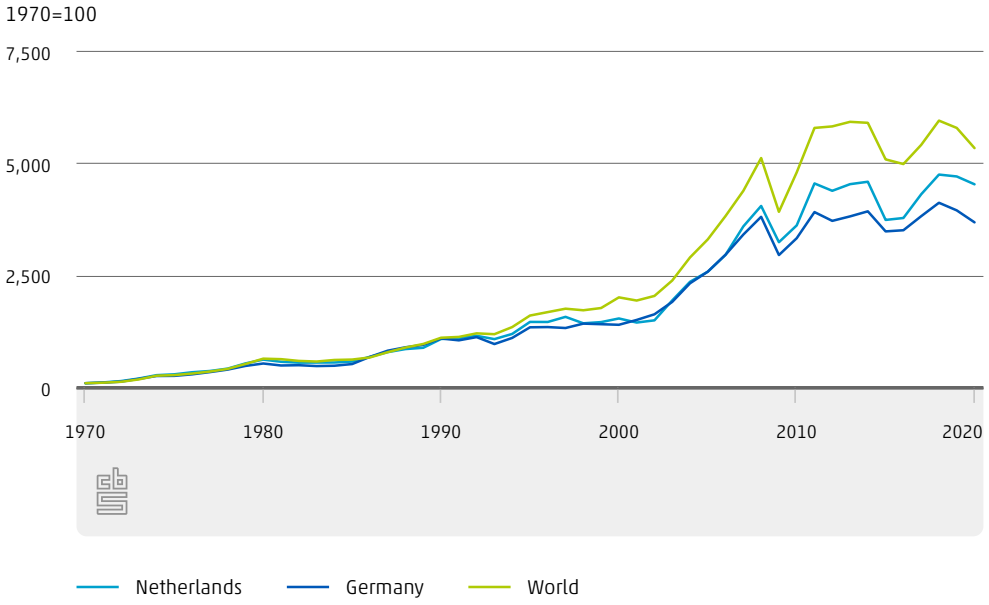
3.5 Relative export performance of the Netherlands as a goods trader

The growth of Dutch exports is a crucial factor in assessing the country's performance in export markets. Export growth, however, only paints a partial picture of our competitive position as an exporting country. It should not be viewed in isolation from the growth of our competitors' exports in the world market or from the development of total global exports. Growth in our goods exports may be seen in a different light if growth in global exports is just as strong or even stronger. In this section, we therefore look at the relative export performance of the Netherlands using a Constant Market Share analysis.

Dutch exports grow relatively less rapidly than global exports

Figure 3.5.1 charts the development of Dutch, German and global goods exports since 1970. It shows that Dutch and German exports follow the patterns of global trade, but also that the goods exports of both countries did not grow as fast as global exports in the period 1970–2020. Furthermore, the periods of crisis (such as the 1980s and the financial crisis in 2008) are clearly recognisable, as are the years of economic prosperity.

3.5.1 Development of goods exports in the Netherlands, Germany and the world, indexed

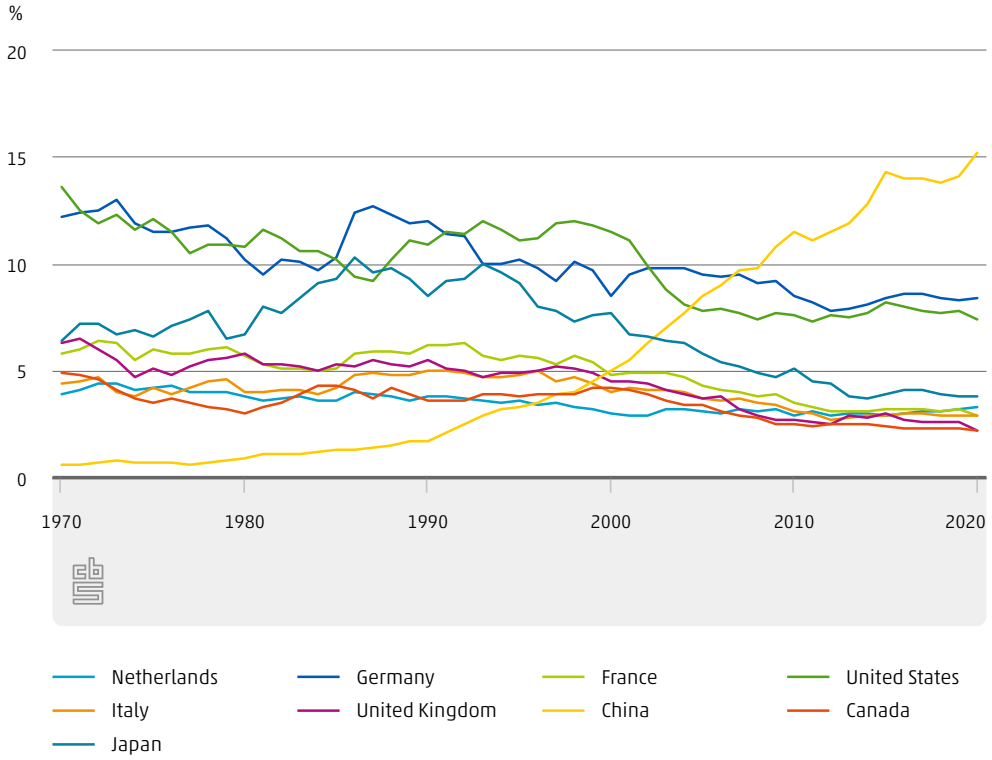


Source: CBS, CEPII

It is not surprising that Dutch and German goods exports have grown more slowly cumulatively than global exports in the period 1970–2020, and it certainly does not mean that the Netherlands and Germany are performing poorly in terms of exports. Countries that showed stronger export growth in the period 1970–2020 are countries that hardly exported at all in the 1970s, such as China and South Korea, but that have since developed into major world players. We also see such developments in Europe. For example, the export growth of Portugal is also clearly above the growth curve of global trade.

The Netherlands and Germany have long been established trading nations. The fact that the development of Dutch exports has followed global exports very closely, despite the emergence of a number of major players, means that the Netherlands maintained its position as a prominent trading nation during the period 1970–2020. The share of Dutch goods exports in global exports has been fairly stable since 1970. Figure 3.5.2 shows that the Netherlands was responsible for 3.3% of global exports in 2020. This share is slightly lower than in 1970 (3.9%) but virtually the same as in 2000. Since 2000, the shares of many other countries, such as Germany, Japan and the UK, have declined more rapidly than that of the Netherlands. The Netherlands was the fifth-largest exporting country in 2020, after China, Germany, the US and Japan.

3.5.2 Shares in global goods exports



Source: CBS, CEPII

For China, the picture is obviously very different. Chinese exports grew significantly faster than global exports and in 2020, China was unmistakably the world's largest trading nation, accounting for 15.2% of total global exports. China's export share has risen sharply since the country joined the World Trade Organization in 2001. This growth actually started in the early 1990s, mainly due to the gradual opening of Chinese markets by the government (Autor et al., 2021). Before that, the US and Germany (before 1990 the GDR and BRD together) were leaders in global exports for decades.

2nd European exporting country in the world in 2020 was the Netherlands

Constant Market Share analysis

Studying Dutch export growth, in specific products or to specific markets, is an interesting exercise, but not sufficient to say anything about the development of the competitive position of the Netherlands as an export country. After all, it offers no insight into the relative performance of the Netherlands as an export country compared to other countries. Take, for example, a fictitious situation in which Dutch exports to Germany increase by 8%. That may seem a lot at first sight. But if total German imports have

increased by 12%, this puts the growth of Dutch exports to Germany in a different light. Growth in Dutch exports to a particular country may be accompanied by a loss of market share for the Netherlands in that same market. The Constant Market Share (CMS) analysis offers a solution by relating the growth of Dutch exports to the growth of global trade.[8] The total shift in the share of Dutch exports in global trade (hereafter referred to as the total effect) is equal to the difference between the growth of Dutch exports and the growth of exports of the rest of the world excluding the Netherlands. A positive total effect means an increase in the share of total global exports supplied by the Netherlands; a negative total effect means a decrease in the market share of the Netherlands.

The total effect can be further broken down into a pure market share effect and what is called a structural effect or combined structural effect. The market share effect looks at the change in the Dutch market share in trade without taking into account shifts in the composition of Dutch exports. The structural effect shows which part of the total shift in the market share of the Netherlands in trade is due to the fact that the Netherlands has specialised more or less in specific product groups (the product effect) or destination markets (the geographic or country effect).

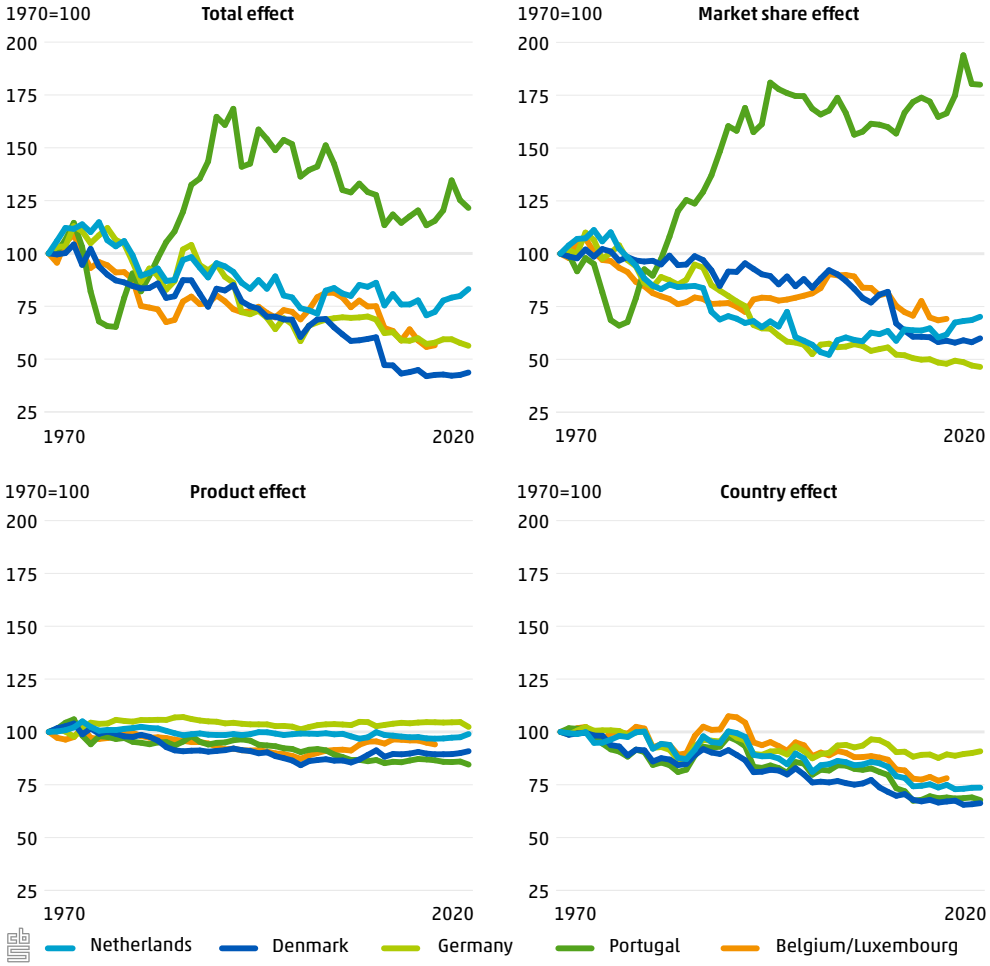
Slight decline in share of Dutch exports in global trade compared to 1970

Figure 3.5.3 shows the total effect and its components for the Netherlands and a number of reference countries: Germany, Belgium/Luxembourg[9], Portugal and Denmark. The figure again shows that Dutch exports grew less strongly in the years 1970–2020 than global exports. The same is true of exports from Germany, Belgium/Luxembourg and Denmark. Portugal is the only country in this selection that has seen its exports grow faster than the rest of the world. This is because Portugal still had relatively limited exports between 1970 and 1980, and only experienced a period of strong export growth in the 1980s (see Amador and Cabral, 2008, for details of developments in Portugal). By way of illustration, if China were to be included in this figure, the difference between the countries shown, including Portugal, would no longer be visible, because the total effects of these five countries would pale into insignificance next to the total effect of China.

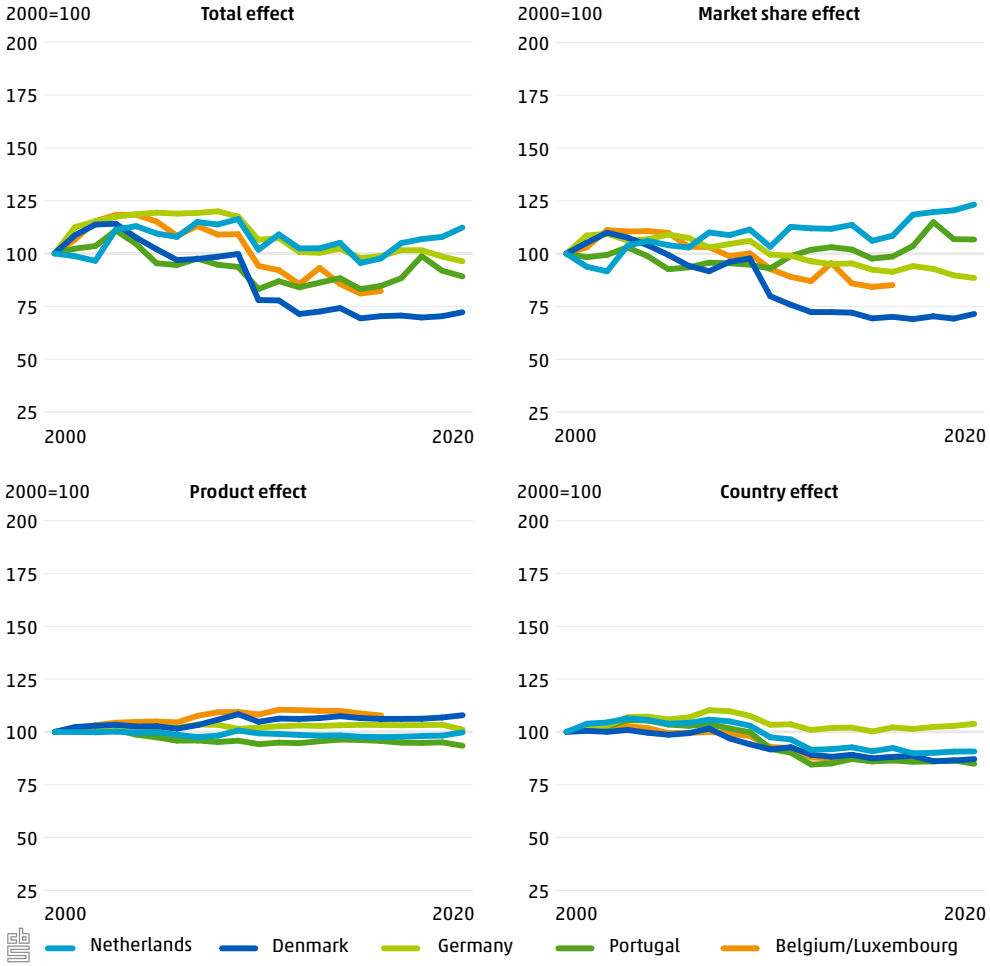
The figure also shows that the Netherlands has performed well compared to its competitors, particularly over the last 20 years. Despite the strong advance of China, particularly in global trade, the total effect for the Netherlands has been roughly stable since 2000. This can be seen clearly if we replicate Figure 3.5.3 with the year 2000, the year before China joined the World Trade Organization, as the base year for the indices (Figure 3.5.4). Figure 3.5.4 shows that the line of the Netherlands constantly meanders around 100 and in recent years has even been slightly above that level. This means that the Netherlands has not lost any market share since China's accession to the WTO and has even slightly increased its share in global trade recently. This is in contrast to Denmark and Belgium/Luxembourg, for example. However, this is not to say that these countries have lost market share to China; there may well be very different patterns underlying the decline.

8) See section 3.8 Data and methods for a detailed description of the data and methods used in this Constant Market Share analysis.
9) Due to a method break in the CEPII-CHELEM database for Belgium between 2016 and 2017, the series for Belgium/Luxembourg is only shown up to 2016.

3.5.3 De composition of the relative performance of Dutch goods trade, base year 1970



3.5.4 Decomposition of the relative performance of Dutch goods trade, base year 2000



Dutch exports generally fluctuate in line with demand

For each of the five countries, the market share effect appears to play a greater role in shifting the total share in global trade than the structural effect. Indeed, in Figure 3.5.3, the trend in the total effect closely resembles the trend in the pure market share effect. In other words, dynamics in the market share of the Netherlands in specific export markets where the country is active are more decisive for the total share in global trade than dynamics in the relative specialisation of the Netherlands in specific markets. This means that shifts in the Dutch share in global trade are mainly the result of moving with developments in existing markets and much less due to shifting the focus to other markets. Table 3.5.5 confirms this picture for the Netherlands. Only in the years 1986–1990 and 2011–2015 did the pure market share effect clearly deviate from the total effect. Figures 3.5.3 and 3.5.4, and Table 3.5.5, show that the various components of the total effect for the Netherlands were quite volatile over the years. The pure market share effect, the structural effect and the country effect all fluctuate strongly. Only the product effect is fairly small over the years and therefore has a relatively limited influence on the total effect. This can be explained on the one hand by the fact that a reorganisation of the export portfolio in terms of product specialisation is much slower to implement than a reorganisation in terms of destination countries. On the other hand, when there was a significant change in the product composition of Dutch exports, a similar change was seen in global exports, so that the product effect was also small.

3.5.5 Export growth and total effect explained for the Netherlands

	Growth of Dutch exports	Growth of global exports (minus the Netherlands)	Total effect	Market share effect	Combined structural effect	Product effect	Country effect	Mixed structural effect
	%							
1970–75	21.8	20.2	1.7	1.2	0.5	0.4	–0.8	0.9
1976–80	14.9	16.8	–2.0	–3.5	1.5	–0.1	1.1	0.5
1981–85	–1.2	1.2	–2.4	–0.9	–1.5	–0.5	–2.7	1.7
1986–90	17.0	15.1	1.9	–3.4	5.3	–0.2	2.9	2.6
1991–95	7.6	9.3	–1.7	–0.7	–1.0	0.3	–2.4	1.1
1996–00	1.1	4.2	–3.1	–3.1	0.0	–0.1	–1.7	1.8
2001–05	11.7	9.7	2.0	1.0	1.0	0.0	0.8	0.3
2006–10	7.0	8.2	–1.2	0.0	–1.2	–0.1	–1.2	0.1
2011–15	1.7	2.8	–1.1	0.7	–1.8	–0.3	–1.4	–0.1
2016–20	4.9	1.6	3.3	3.1	0.2	0.4	0.0	–0.2

Source: CEPII, edited by CBS

Early European integration consolidates position of the Netherlands as an export country…

The 1970s saw a number of important developments both in and outside Europe that had an impact on Dutch trade. In addition to the oil crises of 1973 and 1979, the Netherlands pegged the guilder to the German mark in 1973, resulting in a 30–40% increase in the effective exchange rate (Ramaekers & Walhout, 2018; CBS, 2022d). This rising exchange rate was not favourable for the Dutch export position, as it made Dutch products substantially more expensive for foreign buyers. There were also a number of enlargements of the European Community in the early 1970s, with the accession of Denmark, the United Kingdom and Ireland in 1973. It therefore appears that during this period, the Netherlands was able to consolidate its share in global trade to some extent by reaping the benefits of advancing European integration.

…but Dutch export share comes under pressure in the mid-1970s

That the 1970s were a turning point for Dutch exports can be seen in Table 3.5.5. The total effect and its two components (the pure market share effect and the structural effect) were positive on average in the period 1970–1975. This picture was later reversed. In the second half of the 1970s, both the total effect and the market share effect were negative on average. Dutch exports increased less rapidly than global exports and the Netherlands lost market share. The structural effect remained positive in this period, particularly due to the country effect. This was related to increasing relative specialisation of Dutch exporters in growing markets such as Germany, France and the UK.

Dutch exports lose market share in Germany

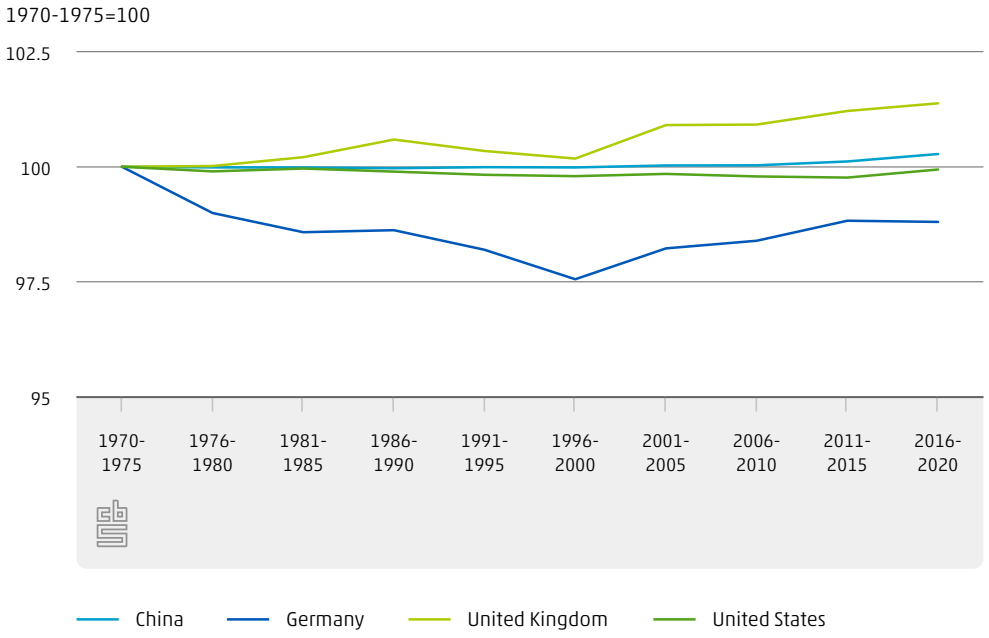
In Figure 3.5.6, we look at the contribution of four major trading partners of the Netherlands – Germany, China, the UK and the US – to the Dutch market share effect. The figure shows that Germany's contribution to the market share effect broadly declined up to and including the period 1996–2000. This means that the Dutch share of German imports decreased compared

to the rest of the world, because Dutch exports to Germany grew relatively less strongly than exports from the rest of the world to Germany. This could be related to various enlargements of the European Community and later of the EU, which have steadily expanded the internal market (the UK in particular increased its share in the 1970s) and an increasing focus by Germany on trade with former Eastern Bloc countries, especially Poland and Hungary, starting in the 1990s. During the period 1970–2000, the Netherlands tended to specialise relatively more in exporting to Germany, even in periods when the German market experienced below-average growth. The country effect of Germany on the total share of the Netherlands in global trade therefore fluctuated strongly between 1970 and 2000.

Increased significance of Dutch goods in British imports

Figure 3.5.6 shows a rising market share effect for Dutch exports to the UK up to and including the period 1986–1990, and renewed growth from the second half of the 1990s. Since the UK's accession to the EU's predecessor in the 1970s, the share of Dutch exports in total UK imports has increased significantly. It will be interesting to see whether a reverse trend becomes visible in the coming years in the aftermath of Brexit.

3.5.6 Dutch market share effect by destination country



Source: CBS, CEPII

Stagnant economic growth in key markets depresses Dutch export share in 1980s

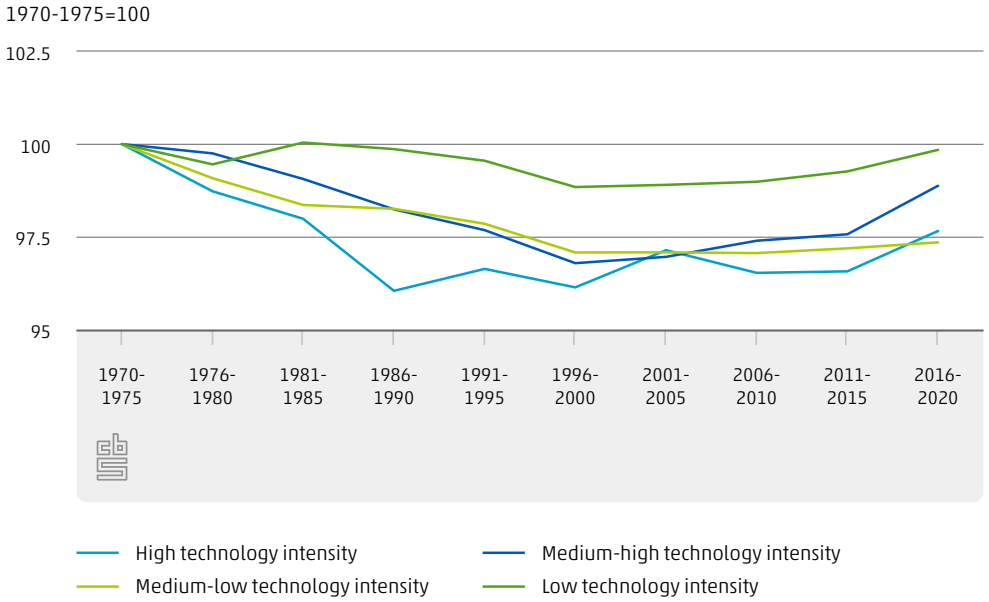
In the first half of the 1980s, Dutch exports on average did not grow in line with global exports. The country effect was decisive for the loss of market share during this period. A negative country effect shows that growth in countries for which the Netherlands was a relatively substantial exporter was slower than the growth of global imports. Imports from major trading partners Belgium/Luxembourg and Germany, for instance, grew less quickly than the total. In addition, the Netherlands was relatively less specialised in countries such as

China and the US, where imports did grow faster than global imports. In the second half of the 1980s, this picture changed and we actually see the country effect making a positive contribution to a cautious recovery of the Dutch share in total global trade. Despite the recovery of growth in Dutch exports as well as total global exports, the market share effect remained negative on average in those years. This means that the Dutch share in export markets that are important to the Netherlands declined.

Dutch share in high-tech exports down since 1970

Figure 3.5.7 looks at the contribution of four different product groups, classified by technological intensity, to the Dutch market share effect in the period 1970–2020. Firstly, it is noticeable that in the period 1970–1990, the Netherlands lost market share in high-tech products in particular, before experiencing a period of cautious recovery from 2011 onwards. Secondly, it is striking that low-tech products show a relatively stable picture over the entire study period. Examples of low-tech products are food products.

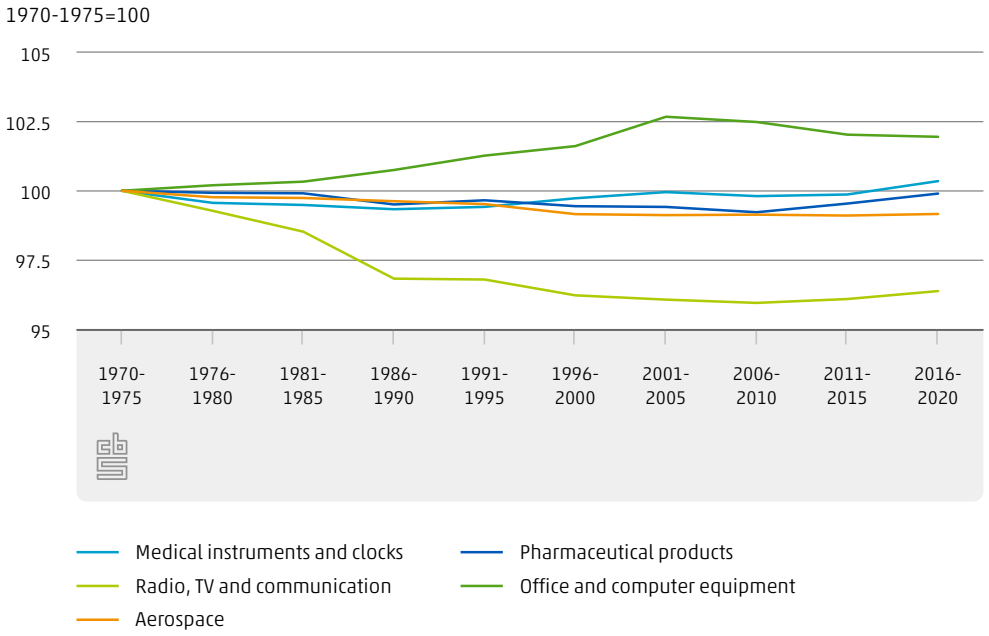
3.5.7 Market share effect by technology intensity of export products



Source: CBS, CEPII

If we zoom in further on the various high-tech products, we see that the main cause of the negative market share effect is the radio, TV and communication product group. This indicates that the Netherlands has lost market share to other countries specifically in this product category. This may be due to the rise of a number of Asian brands that are currently leaders in consumer electronics, at the expense of local manufacturers. But another factor may be that the Netherlands is not a significant player as a manufacturer of modern communication electronics, such as mobile phones, while these have become an increasingly important part of this product group more or less since the beginning of this century. The Netherlands naturally benefits to some extent from this development through re-exports, but this is not in proportion to the total size that this product market has reached in a relatively short period.

3.5.8 Market share effect by exported product groups



Source: CBS, CEPII

In the early 1990s, many countries were in recession, including the Netherlands (CBS, 2001). In Table 3.5.5, it can be seen that both the growth of Dutch exports and global trade declined. However, the growth of exports was declining faster in the Netherlands than in the rest of the world, causing the Dutch share in global trade to decrease. This was due to a negative pure market share effect as well as a negative structural effect. The country effect in particular was responsible for this negative structural effect. In other words, during this period, the Netherlands focused relatively more on destination countries with below-average growth, such as Belgium, Germany and the United Kingdom. Iin this period, it did not focus sufficiently on markets with above-average growth, such as China and South Korea.

Dutch exports leave behind the crises of the 2000s and grow in importance from 2016

In the first years of the new century, the world saw a rapid recovery from the bursting of the dotcom bubble in early 2000. During this period, the growth of Dutch exports exceeded that of global exports and the share of the Netherlands in global trade increased. This was mainly due to the market share effect and the country dimension of the structural effect. Global trade then collapsed (–20%) under the impact of the credit crisis in 2009. Dutch exports were also hit hard, but the Dutch share in global trade nevertheless increased slightly, mainly because the Netherlands was active in markets that were performing slightly less poorly, such as Germany and China. In 2010, however, the picture was exactly the opposite. In the years that followed, what is sometimes referred to as the 'hyperglobalisation of the noughties' seems to have come to an end and we see some positive *and* negative developments in global trade. The Netherlands performed relatively well and has been able to increase its share in global trade consistently since 2016.

It appears that in recent years, Dutch exports have succeeded in strongly bucking the global trend of slowing growth in global trade. A number of reference countries are not managing to do so (Figure 3.5.2). The underlying causes of this are as yet unclear. However, the figures show that the relatively good performance of Dutch exports stems not so much from changes in the structure of exports, but mainly from the fact that the Netherlands is active in markets with above-average growth. Germany in particular, and to a somewhat lesser extent the UK, Belgium, China and the US, were decisive for the relative growth of Dutch trade in the period 2000–2020.

3.6 Importance of the Netherlands as a supplier of goods to other countries

In sections 3.6 and 3.7, we answer the question: how important is the Netherlands as a trading partner for other countries? In addition to the importance of the Netherlands, we also look at the position of the Netherlands in relation to other trading partners in those countries.

More than half of Dutch exports destined for the 10 largest economies

Nearly 53% of Dutch exports went to the 10 largest economies in 2020.[10] The 10 largest economies in 2020 were the US, China, Japan, Germany, the UK, India, France, Italy, Canada and South Korea. Each of these countries imported more than US$1 billion of goods from the Netherlands in 2020. The Dutch shares of countries' imports were highest for Germany (9.4%), France (8.9%), the UK (7.9%) and Italy (6.1%). For these countries, the Netherlands is an important supplier of goods. From a German and French perspective, the Netherlands has a strong position as the second most significant import partner. The Netherlands mainly exported refined petroleum products, telephones, medicaments, fruit and vegetables to Germany in 2020. Germany is the main buyer of these goods. In 2020, French customers mainly imported telephones, refined petroleum products, medicaments and computers from the Netherlands. Furthermore, 10% of medical instruments and appliances were destined for the French market in 2020. This makes it the second-largest purchaser of medical instruments and appliances. Over a period of 20 years, the Dutch share in French imports has almost doubled. This is mainly due to higher exports of re-exported goods such as telephones, medicinal products (medicaments and pharmaceutical products) and medical instruments. For the UK and Italy, the Netherlands was the fourth-largest supplier of goods in 2020. Dutch manufacturers mainly sold telephones, computers, vegetables, flowers and plants to the UK in 2020 (see also CBS, 2022b).

The Dutch share in the imports of the largest non-European economies is significantly smaller. The Netherlands ranks 24th among suppliers of goods to China and is in 18th position in the imports of the US. China imports most goods from South Korea, Japan and Taiwan. At the same time, China is the biggest customer of the Netherlands for prepared foodstuffs and meat. The most significant suppliers of goods to the US are China, Mexico and Canada. In 2020, the Netherlands mainly supplied medicinal products (medicaments and

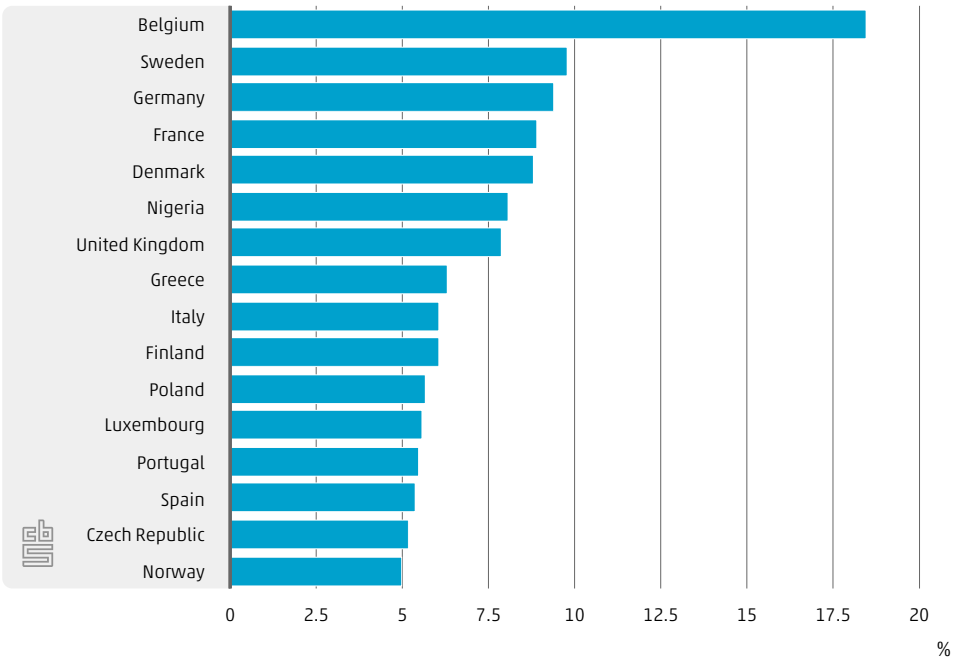
10) Export value and GDP are measured here based on CEPII data and IMF data respectively.

pharmaceutical products) and specialised machinery to the US. Dutch exports of medicinal products to the US more than doubled compared to 2019. In 2020, the US was the largest customer for, among other things, medicinal and pharmaceutical products, and alcoholic beverages. South Korea appears to be a major customer for lithography machines from the Netherlands: a quarter of these exported machines are destined for that country.

The Netherlands is a key supplier of goods for neighbouring countries and Sweden

The Netherlands is among the top 3 suppliers of goods for seven countries in Figure 3.6.1: Belgium, Sweden, Germany, France, Denmark, Nigeria and Poland. Neighbouring country Belgium, with an import share of 18.5%, is most dependent on the Netherlands. After Germany, the Netherlands is the second-largest supplier of goods to Sweden. Sweden imported 9.8% of its goods from the Netherlands in 2020. In 2010, the Netherlands was still the fifth-largest supplier of Swedish imports. In 2020, it mainly supplied telephones, petroleum and petroleum products, fruit and vegetables, and electrical appliances to Swedish importers. Fifteen of the 16 countries for which the Netherlands is the most important supplier (Figure 3.6.1) are European. The 6th position of Nigeria, which imports many petroleum products from the Netherlands, is striking.

3.6.1 The Netherlands' share in goods imports per country, 2020[1)]



Source: CBS, CEPII

1) Only trading partners with a Dutch share ≥ 5% and that imported ≥ US$1 bn in goods from the Netherlands in 2020 are shown here.

Estonia is the Baltic State that depends most on the Netherlands for imports

On the left-hand side of Table 3.6.2, we find the Dutch shares in the imports of the other countries that import US$1 billion a year or more in goods from the Netherlands. The Netherlands occupies a relatively important position as a supplier for Estonia, with a share of 4.7% in 2020. Ten years earlier, the Dutch share of Estonian goods imports was 2.2 percentage points smaller. Chips and semiconductors are dominant in Estonia's import package (see also Creemers & Draper, 2022 and CBS, 2022e). The Netherlands also has a 4.0% share in Lithuanian imports, as a result of substantial Dutch exports of road transport vehicles, plastics and medicinal products. The third Baltic State, Latvia, is on the right-hand side of Table 3.6.2 because the value of its imports from the Netherlands was less than US$ 1 billion in 2020.

Israel imports a relatively large amount of goods from the Netherlands. These imports are a diverse range of machinery and equipment, chemical products and manufactured goods. They include chips and semiconductors, medicaments, mobile phones and medical instruments. In 2020, the Dutch market share of Israel's imports was 1.1 percentage points higher than 20 years earlier. However, the United States, China and Germany are Israel's main suppliers of goods.

3.6.2 Importance of the Netherlands as a supplier of goods by trading partner

≥ US$1 bn of goods imported from NL	2000	2010	2015	2019	2020	< US$1 bn of goods imported from NL	2000	2010	2015	2019	2020
			%						%		
Israel	3.7	4.1	4.3	2.7	4.8	Iceland	4.5	6.4	8.1	11.3	11.8
Estonia	1.4	2.5	4.3	4.2	4.7	Cyprus	1.5	3.0	4.0	3.7	4.8
Ireland	3.0	4.9	4.3	4.4	4.6	Libya	3.4	1.7	1.7	3.8	4.5
Lithuania	2.0	2.6	3.0	3.8	4.0	Gabon	3.9	3.9	3.3	3.2	3.8
Hungary	2.5	3.3	3.6	4.0	3.7	Latvia	2.1	1.9	2.2	2.8	3.6
Austria	3.1	3.2	3.1	3.5	3.4	Croatia	2.1	2.9	2.7	2.8	3.3
Bulgaria	2.6	2.1	3.1	3.0	3.4	Ivory Coast	1.7	2.4	2.2	3.6	3.2
Romania	2.6	2.8	3.1	3.1	3.2	Malta	1.8	2.2	2.0	2.4	3.1
Russia	3.0	3.0	2.3	2.8	2.9	Kenya	2.6	3.4	1.6	1.7	2.8
Taiwan	1.5	1.4	1.5	3.5	2.9	Cameroon	2.4	1.7	1.8	2.0	2.2
Saudi Arabia	1.8	2.1	1.6	2.7	2.8	Bosnia and Herzegovina	1.8	1.3	1.8	2.1	2.1
Turkey	2.7	2.5	2.3	2.6	2.6	Albania	1.0	1.5	1.2	1.5	1.6
Switzerland	4.7	4.1	2.3	2.6	2.5	Algeria	1.3	1.4	2.3	1.6	1.6
Morocco	2.0	2.5	2.5	2.3	2.4	Kazakhstan	1.6	1.6	1.2	1.2	1.5
Slovenia	2.6	2.4	2.2	2.3	2.4	Argentina	0.7	1.5	1.1	1.6	1.4
Ukraine	1.2	1.8	1.6	1.9	2.1	Paraguay	0.2	0.4	0.7	0.6	1.4
Egypt	1.9	2.3	1.9	2.1	2.1	Tunisia	2.0	1.5	1.3	1.5	1.4
Slovakia	1.9	1.9	1.8	1.8	1.9	Macedonia	1.9	2.1	1.2	1.2	1.4
South Korea	0.7	1.1	1.2	1.1	1.7	New Zealand	0.7	0.7	1.1	1.3	1.3
Hong Kong	1.2	1.6	1.6	1.5	1.5	Ecuador	1.0	0.6	0.9	1.6	1.0
Brazil	0.8	1.1	1.5	1.5	1.4	Chile	0.9	0.7	0.8	1.0	1.0
Australia	0.8	0.8	1.0	1.5	1.4	Pakistan	1.1	1.1	0.7	1.8	1.0
US	0.7	0.9	0.9	1.2	1.1	Colombia	0.8	0.9	1.0	0.9	1.0
Singapore	0.9	1.7	1.7	1.3	1.1	Uruguay	0.8	0.8	0.7	0.9	0.9

3.6.2 Importance of the Netherlands as a supplier of goods by trading partner (continued)

≥ US$1 bn of goods imported from NL	2000	2010	2015	2019	2020	< US$1 bn of goods imported from NL	2000	2010	2015	2019	2020
China	0.4	0.6	0.7	0.8	0.9	Belarus	0.9	1.0	0.8	0.7	0.8
Canada	0.4	0.5	0.7	1.0	0.8	Peru	0.6	0.7	0.8	0.8	0.8
Mexico	0.3	1.1	0.7	0.7	0.7	Brunei	0.3	0.8	0.7	1.0	0.7
Japan	0.5	0.6	0.5	0.6	0.7	Bolivia	0.4	0.6	1.0	0.6	0.7
Malaysia	0.5	0.6	0.7	0.6	0.6	Sri Lanka	0.7	0.5	0.6	0.8	0.6
India	0.6	0.6	0.5	0.5	0.5	Indonesia	0.9	0.4	0.5	0.5	0.5
Thailand	0.5	0.6	0.6	0.5	0.5	Philippines	0.4	0.5	0.5	0.4	0.5
Vietnam	0.4	0.7	0.4	0.4	0.4	Bangladesh	0.6	0.5	0.4	0.5	0.5
						Venezuela	0.7	1.0	1.0	2.7	0.4
						Kyrgyz Republic	0.4	0.4	0.3	0.3	0.3
						Cambodia	0.2	0.1	0.1	0.1	0.1

Source: CEPII, edited by CBS

Nearly 12% of Iceland's goods imports come from the Netherlands

If we also include the countries that import goods worth less than US$1 billion from the Netherlands, the Dutch share in Iceland's imports is the largest (see right-hand side of table 3.6.2). Iceland obtains 11.8% of its goods from the Netherlands, which is the country's second-largest supplier after Denmark. Electrical appliances are the dominant category in Iceland's import package. Over a period of 10 years, the Dutch share in Icelandic imports has almost doubled.

A quarter of Russian goods imports come from China

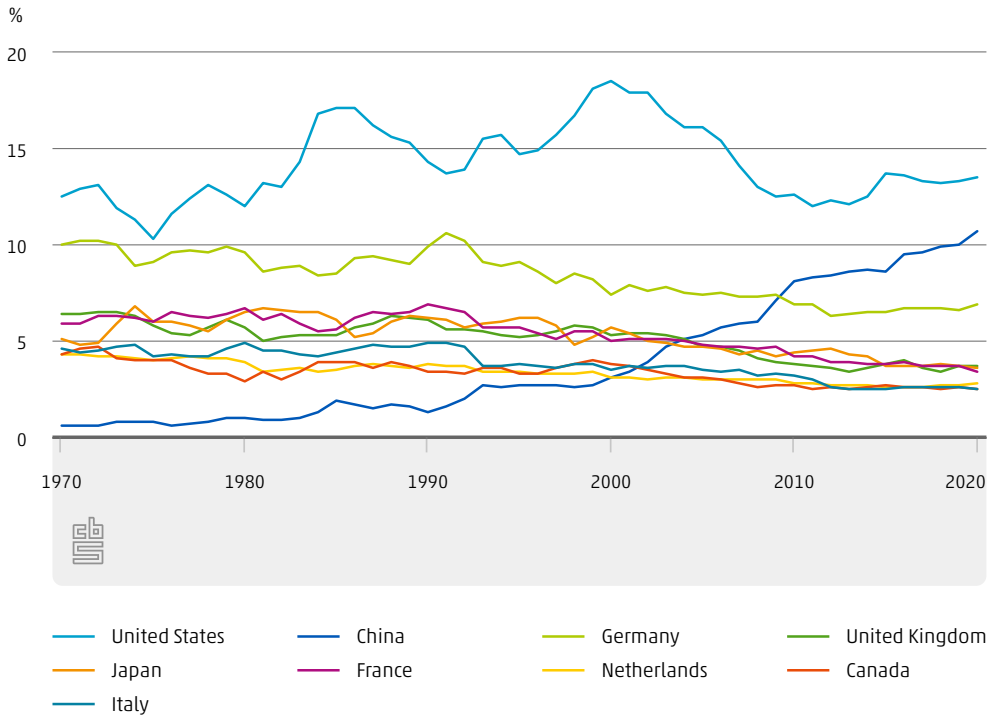
China is by far Russia's largest trading partner. Over a quarter of Russia's goods imports came from China in 2020. Germany, Bulgaria, Italy, Poland and the Netherlands were important European suppliers of goods to Russia. Russia imports much less from the Netherlands than it exports to that country. Russian enterprises imported 2.9% of their goods from the Netherlands in 2020 (Table 3.6.2). See Chapter 2 of this publication for the most recent figures on trade with Russia and Ukraine. Key goods produced in the Netherlands and exported to Russia are medicaments, road vehicles, such as tractive units for semi-trailers, and flowers. Re-exports destined for Russia include electronic circuits, telephones and medicaments (see also CBS, 2022f).

In 2020, the Netherlands accounted for 2.1% of Ukrainian goods imports. A wide range of products are exported from the Netherlands to Ukraine, of which medicaments, flowers and plants, cocoa, computers and mobile phones are the most significant (see also CBS, 2022g). China, Russia, Poland and Germany are also key suppliers of goods to Ukraine.

3.7 Importance of the Netherlands as a market for other countries

Figure 3.7.1 shows that the Netherlands was responsible for 2.8% of global imports in 2020. This means the Dutch contribution to global imports declined by 1.5 percentage points between 1970 and 2020. However, the import share of the Netherlands has grown slightly since 2015: from 2.6 to 2.8%. Globally, the Netherlands was the seventh-largest importer in 2020. The US was the largest importing country in the world in 2020, accounting for 13.5% of total global imports. China moved up to second place, with a 10.7% share in global imports. Before China's accession to the WTO, this share was only 3.1%.

3.7.1 Shares in global goods imports



Source: CBS, CEPII

4th European import country in the world in 2020 was the Netherlands

53.8% of Dutch imports come from 10 largest economies

The Netherlands has intensive trading relationships with the 10 largest economies in the world. In 2020, these 10 countries supplied close to 54% of goods imported by the Netherlands. Each of these 10 countries sold more than US$1 billion worth of goods to the

Netherlands in 2020. The Netherlands exports more goods to the 10 largest economies combined than it imports from them. But the opposite is true in relation to China, the US, Japan and India, with which the Netherlands has a trade deficit. It imports substantially more goods from these countries than it exports to them. A large proportion of the goods that the Netherlands imports from these countries are ultimately sent abroad as re-exports or quasi-transit trade. Quasi-transit trade goods continue on to foreign countries after entering the Netherlands without becoming the property of a Dutch resident (see also Creemers et al., 2021). The Netherlands has a significant trade surplus with the European superpowers Germany, the UK, France and Italy.

The Netherlands is fourth-largest market for German and British exports

Exports to the Netherlands from Germany and the UK were the largest (6.7% for both countries). From a German and British perspective, the Netherlands is the fourth-largest export partner in both cases. The US, China and France are the largest markets for goods exports from Germany. For the UK, the main customers of imports are the US, Germany and Ireland. For the Netherlands, Germany is the principal supplier of passenger cars, medicaments and lithography machines, among other things. And the UK mainly supplies crude oil and refined petroleum products to the Netherlands.

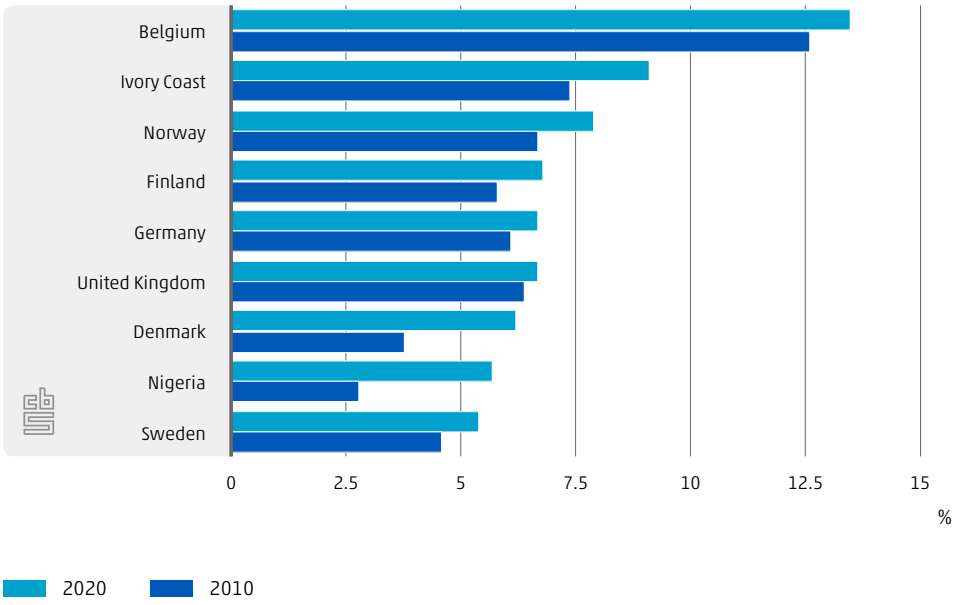
The Netherlands is an increasingly important market for Danish goods

Of the countries with an export flow of more than US$1 billion to the Netherlands in 2020, Belgium, Ivory Coast and Norway were most dependent on the Dutch market (Figure 3.7.2). For example, in 2020, 13.5% of all Belgian goods exports were destined for the Netherlands. For Ivory Coast, the share was 9.1% and for Norway, it was 7.9%. The Netherlands was the third-largest market for Belgian exports, after France and Germany. For all trading partners shown in Figure 3.7.2, the Dutch share in their total goods exports increased compared to 2010.

As a customer, the Netherlands occupies an important position for Denmark, with a 6.2% share in Danish exports. Ten years earlier, the Dutch share in Danish goods exports was 2.4 percentage points smaller. With this increase, the Netherlands overtook the UK, Norway and France as an export destination for Danish goods. The package of Danish exports destined for the Netherlands is very diverse. Among other goods, it comprises electrical machinery, refined petroleum products, pharmaceutical products, furniture, flowers and plants.

Seven of the nine countries in Figure 3.7.2 are European. Ivory Coast's second position and Nigeria's eighth position are striking. With the port of Amsterdam being the largest port in the world for cocoa imports, the Netherlands is a major market for goods from Ivory Coast. In 2020, 46.0% of cocoa imported by the Netherlands came from Ivory Coast. Nigeria is an important supplier of crude oil entering the Netherlands, in addition to Russia, the US, the UK and Norway.

3.7.2 The Netherlands' share in goods exports per country[1)]

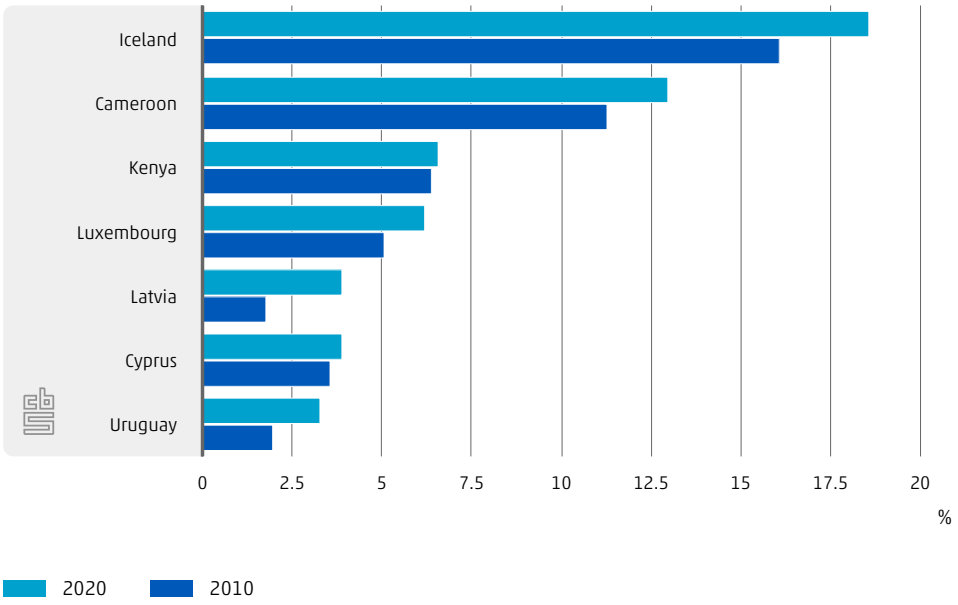


Source: CBS, CEPII
1) Only trading partners with a Dutch share ≥ 5% and that exported ≥ US$1 bn in goods to the Netherlands in 2020 are shown here.

The Netherlands is an important market for goods from Iceland and Cameroon

Of the countries with an export flow to the Netherlands of less than US$1 billion, Iceland and Cameroon are very dependent on the Dutch market (Figure 3.7.3). Iceland sells the largest share of its goods – 18.6% – to the Netherlands. Large amounts of aluminium in particular are exported from Iceland to the Netherlands. Iceland is the largest supplier of aluminium to the Netherlands. For Cameroon, the Netherlands is the second-largest export destination, with a share of 13.0%, preceded only by China. Cameroon mainly supplies cocoa and crude oil to the Netherlands, and it ranks second among suppliers of cocoa after Ivory Coast. In 2020, 6.6% of Kenya's exports were destined for the Netherlands. Kenya supplied many flowers and plants to the Netherlands, making it the third-largest supplier in this product group.

3.7.3 The Netherlands' share in goods exports less than US$1 bn[1)]



Source: CBS, CEPII
1) Only trading partners with a Dutch share > 4% and that exported < US$1 bn in goods to the Netherlands in 2020 are shown here.

3.8 Data and methods

Table 3.8.1 contains an overview of the product category classification used in sections 3.3 and 3.4. The seven product categories are based on SITC codes.

3.8.1 Composition of product groups

Product group	SITC
Food and beverages	0 + 11 – 00
Raw materials and natural products	2 + 4 + 00 + 12
Mineral fuels	3,0
Chemical products	5,0
Machinery and equipment	71 to 77
Transport equipment	78 + 79
Manufactured goods	6 + 8 + 9

Table 3.8.2 contains an overview of the product group classification used in sections 3.3 and 3.4. These product groups are compiled on the basis of SITC and CN codes. We explicitly refer here to product groups and not goods or products, because a combination of SITC and CN is used for the classification.

3.8.2 Composition of goods groups

Product group	Code
Meat	SITC 01
Dairy	SITC 022 + 023 + 024
Cereals	SITC 04
Fruit and vegetables	SITC 05
Cocoa and chocolate	SITC 072 + 073
Cattle feed	SITC 08
Beverages	SITC 11
Wood	SITC 245 to 248
Metal ores, metal waste	SITC 28
Flowers and plants	SITC 292
Vegetable fats and oils	SITC 42
Petroleum and petroleum products	SITC 33
Natural gas	SITC 34
Medicinal and pharmaceutical products	SITC 541
Medicines	SITC 542
Perfume and cosmetics products	SITC 553
Plastics in primary forms	SITC 57
Plastic products	SITC 58
Biodiesel	GN 38260010 + 38260090
Generators and motors	SITC 71
Specialist machinery	SITC 72
Pumps and elevators	SITC 742 + 743
Office machines	SITC 751
Computers, laptops, tablets	SITC 752
Televisions	SITC 761
Chips, semiconductors	SITC 776
Mobile telephones	GN 85171200
Modems and routers, speakers	GN 85176200
Passenger cars	SITC 781
Other motor vehicles	SITC 782 + 783
Parts and accessories for motor vehicles	SITC 784
Paper, cardboard	SITC 64
Iron and steel	SITC 67
Non-ferrous metals	SITC 68
Furniture	SITC 82
Clothing	SITC 84
Footwear	SITC 85
Medical instruments and devices	SITC 872
Measuring, monitoring and analysis instruments	SITC 874

Constant Market Share analysis

The Constant Market Share (CMS) analysis is a widely used statistical decomposition method that is also regularly used to analyse developments in international trade, for example in Portugal (Amador & Cabral, 2008), Belgium (Simonis, 2000), Austria (Skriner, 2009), India (Singh, 2014) and the EU (ECB, 2005; Buitelaar & van Kerkhoff, 2010).

By means of a CMS analysis, the growth of Dutch exports can be related to the growth of global trade. In addition, the development of the total market share of the Netherlands in global trade can be broken down into shifts in Dutch market shares in specific markets on the one hand, and shifts in the composition of total Dutch trade on the other. This method has three important advantages: (1) it makes it possible to draw up an overall picture of the relative position of the Netherlands in global trade, but also of specific geographical or product markets; (2) it is flexible in grouping countries or product groups as a unit of analysis and (3) a comparison of relative performance with benchmark countries is possible. There are also points of concern in relation to the method. For example, the results are not independent of the chosen aggregation level of products or countries in groups. In addition, it is not possible to correct the developments in market shares for price and exchange rate fluctuations. For these reasons, the results of a CMS analysis should always be interpreted with some caution.

The method

The Constant Market Share analysis is a calculation method that makes it possible to analyse changes in the market share of a specific country over time. The method mainly provides descriptive insights, rather than direct explanations of the patterns observed. We discuss the analysis method in a descriptive sense by means of a calculation example as shown in Table 3.8.3; for the underlying mathematical elaboration of the method, we refer to Amador & Cabral (2008, section 2) whose study design we have replicated for our analyses.

The total shift in the share of Dutch exports in global trade (total effect, TE) is equal to the difference between the growth of Dutch exports and the growth of exports of the rest of the world excluding the Netherlands. Table 3.8.3 shows, for example, that in 2011, Dutch exports grew faster (+23.4%) than global trade (+16.3%), which means that the total effect is positive (+7.1%). A positive total effect (TE) means an increase in market share; a negative total effect means a decrease in market share. In other words, the market share of Dutch exports in total global trade was higher in 2011 than in 2010.

The core of the constant Market Share analysis is to decompose this development of the total market share of the Netherlands in global trade into two main elements: a pure market share effect (MSE) and the combined structural effect (CSE).

A pure market share effect (MSE) plots the change in market share in each individual product and destination market. To calculate the MSE, the detailed structure of Dutch exports is 'fixed' between two years, after which the development of Dutch exports is compared with that of the rest of the world in each individual submarket. In the calculation example, we therefore see the market share of Dutch exports in global trade in 2011 in a pure sense, that is to say excluding shifts in specialisation, increasing by 9.1%.

The combined structural effect (CSE) shows which part of the total shift in the market share of the Netherlands in global trade is due to the fact that the Netherlands has specialised more or less in specific product groups or destination markets. The CSE is positive in a given year if the Netherlands has specialised more in net exports to specific submarkets that have grown relatively fast. In the example in Table 3.8.3, we see that in 2011, the Netherlands actually started to specialise more in submarkets that were performing relatively poorly (–2.0%). This applies both to specialisation in product markets (–1.1%) and in geographical markets (–0.3%) in which the CSE can be broken down:

- The country effect (GSE) describes the extent to which a change in the geographical composition of Dutch exports (specialisation) affects the total Dutch market share in global trade.
- The product effect (PSE) describes the extent to which a change in the product composition (specialisation) of Dutch exports affects the total Dutch market share in global trade.
- In addition to the country effect and product effect, a residual item is distinguished – the mixed structural effect (MIX). This stems from the fact that the product structure and the geographical structure of exports are not independent of each other. The MIX effect ensures that together with the country effect and product effect, it adds up to the combined structure effect (CSE), but it is not meaningful to interpret the MIX effect in isolation.

3.8.3 Development of market share in Dutch exports in 2011

Growth of NL exports	+23.4%
Growth of global exports	+16.3%
Total effect = development of share in global trade	+7.1%
consisting of:	
Market share effect	+9.1%
Combined structural effect	-2.0%
consisting of:	
Country effect	-0.3%
Product effect	-1.1%
Mixed structural effect	-0.6%

Source: CEPII, edited by CBS

The data: CEPII-CHELEM

We base our CMS analysis on the CHELEM International Trade database of the French Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). The reason for this is the length of the available time series of fully harmonised and complete bilateral trade data. Other known sources of bilateral trade data, such as UN COMTRADE or data from international institutions, such as the IMF, the World Bank, the OECD and UNCTAD, are characterised by much shorter historical series, incompleteness and a lack of harmonisation. By harmonisation we mean that trade is completely 'squared' in the CEPII-CHELEM data: the import of product 1 by country X from country Y is exactly the same as the export of product 1 by country Y to country X. This sounds rather obvious, but it is rarely the case in bilateral statistics. The main source of the CEPII-CHELEM database is COMTRADE, supplemented by data from the aforementioned institutions and all kinds of national sources such as national statistical offices.

An observation in the CEPII-CHELEM data is the value of trade between an exporting country and an importing country in millions of US dollars (current prices) per product group/industry (De Saint-Vaulry, 2008). In principle, it concerns trade excluding re-exports, but for the

Netherlands, among others, re-exports are part of the figures. The series starts in 1967 and ends in 2020. Because there are some unexplained jumps in the Dutch figures in CEPII-CHELEM at the end of the 1960s that do not correspond to the historical series of international trade published by CBS on StatLine, we have the analyses start in 1970. As is well known, since 1967, the world has seen a large number of new countries emerging, for example following the collapse of the Soviet Union and Yugoslavia. For statistical-analytical reasons, we have chosen in all cases to include the highest geographical-historical aggregate in the analysis file. This means that we include, for example, Czechoslovakia instead of the Czech Republic and Slovakia separately. This avoids the need to distribute trade among the countries into which the original country eventually breaks up, before the break-up of the country that no longer exists. As a result, we distinguish a total of 80 countries and country groups in the analyses. For the exact list, we refer to Appendix A of Amador & Cabral (2008).

It is worth mentioning that Belgium and Luxembourg have been included jointly in the analyses, also as a benchmark country for the Netherlands, because until 1999, they jointly reported their trade to the UN. The product groups that are distinguished follow the ISIC classification, where the analyses are performed at the two-digit level of detail.[11)] In addition, we use an aggregation of the ISIC classification by technological intensity of trade, developed by the OECD and published by CEPII. For a list of products and the linking with the ISIC, we refer to Appendix B of Amador & Cabral (2008). All analyses are based solely on trade in industrial products (ISIC Chapters 15–37), excluding product group 23. Product group 23 refers to the product group energy, which includes petroleum, for example. This product group is so strongly influenced by price effects that it does not make sense to include it in the analyses.

3.9 References

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11) As mentioned, a limitation of the CMS analysis is that the results are influenced by the chosen aggregation levels of products. Here, we observed in particular that the analyses at the four-digit ISIC level lead to strange results because marginal product groups in percentage terms have disproportionate weight in the total figures. The analyses at the two-digit ISIC level and based on product groups according to technological intensity are considerably more stable and do result in qualitatively very similar findings.

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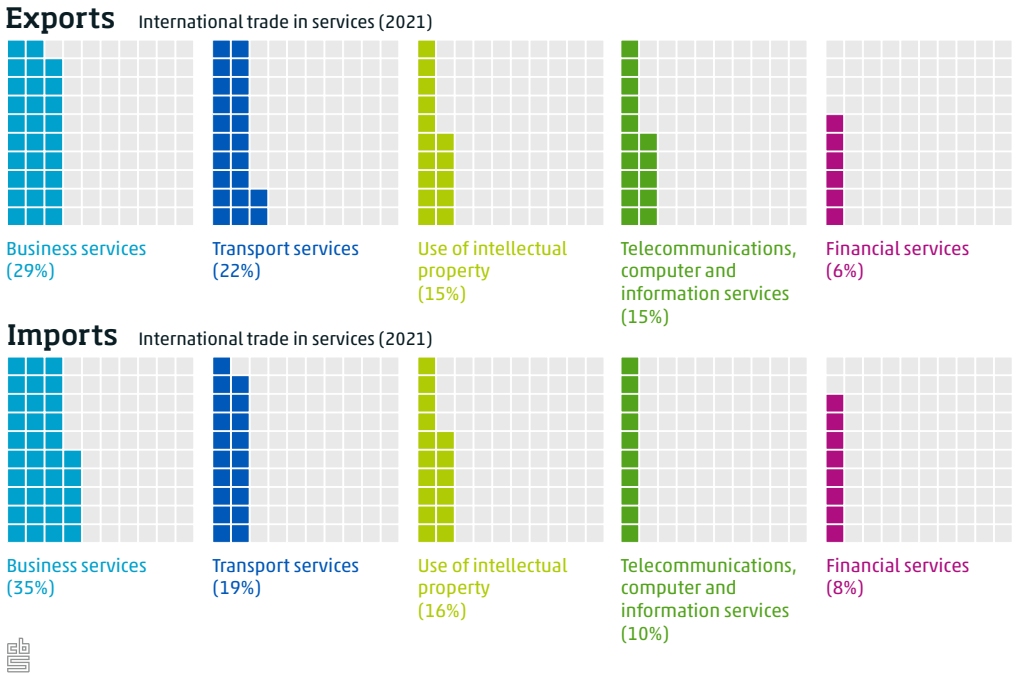
4 International trade in services

Authors: Dennis Dahlmans, Marjolijn Jaarsma, Janneke Rooyakkers, Iryna Rud



This chapter focuses on international trade in services. We examine the development of international trade in services over time, identifying the main trading partners and types of service. We also look at the regional distribution of international service trade in the Netherlands. Which regions of the Netherlands have a high level of service trade, in both absolute and relative terms? Finally, we consider the Netherlands' international position as a trader in services: how important is the Netherlands for other countries' service trade, both as a customer and as a supplier? This chapter considers these and other aspects in order to provide an overview of Dutch trade in services.

4.1 Key findings

Service exports not yet back to pre-coronavirus crisis level

Dutch service exports amounted to nearly €211 billion in 2021. That is 5.7% more than in 2020, but 10.5% (€–24.8 billion) less than in the pre-coronavirus year 2019. In particular, exports of travel services (expenditure by tourists and travellers in the Netherlands) and exports of services by travel intermediaries and platforms were not yet back to pre-coronavirus crisis levels. Exports of intellectual property (fees received for the use or licensing of the distribution or reproduction of intellectual property such as music, films, series, TV

formats and trademarks) have fallen sharply in the last two years. This fall is related to changes in tax rules in the Netherlands.

The United Kingdom was the most important market for Dutch services in 2021. In particular, the UK sources business and transport services from the Netherlands. After the UK, Germany is the main export country, with transport services playing a key role. The United States, in third place, sources a relatively large amount of financial services from the Netherlands, with a number of multinationals having switched certain financial and service flows away from the Netherlands.

Import value of services 15% lower than in 2019

Dutch service imports amounted to more than €200 billion in 2021. That represents a 7% increase compared to 2020, but it remains more than 15% below the 2019 level.
The coronavirus crisis and the restructuring of financial and service flows by multinationals also account for the bulk of the contraction in service imports. The share of other business services and transport services in total service imports grew between 2019 and 2021.
The ongoing coronavirus crisis and travel restrictions meant that expenditure by Dutch travellers abroad (import of travel services) was much lower in 2021 than in 2019.

As in 2019 and 2020, the main source of service imports was the United States. Despite Brexit, the United Kingdom was the second largest supplier of services. Ireland, Belgium, France and Poland also saw their share of Dutch service imports grow between 2019 and 2021. Switzerland and Bermuda, both major trading partners, ceded market share, partly due to restructuring by multinationals, and became less important sources of Dutch service imports.

Five regions account for more than 70% of service trade

Nearly half of the service trade of the Dutch business economy is conducted by enterprises in the Greater Amsterdam region. This region, together with Greater Rijnmond, Greater The Hague, South East Noord-Brabant and Utrecht, account for over 70% of all service trade in the Netherlands. Based on an analysis by COROP region (regional breakdown used in the Netherlands for statistical purposes), Zeelandic Flanders (36%), Mid Limburg (28%) and South Limburg (27%) had the largest relative shares of enterprises trading in services.

East Groningen, Arnhem/Nijmegen and South East Drenthe are the three regions with the largest shares of exports to Germany. With regard to imports of services from Germany, South East Friesland has replaced the Arnhem/Nijmegen region as one of the three regions with the largest shares. The frontrunner in service exports to Belgium is the Mid Noord-Brabant region; for imports of services it is Zeelandic Flanders. The COROP regions in Limburg are much more focused on Germany than on Belgium for service exports and imports.

The Netherlands is the main customer and the main supplier of services for Belgium

Nearly 15% of Belgian service trade takes place with the Netherlands. In terms of size, the Netherlands was therefore the main customer and the main supplier of services for Belgium in 2019. Conversely, the Belgian share of Dutch service trade was substantially smaller (around 5–6%). The Netherlands ranks fifth in German imports and exports of services with a share of 5–6%. The Dutch share of German service trade is therefore significantly smaller than the German share of Dutch service trade. The same applies to other major trading partners such as the United States and the United Kingdom: the Netherlands sells and purchases relatively more services there than vice versa. For countries such as Poland, Sweden, Iceland and Lithuania, the Netherlands is a more important partner than vice versa. The extent of trading with a country nevertheless depends on many factors. Distance plays an important role, for example, as does the size of the partner country. The larger the partner country, for example in terms of GDP or population, the higher is the level of service exports (*ceteris paribus*) (Cremers & Jaarsma 2020; Cremers et al. 2022).

4.2 Service exports by type of service and country

International trade in services is an important part of the Dutch economy. Earnings from service exports accounted for around 12% of Dutch GDP in 2020. The Netherlands generates these earnings from exports of transport services, payment services, technical services, such as those relating to petroleum and natural gas extraction, fees for the use of licences and intellectual property, expenditure by tourists and day visitors in the Netherlands, telecommunications, consulting and accountancy services and many other types of cross-border services. Just over 1 million full-time jobs were directly or indirectly related to service exports in 2020. Chapter 6 of this publication examines Dutch export earnings and the related employment in greater depth.

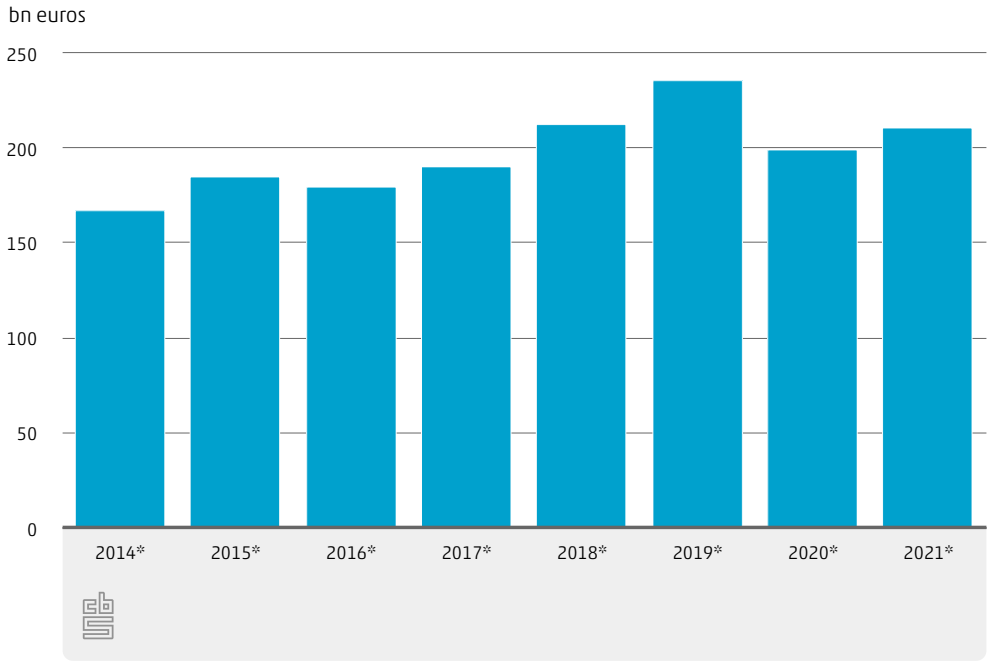
Dutch service exports have not yet recovered from the coronavirus crisis

The Netherlands exported services worth close to €211 billion in 2021 (Figure 4.2.1). Although that is 5.7% more than in 2020, exports were 10.5% – €24.8 billion – below the 2019 level. That was also around €2 billion less than in 2018. Service trade has therefore not yet recovered from the sharp contraction in the 2020 COVID year. A large part of that contraction after 2019 was due to the coronavirus crisis. Exports of travel services in particular slumped due to the travel restrictions in force in 2020 and 2021, which also caused sharp falls in exports of support services for travel (websites and platforms for booking accommodation, airline tickets and taxis; passenger transport in the aviation sector, aviation services etc.).

Restructuring of service flows by multinationals

The Netherlands introduced a number of changes to the tax system in 2020 and 2021, making it less attractive for multinationals to route certain service flows through the Netherlands, including interest and royalties (see box below). A number of enterprises consequently restructured their international service and income flows, with the result that Dutch exports of intellectual property (receipt of fees and royalties), among other things, were substantially lower in 2021 than in 2019 (Poulissen et al., 2022). In addition to the coronavirus crisis and corporate restructuring, 2020 and 2021 were uncertain years for both the Dutch and the global economy, with among other things the continuing tense trade relationship between the United States and China, uncertainties surrounding Brexit and various disruptions to supply and demand, such as chip shortages and tightness in the labour market.

4.2.1 Service exports



Restructuring of financial and service flows by multinationals

The highly educated workforce, good digital and physical infrastructure and investments in innovation and technology, the favourable location in Europe with the key entry points of the Port of Rotterdam and Amsterdam Airport Schiphol, as well as a business-friendly tax system, mean the Netherlands has a good business climate for large international enterprises, among others. The Netherlands plays an important role in multinationals' tax structures (DNB, 2020). Having a holding company or special purpose entity (SPE) in the Netherlands enables multinationals to conduct major income or capital transactions on behalf of the parent enterprise through the Netherlands. Partly due to the large number of SPEs in the Netherlands and the large financial flows that they process, the Netherlands is one of the largest recipients and investors worldwide (DNB, 2020). See also Chapter 8 of this publication for further information and figures on foreign direct investment in and from the Netherlands.

The dividends, interest and royalties generated by this foreign direct investment often flow through the Netherlands (Lejour et al., 2019). Prior to 2021, these interest and royalty payments were not subject to withholding tax in the Netherlands, so these financial flows were taxed not in the Netherlands but (possibly) in the destination country as part of the profit tax payable there. So-called 'tax havens', however, levy little or no profit tax and a significant proportion of revenues leaving the Netherlands are destined for these territories (Berentsen, 2020).

This changed with the amendment to the Withholding Tax Act that came into force on 1 January 2021, with the result that certain interest and royalty payments to Dutch-based entities of multinationals are now subject to withholding tax. International payments that have been routed through the Netherlands for tax structuring reasons have also been subject to this withholding tax since 2021 and dividends flowing to low-tax jurisdictions will also be taxed in the Netherlands from 2024. Poulissen et al. (2022) show that multinationals in the Netherlands have anticipated this legal change and responded to it by restructuring their operations and no longer routing certain service and financial flows through the Netherlands. This has negative consequences for the Netherlands' international service trade, since some flows fall within the definition of international service trade. Examples include the international settlement of royalties between the parent enterprise and subsidiaries, such as payments for the use of intellectual property (for example a registered trademark, certain proprietary software or rights to films and music).

Decline in importance of travel services

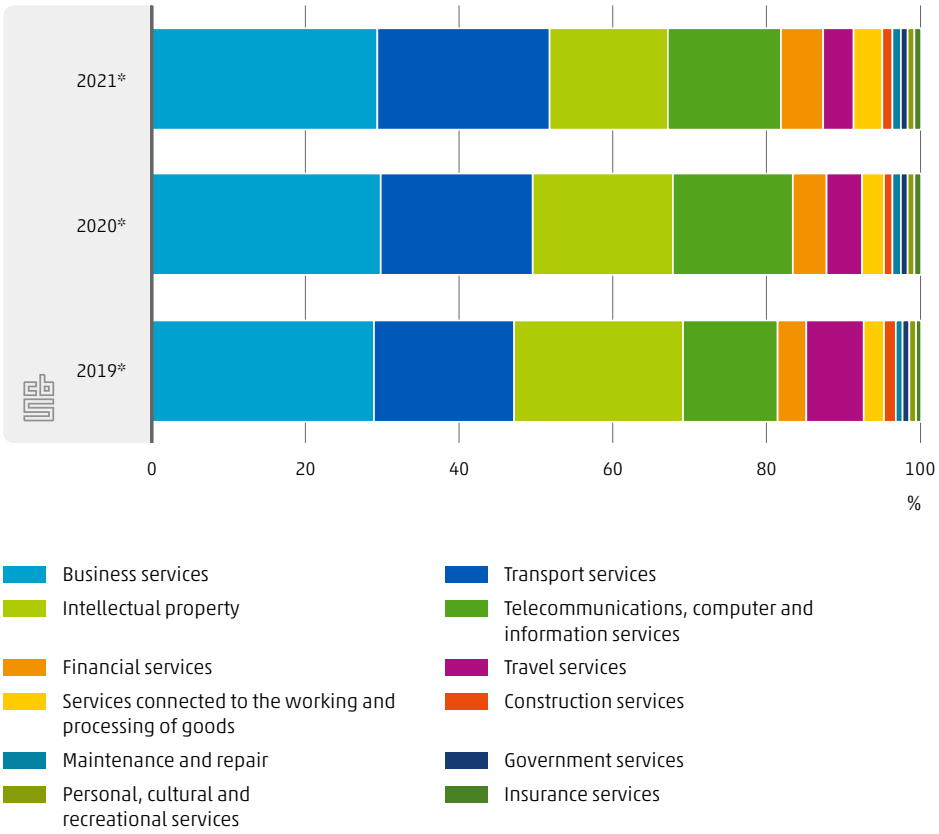
Figure 4.2.2 shows the composition of Dutch service exports over the past three years. Exports of insurance services, personal, cultural and recreational services, government services, exports of maintenance and repair services and construction services make up only a very small part of total Dutch service exports. Travel services were still the fifth largest type of service in 2019, accounting for 7.5% of total exports. That share fell to 3.9% in 2021.

Transport services are an increasingly important component of service exports

With a share of around 30% of total exports, business services have topped the list of the main service types in recent years. The share of transport services, which accounted for more than 22% of total service exports in 2021, is rising steadily. Higher energy and fuel prices since the end of the summer of 2021 may also be a factor.

Exports of intellectual property (fees received for the use of intellectual property) were substantially lower in 2021 than in 2019. This is mainly due to the aforementioned restructuring of service flows by large multinationals.

4.2.2 Service exports by type of service



Contraction in business services due to R&D and other business services

Figure 4.2.3 provides a further breakdown of the top 5 exported services. Within exports of business services, the 'technical services, trade-related and other business services' category has the highest export value (€30.2 billion), followed by professional and management consulting services (€26.1 billion). The first group of business services includes services provided by architects and engineers, scientific and other technical services, services incidental to mining and oil and gas extraction, for example on a foreign drilling platform, and operational leasing of aircraft, for example. It may also include platforms (for arranging travel, taxi services or accommodation, for example). The decrease in travel during the coronavirus crisis was therefore associated with the contraction in exports of this type of services between 2019 and 2021. Examples of professional and management consulting services are legal services, accounting, auditing, bookkeeping and tax consulting services, business and management consulting and public relations services, advertising, market research and public opinion polling.

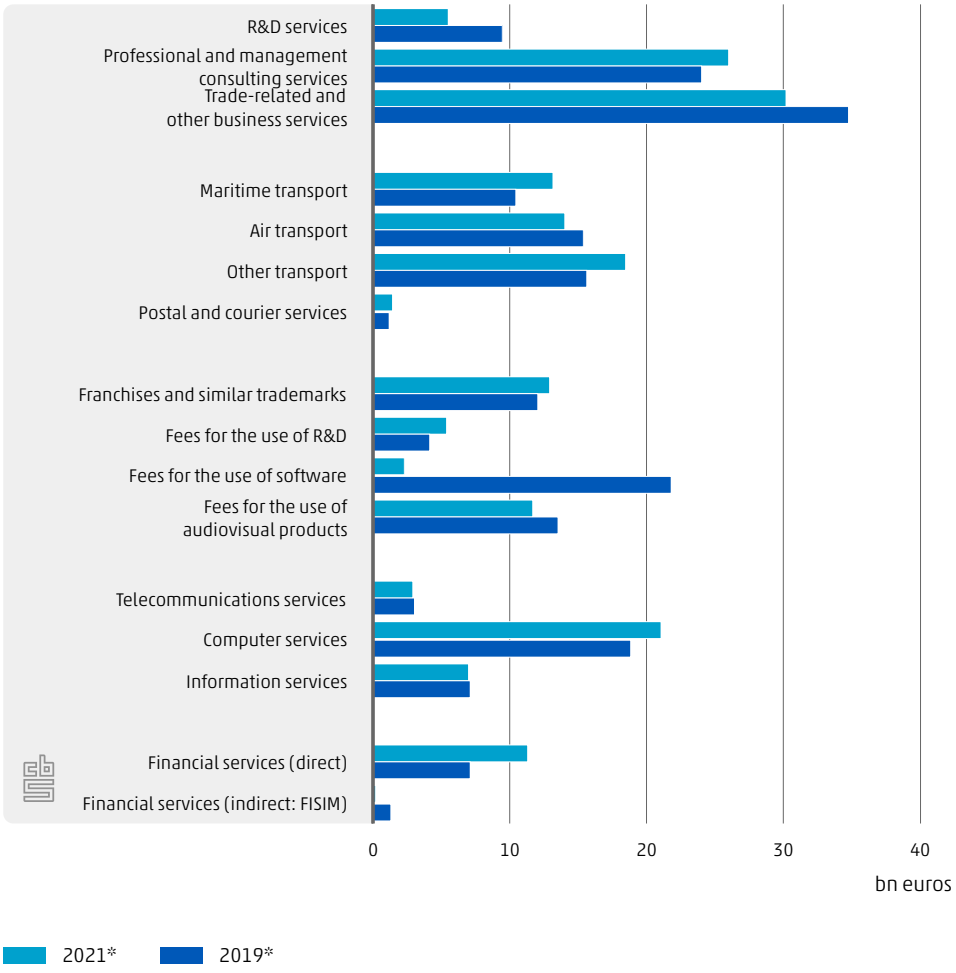
Within transport services, other transport services are the largest component. These include freight and passenger transport and support services for transport by rail, road, inland shipping and pipeline. Freight transport is by far the largest component. The next largest after other transport services are exports of aviation services, at €14.1 billion, followed by maritime services at €13.1 billion. These services include passenger and freight transport by air and by sea, together with related support services, provided for foreign residents. Within

transport services only aviation contracted between 2019 and 2020; other services showed growth.

In the case of fees received for the use of intellectual property, the largest share of export value is represented by fees for the use of audiovisual services, such as fees for music and film distribution rights, and franchises and similar trademarks. In the case of exports of information services, the most important are computer services. This type of service includes fees for the use and distribution of software and proprietary software rights. The latter component contracted sharply in 2021 compared to 2019.[1)]

In financial services, finally, we can only provide a breakdown between explicitly charged financial services and indirect financial services. The latter category plays hardly any role in Dutch service exports.

4.2.3 Service exports by type of service, top 5 in greater detail



1) The large movements in the export value of fees for the use and distribution of software and proprietary software rights that occurred before 2020 will disappear in subsequent publications. A large part of this flow consists of a type of financial flow which, according to a recent decision, is no longer to be included in international service trade. This flow will therefore disappear in future calculations of the time series used for international service trade. There was insufficient time to make the necessary amendments to the time series before the publication date of this report.

United Kingdom becomes largest export partner despite Brexit

The United Kingdom was the Netherlands' largest export market for services in 2021. Despite the imminence of Brexit, the UK has become increasingly important for Dutch service exports in recent years: in 2019, 10.9% of exports went to the UK, whereas in 2021 the figure was 13.7%. Chapter 8 of this publication shows that direct investments by the Netherlands in the UK also grew further in 2021, with the result that in 2021 the country again received more Dutch investment than the US and therefore topped the list of investment markets for the Netherlands. The other export markets in the top 5 in 2021 were Germany (12.8%), the US (11.7%), Ireland (7.4%) and Belgium (6.0%). Figure 4.2.4 shows that the UK, the US and Germany are very close to each other in terms of export value. The export value to Ireland, however, has fallen sharply since 2019.[2)]

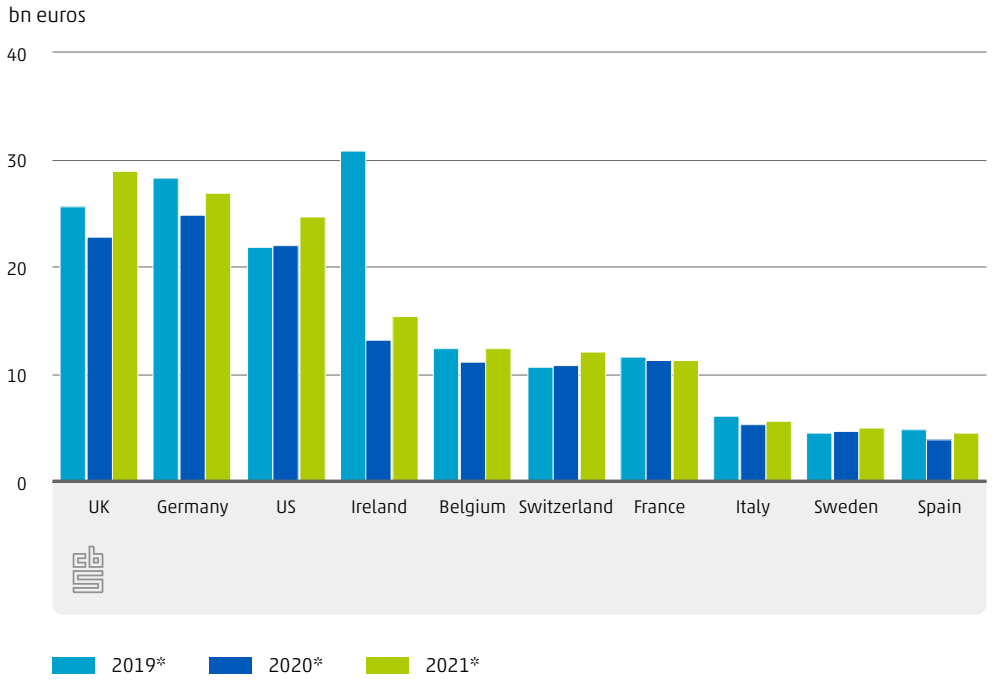
Higher service exports to United Kingdom despite Brexit

The Netherlands exported nearly €29 billion worth of services to the United Kingdom in 2021. That is 13% more than in 2019 and as much as 27% more than in 2020 – a notable development given that the United Kingdom left the European Union on 31 January 2020. Whereas goods exports to the UK have shown a clear contraction since 2021 – the first year in which the rules of the Internal Market no longer applied – exports of services have so far proved immune. This may be because the Trade and Cooperation Agreement between the UK and the EU includes less explicit agreements on mutual service trade than on goods trade.

Far more exports of transport services and other services such as telecommunications, computer and information services went to the UK in 2021 than in 2019 and 2020. With a value of €9.8 billion in 2021, business services, including legal and accounting services, are by far the most important type of service exports to the UK. Almost one-third of service exports to the UK consist of business services. Expenditure by British tourists and business travellers during their stay in the Netherlands remained stable at just over €200 million in 2021. That represents a decrease of 86% compared to 2019, before the effective date of Brexit and the outbreak of the coronavirus pandemic (CBS, 2022).

2) The large changes in the value of exports to Ireland before 2020 will disappear in later publications. A large part of this flow consists of a type of financial flow which, according to a recent decision, is no longer to be included in international service trade. This flow will therefore disappear in future calculations of the time series used for international service trade. There was insufficient time to make the necessary amendments to the time series before the publication date of this report.

4.2.4 Service exports by country

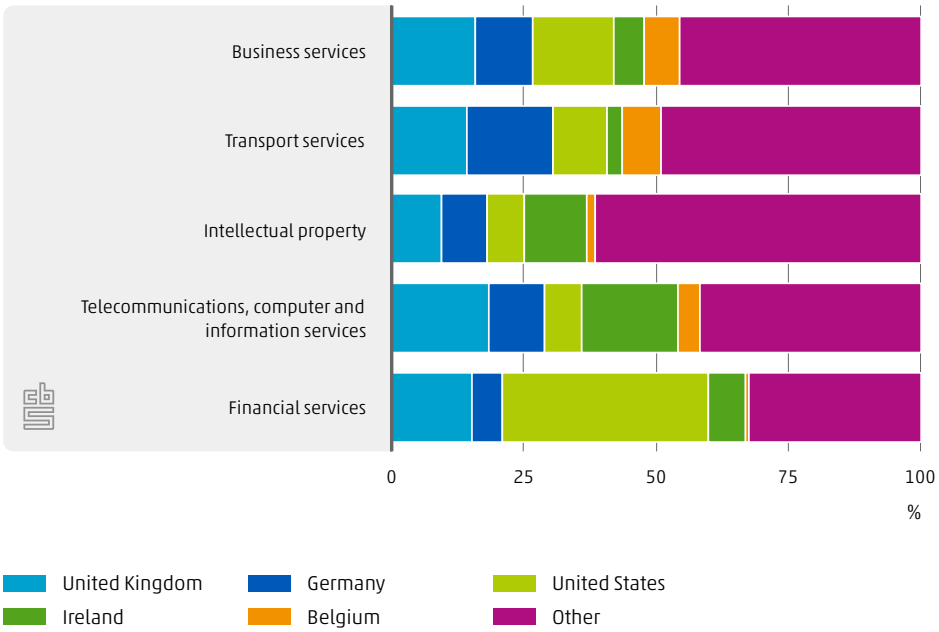


Large share of financial services going to the United States

Figure 4.2.5 shows the shares of important export markets for the five largest service types. It shows that the importance of the largest export markets varies depending on the type of service.

After the UK, the US is also an important market for business services. Germany is an important market for Dutch transport services, which is not surprising given that many goods are transported from the Netherlands to Germany by road or inland shipping. Ireland remains a relatively important market for exports of intellectual property, even after the changes in tax rules. Ireland, like the UK, is also an important market for computer and information services. A large share (38.9%) of exports of financial services go to the United States.

4.2.5 Service exports by type of service, top 5 destinations, 2021*

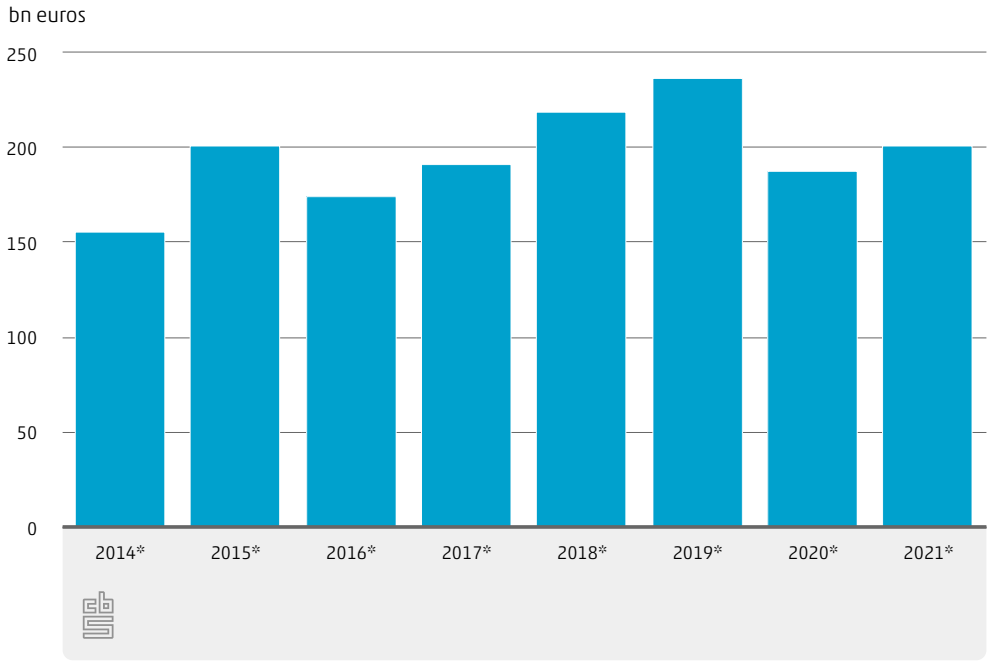


4.3 Service imports by type of service and country

Dutch service imports are of a similar size to exports. Before 2020, the import value was slightly higher than the export value, but since 2020 the Netherlands has exported more services than it imports in terms of value. Service imports consist partly of services that are used directly by consumers and partly of services that enterprises incorporate in production processes. Chapter 7 of this publication considers in further detail the question of what imports (including services) are used for in the Netherlands.

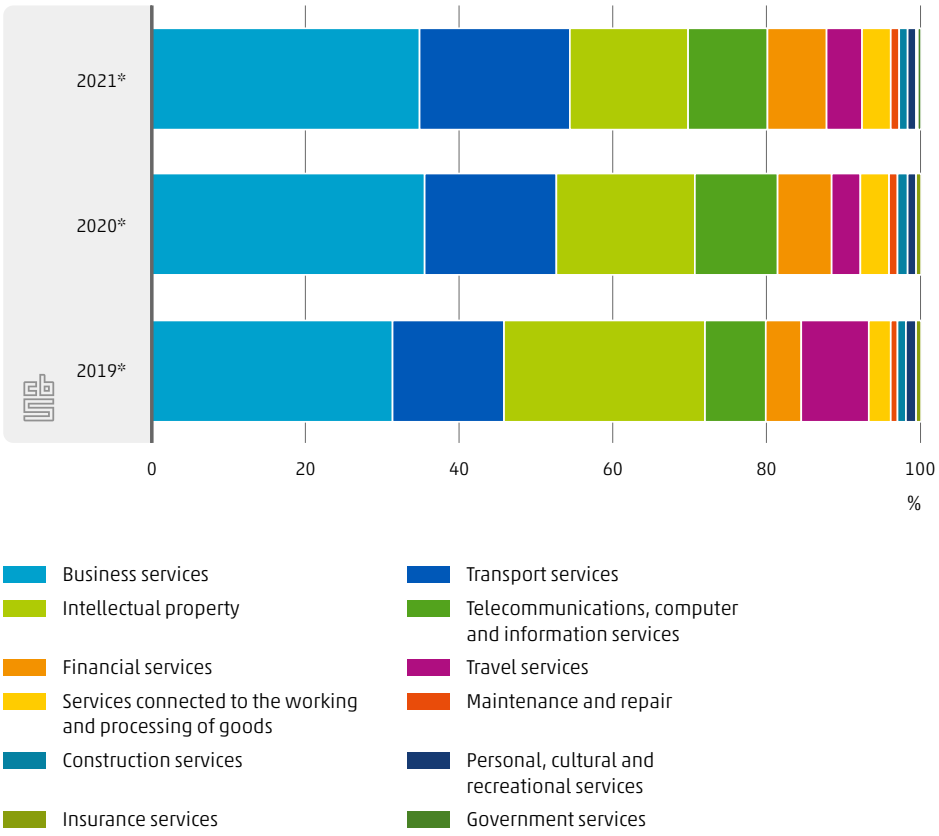
The value of Dutch service imports amounted to more than €200 billion in 2021. Total service imports were around 7% higher than in the COVID year 2020, but still remained more than 15% below the 2019 level and 8% below the level of total service imports in 2018. As in the case of service imports, the coronavirus crisis also accounted for a significant part of the contraction of service exports, but other factors also played a role. The most notable of these is the international restructuring of financial and service flows by a number of large enterprises (see Poulissen et al., 2022).

4.3.1 Service imports



As in the case of exports, the top 5 service types accounted for more than 85% of the total import value in 2021 (Figure 4.3.2). This was also the case in the preceding years. Over one-third of Dutch imports comprise business services, followed by transport services, payments for intellectual property, telecommunications, computer and information services, and financial services. Compared to previous years, the biggest decline can be seen in payments for the use of intellectual property. As discussed above, this decrease is mainly due to changes in the Dutch tax system which have led to enterprises no longer routing certain financial and income flows through the Netherlands. Imports of intellectual property, at €31.2 billion, were nevertheless still the third largest import category in 2021.As a result of changes in the tax system and the decrease in intellectual property, the importance of business services and transport services actually grew between 2019 and 2021. Imports of travel services moved in the opposite direction. At 8.7%, they were much lower in 2021 than in 2019, particularly as a result of the ongoing travel restrictions and coronavirus measures.

4.3.2 Service imports by type of service



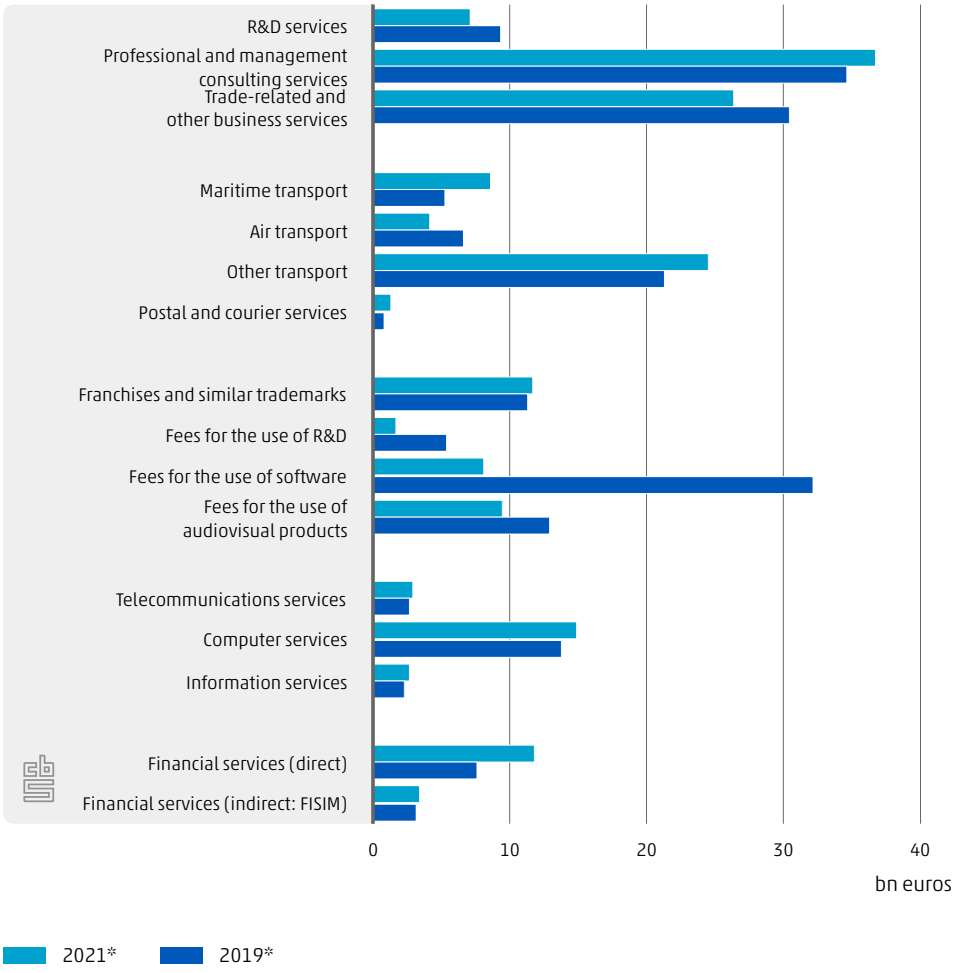
Fall in imports of the use of intellectual property on several fronts

Figure 4.3.3 provides a more detailed breakdown of the top 5 imported services. This largely presents the same picture as exports. In the case of imports of business services, it is notable that professional and management services are the most important, followed by other business services. R&D also plays a limited role in imports. Within transport services, other transport accounts for a very large share. Inland shipping, road transport and pipeline transport are the largest components of this service type. In imports too, all components of transport services grew except aviation.

Fees for the use of intellectual property are spread fairly evenly over the more detailed categories, except fees for the use of R&D. Once again a large contraction can be seen in imports of fees for software distribution and reproduction. This is due to the aforementioned change in flows that are no longer seen as services but as financial flows. In the case of imports of business services, the Netherlands already had only limited imports of R&D services and the corresponding fees. Furthermore – apart from franchises – the detailed data for all services after fees for the use of intellectual property show a contraction between 2019 and 2021. This decline in import value is due to the aforementioned corporate restructuring in response to changes to the Dutch tax system.

In the case of imports too, computer services are by far the largest component of telecommunications, computer and information services, while in financial services it is notable that the indirect financial services share (FISIM) is somewhat larger than in the case of exports. Imports of direct financial services also increased considerably between 2019 and 2021.

4.3.3 Service imports by type of service, top 5 in greater detail



The largest share of services is imported from the United States (Figure 4.3.4). That has not changed since 2019, and the import value of €38.3 billion in 2021 almost marks a return to the 2019 level. The United Kingdom, at €33.4 billion, was the second largest supplier of services to the Netherlands. These imports of services from the UK were substantially higher in 2021 than in 2019. Despite Brexit, the UK thus became increasingly important for the Netherlands in both the import and export of services. The shares of Ireland, Belgium, France and Poland also grew between 2019 and 2021; Switzerland and Bermuda became less important for the Netherlands in terms of service imports. In the case of Switzerland, changes in tax law are probably a factor once again. Bermuda was no longer even in the top 10 countries in terms of import value in 2021, whereas in 2019 it was still the third largest

import partner.[3)] Imports of services from Germany grew compared to 2020, but were still €2.4 billion lower than in 2019. This is due to the substantial fall in expenditure by Dutch tourists and travellers in Germany as a result of the coronavirus crisis.

4.3.4 Service imports by country

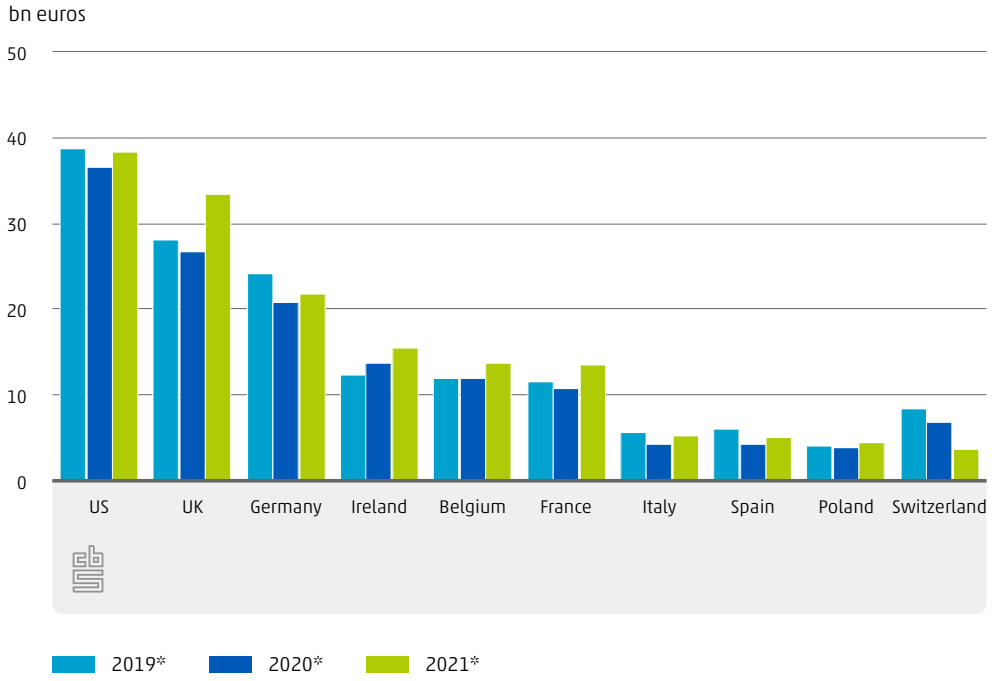
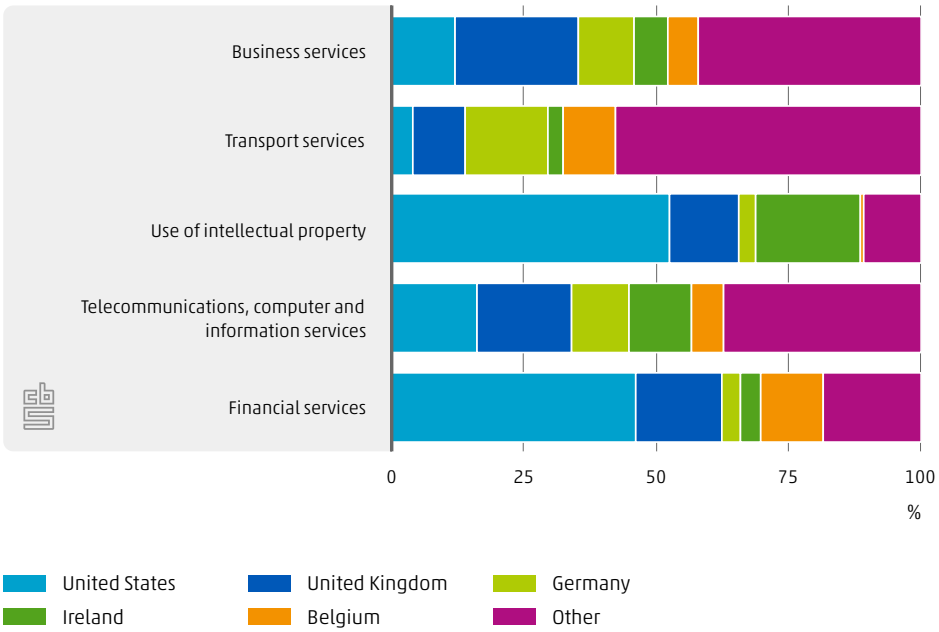


Figure 4.3.5 shows the shares of the five most important origin countries for each type of service in the top 5 imports. It shows that a large part of the business services come from the UK. As in the case of exports, Germany is an important supplier of transport services. Payments for the use or distribution of intellectual property are made principally to the US and Ireland. The five most important import countries make up nearly 90% of the import value of this service type. The top 5 origin countries have a fairly equal role in imports of telecommunications and computer services. Financial services are mostly sourced from the US, and to a large extent also from the UK.

3) The large changes in import value from Bermuda before 2020 will disappear in later publications. A large part of this flow consists of a type of financial flow which, according to a recent decision, is no longer to be included in international service trade. This flow will therefore disappear in future calculations of the time series used for international service trade. There was insufficient time to make the necessary amendments to the time series before the publication date of this report.

4.3.5 Service imports by type of service, top 5 destinations, 2021*



4.4 International service trade by region

This section focuses on the spatial distribution of enterprises with international trade in services.[4)] Distribution is measured here as the breakdown by COROP region of the business establishments of enterprises trading services internationally. The Netherlands has 40 COROP regions, each comprising various municipalities. Research shows that the bulk of international goods traders are concentrated in the Greater Amsterdam and Greater Rijnmond regions (CBS, 2017). It is notable that the dominance of these two regions is even greater in the case of the trade value of services. Figure 4.4.1 shows the top 10 COROP regions with the highest trade value of services in the Netherlands.

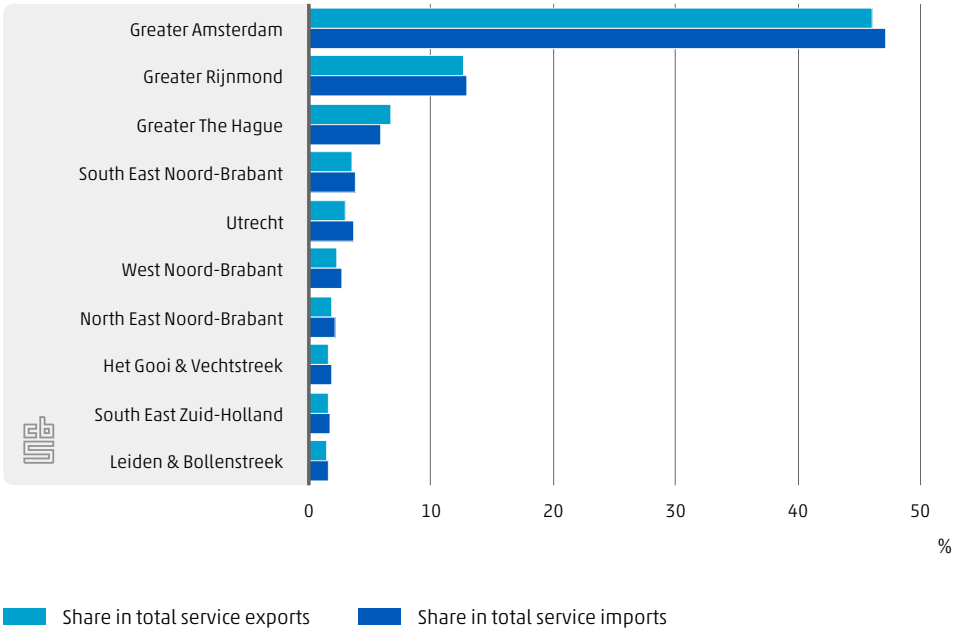
Almost half of Dutch service trade goes through business establishments in Greater Amsterdam

Almost half of the export and import value of services is accounted for by business establishments concentrated in the Greater Amsterdam region. This is hardly surprising, since Greater Amsterdam is the region with the highest number of business establishments and a major specialisation in services such as tourism, financial and business services. The top 5 regions in terms of the value of service trade also include Greater Rijnmond, Greater The Hague, South East Noord-Brabant and Utrecht. These five regions account for over 70% of all service trade in the Netherlands and for 38.5% of all Dutch business establishments trading in services. The role of these five regions has grown even more important compared to 2014

4) The figures in this section relate to the number of Dutch enterprises with international service trade (see also Chapter 5 on businesses trading internationally). To that end links were made between the international service trade data and all the business units listed in the General Business Register (ABR) for the year in question. As not all international service trade can be linked to an enterprise registered in the ABR, the total figures are lower than the value of service trade in sections 4.2 and 4.3, and lower than reported on StatLine. For example, this study did not include services supplied or received by individuals (e.g. travel services), government organisations or multinationals' financial flows.

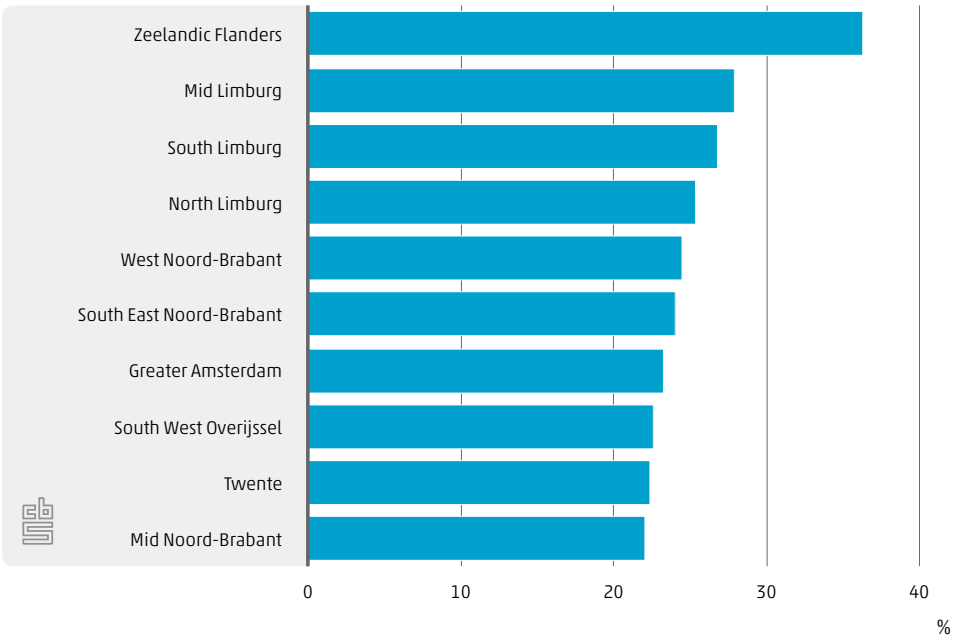
(CBS, 2017). Greater Amsterdam, for example, had a 27% share of the total import value in 2014 and 47% in 2020. With regard to export value, the figures were 38% in 2014 and 46% in 2020.

4.4.1 Top 10 regions with the highest trade value in services, 2020*



If we look at the share of business establishments trading services as a proportion of total business establishments in each COROP region, three regions with a large number of traders stand out: Zeelandic Flanders with a service trader share of over 36%, followed by Mid Limburg with 28% and South Limburg with almost 27%. Regions in the south and east of the country, particularly along the national borders, have the largest concentration of service traders. Greater Amsterdam, with 23%, has a relatively large share of business establishments trading services: In these regions this may have to do with tourism and/or cross-border commuters.

4.4.2 Share of service traders per region, 2020



The same sector is often dominant in both service imports and exports

Which sectors are dominant in each region? Table 4.4.3 shows the main sectors for the regions with the most service trade as in Figure 4.4.2, as well as the associated shares of these sectors in the total trade value. It is notable in the first place that the dominant sector in terms of export value and the dominant sector in terms of import value is often the same within a region. A second observation is that in a number of COROP regions the most important sector accounts for at least half of the trade value. In Zeelandic Flanders, for example, over 80% of the export value and 57% of the import value is generated by the manufacturing sector. In the Mid Noord-Brabant region, the transportation and storage sector is responsible for 52% of the value of service exports. Exports in North Limburg are also dominated by enterprises in the transportation and storage sector, with a share of 45%.

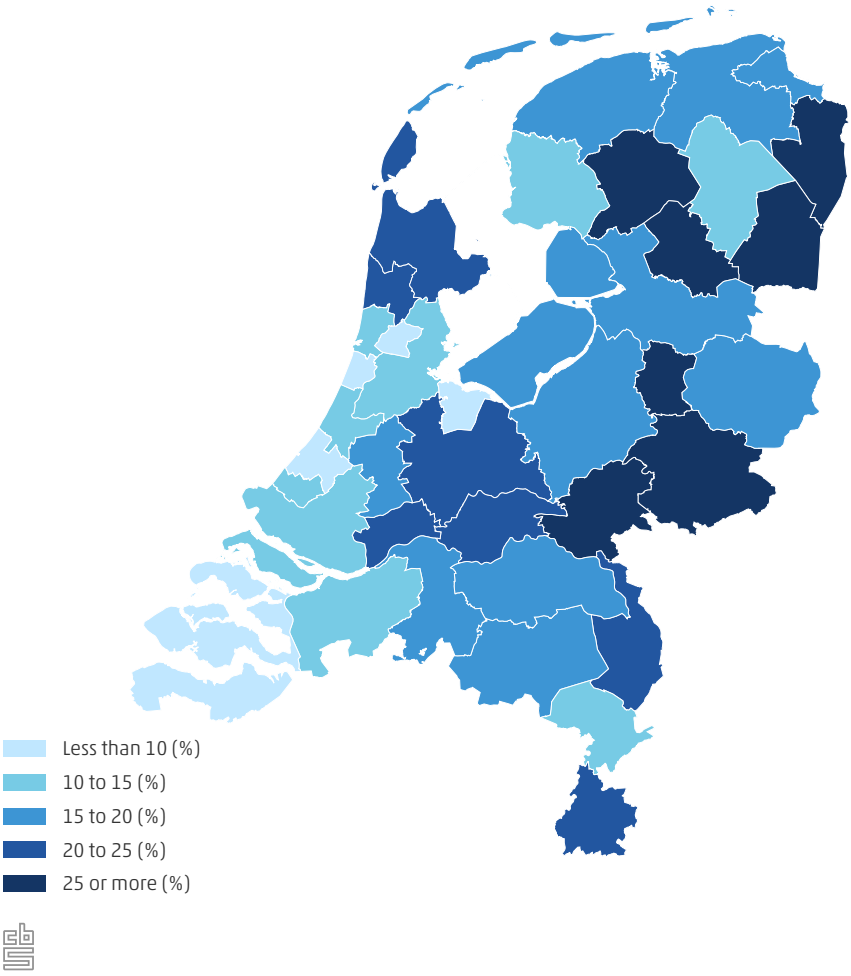
4.4.3 Dominant sector in terms of trade value; share of exports/imports by region

Region	Export share	Export sector	Import share	Import sector
	%		%	
Zeelandic Flanders	80	Manufacturing	57	Manufacturing
Mid Limburg	32	Renting/leasing and other business services	32	Wholesale and retail trade
South Limburg	29	Transportation and storage	40	Manufacturing
North Limburg	45	Transportation and storage	31	Wholesale and retail trade
West Noord-Brabant	42	Transportation and storage	29	Transportation and storage
South East Noord-Brabant	37	Specialised business services	36	Manufacturing
Greater Amsterdam	43	Information and communication	34	Information and communication
South West Overijssel	22	Energy supply	38	Manufacturing
Twente	41	Manufacturing	30	Manufacturing
Mid Noord-Brabant	52	Transportation and storage	31	Wholesale and retail trade

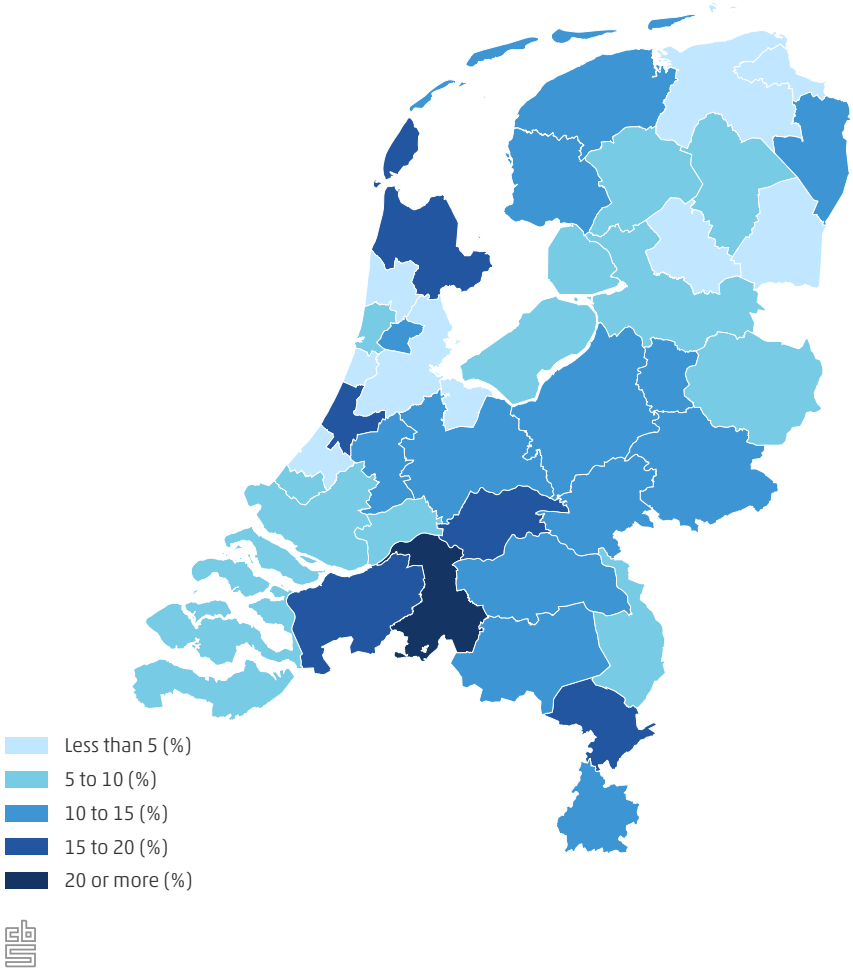
Germany, Belgium and the United Kingdom are important trading partners of the Netherlands with regard to services.[5)] It is therefore interesting to know what share of the trade value in each region consists of trade with these countries. Figure 4.4.4 shows that East Groningen, Arnhem/Nijmegen and South East Drenthe, three regions bordering Germany, are the top 3 regions with the largest shares of exports to Germany. Over one-third of service exports from East Groningen go to Germany. With regard to imports of services from Germany, South East Friesland, East Groningen and South East Drenthe have the largest shares. The frontrunner in service exports to Belgium is the Mid Noord-Brabant region, with a share of 23%. For imports it is Zeelandic Flanders, with 29%. The COROP regions in Limburg are more focused on Germany than on Belgium when it comes to service exports and imports. The top regions for trade with the UK are IJmond for service exports and Greater Rijnmond for service imports.

5) International trade information (value and partner) is only available at enterprise level. In order to determine the precise geographic location of the enterprise, this trading information has been further regionalised to the level of the local business establishment. In most cases the enterprise is small and comprises only one office. In that case the enterprise's international trade is allocated to the region in which the business is established. If the enterprise has more than one business establishment, the trade value is distributed among the various business establishments, and hence among the COROP regions, in proportion to the number of employees in each business establishment.

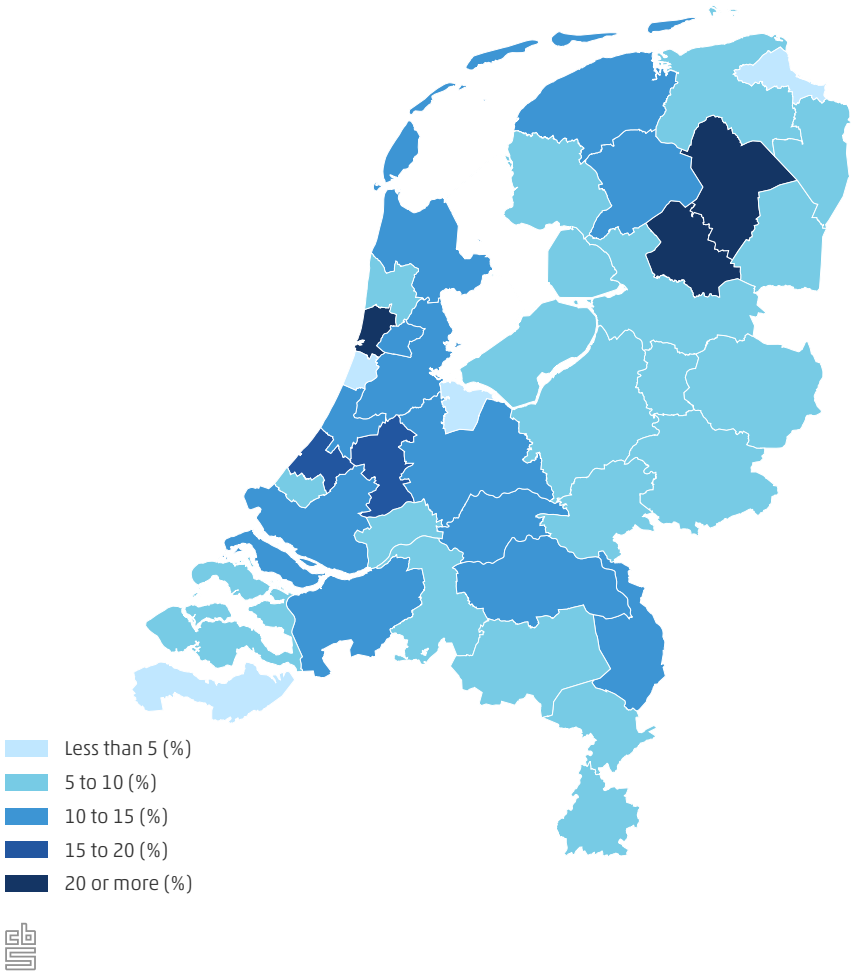
4.4.4 Share of exports to Germany in total exports per region, 2020



4.4.5 Share of exports to Belgium in total exports per region, 2020

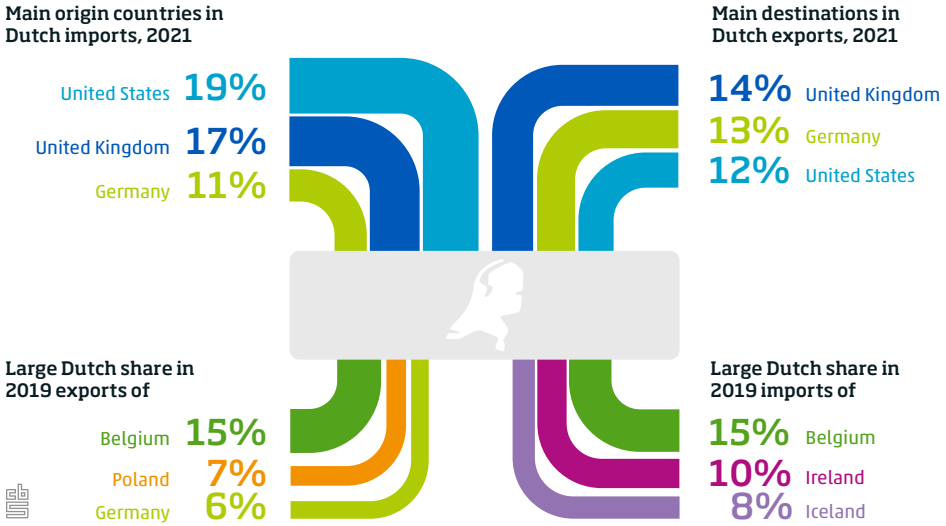


4.4.6 Share of exports to the UK in total exports per region, 2020



4.5 Importance of Dutch service trade for other countries

Section 4.2 shows among other things that the United Kingdom, the United States and Germany are the main partner countries for the Netherlands' international service trade (see infographic below). But how important is the Netherlands for these – and other – countries with regard to their international service trade? In which countries does the Netherlands have a large market share in services, and has this share grown in recent years, or not? This section addresses such questions. To arrive at the figures on other countries' service trade that are required for this analysis, we use data on international trade in services reported by the International Trade Center (ITC).



Source: CBS, ITC

Belgium is most dependent on the Netherlands with regard to service exports

The Netherlands exported services worth €246 billion and imported services worth €237 billion in 2021. Table 4.5.1 shows the 10 partner countries with the largest shares of Dutch service exports in 2021. The biggest shares of Dutch services were imported by the United Kingdom (13.7%), Germany (12.8%) and the United States (11.7%). Partner countries with the largest shares of Dutch service imports are shown in Table 4.5.2. The largest shares of services were imported from the United States (19.1%), the United Kingdom (16.6%) and Germany (10.9%).

4.5.1 Top 10 partner countries for Dutch service exports, 2021

	Export value	Share
	x bn euros	%
United Kingdom	29.0	13.7
Germany	26.9	12.8
United States	24.7	11.7
Ireland	15.5	7.4
Belgium	12.5	6.0
Switzerland	12.2	5.8
France	11.4	5.4
Italy	5.7	2.7
Sweden	5.0	2.4
Spain	4.6	2.2

4.5.2 Top 10 partner countries for Dutch service imports, 2021

	Import value	Share
	x bn euros	%
United States	38.3	19.1
United Kingdom	33.4	16.6
Germany	21.8	10.9
Ireland	15.5	7.7
Belgium	13.8	6.9
France	13.5	6.7
Italy	5.3	2.6
Spain	5.2	2.6
Poland	4.5	2.3
Switzerland	3.7	1.8

Having identified the Netherlands' main trading partners, we now use international data from the ITC to gauge the importance of the Netherlands for other countries. What is the Netherlands' share of other countries' imports and exports of services? The ITC Trade Map combines sources of the ITC itself, the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO).

5th largest destination country for services from Germany is the Netherlands

4.5.3 Top 10 import partner countries with the largest shares of exports to the Netherlands, 2019

	Share	Rank
	%	
Belgium	14.7	1
Germany	5.9	5
France	5.8	6
United Kingdom	5.1	3
Spain	5.1	5
Ireland	3.3	7
Italy	3.3	8
Sweden	3.0	9
Switzerland*	2.8	8
United States	2.3	15

Source: ITC

4.5.4 Top 10 export partner countries with the largest shares of imports from the Netherlands, 2019

	Share	Rank
	%	
Belgium	14.8	1
Ireland	10.1	3
Poland	5.6	4
France	5.6	5
Germany	5.5	5
Italy	3.9	9
United Kingdom	3.9	6
Spain	3.7	8
United States	2.5	12
Switzerland*	2.3	8

Source: ITC

The Netherlands is Belgium's most important trading partner for services

Tables 4.5.3 and 4.5.4 show the Netherlands' share of exports and imports of services of the 10 largest Dutch partners in Tables 4.5.1 and 4.5.2. They also show the Netherlands' position in the ranking of the main customers and suppliers in the respective country. With a share of almost 15% of total Belgian service exports, the Netherlands is the largest importer of Belgian services. It is followed by France, the United Kingdom and Germany as countries for which the Netherlands is also an important trading partner. The Netherlands takes around 5–6% of total service exports from these countries. With regard to service imports from Belgium, we see a similar picture to that of exports: here too the Netherlands has a share of nearly 15%. The Netherlands was therefore both the largest customer and the largest supplier of services for Belgium in 2019. As stated above in Tables 4.5.1 and 4.5.2, Belgium has become significantly less important as a destination country and origin country for services.

14.8% of the services that Belgium imported in 2020 came from the Netherlands

Germany is a bigger trading partner for the Netherlands than vice versa

As Tables 4.5.1 and 4.5.2 showed, Germany accounts for more than 10% of Dutch service imports and exports. Germany is also among the top 3 most important partner countries for both Dutch imports and exports. Conversely, 5.9% of Germany's total service exports go to the Netherlands. The Netherlands therefore ranks fifth among German export markets, after the United States, the United Kingdom, Switzerland and France. The Dutch share of Germany's total service imports was 5.5% in 2019. Here too, the Netherlands ranks fifth after the United

States, the United Kingdom, France and Austria. Service trade with Germany is thus more important for the Netherlands than trade with the Netherlands for our eastern neighbours.

4.5.5 Top 30 countries with the largest shares of service imports from the Netherlands

	2016	2017	2018	2019
	%			
Belgium	13.4	14.5	14.4	14.8
Ireland	9.2	11.0	12.6	10.1
Iceland	6.7	7.4	7.2	7.6
Singapore	5.0	5.7	5.8	-
Poland	5.1	5.3	5.6	5.6
France	5.7	4.9	5.6	5.6
Germany	5.7	5.5	5.6	5.5
Sweden	3.9	4.7	4.3	5.2
Finland	4.7	5.1	5.2	5.0
Portugal	3.9	4.0	4.1	4.4
Italy	3.8	3.8	3.7	3.9
Hungary	4.0	4.5	4.5	3.9
United Kingdom	4.3	4.2	4.3	3.9
Denmark	3.9	3.6	3.8	3.8
Spain	4.4	3.8	3.7	3.7
Russia	2.9	3.0	2.9	3.5
Czech Republic	3.2	3.2	3.6	3.4
Austria	2.8	3.0	3.0	3.3
Estonia	3.5	3.5	3.3	3.1
Lithuania	2.2	2.1	2.5	2.9
Luxembourg	3.3	2.9	2.8	2.6
Greece	2.4	2.6	2.5	2.6
United States	2.2	2.3	2.4	2.5
Switzerland	2.1	2.2	2.3	-
Slovakia	2.1	2.0	2.3	2.3
Latvia	1.9	2.2	2.3	2.0
Slovenia	1.4	1.7	1.9	2.0
Japan	1.9	1.8	1.9	-
Canada	1.4	1.3	1.4	1.3
Australia	1.4	1.2	1.0	-

Source: ITC

4.5.6 Top 30 countries with the largest shares of service exports to the Netherlands

	2016	2017	2018	2019
	%			
Belgium	14.6	14.9	14.9	14.7
Poland	5.6	6.0	6.6	6.7
Germany	5.8	5.9	6.1	5.9
France	5.7	5.3	5.8	5.8
Lithuania	4.0	4.0	4.7	5.4
United Kingdom	5.2	5.7	5.8	5.1
Spain	5.0	5.0	5.1	5.1
Slovakia	4.9	5.3	4.9	4.7
Austria	4.1	4.2	4.3	4.3
Hungary	3.4	4.1	3.9	3.9
Portugal	4.4	4.2	4.1	3.9
Czech Republic	3.4	3.9	3.6	3.8
Slovenia	2.9	3.6	3.8	3.7
Ireland	3.3	3.1	3.5	3.3

4.5.6 Top 30 countries with the largest shares of service exports to the Netherlands (continued)

	2016	2017	2018	2019
	%			
Italy	3.1	3.5	3.3	3.3
Luxembourg	3.4	3.2	3.2	3.2
Denmark	3.4	3.1	3.2	3.1
Sweden	3.8	3.6	3.2	3.0
Iceland	3.0	3.1	3.1	2.9
Finland	2.7	2.7	3.4	2.7
Switzerland	2.7	2.7	2.8	-
Russia	2.7	2.6	2.7	2.7
Latvia	2.6	2.6	2.3	2.7
Estonia	2.1	2.1	2.5	2.6
Greece	2.8	3.1	2.8	2.5
United States	2.2	2.3	2.3	2.3
Japan	1.6	1.6	1.4	-
Singapore	1.5	1.5	1.3	-
Canada	1.2	1.1	1.1	1.1
Australia	0.6	0.6	0.8	-

Source: ITC

Poland has the largest share of service exports to the Netherlands after Belgium

For which other countries outside the main service trading partners do Dutch service imports and exports play a major role? Tables 4.5.5 and 4.5.6 show the Netherlands' share of the total service imports and exports of the 30 countries in which the Netherlands had the largest share of the service flow. The Netherlands has a fairly major role in Polish service trade. Poland exports 6.7% of its services to the Netherlands and 5.6% of the total value of its service imports comes from the Netherlands. The Netherlands thus ranks fifth as a buyer of Polish service exports and is the fourth largest supplier of Polish imports. The share of Polish service exports and service imports to and from the Netherlands grew by 1.2 and 0.5 percentage points respectively between 2016 and 2019. The Netherlands imports particularly transport services from Poland. Examples include Polish freight forwarders who transport goods on behalf of Dutch enterprises. In addition, the Netherlands imports a relatively large amount of business services such as professional and management consulting services from Poland. Exports of services to Poland are spread relatively evenly among travel – largely Polish seasonal workers offering their services in the Netherlands – business services and exports of intellectual property, as well as payments for streaming content or licences for the use of trademarks.

Slight growth in Icelandic imports of Dutch services

Iceland has imported an increasing share of its services from the Netherlands over the years. In 2016, the Netherlands still accounted for 6.7% of Icelandic service imports, whereas in 2019 this share had grown to 7.6%. The Netherlands is thus Iceland's fourth largest import partner. Dutch service imports from Iceland, at €253 million, are relatively small, however: the Netherlands is the ninth largest export market for Iceland. Over half of these exports

consist of transport services from Iceland. Service exports from Iceland to the Netherlands have remained fairly stable over the years.

Swedish imports from the Netherlands are rising, but exports are falling

Sweden imported almost 34% more services from the Netherlands between 2016 and 2019. In 2016 the Netherlands' share of Swedish service imports was still 3.9, whereas in 2019 it had grown to 5.2%, making the Netherlands the seventh largest import partner. Sweden receives particular business services, intellectual property and transport services from the Netherlands. The latter category involves particularly services for maritime and freight transport to Sweden. Conversely, the share of service exports to the Netherlands has decreased. The Dutch share of Swedish exports fell from 3.8% in 2016 to 3.0% in 2019. The Netherlands is the ninth largest destination for Swedish service exports.

Rise in Dutch share of Lithuanian service trade

Lithuania accounts for only a small share of Dutch service imports and exports, 0.2% and 0.1% respectively. Conversely, the Netherlands plays a greater role in Lithuanian service trade. Lithuania imports 2.9% of its services from the Netherlands, representing growth of almost 32% compared to 2016, when Lithuanian service imports from the Netherlands amounted to 2.2%. The Netherlands is the 13th largest import partner for Lithuania. The share of Lithuania's service exports going to the Netherlands has also grown during the period under review. It grew by almost 36% from 4.0% in 2016 to 5.4% in 2019. This was largely due to services provided by Lithuanian freight forwarders. The Netherlands is Lithuania's fifth largest export market.

It is clear that the Netherlands is an important player in international trade in services, not only for its principal trading partners but also for countries with a smaller share of Dutch service imports and exports. Dutch service trade is also strong in specific areas, such as transport services, business services and the management and distribution of intellectual property. These types of services are clearly reflected in the trade with our main trading partners, as well as in trade with smaller countries. Travel services play a relatively major role in service trade with typical holiday destinations and neighbouring countries (partly due to cross-border or seasonal labour and day visitors).

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5 Characteristics of enterprises that trade internationally

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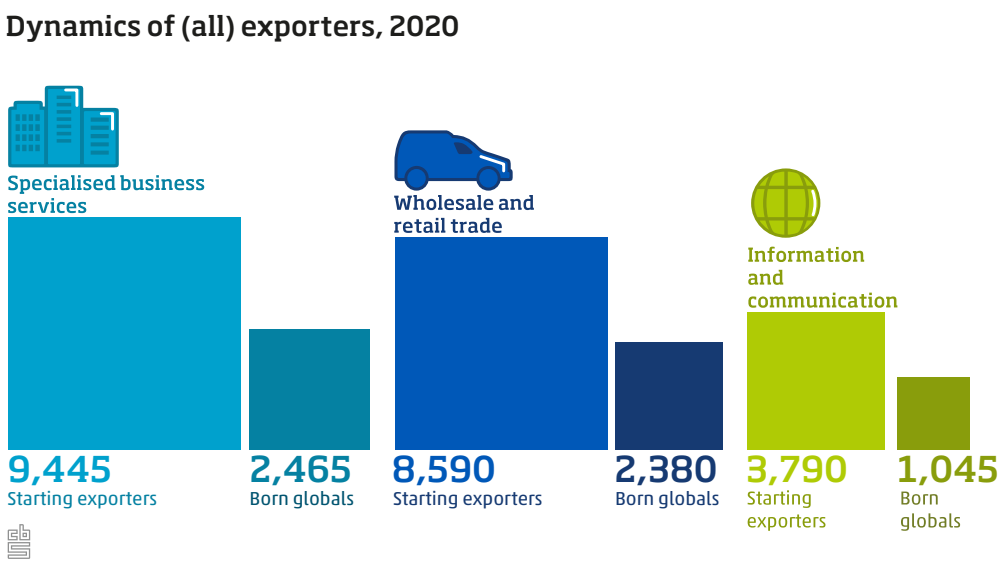


This chapter examines the characteristics of enterprises and entrepreneurs that trade internationally. First, it discusses the Dutch business economy from the perspective of trade: to what extent do enterprises export, import or engage in both activities? What proportion of enterprises trading internationally are independent SMEs or large enterprises, and how does this differ between industries? Next is a separate discussion on the trade in goods and services from a business perspective. The chapter then highlights entrepreneurs trading internationally: what proportion are women and how does this figure vary by age category and sector? Finally, we compare the characteristics of employees of enterprises with production processes that depend to a greater or lesser extent on imports or exports of goods.

5.1 Key findings

Fewer enterprises trading internationally in 2020

In 2020, there were 406,000 Dutch enterprises that traded goods or services with foreign countries, thus constituting 30% of the total Dutch business economy. This was 37,000 fewer enterprises than in 2019, representing an 8% decline. Close to two-thirds of the international traders only imported goods and/or services, while 11% only exported goods and/or services. The remaining quarter both imported and exported goods and/or services (two-way traders).

Of all the internationally operating enterprises, nearly one in three is active in the wholesale and retail trade sector.

A small group of international traders is responsible for the bulk of the trade value. The 25% two-way traders accounted for more than 97% of the total export value and 92% of the import value. Moreover, within this group of two-way traders, the bulk of these values is concentrated among large enterprises and independent SMEs with foreign subsidiaries.

International trade in goods

In 2021, the export of goods recovered from a dip in 2020. The value of goods exports increased in almost all sectors, with the highest increase in the transportation and storage sector (77%). In 2021, large enterprises exported over three times as much in terms of value as independent SMEs. The strongest growth in the export of goods was achieved by already exporting enterprises that started exporting more of their existing products to established destination countries, and not by enterprises starting their export activities for the first time.

In 2021, the import of goods also recovered from a dip in 2020. The growth in the import value of independent SMEs without subsidiaries abroad was twice as high as that of large enterprises.

International trade in services

The total value of the export of services fell by 4% in 2020. The decline in imports was even greater (6%). The number of trading enterprises that import services declined by 17%, up to 236,000. The number of service exporters, on the other hand, remained unchanged at 75,000. More than nine out of ten trading enterprises that import services do so exclusively from other EU countries. Only 5% of the enterprises operating as independent SMEs trade in services with non-EU countries. A similar pattern applies to exporters of services.

On average, Dutch enterprises export more services than they import. As with the trade in goods, there is only a small group of international traders responsible for the bulk of the export and import value of services. Moreover, the average traded value per enterprise was many times higher for exporters than for importers.

Entrepreneurs and employees working for international traders

In the Dutch business economy, a total of approximately 411,000 entrepreneurs headed an enterprise in 2020 that trades internationally in goods and/or services. Around 30% of the Dutch business economy was thus trading internationally, which represents a 4 percentage point decrease on 2019.

Of all male entrepreneurs in the business economy in 2020, about 30% were trading internationally, while the share among women was 31%. Therefore, the likelihood of an entrepreneur trading internationally does not appear to be strongly dependent on sex.

However, the median export value in the trade of goods of female-led enterprises in 2020 was nearly €13,000 lower than that of businesses led by male entrepreneurs.

In 2020, a total of 2.5 million full-time equivalents (FTEs) were employed by importers and 1.8 million FTEs by enterprises with exports. Employees at enterprises with a relatively high ratio of goods imports or goods exports to turnover earn higher wages on average as opposed to employees at enterprises with lower trade intensities.

5.2 Dutch business economy from the perspective of trade

In 2020, the Dutch business economy (see box for more information) comprised more than 1.3 million enterprises. This is 68,000 up on 2019. This group can be divided into one-way importers, one-way exporters, two-way traders (enterprises that import and export), and enterprises not trading in goods or services, thus not trading internationally at all.[1)] Enterprises that belong to the category 'not an international trader' focus exclusively on the domestic market.

What is the Dutch (non-financial) business economy?

Enterprises considered part of the Dutch business economy are those listed in the General Business Register (ABR), with an activity classified in sections B to N, excluding K and plus division S95. This delineation is referred to internationally as 'non-financial business economy'. This category is composed of the following sectors[2)]:

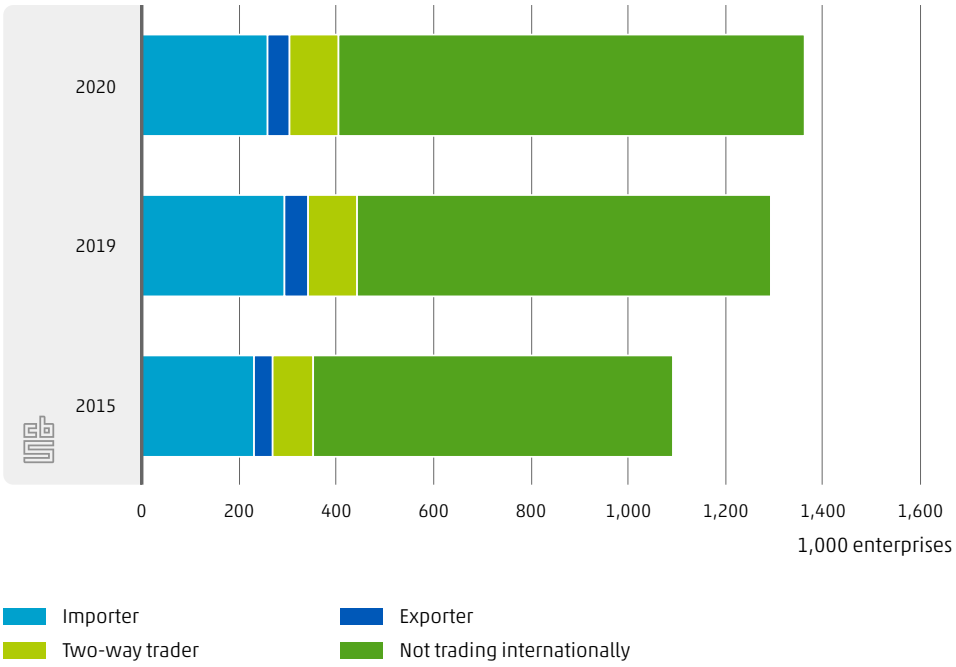
- **B Mining and quarrying;**
- **C Manufacturing;**
- **D Energy;**
- **E Water and waste management;**
- **F Construction;**
- **G Wholesale and retail trade;**
- **H Transportation and storage;**
- **I Accommodation and food service activities;**
- **J Information and communication;**
- **L Renting, buying and selling of real estate;**
- **M Specialised business services;**
- **N Renting/leasing and other business services;**
- **S95 Repair of computers and consumer goods**

1) In defining the types of international traders, no minimum threshold was used to filter out small traders. Importers (exporters) import (export) in goods and/or services; a two-way trader is active in both importing and exporting goods and/or services.
2) Agriculture, forestry and fishing (A), financial institutions (K), public administration (O), education (P), health care (Q), culture, sports and recreation (R), ideological and political organisations (division 94), wellness and funeral services (division 96), households (T) and extraterritorial organisations and bodies (U) are therefore outside the Dutch business economy.

Three in ten enterprises in the Dutch business economy are international traders

In 2020, 30% of the Dutch business economy (or some 406,000 enterprises) was made up of international traders in goods and/or services. This is almost 37,000 less than in the previous year, while the number of international traders has actually grown in recent years, reaching 442,000 (one in three) in 2019. As a result of the coronavirus crisis, enterprises had been more restricted in their international trade activities in 2020, which may have led to the decline in the number of international traders. The Internationalisation Monitor Q2 2022 focused closely on the barriers and developments of the international trade in services in 2020 and 2021 (CBS, 2022b). Of those international traders in 2020, 64% were exclusively involved in imports, 11% only in exports and 25% were two-way traders (Figure 5.2.1).

5.2.1 Enterprise population by type of trader



Rising number of non-traders in 2020

In 2020, the Dutch business economy expanded by more than 68,000 enterprises from the previous year (Figure 5.2.1), which was an increase of 5.3%. As in previous years, the Dutch business economy consists for the most part of non-traders. This latter group expanded by more than 100,000 to 957,000 enterprises in 2020. This means that seven out of ten enterprises in the Dutch business economy therefore did not trade with foreign countries in 2020. The composition of the business economy by trading status (whether or not enterprises trade internationally) has somewhat changed compared to 2019. The number of one-way importers dropped (35,000 less) while the number of two-way traders and one-way exporters remained virtually unchanged.

Number of traders grew less fast than the Dutch business economy

Compared to 2015, the total enterprise population in the Dutch business economy had increased by 25% in 2020. Due to the declining number of international traders in the previous year, the number of traders grew less quickly (+14%) than the number of non-traders (+30%) across the entire period (2015–2020).

Despite the decline in the number of importers in 2020, this group of traders experienced the strongest growth in numbers between 2015 and 2020. The percentage increase compared to 2015 was the highest in the number of two-way trading enterprises (+20%). If we not only consider the developments in the last year as a result of the coronavirus crisis, but also look at the entire period from 2015 to 2020, the number of internationally active enterprises has increased. That increase is connected among other things with the increasing number of enterprises in the Dutch business economy, but also with the growing global trade in that period.

Developments such as increasing digitisation have made it easier for enterprises to sell their products across country borders, for example through online platforms, where this was previously too costly or too complicated (Polder & Rooyakkers, 2021). Digitisation lowers the costs of participating in international trade, connects businesses and consumers worldwide, facilitates the spread of ideas and technologies, and eases the coordination of global value chains (OECD, 2019).

Number of international traders under pressure

The figures from the most recent reporting year show that business trade flows are nevertheless fragile. In 2020, 30% of the enterprises in the Dutch business economy was trading with foreign countries while that share was about 33% in previous years. As a result of the great shock caused by the coronavirus pandemic, many enterprises were temporarily faced with restrictions in their international activities. This is reflected in a decline in the number and share of Dutch enterprises that export and/or import services. Given the upward trend in the trade of goods in 2021, these figures are expected to recover in 2021, although there may also be enterprises that have had to temporarily postpone or permanently halt their trading activities or the expansion thereof. Once enterprises start trading internationally, it is thus by no means a foregone conclusion that trade flows will continue, especially in economically uncertain times.

Enterprises in wholesale and retail trade or manufacturing relatively most often trade internationally

Figure 5.2.1 shows us that in 2020 approximately 30% of the enterprises in the Dutch business economy did business with foreign countries. However, that share varies considerably from one sector to another (Figure 5.2.2). For instance, the share of international traders is above average in the wholesale and retail trade, manufacturing, and information and communication sectors. This share was 47% in wholesale and retail trade. This is not surprising in itself, as enterprises in the wholesale trade form an indispensable link between suppliers and customers. This sector provides support services and in doing so, it connects

many sectors at home and abroad (CBS, 2019b). Of all the enterprises that trade internationally, nearly one in three are active in the wholesale and retail trade.

Dutch manufacturing is also strongly interconnected with foreign countries: 43% of the manufacturing enterprises traded beyond the borders of the Netherlands in 2020. For example, manufacturing is highly dependent on exports because most of its customers are located in other European countries (De Boeck, 2017). The food and beverage industries are examples of industries that have become increasingly dependent on foreign countries in terms of their turnover (CBS, 2017). In addition to exports, the sector is also heavily dependent on imports of foreign products (De Boeck, 2017).

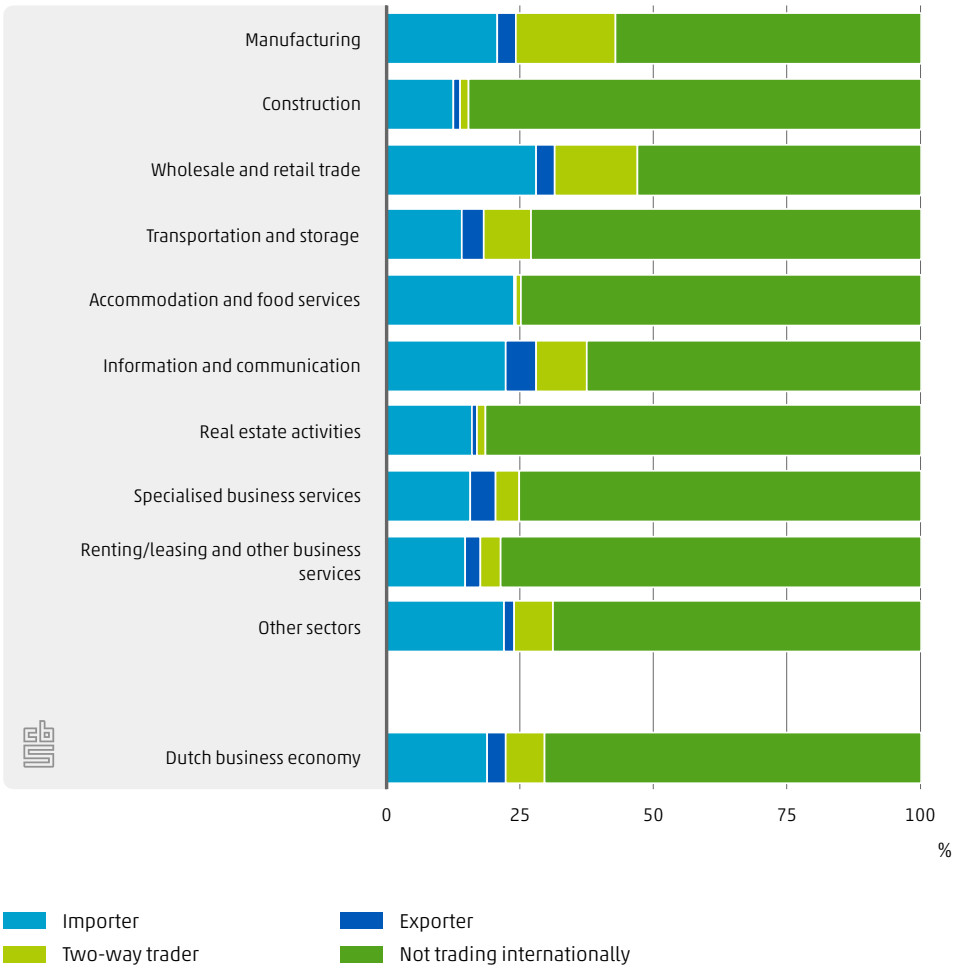
Least traders in construction

The share of international traders in construction, at 16%, was significantly lower than in the Dutch business economy as a whole. Nevertheless, the number of international traders in this sector has risen significantly compared to 2015 (+24%). The number of international traders in the accommodation and food services sector is also somewhat lower than average, but increased by 50% in 2015 compared to 2019, to just under 20,000 enterprises. In 2020, the number of traders in the accommodation and food services sector dropped by about 2,000 enterprises. Of these enterprises, 25% were still internationally active within this sector, almost 5 percentage points less than in the previous year.

There are also significant differences between sectors in the proportion of enterprises that exclusively import, exclusively export or enterprises that both import and export, as shown in Figure 5.2.2. Of all sectors, the wholesale and retail trade had the highest share of enterprises in 2020 in relative terms (28%) that were exclusively active in imports, against 19% for the Dutch business economy as a whole. The sector with the highest percentage of enterprises that only engaged in export activities is information and communication (6%).[3)] For the total Dutch business economy, the share is 3.4%. In relative terms, two-way traders were most common in manufacturing, at nearly 19%.

3) Of all sectors, mining and quarrying had the highest share of exclusive exporters, just over 6%. However, it must be emphasised that this is a small sector with regard to the number of enterprises it includes. Mining and quarrying involved some 585 enterprises in 2020, which is only 0.04% of the total Dutch business economy.

5.2.2 Type of trader by sector, 2020



Within all sectors, the share of international traders in 2020 was on average about 4 percentage points lower than in the previous year. The number of traders declined in all sectors and most significantly among water and waste management (–14%) and enterprises active in renting/leasing and other business services (–13%). In the wholesale and retail trade and manufacturing sectors, the drop in the number of trading enterprises remained limited, at –5% and –4% respectively. It is worth noting that while the number of traders fell least in the wholesale and retail trade sector in percentage terms, the proportion of traders in that sector actually fell more than in the other sectors. This is because the number of non-traders in wholesale and retail trade increased by 18% to almost 148,000 out of 278,000 by 2020.

47% of wholesale and retail trade enterprises trade with foreign countries

Decline in traders in 2020 mainly among importers

In all the larger sectors, i.e. manufacturing, wholesale and retail trade, construction, accommodation and food services, information and communication and specialised business services, the decrease in the number of trading enterprises was greatest among those that exclusively import. The number of exporters and two-way traders remained fairly stable in the transportation and storage sector and the information and communication sector, while the number of one-way importers fell by 18% and 16% respectively. In the accommodation and food services sector, the number of two-way traders and exporters fell as sharply as the number of one-way importers (10 or 11%). The growth in the number of enterprises between 2019 and 2020 can be attributed to the growing number of non-traders in all sectors. In 2020, there was even a record number of enterprise creations. The sharpest rise could be seen in the retail trade. This mainly concerned online shops (the publication The State of SMEs, 2021).

Despite the decline in the number of traders between 2019 and 2020, the number of trading enterprises in all sectors is still larger than five years ago. However, the share of trading enterprises in the total enterprise population has decreased compared to 2015 in almost all sectors. This is mainly attributed to the growth of the number of new non-traders, a trend that was already visible in the figures of many sectors in previous years. Only in the accommodation and food services sector and among enterprises active in the sector renting, buying, selling real estate did a larger proportion trade across borders in 2020 than in 2015.

Independent small and medium-sized enterprises (SMEs)

The Dutch business economy can be broken down by activity as well as by enterprise size. A distinction can also be made based on the level of the enterprise's autonomy; is the enterprise operating autonomously or is it, for example, part of a larger international network? This chapter distinguishes between two types of enterprises: large enterprises and the independent SMEs. The independent small and medium-sized enterprises include all Dutch-owned enterprises employing fewer than 250 people across the whole organisation (in the Netherlands). The independent SMEs are further categorised into enterprises with and without foreign subsidiaries. Large enterprises comprise all Dutch enterprises that are part of a group employing at least 250 people and/or part of a foreign-owned group.

Of nearly 1.4 million enterprises in the total Dutch business economy in 2020, 1.3 million were independent SMEs, 7,000 of which had one or more foreign subsidiaries. Approximately 18,000 were large enterprises. Over 98% were therefore enterprises operating as independent SMEs with no foreign subsidiaries. Of all the enterprises engaged in international trade, around 94% are independent SMEs without subsidiaries abroad, hereinafter referred to as independent SMEs.

89 out of 100 large enterprises trade internationally

Independent SMEs are far less active as international traders than large enterprises (Figure 5.2.3). While seven out of ten independent SMEs did no business with foreign countries in 2020, this was true of only 11% of large enterprises. It is generally known that small enterprises trade less in international markets than large enterprises (Bernard et al., 2007 and 2012). Both large enterprises and independent SMEs encounter various obstacles to entering foreign markets. For example, it is more of an effort for them to find local partners; they lack knowledge of local markets; legislation and regulations differ; it is more difficult for them to access funding; and exporting is usually associated with payment and currency risks. However, large and productive enterprises are more often able to bear such costs and risks than independent SMEs. The larger the enterprise, the more likely it is to export (Brakman et al., 2018). In comparison with large enterprises, independent SMEs do more themselves and are less active in global value chains. Independent SMEs therefore focus more on the local market, both for supplying and obtaining goods and services, and less on direct sales to foreign markets (Statistics Denmark & OECD, 2017; Chong et al., 2019).

Number of traders among independent SMEs and large enterprises has increased since 2015

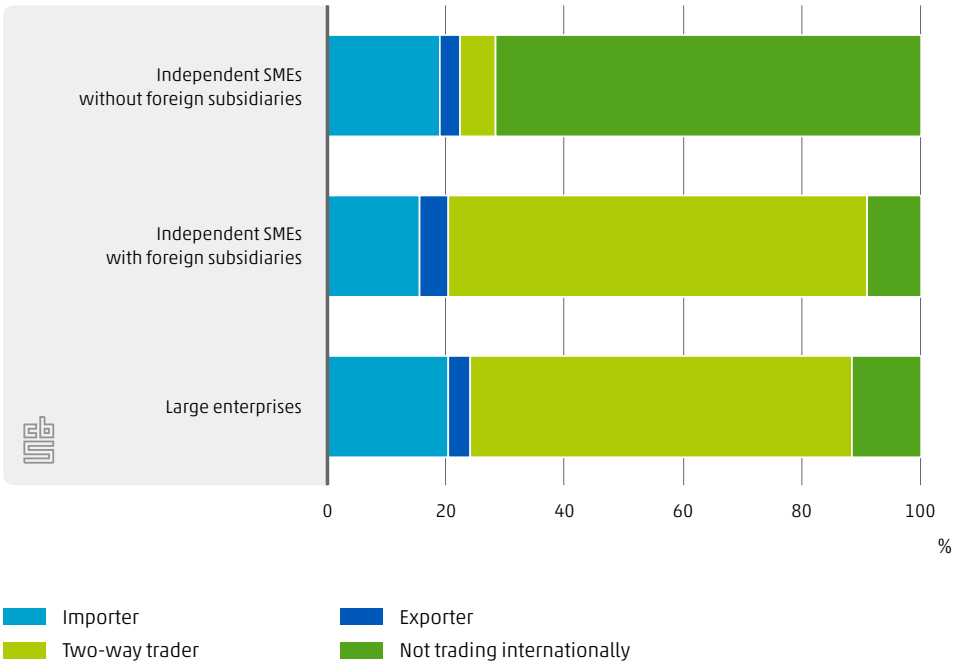
For both independent SMEs and large enterprises, growth in the share of international traders has increased by 14% in the period 2015–2020. The number of international traders among independent SMEs with foreign subsidiaries increased by 7% in that same period. Both large enterprises and independent SMEs with subsidiaries saw their share of traders increase by a few percentage points between 2015 and 2020. In contrast, the proportion of independent SME traders without foreign subsidiaries decreased.

There is a major difference between the two groups mainly in the share of two-way traders. Only 6% of independent SMEs were two-way traders, against 64% of large enterprises and even 71% of independent SMEs with foreign subsidiaries. This demonstrates that independent SMEs with subsidiaries abroad may be more similar to large enterprises in terms of international activities than independent SMEs without a parent company or subsidiary abroad. Two-way traders are by definition the enterprises that are most strongly and directly interconnected in global value chains (Statistics Denmark & OECD, 2017). Two-way trade generally increases with the size of the enterprise (Van den Berg, 2013).

Ratio one-way importers and exporters varies in terms of enterprise size

The total percentage of enterprises that only export or import is comparable in the three groups. However, the ratio between one-way importers and one-way exporters varies. Around 19% of independent SMEs in the Dutch business economy only imported goods and/or services in 2020, compared to 20% of large enterprises and 16% of independent SMEs with foreign subsidiaries. For both independent SMEs with or without subsidiaries and large enterprises, 3% to 5% were one-way exporters.

5.2.3 Type of trader by enterprise size, 2020



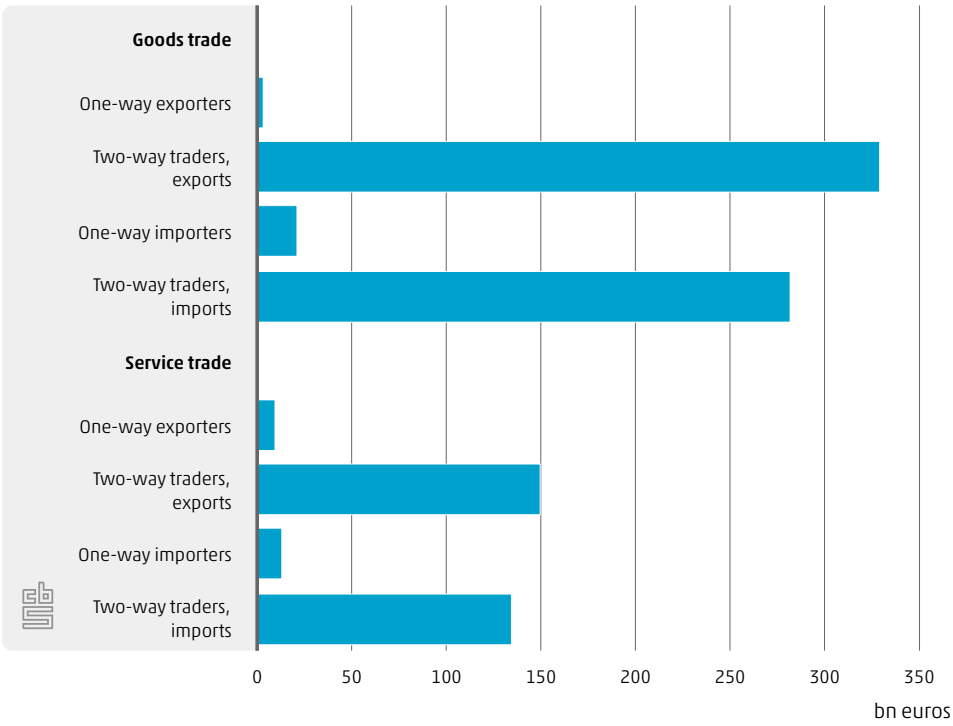
Large enterprises most frequently both importer and exporter

For both independent SMEs and large enterprises, the information and communication sector had relatively the most enterprises that were exclusively active in exports in 2020. There are major differences in the proportions of two-way traders between independent SMEs and large enterprises. For both the independent SMEs and the large enterprises, the manufacturing sector includes the most two-way traders in relative terms. For manufacturing enterprises in the large enterprise category, more than eight out of ten are two-way traders, while the share is around 15% for independent SMEs without subsidiaries abroad. In the independent SME group, most one-way importers are active in the wholesale and retail trade. The accommodation and food services top the charts among large enterprises, where seven out of ten large enterprises were one-way importers in 2020.

Small group of two-way traders representing majority export value

Figure 5.2.1 showed that two-way traders only represented a small portion (25%) of the internationally active enterprise population. However, if one looks at the value traded internationally by these enterprises, it is a multiple of the value traded by one-way exporters or one-way importers (Figure 5.2.4). Two-way traders turn out to account for more than 97% of the total export value for both goods and services and over 92% of the total import value.

5.2.4 Trade value by trading status, 2020



5.3 International traders in goods

This section specifically discusses enterprises that trade in goods internationally. It focuses both on the number of enterprises and the value they trade, and on the differences between the independent SMEs and large enterprises.

Both the export and import of goods recovered from a dip in 2020 and even experienced growth

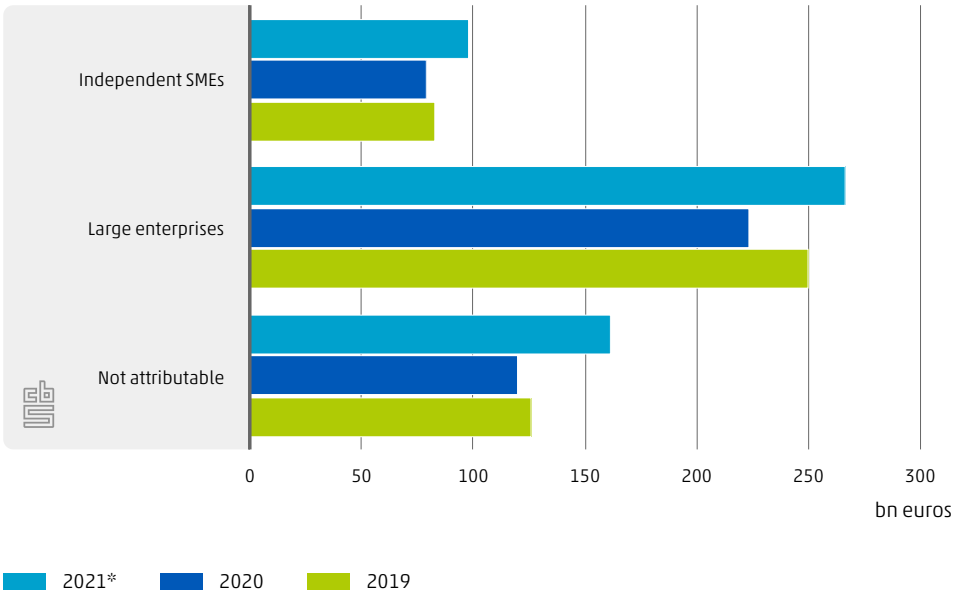
Imports of goods totalled €527 billion in 2021. This amounts to a 24% growth compared to 2020. The export value showed a similar growth, when the exports of goods totalled €587 billion in 2021.

The import value of large enterprises remains high, but rises less steeply

The value of goods imports of the Dutch business economy differs substantially in terms of enterprise size. Large enterprises imported goods worth over €267 billion in 2021. This was 2.7 times the aggregate value imported by independent SMEs. Both groups of enterprises experienced a recovery in the import value in 2021 compared to 2020. The growth in the import value of independent SMEs was higher as that of large enterprises, also compared to 2019.

One part of the exports cannot be attributed to independent SMEs or large enterprises. It mainly concerns trade by foreign enterprises that have a Dutch VAT number to report their international trade, but have no physical presence in the Netherlands in the form of, for example, a factory. This part of the exports also showed a growth in 2021.

5.3.1 Value of goods imports by enterprise size[1)]



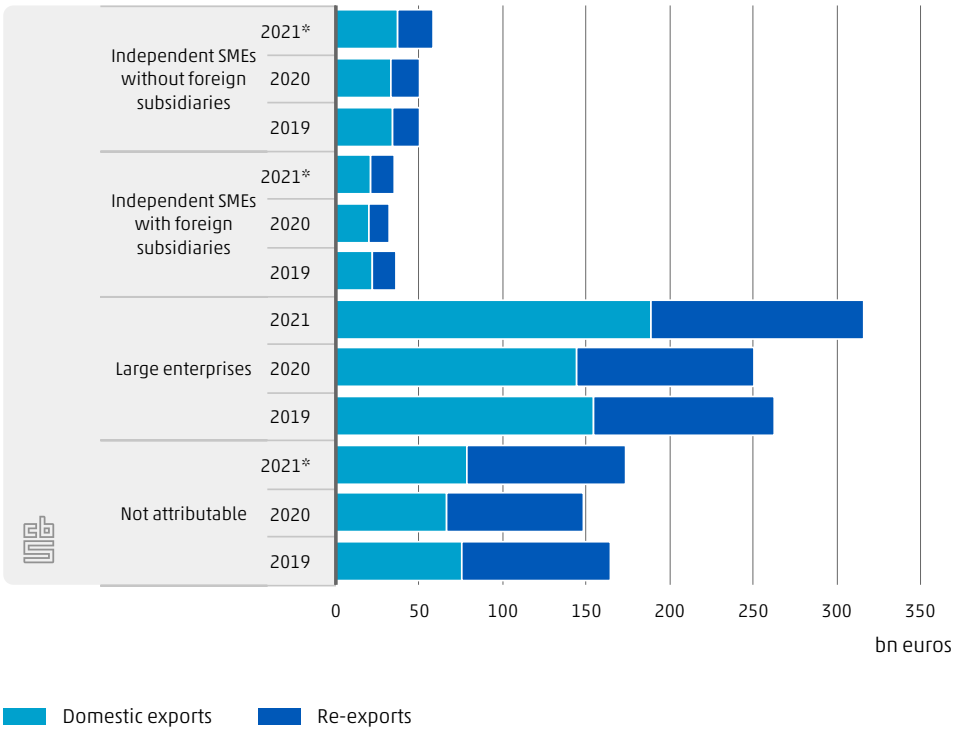
1) A part of the exports cannot be attributed to independent SMEs or large enterprises, because not all traders can be linked to the General Business Register (ABR).

Substantial growth in the large enterprises' export value of goods

The aggregate value of the goods exports of large enterprises in 2021 was about €317.5 billion, over three times as much as the export value of the independent SMEs (Figure 5.3.2). Academic literature also supports the fact that export value is more often concentrated in large enterprises (Bernard & Jensen, 1995; Bernard, 2004). This is partly explained by the fact that the marginal costs of exporting are often lower for large enterprises. Between 2019 and 2021, the export value of large enterprises increased twice as rapidly as that of independent SMEs. As with the import value, we see a dip in the export value of both types of enterprises in 2020, which is linked to the coronavirus pandemic, among other things.

Domestic exports represent the largest part of the total export value. The re-exports' share in the export value is about 40% and is comparable for the independent SMEs and large enterprises. Among independent SMEs, re-exports rose more sharply in 2021 than the domestic exports. This was the other way round for large enterprises.

5.3.2 Value of goods exports by enterprise size and type of exports[1)]



1) A part of the exports cannot be attributed to independent SMEs or large enterprises, because not all traders can be linked to the General Business Register (ABR).

Independent SMEs with foreign subsidiaries have higher goods exports on average

As the box in the previous section described, a small proportion of enterprises within the independent SME group has one or more subsidiaries abroad. These so-called Dutch multinationals are often two-way traders. This is linked to more international experience and better knowledge of international networks than independent SMEs that do not have any subsidiaries abroad. Chapter 8 elaborates on the role of multinationals in Dutch imports and exports.

Figure 5.3.2 shows that the total export value of the independent SMEs with foreign subsidiaries is smaller than that of the independent SMEs without foreign subsidiaries. However, as there are far fewer independent SMEs with foreign subsidiaries than without, the average trade value of the group with foreign subsidiaries is significantly higher. As an example, independent SMEs with foreign subsidiaries had an average goods export value of €8 million, compared to €0.6 million for independent SMEs without subsidiaries.

Goods exports in the manufacturing sector recovered from dip in 2020

Figure 5.3.3 shows that the Dutch goods exports are largely concentrated in two sectors: the wholesale and retail trade (42%) and manufacturing (40%). The goods exports of the manufacturing sector (€165.1 million) consist of 80% domestic goods. The re-exports were slightly higher for wholesale and retail trade (€92.1 million) than the domestic exports

(€82.7 million). The goods exports were up in 2021 in almost all sectors. The sharpest increase could be seen in the transportation and storage sector (77%).[4)]

5.3.3 Value of goods exports by sector

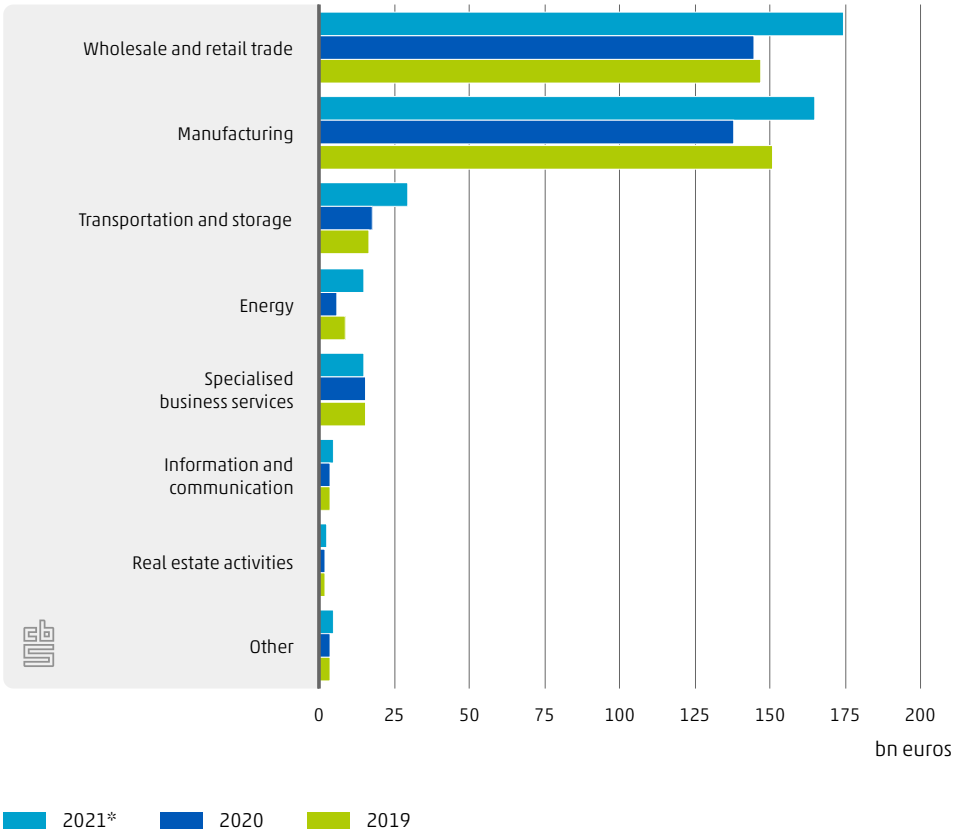
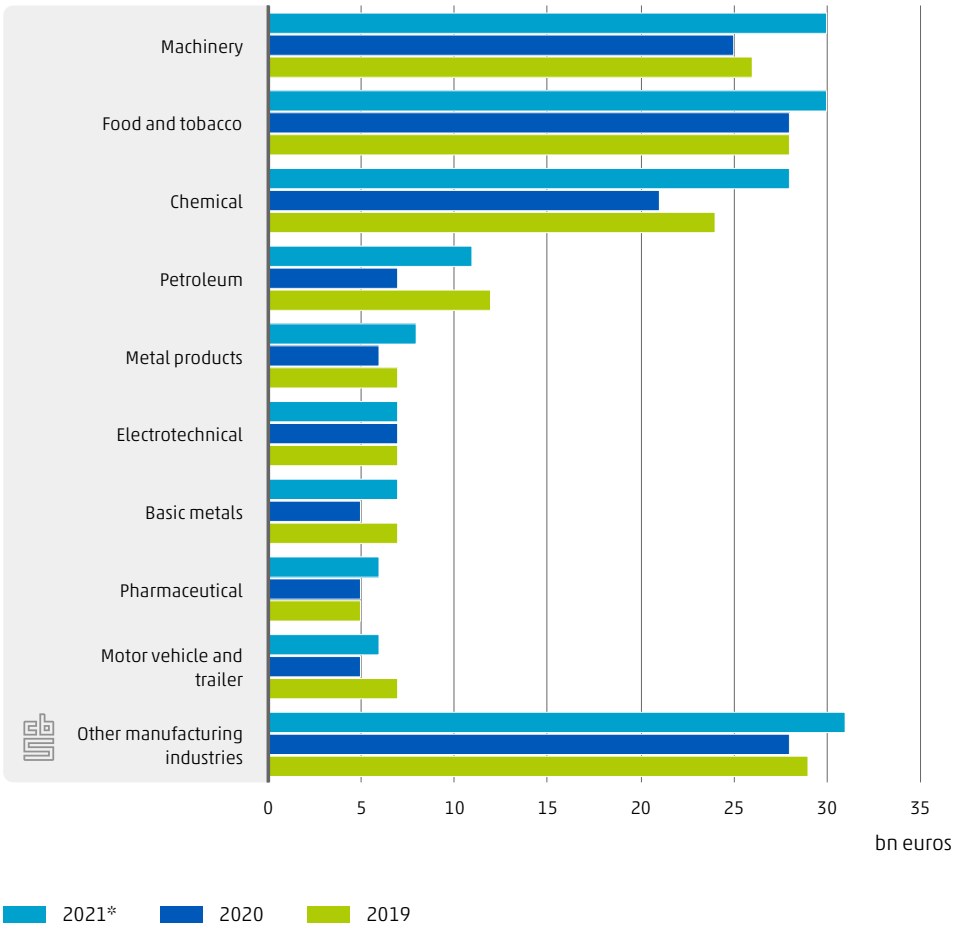


Figure 5.3.4 further splits the exports of manufacturing enterprises into the ten largest sectors in terms of export value. In 2021, the value of the goods exports of the manufacturing sector recovered from a dip in 2020. The steepest rise was in the petroleum industry (54%), which went hand in hand with the rise in prices of the products manufactured in this industry.[5)] Also the chemical industry (34%) and the metal products industry (29%) showed a relatively large growth in exports. Some relatively smaller industries within manufacturing (not shown in the figure) suffered a fall in goods exports. The exports in the tobacco products industry and the repair and installation of machinery and equipment industry, for example, saw their exports contract by 10% and 4% respectively. The export value of the clothing industry remained virtually unchanged.

4) The actual Dutch *earnings* from exports per sector are discussed in Chapter 6.
5) See CBS (2021a).

5.3.4 Value of goods exports by top 10 manufacturing industries

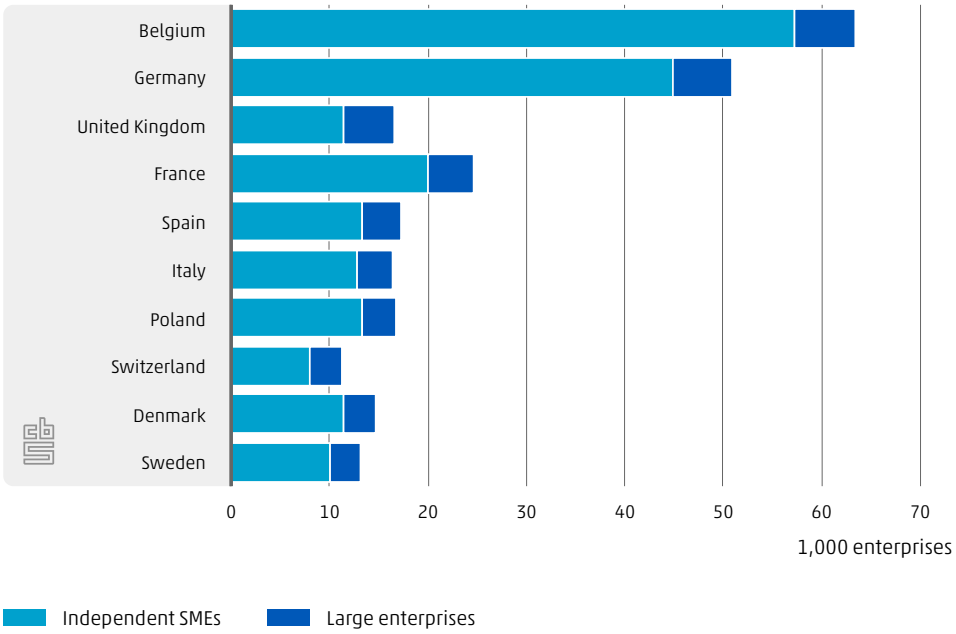


Average export value per enterprise to Germany remains high

Figure 5.3.5 shows the main countries to which Dutch exporters supply goods. Belgium and Germany are important trading partners, both for exporters among the independent SMEs and the large enterprises. Although Germany is the largest export destination for Dutch goods in terms of value, considerably more exporters are trading with Belgium.

In total, over 63,500 exporters exported goods to Belgium in 2021, of which 10% were large enterprises. Exports to Germany, on the other hand, were carried out by some 51,000 exporters, of which 12% were large enterprises.

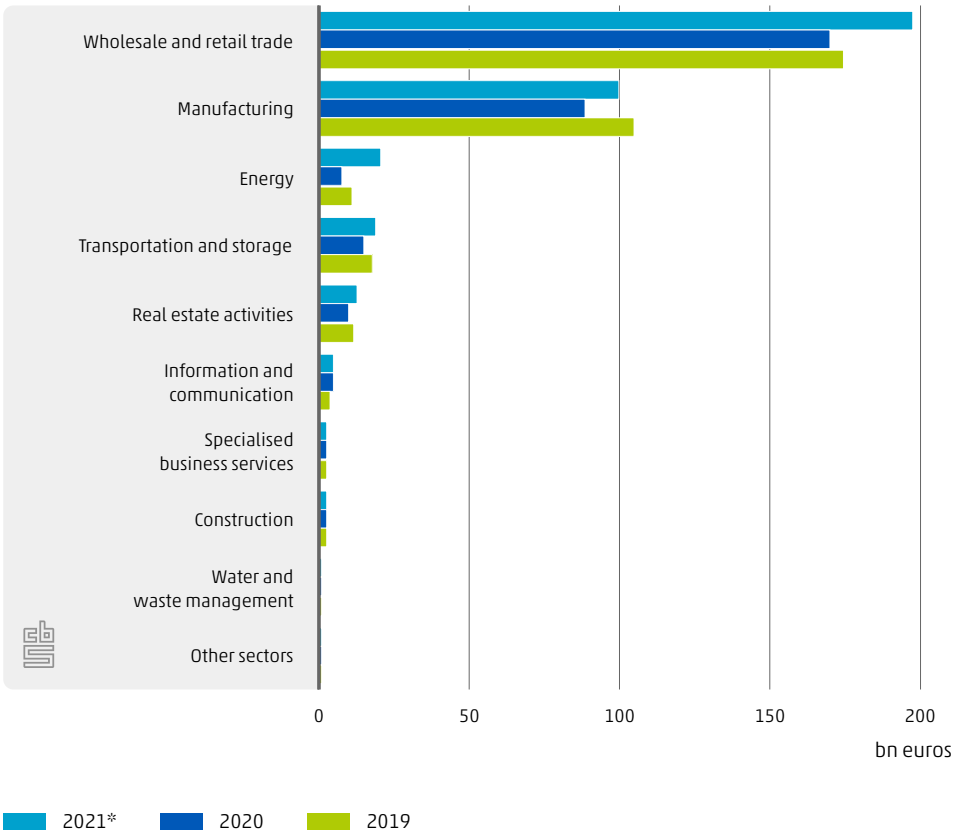
5.3.5 Exporting enterprises by main trading partners (based on export value), 2021*



Import value of most sectors recovered from a decline in 2020

The manufacturing and wholesale and retail trade sectors were also leading in the import of goods. As with exports, following a decline in 2020, the value of imports increased in most sectors in 2021. The largest growth was recorded in the energy industry (180%).

5.3.6 Value of goods imports by top 10 sectors



5.4 International traders in services

Less importers of services; number of exporters stable

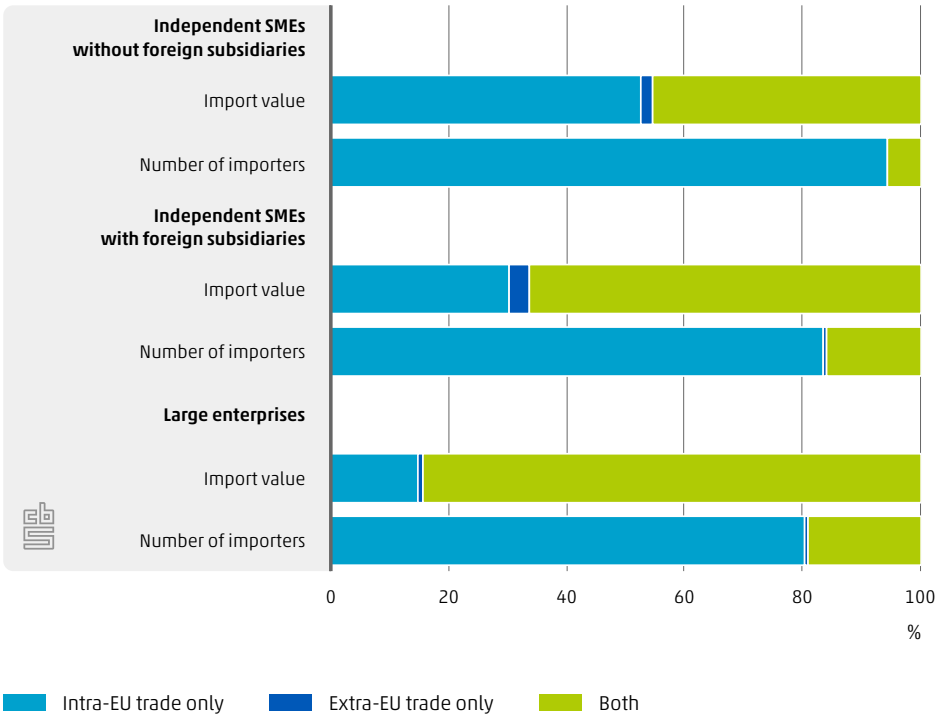
In 2020, there were 75,000 exporters and 236,000 importers of services.[6)] The coronavirus crisis weighed heavily on the import of services. The number of trading enterprises that imported services declined by 17% compared to 2019. However, the number of exporters of services remained virtually unchanged during that period. The decline in the number of internationally active service providers was only observed in the most recent year (2020). The number of trading enterprises that exported services was still 23% larger in 2020 compared to 2015. The number of service importers increased by 7% during that period.

6) The figures in this section relate to the number of Dutch enterprises with international service trade (see also Chapter 4 on international trade in services). To that end, the international trade in services was linked to all business units listed in the General Business Register (ABR) for the year in question. As not all international service trade can be linked to an enterprise registered in the ABR, the total figures are lower than the value of service trade in Chapter 4, and lower than reported on StatLine. For example, services provided or received by individuals (e.g. travel services), government organisations or multinationals' financial flows are not included in the service trade in this section.

More than 9 out of 10 importers of services are among the independent SMEs

Figure 5.4.1 shows the import value and export value of services and the number of importers and exporters. Of almost 236,000 trading enterprises that imported services in 2020, 92% were operating as independent SMEs, 5% were large enterprises and 3% were independent SMEs with foreign subsidiaries. The bulk of the trading enterprises that imported services only imported services from other EU countries (93%). Among large enterprises, the share of enterprises that only, or also, traded in services outside the EU was significantly higher (20%) than among independent SMEs (6%).

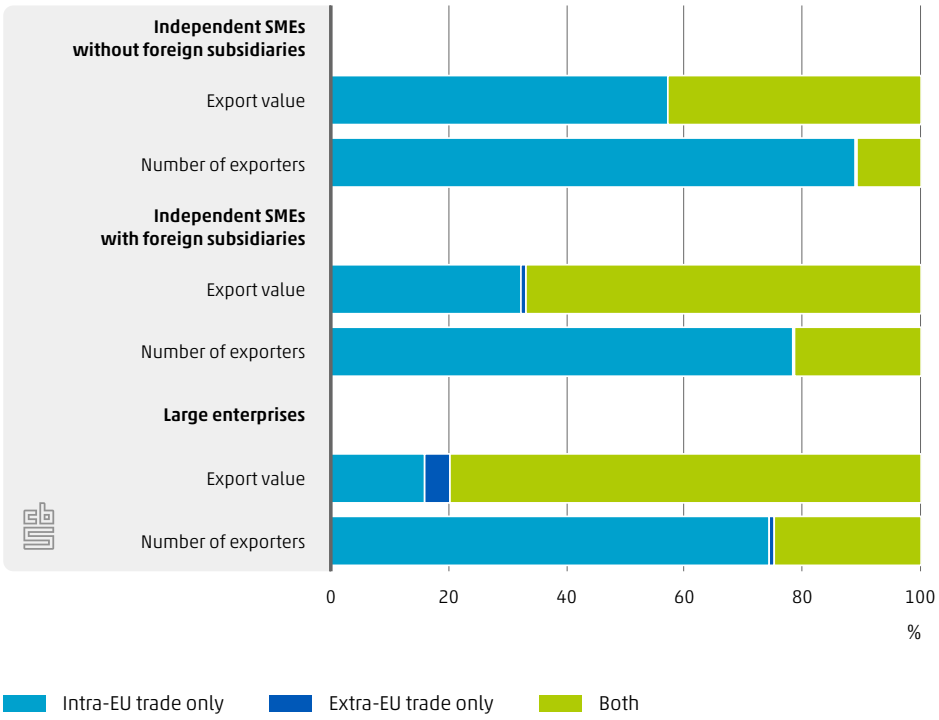
5.4.1 Intra-EU and extra-EU service imports by enterprise size, 2020*



Export of services to other EU countries

The 75,000 Dutch enterprises that exported services mostly did so exclusively within the EU, similar to the import of services. Of the exporters of services, 85% belonged to independent SMEs and 10% to large enterprises (Figure 5.4.2). Of the trading enterprises engaged in the export of services, 87% only exported to other countries within the EU, while 12% exported both in and outside the EU. At 25% and 22%, the percentage of large enterprises and independent SMEs with foreign subsidiaries that also exported services outside the EU was higher than the percentage among the independent SMEs without foreign subsidiaries (11%).

5.4.2 Intra-EU and extra-EU service exports by enterprise size, 2020*



Decline in export value in 2020 despite similar number of exporters of services

In 2020, the Dutch business economy exported €149 billion in services and imported €160 billion in services. A total of 75,000 enterprises were responsible for the aggregate value in exports, which is 161,000 less than for the total import value. This demonstrates that, as in previous years, the average traded value per enterprise is many times higher for exporters than importers. However, the total export value in 2020 was in fact 4% lower than in 2019. As, despite the coronavirus crisis between 2019 and 2020, the number of exporters of services more or less remained the same, this means that the average export value per enterprise was lower. The import value fell by 6% in 2020, which is a sharper decline than for the export value, though relatively less steep than that of the number of importers (17% less in 2020).

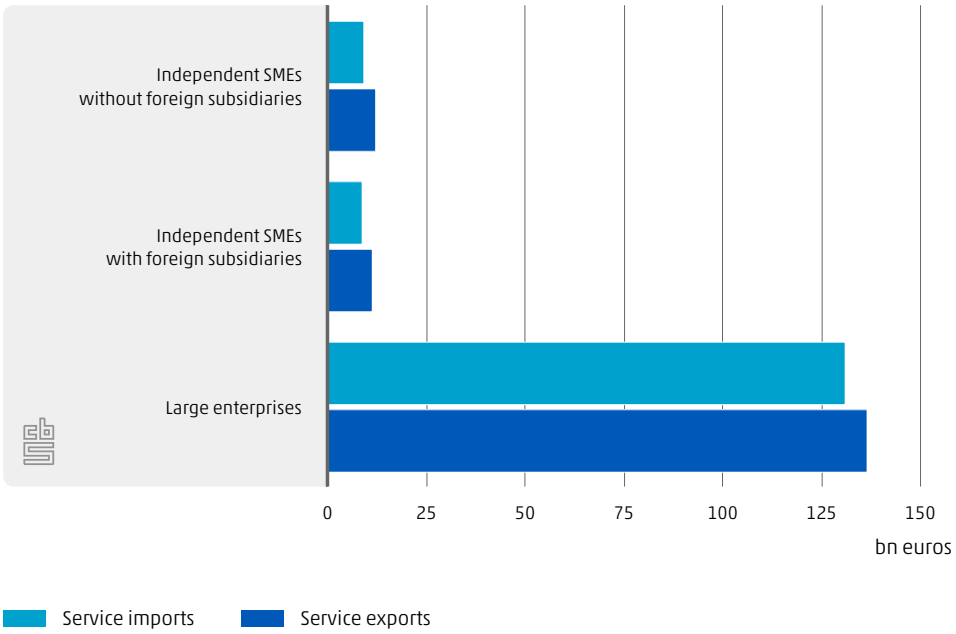
Looking at a somewhat longer period, it appears that the trade in services is still on the rise. Total export value of services of the Dutch business economy rose by 32% between 2015 and 2020. The import value increased by 30%.

Large enterprises representing bulk of the value of the trade in services

Figure 5.4.3 shows that independent SMEs with and without subsidiaries abroad have been importing and exporting a similar value in services in 2020. This is striking since the number of enterprises with foreign subsidiaries trading in services is only a fraction of the number of trading enterprises without foreign subsidiaries. By contrast, the aggregate value of the

imports and exports of large enterprises is many times greater. Over 85% of the total trade value is accounted for by large enterprises. 12,500 large enterprises imported services totalling €131 billion and 7,600 large enterprises exported services with an aggregate value of almost €137 billion.

5.4.3 Value of service imports and exports by enterprise size, 2020*



Average trading value of large enterprises many times that of independent SMEs

The large difference becomes even more apparent when calculating the average import and export value of the trade in services. The average import value for independent SMEs was €40,000 in 2020. Independent SMEs with foreign subsidiaries imported on average over 35 times as much: €1.5 million. The average import value of large enterprises, at €10.5 million, was even greater by a factor of seven. As stated above, the average export value of enterprises that export services is considerably higher, but even there, the differences between the three types of enterprises are substantial. Independent SMEs without foreign subsidiaries exported for an average of €270,000, independent SME exporters with subsidiaries across the border exported for an amount of €32 million and large enterprises for six times that amount: an average of €192 million.

€10.5 million in services imported by large enterprises on average

This illustrates which business types are most important for service trade in the Netherlands. Large enterprises carry a huge weight: 5% of the trading enterprises engaged in importing activities account for 88% of the import value and 10% of the exporters are responsible for 85% of the total export value. Ultimately, both independent SMEs and Dutch large enterprises are net exporters of services: the average export value is several times higher than the average import value for these three groups. This particularly applies to the independent SMEs with no foreign subsidiaries. An average enterprise of this type exports 4.5 times as much in terms of value as it imports.

Independent SMEs that trade with EU countries account for a substantial part of the value

Trading enterprises that import services do so mainly exclusively from countries within the EU (92%). However, trading enterprises that only import from EU countries only represent 20% of the total value of the import of services. Those 8% enterprises that trade in services both in and outside the EU, imported over 80% of the total value of importedservices in 2020. Figure 5.4.1 had already previously shown that the bulk of both independent SMEs and large enterprises only imports services from other EU countries. That same figure also shows that within the independent SME group, those enterprises that exclusively import from the EU (94%) accounted for more than half of all import value. On the other hand, 80% of the large enterprises that only import from the EU contributed a mere 15% to the import value. Among large enterprises, it is mainly those that import from countries outside the EU that contribute to the total import value. This also applies to the independent SMEs with foreign subsidiaries.

High concentration of export of services among small group of traders

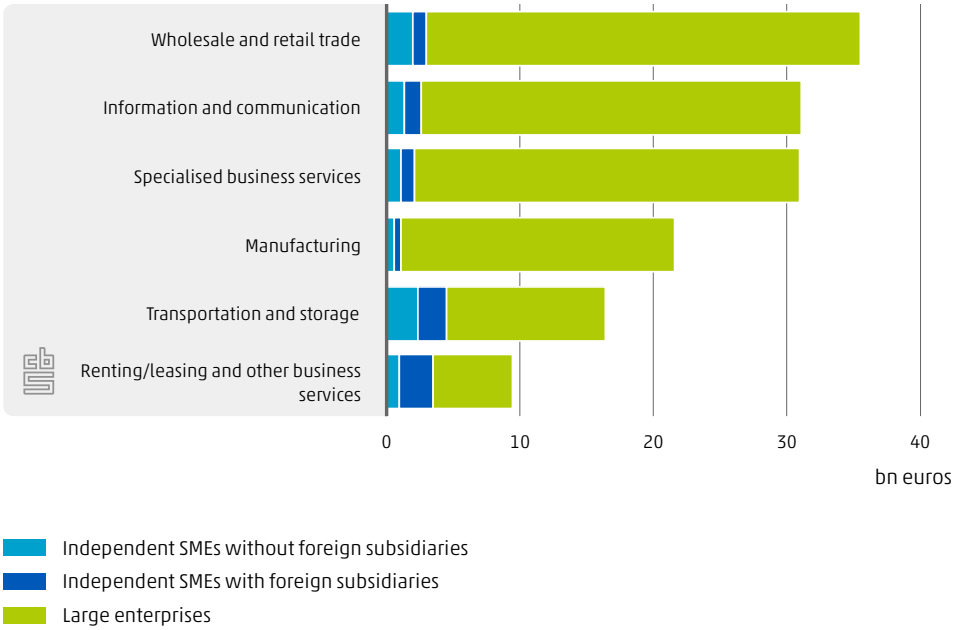
A similar situation applies to the value of the export of services (Figure 5.4.2). More that 85% of the enterprises that export services represent 'only' 30% of the export value. Approximately 13% of the enterprises that export services both within and outside the EU account for more than three quarters of the total value.

The ratio within the different business types is comparable to imports. Among the independent SME group, more than 55% of the export value is accounted for by enterprises that exclusively export services to other EU countries, while large enterprises that export both within and outside the EU make a substantial contribution to the total export of services. A subtle difference towards enterprises that import services is that the share of enterprises that only export services within the EU is slightly smaller. At the same time, the value that this group adds to the total export value is slightly higher than that of the import of services, relatively speaking. Exporting services exclusively to EU countries is thus slightly more important for the total export value than importing exclusively from EU countries is for the total import value. Nonetheless, the fact remains that a small proportion of the total business economy, i.e. the large enterprises that trade in services both in and outside the EU, is responsible for a significant part of the total value of the trade in services.

Highest import value for large enterprises in wholesale and retail trade

The import of services by enterprises in the wholesale and retail sector had the highest value at €35.6 billion in 2020 (Figure 5.4.4). With 91%, the large enterprises contribute substantially to this sector's total value. With regard to the import of services by manufacturing enterprises, large enterprises even exceed this share. In that sector, €20.5 billion of the €21.6 billion (95%) is imported by large enterprises and only a mere 3% is imported by the independent SMEs. Among the larger sectors, the transportation and storage sector is an exception to this pattern. In this sector, independent SMEs represent 15% of the total import of services. In the construction sector, the share is even slightly higher at 20%, but the aggregate value is significantly lower than in the other sectors (€1.7 billion).

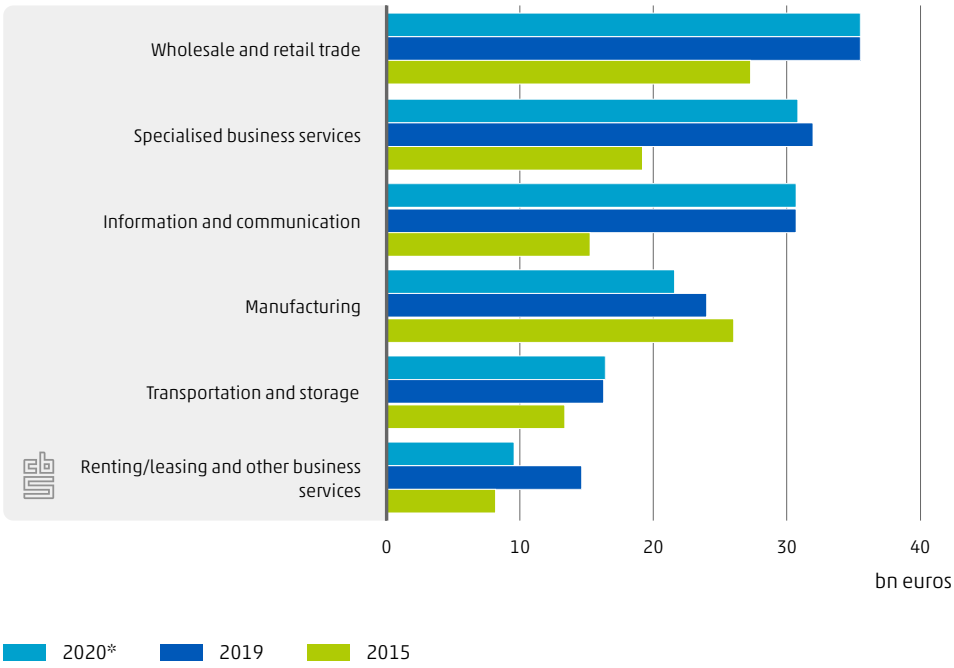
5.4.4 Value of service imports by sector and enterprise size, 2020*



Slight increase for the information and communication's import value in 2020

In 2020, the Dutch business economy's total import of services was dealt a heavy blow by the coronavirus crisis. In 2020, imports were over 6% lower than in 2019, whereas in previous years there had actually been an upward trend. In 2020, the total import value of services was however still 30% higher than in 2015. Figure 5.4.5 shows that the import of services in wholesale and retail trade, manufacturing and business services had fallen compared to 2019, while the information and communication sector had risen by 1%. ICT services thus proved better equipped against the restrictions that had been imposed and the lockdowns implemented to curb the coronavirus crisis. The slight increase in import value in this industry is attributable to a growth in the trade with countries outside the EU. In 2020, the ICT industry imported less value in terms of services from EU countries than in 2019.

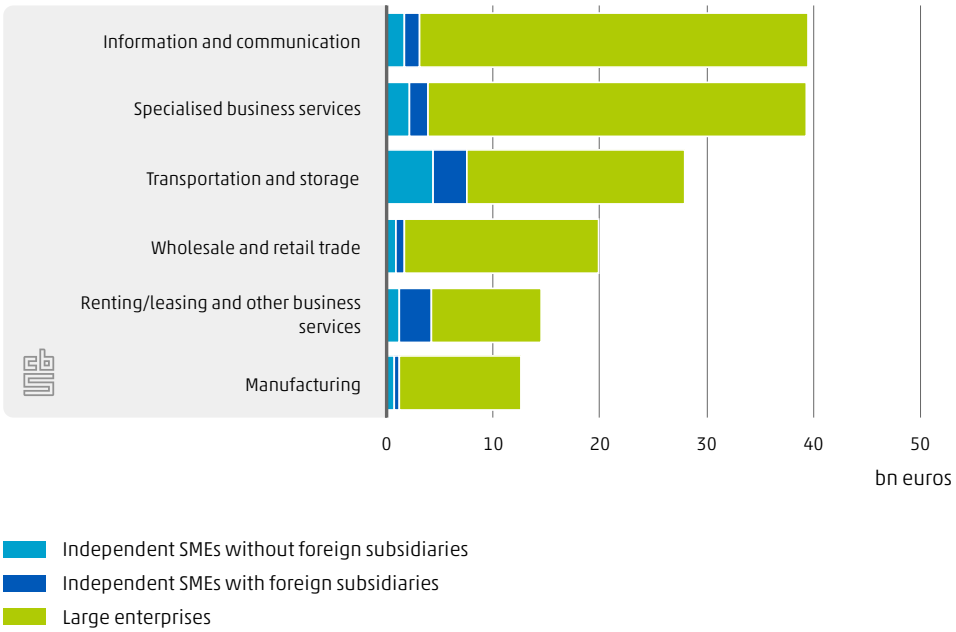
5.4.5 Development of import value services, top 6 sectors



Independent SMEs account for large share of total export value of transport sector

The information and communication sector and the specialised business services sector had by far the highest exports of services in 2020 (Figure 5.4.6). In both sectors, enterprises exported about €39.5 billion worth in services. Large enterprises achieved over 90% and independent SMEs without foreign subsidiaries only 5%. In the transportation and storage sector, the independent SMEs were responsible for a relatively large part of the total export value: independent SMEs without foreign subsidiaries accounted for 16% and independent SMEs with foreign subsidiaries accounted for 12% of the total export value.

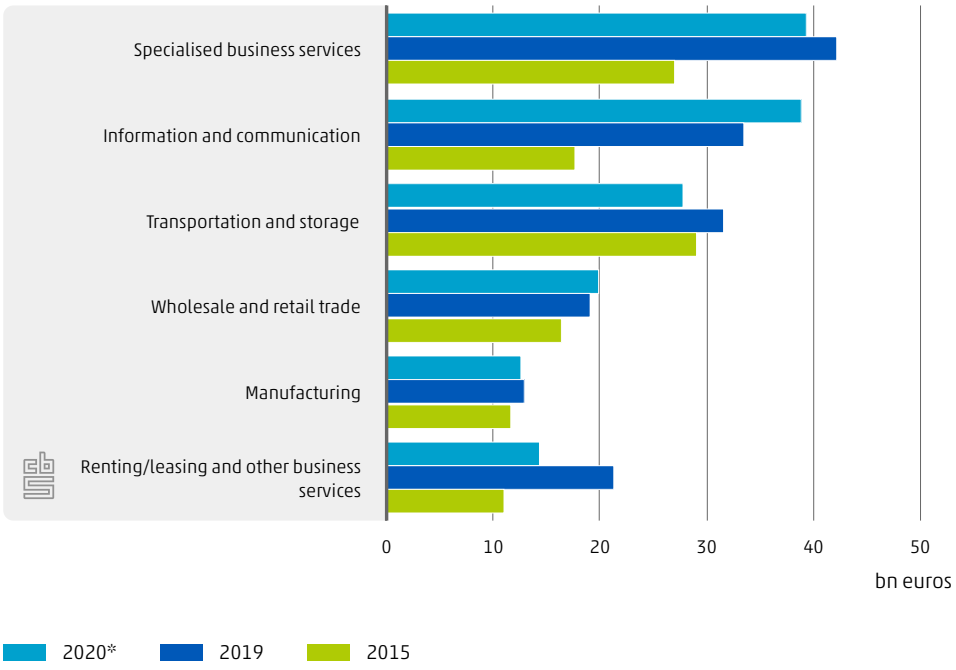
5.4.6 Value of service exports by sector and enterprise size, 2020*



Export value in ICT services continues to be strong in 2020

The total export value of services in the Dutch business economy declined by 4% in 2020 relative to 2019, which, compared to five years earlier, is still 32% higher. As in 2019, the export value was highest in business services (Figure 5.4.7). Owing to a 16% growth in the export value of the information and communication sector, the difference was only €0.4 billion in 2020. The ICT industry's export value from other EU countries has particularly increased compared to 2019 (up 20%). In the wholesale and retail trade, too, the export value in services increased in 2020. The export value of the transportation and storage sector fell in 2020 and is the only sector which export value is at an even lower value than in 2015.

5.4.7 Development of export value services, top 6 sectors

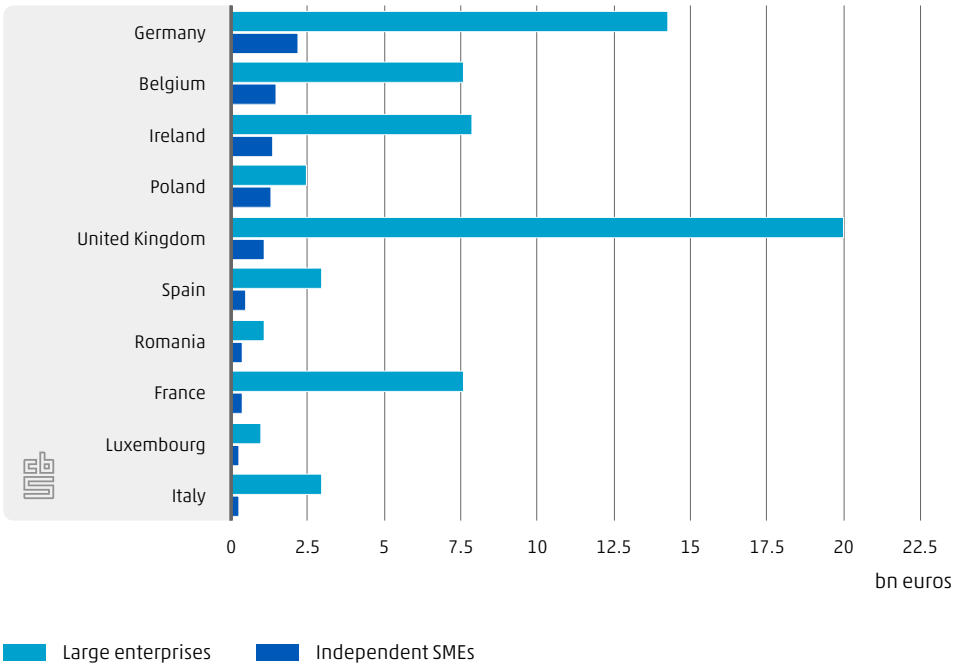


Neighbouring countries main source of services for independent SMEs

In 2020, Belgium and Germany were the main origin countries of the import of services for the Dutch independent SMEs (Figure 5.4.8). This group of enterprises imported €2.2 billion worth of services from Germany and over €1.5 billion worth of services from Belgium. Ireland ranked third. If we also look at the large enterprises, we see that the United Kingdom is a big player. In 2020, large enterprises imported nearly €20 billion worth of services from the UK, by far the largest trade value of all EU countries.

Although Belgium and Germany represent the most value in terms of the import of services for the independent SMEs, these are not the countries from which the highest proportion of enterprises import services. That list is headed by Ireland. More than 120,000 independent SMEs imported services from Ireland. This is mainly due to the fact that many tech enterprises are situated in Ireland, where Dutch enterprises purchase a small amount of (advertising) services in order to improve their business operations. For the independent SMEs, Germany and Belgium follow Ireland as countries from which the highest proportion of enterprises import services. Only about 500 large enterprises each imported an average of over €40 million worth of services from the United Kingdom in 2020.

5.4.8 Import value per EU country, 2020*

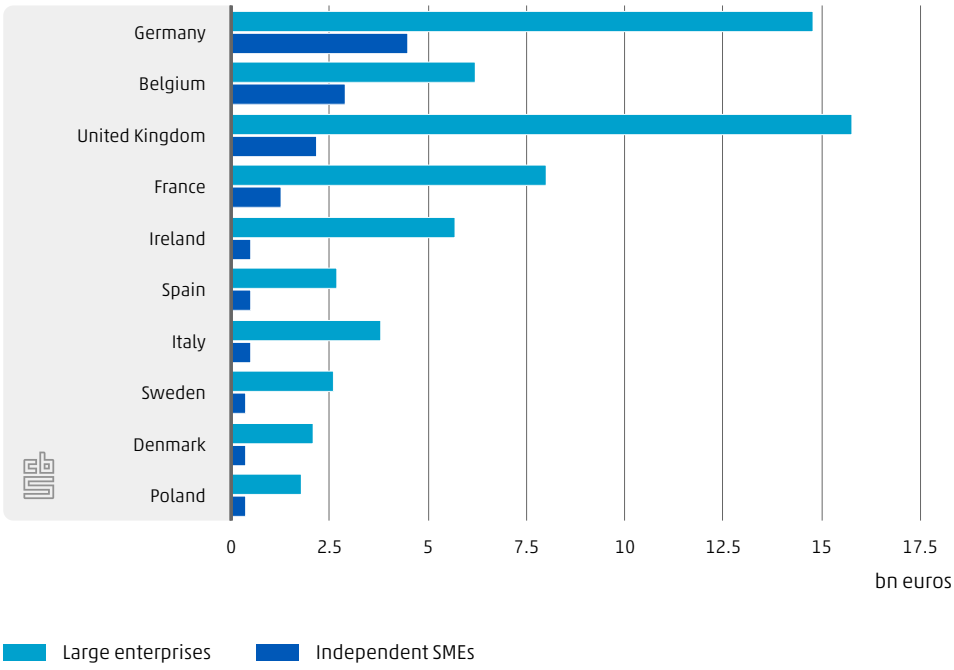


Large enterprises export most to Germany and the UK

As with the import of services, Belgium and Germany are the most important destination countries for Dutch services provided by independent SMEs. Independent SMEs exported services worth €4.5 billion to Germany and almost €3 billion to Belgium. In third and fourth place were the United Kingdom and France, respectively. The contrast between the trade value of large enterprises and independent SMEs is less striking for the export value than for the import value. Still, the large enterprises exported services over seven times as much to the UK as the independent SMEs. Exports to the United Kingdom, like imports of services, are therefore mainly a matter for large enterprises. In addition, the large enterprises' export value of €15 billion to Germany is also relatively high.

In 2020, there were nearly 30,000 independent SMEs that exported services to Belgium. On average, Dutch enterprises among the independent SMEs exported a larger amount to Germany: €176,000 per enterprise compared to nearly €100,000 to Belgium.
The 35,000 large enterprises that exported services to the UK did so for an average of €4.5 million.

5.4.9 Export value per EU country, 2020*



5.5 Dynamics of exporters

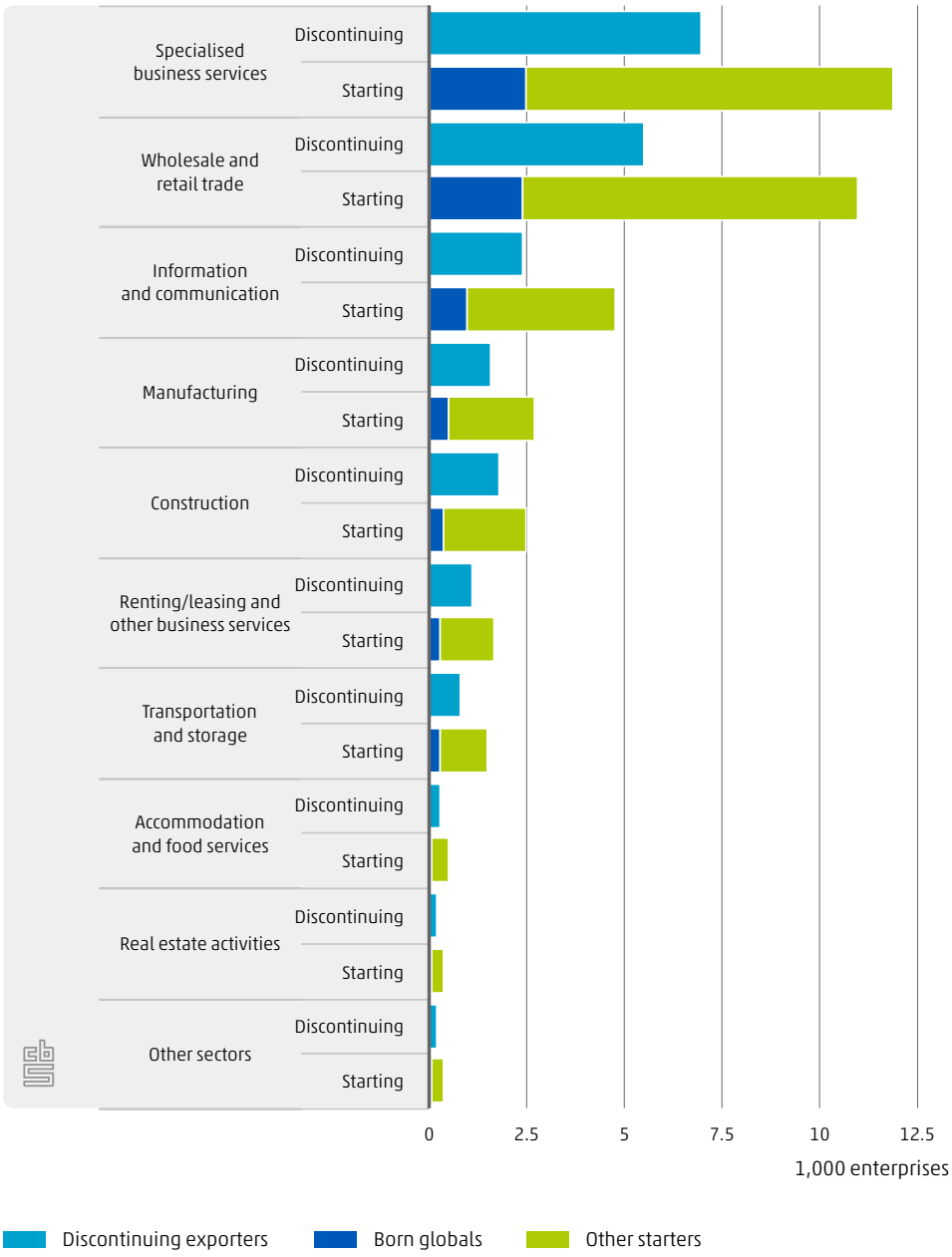
The group of enterprises that export goods or services abroad is extremely diverse and subject to strong dynamic forces. Every year, there are new arrivals and there are also enterprises that, voluntarily or out of necessity, close their doors to international trade.

In 2020, more than 37,000 enterprises started exporting goods or services abroad[7], 3,000 less than in 2019. Especially the number of starting exporters of goods fell sharply. The number of starting exporters of services, on the other hand, remained roughly the same. Reasons to start exporting may, for example, be because they received orders from abroad, the domestic market became too small or they were driven by the competition to start exporting (CBS, 2019a). Conversely, nearly 21,000 enterprises withdrew from the international market as exporters in 2020, 2,500 more than in the previous year.[8]

Wholesale and retail trade and the specialised business services are the two sectors in which most enterprises started exporting (Figure 5.5.1). These are also the sectors that have the most exporters in the total number of international traders. As a proportion of the total number of exporters, the largest number of starting exporters was in the accommodation and food services sector (47%) and the renting, buying, selling real estate sector (40%). At 16%, the share was lowest in the manufacturing sector. The largest proportion of discontinuing exporters was in the accommodation and food services sector (30%). Compared to the previous year, 13% more enterprises stopped exporting in 2020.

7) A starting exporter is an enterprise that exported goods and/or services in 2020, but did not engage in exports (yet) in 2019 or in 2018, regardless of whether the enterprise already existed in those years.
8) A discontinuing exporter is an enterprise that did not export goods or services in 2020 or in 2019, but that did do so in 2018. The enterprise must still have been in existence in 2020 in order to be listed as a discontinuing exporter.

5.5.1 Dynamics of exporters by sector, 2020



One in five new exporters is a born global

For many enterprises, internationalisation is seen as a gradual process, taking the step to expand the scope of their international activities only after having reached a certain level of development in the domestic market (Lopez et al., 2009; Sui & Baum, 2014). However, some enterprises start exporting goods or services as early as within the year of being founded. Such exporters are known as born globals. Born globals are characterised by their ability to overcome the initial barriers associated with entering foreign markets without first establishing a strong presence in their home market (Ferguson et al., 2021). Compared with the average start-up, born globals have on average more destination countries and have a higher export value. Also, the trade value of born globals generally grows faster in the years

following their entry into the export market and they have a better chance of survival than other starting exporters (Cremers et al., 2019).

In 2020, there were nearly 7,500 of these types of born globals, 20% of the total number of enterprises that started exporting activities. This was still 500 more one year earlier and born globals were then still representing a quarter of the number of starting exporters. Thus, in 2020, the number of born globals fell for the first time since 2014.

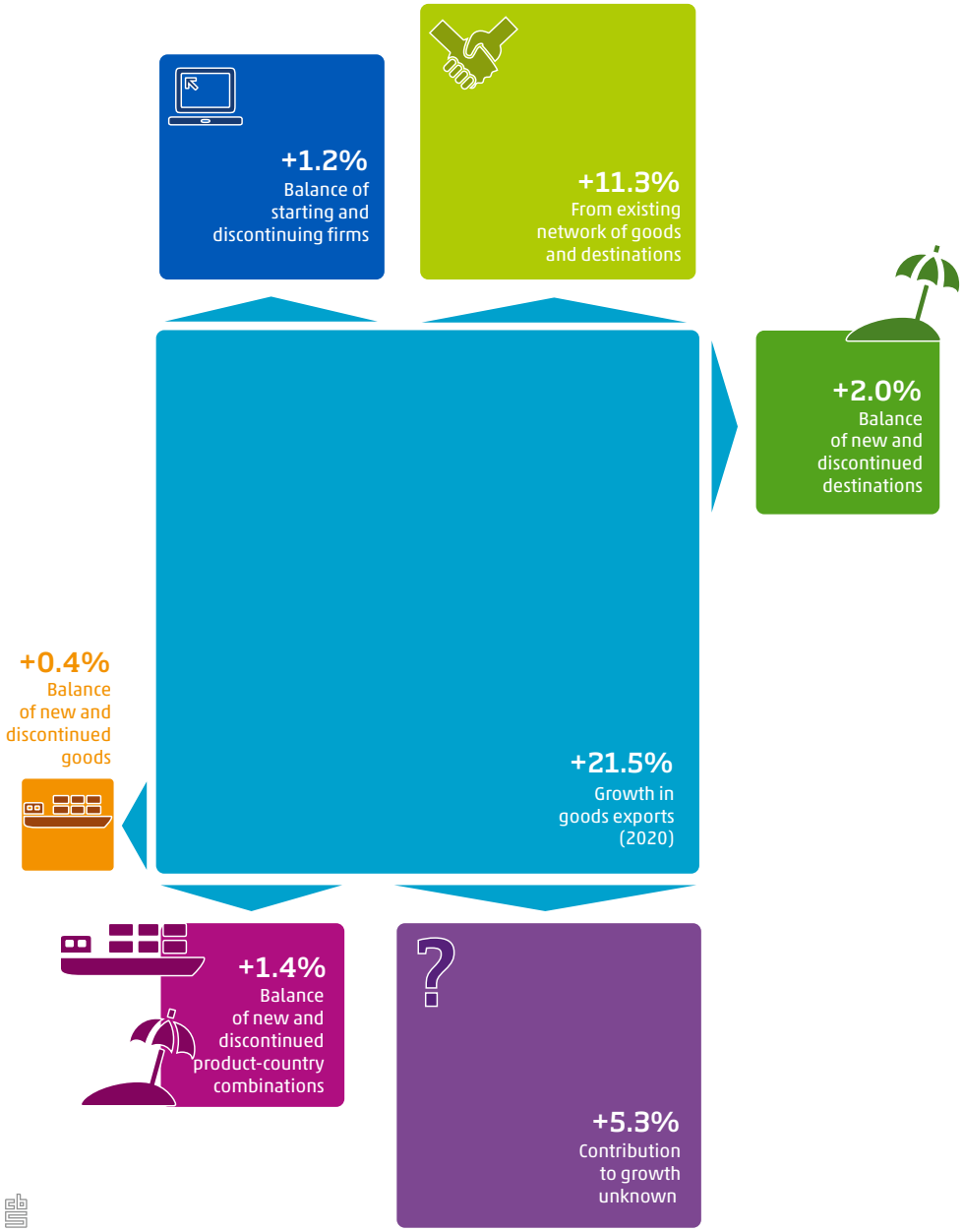
In terms of industry, born globals were most often active in specialised business services (2,465) and in wholesale and retail trade (2,380). As many as two out of three enterprises that started exporting in the year they were founded were active in one of these two sectors in 2020. In absolute terms, born globals were also quite prominent in information and communication activities (1,045). Also in relative terms, there are many born globals in these three sectors, about 21% of the total number of starting exporters. These types of enterprises are rarest in the accommodation and food services sector (13% of the starting exporters).

Existing products and countries vital for export growth

Previous chapters showed that the export of goods in 2021 rose by 21.5% compared to 2020. However, what part of this growth is explained by starting exporters? What part results from enterprises exporting new products or tapping into new destination countries? Or could it better be explained by the increase of the exports of existing products to existing destinations?

The infographic below shows that enterprises can generate growth or decline in exports in various ways. Enterprises that started exporting for the first time created a 2.0% growth in goods exports, while those that stopped exporting altogether caused a 0.8% contraction. On balance, there was thus a 1.2% export growth. The difference in the export of goods on account of enterprises starting or discontinuing their exporting activities is also referred to as the extensive margin.

Growth in goods exports, 2020



However, the strongest growth in the export of goods took place along the intensive margin, i.e. as existing exporters exported more of their products to existing destinations and thus increasing their sales to established customers. This was a 20.8% growth in 2021, which was offset by a 9.5% decline in exports by enterprises for which this type of trade was just beginning to decrease. On balance, there was thus a 11.3% export growth along the intensive margin.

Another aspect of the intensive margin is that there can be one new (or discontinued) dimension. The export of goods rose by 7.6% on account of enterprises that exported existing products to a new destination country, and contracted by 5.6% due to discontinued destinations. On balance this comes down to a 2.0% increase. New products to existing destinations resulted in an export growth of 0.7%, compared to a decline of 0.3% due to discontinued products. On balance, this results in a 0.4% growth. New or discontinued

combinations of products and destinations resulted, on balance, in another 1.4% export growth in 2020.

Not all goods trade can be assigned to individual enterprises. The part that cannot be linked mainly concerns the re-exports by foreign enterprises that have a Dutch VAT number to report their trade, but have no significant physical presence in the Netherlands in the form of, for example, a factory with employees. These are mostly large enterprises that distribute their goods via the Netherlands across Europe. This unknown group's share of growth was 5.3%. Adding up all the growth balances ultimately results in a 21.5% growth in goods exports in 2021 compared to 2020.

5.6 International traders highlighted

This section looks in more detail at the entrepreneurs behind international traders.[9), 10)] In the Dutch business economy, a total of approximately 411,000 entrepreneurs headed an enterprise in 2020 that trades internationally in goods and/or services. Around 30% of all entrepreneurs in the Dutch business economy were thus international traders. This represents a decline of 4 percentage points from 2019, when 34% of the entrepreneurs were international traders. In total, there were approximately 38,000 fewer entrepreneurs trading internationally in 2020 than in 2019. Three sectors accounted for 65% of this decline: the specialised business services sector (–12,600), the wholesale and retail trade sector (–6,700) and the ICT industry (–4,900).

31% of female entrepreneurs trade internationally

As in 2018 and 2019, approximately 27% of internationally trading entrepreneurs were women. The share of female entrepreneurs is therefore one percentage point higher than for the group of entrepreneurs in the Dutch business economy who are not trading internationally. The likelihood of an entrepreneur trading internationally does not therefore appear to be strongly dependent on sex. This is also illustrated in Figure 5.6.1; of all male entrepreneurs in 2020, about 30% were trading internationally, while the share among women was 31%. The fall in the share of international traders in 2020 compared to 2019 is striking and is attributed to an absolute decrease in the population of international traders, possibly due to the coronavirus crisis.

9) Entrepreneurs are people carrying out work on their own account or at their own risk in their own business or practice (independent entrepreneurs), or are owners of an enterprise and employed by the enterprise as director (owner-managers). At present, about 250,000 enterprises in the Netherlands cannot be linked to an entrepreneur (half of the number of enterprises with legal personality).

10) Previous editions of Dutch Trade in Facts and Figures made use of a lower threshold of €5,000 to qualify as an international trader. This is no longer applied in this edition.

If we differentiate the previously shown decrease of 38,000 internationally trading entrepreneurs according to sex, we count 10,200 fewer internationally trading female entrepreneurs in 2020, especially in the specialised business services sector (–4,500) and the wholesale and retail trade (–2,900). The male group dropped by a total of 27,300, with the largest decline in the specialised business services sector and the ICT industry.

5.6.1 Share of male and female entrepreneurs trading internationally

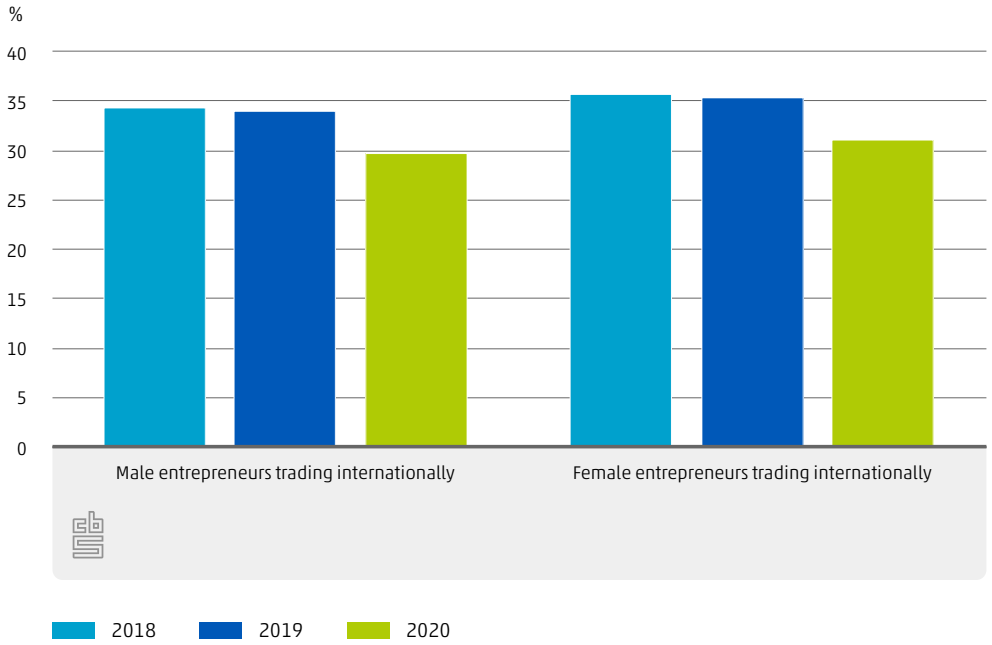


Figure 5.6.2 shows that there are differences in the sectors in which male and female entrepreneurs trade internationally. For both men and women, the majority are internationally active in wholesale and retail trade. As previously discussed, this sector frequently acts as an intermediate link in the national and international supply chains of enterprises. More than 38% of female entrepreneurs trading internationally were in wholesale and retail trade in 2020, compared to 32% of male entrepreneurs. The specialised business services sector ranks second; 30% of internationally trading women and 22% of internationally trading men operate in this sector.

5.6.2 Share of entrepreneurs trading internationally per sector, 2020

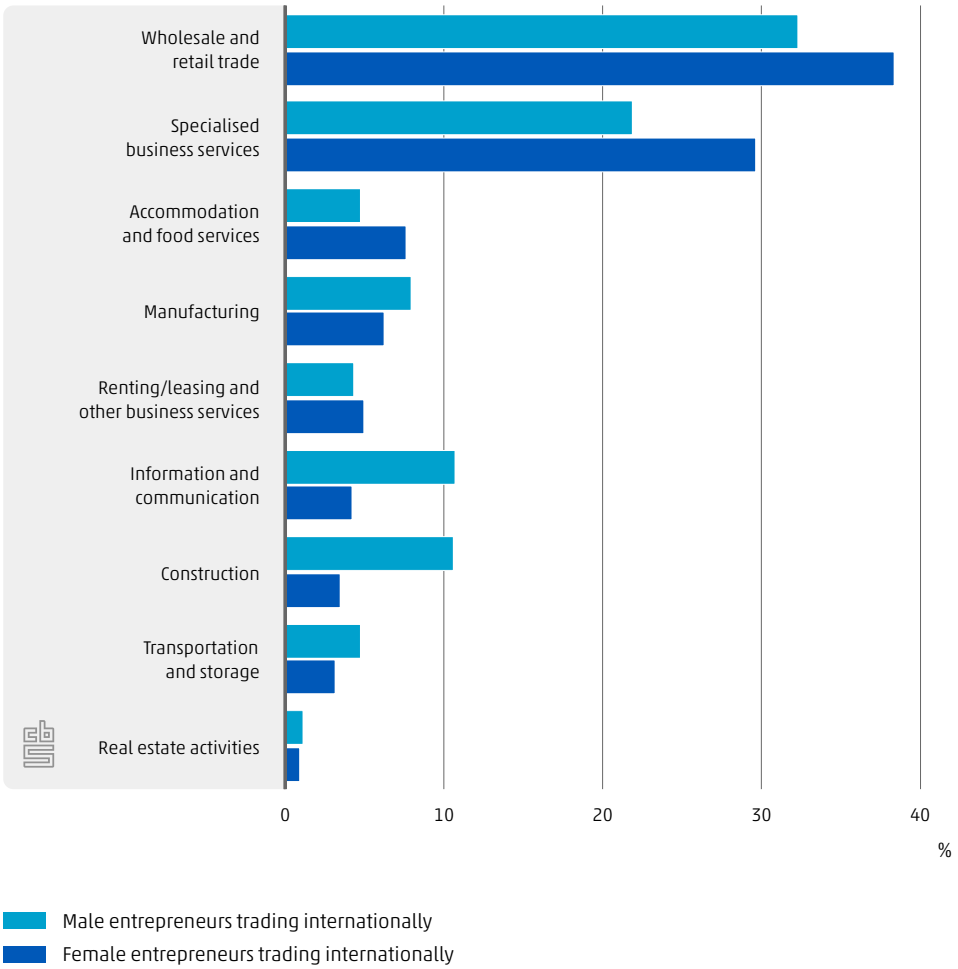
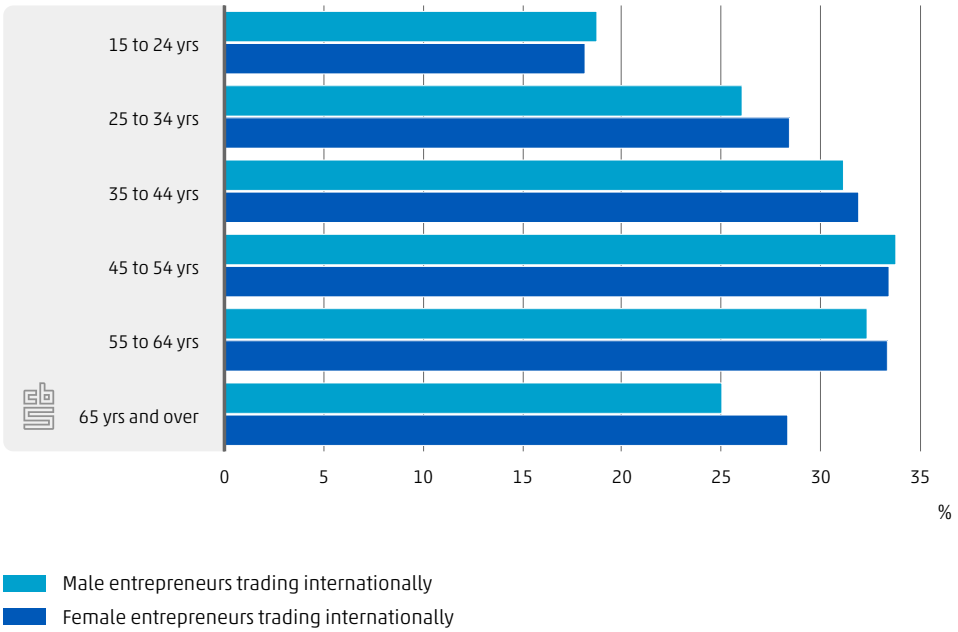


Figure 5.6.3 shows that the extent to which entrepreneurs trade internationally is age-related. Given the age, the probability of entrepreneurs trading with foreign countries is about one third for both men and women between the ages of 35 and 65. Both younger and older entrepreneurs are evidently less often active on the international market. Only the age categories 25 to 34 and 65 and over show a clear difference between men and women; female entrepreneurs in these age groups trade relatively more often with foreign countries than men.

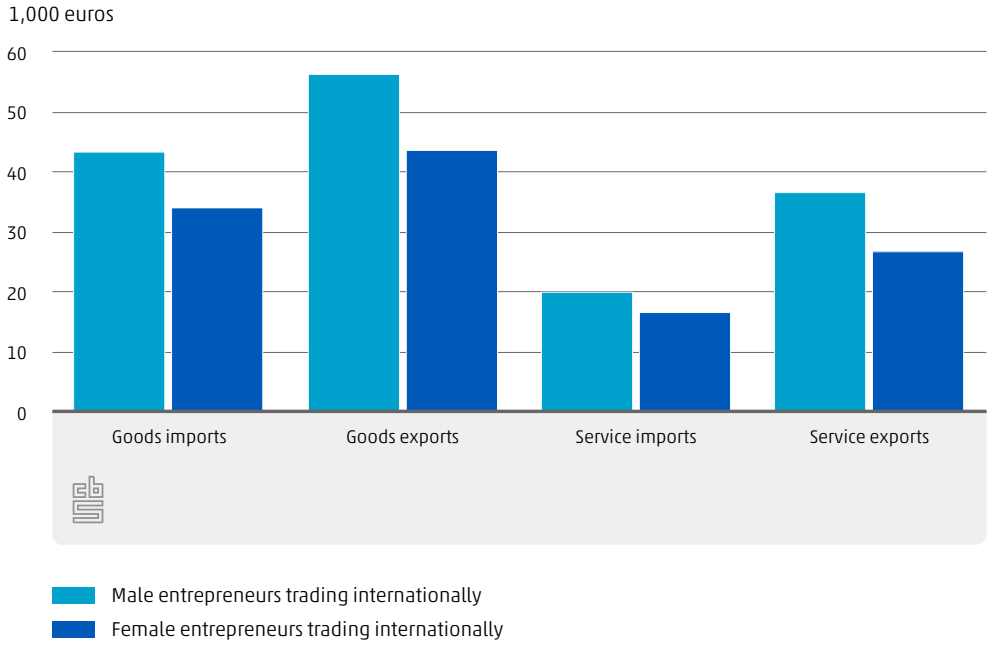
5.6.3 Share of entrepreneurs trading internationally by age, 2020



Male entrepreneurs higher transaction value on average

Figure 5.6.4 shows that there are also differences between men and women as regards trade value. The median import and export value of enterprises headed by a female entrepreneur is lower than for male entrepreneurs. This applies to both the trade in goods and in services. The median value of goods exported by female-led enterprises in 2020 was nearly €13,000 lower than that of businesses led by male entrepreneurs. For the import of services, the difference is slightly smaller at almost €10,000. There are also higher values for male entrepreneurs who trade internationally when it comes to the import of goods and services, though the differences are slightly smaller than for exports. The volume of the export and import of goods and services may, of course, be related to the sector in which the entrepreneur is active. No corrections are made for such differences.

5.6.4 Median trade value among male and female entrepreneurs trading internationally, 2020



5.7 Characteristics of employees and dependence on imports

This section compares the characteristics of employees of enterprises that have production processes or turnover which depend to a greater or lesser extent on imports or exports of goods. A enterprise's dependence on imports or exports is measured on the basis of import or export intensity. These are calculated by dividing the total import or export value of goods by the total turnover.[11)] Enterprises without imports or exports are not included in these analyses.

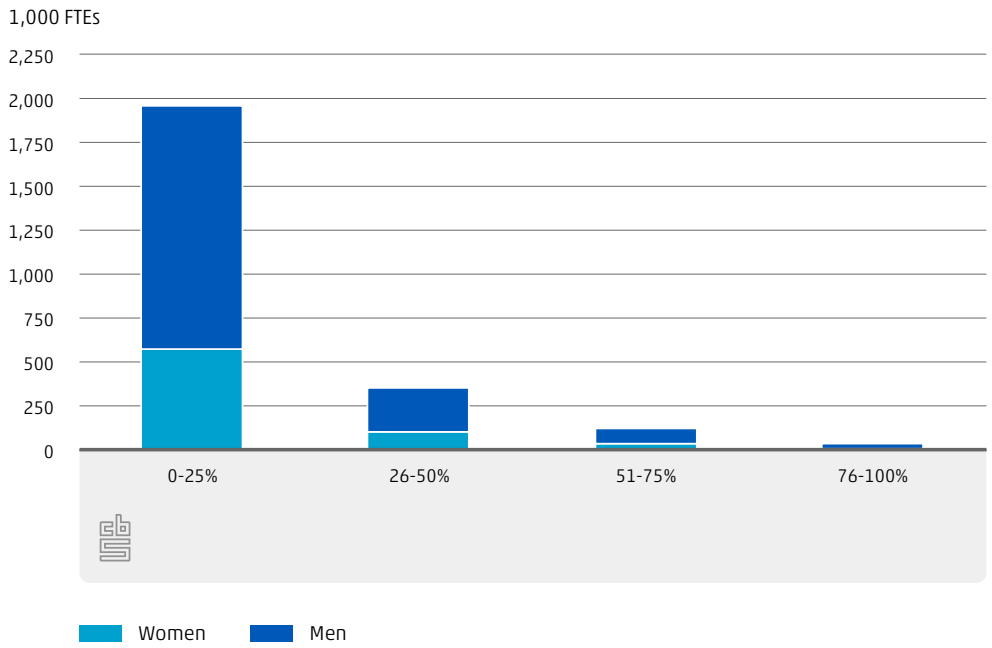
Most employment in enterprises with a less than 25% import ratio

In 2020, a total of 2.5 million full-time equivalents (FTEs) were employed by enterprises with imports and 1.8 million FTEs by enterprises with exports. Of these, relatively few worked for enterprises where the share of imports or exports in relation to turnover was higher than 25% (Figure 5.7.1). Of the importers, the vast majority of employment, i.e. 79% of FTEs, are at enterprises with an import intensity of a maximum of 25%. The picture is similar for export intensity, at 74% of FTEs. In other words, most of the working population is employed by the category of enterprises that import and export the least relative to their total turnover. Figure 5.7.1 also shows that the share of men in the total number of FTEs is considerably

11) An important note is that this method looks exclusively at direct import and export dependency, and therefore does not consider indirect dependencies. An example of an indirect dependency is a Dutch enterprise that sells intermediate goods to another Dutch enterprise, which uses them to manufacture goods that it then exports. Another example is a Dutch enterprise that buys goods from a Dutch wholesaler that had imported those goods from abroad.

higher than that of women. This is true for both imports and exports for all levels of intensity. This may just be a reflection of the fact that men generally work more hours than women; this is also true for enterprises that import and export, regardless of intensity. As a result, men's working hours are also more dependent, both directly and indirectly, on exports than women's working hours (CBS, 2018).

5.7.1 Full-time equivalents by import intensity and by sex, 2020

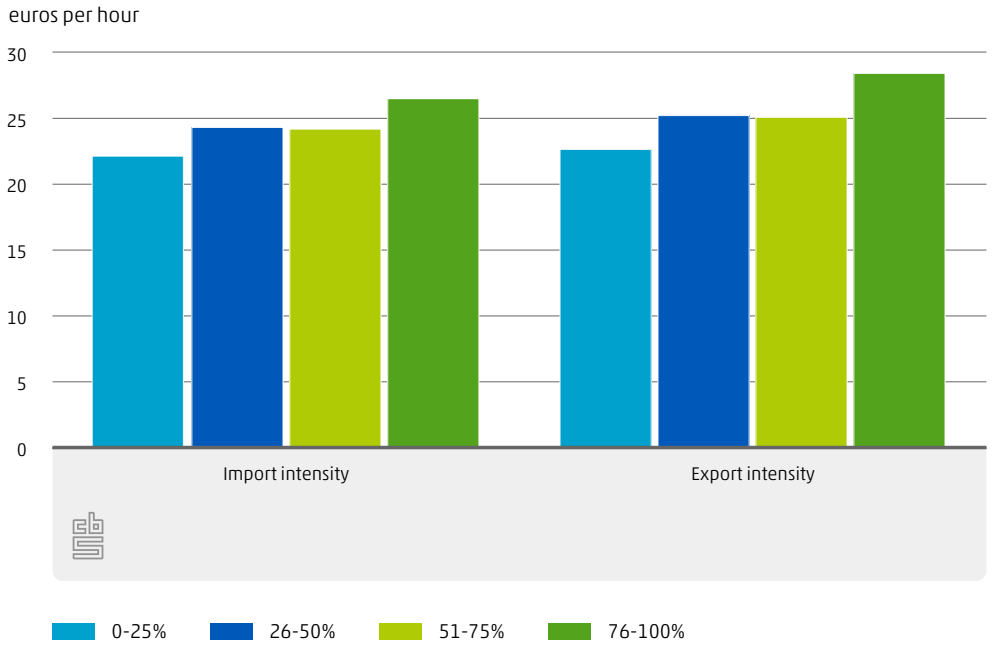


Higher wages at enterprises with large international trade component

Employees at enterprises with a relatively high ratio of goods imports or exports to turnover earn higher wages on average as opposed to employees at enterprises with lower trade intensities (Figure 5.7.2). The average gross hourly wage at enterprises with an import intensity no higher than 25% was more than €22.[12)] In comparison, enterprises with an import intensity of more than 75% paid on average more than €4 more per hour. The picture is similar for exports, though the difference between the two extremes of export intensity is slightly larger, at approximately €6 per hour. These wage differences may be related to differences between sectors, technological requirements, scarcity, personal characteristics such as educational level and differences in labour productivity. Age, usually correlated with work experience, may also be a factor, as the next paragraph shows.

12) The average gross hourly wage has been calculated here as a weighted average of the median gross hourly wages at the various enterprises. The weightings have been determined on the basis of enterprise size in full-time equivalents. The calculation of gross hourly wages also takes into account holiday supplements, year-end payments, the number of overtime hours and compensation for those hours.

5.7.2 Average gross hourly wage by import and export intensity, 2020

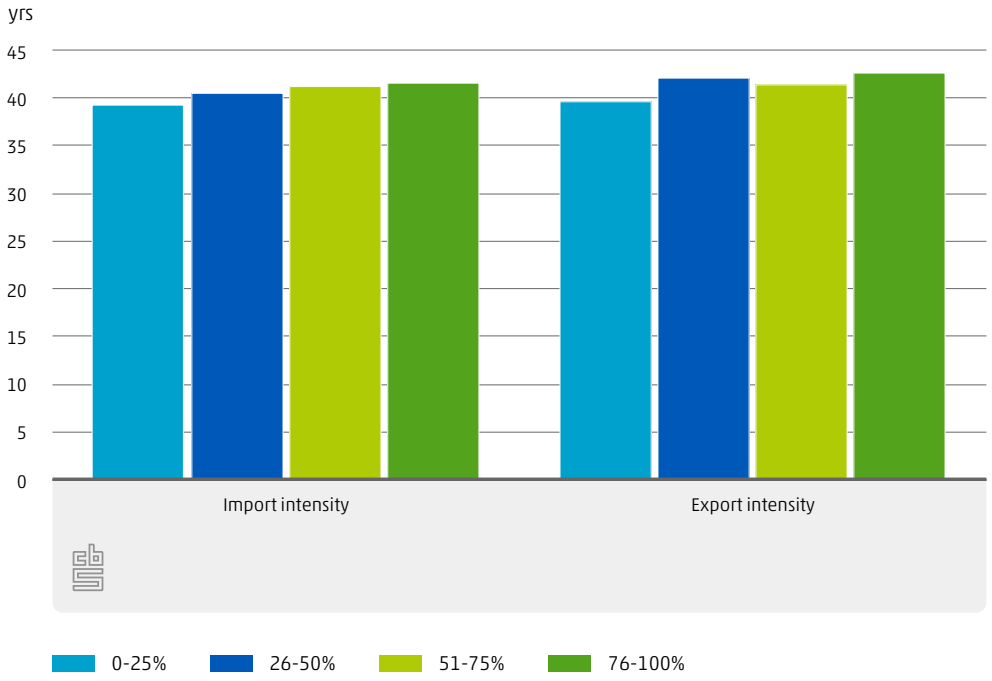


Workforce also older in enterprises with higher trade intensity

Part of the wage gap could also be due to a difference in the age of the workforce (Figure 5.7.3). This is because enterprises that are more dependent on direct or indirect imports or exports employ older workers on average.[13)] Employees who work for enterprises with a ratio of imports to turnover that is no more than 25% are on average more than two years younger than employees at enterprises with an import intensity of more than 75%. In the breakdown by export intensity, the difference with three years is even greater.

13) The average age is a weighted average of the median ages at the different enterprises. As with gross hourly wages, the weighting has been determined on the basis of enterprise size in full-time equivalents.

5.7.3 Average age by import and export intensity, 2020



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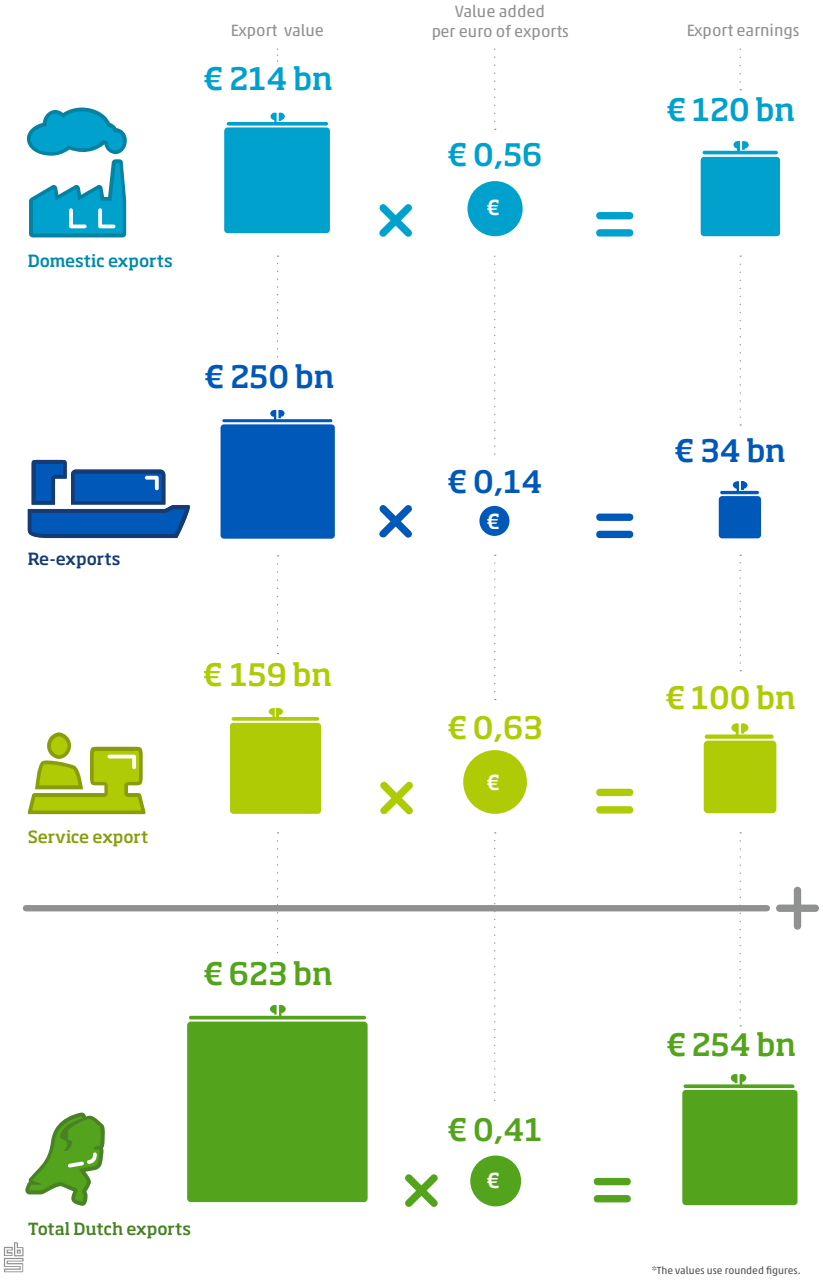
6 Dutch earnings from international trade

Authors: Pascal Ramaekers, Leen Prenen, Bart Loog, Tom Notten

Dutch export earnings (2020)



International trade in goods and services is crucial to a small, open economy such as the Netherlands. Almost one-third of Dutch GDP is earned from exports of goods and services. Exports of goods and services also generate 2.4 million full-time jobs for the Dutch population, both directly at exporting firms and indirectly at suppliers to those exporters.

How did the coronavirus pandemic affect our international trade? How much are domestic exports, re-exports and service exports worth, and what is the value of the goods and services that Dutch firms imported to produce these exports? How much value added and employment does the Dutch economy gain from exports and what developments have occurred since 2015? Which destination countries provide the Netherlands with the highest earnings from its exports and on which export country do the largest number of full-time jobs depend?

6.1 Key findings

The coronavirus pandemic had a major impact on the Dutch economy and on Dutch trade with other countries in 2020. The gross export value fell by 7% to €622.9 billion in 2020.[1)] Within total exports, service exports fell most sharply, by over 12%. This was primarily due to a sharp decline in tourism revenues due to the coronavirus pandemic (inbound travel falls under service exports). It is from service exports that the Netherlands earns the most per euro of exports: 63 cents per euro. That is more than it earns from domestic goods exports (56 cents) and much more than it earns from re-exports of goods (14 cents). Re-exports of goods generate more earnings than quasi-transit trade in foreign goods (1.4 cents) (CBS, 2021). Since the goods do not come into Dutch ownership, quasi-transit trade – unlike re-exports – is not included in the regular trade statistics presented in this chapter. Domestic exports concern typical products from Dutch soil (such as potatoes), but also exports of processed imports (such as chocolate produced from Ivorian cocoa beans). The Netherlands earned slightly more from one euro of domestic exports in 2020 than in the preceding five years. In the case of service exports, earnings per euro in 2020 were slightly lower than the average of the preceding five years. The data series for re-exports is very stable.

Sharp contraction of service exports took biggest toll on economy in 2020

The Dutch economy contracted by 3.8% in 2020 due to the coronavirus pandemic. The fall in exports of goods and services contributed as much as 2.2 percentage points to this contraction, exceeding the negative contribution from domestic expenditure (1.6 percentage points). The fall in service exports alone contributed as much to the contraction of the Dutch economy in 2020 as the fall in all domestic expenditure combined. The fact that exports were hit harder than the Dutch economy as a whole during the first COVID year 2020 is also reflected in the decreased share of total export earnings in GDP. The export share decreased from 33.3% in 2019 to 31.8% in 2020.

Business services generated the highest export revenues in 2020

Of all sectors, manufacturing traditionally earns the most from Dutch exports, with the bulk of the earnings coming from domestic goods exports. Within manufacturing, the main earners are the food, beverages and tobacco industry, the machinery industry and the chemical

1) At the time of writing, 2020 is the most recent full year for which data are available in the National Accounts.

industry. After manufacturing, trade (particularly wholesale through re-exports) is the biggest earner from Dutch exports. Due to the fall in tourism resulting from the coronavirus pandemic, the biggest contraction in export earnings in 2020 was in business services, which include travel intermediaries and platforms for travel and holidays. Accommodation and food services and the transport sector were also hit by lower expenditure by foreign visitors to the Netherlands.

Higher earnings from exports to China despite the coronavirus crisis

Germany has been the Netherlands' main export destination for many decades. Exports to our eastern neighbours accounted for 6% of Dutch GDP in 2020. Earnings from Germany nevertheless fell by 7% (€3.4 billion) compared to 2019. Earnings on exports to China actually increased in 2020, partly as a result of higher sales of Dutch baby milk powder and pork.

As much as 68% of imports of goods and services is ultimately destined for countries abroad: 40 percentage points relate to re-exports of goods and 28 percentage points relate to imports of raw materials, semi-finished products and support services incorporated in goods and service exports.

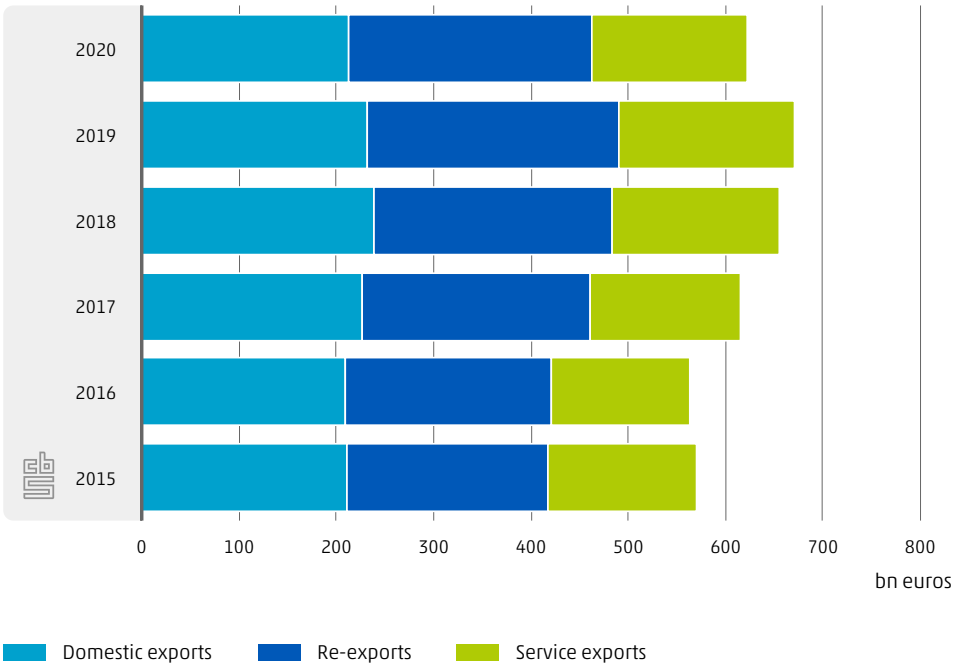
Exports provided 2.4 million direct and indirect full-time jobs in 2020, accounting for 30% of total employment in the Netherlands. 17% of this employment was attributable to goods exports, 13% to service exports. Direct exports provided 1.1 million full-time jobs and indirect exports a further 1.3 million full-time jobs.

The final section shows the extent to which various occupations are linked to exports. It shows, for example, that people in agricultural occupations work more than half of their hours for foreign consumption. Highly educated people also work relatively more (34% of the total number of hours worked by highly educated people) for exports than lower skilled people (28% of the total number of hours worked by lower skilled people).

6.2 Contribution of exports to GDP

The Netherlands exported €622.9 billion worth of goods and services in 2020. Figure 6.2.1 shows that this gross export value is the sum of exports of goods produced in the Netherlands, re-exports and service exports. Re-exports consist of goods imported by the Netherlands and then re-exported after virtually no processing, with the goods having been under Dutch ownership. Compared to 2019, the gross export value was €48.2 billion lower, a decrease of 7%. This decrease was largely attributable to the coronavirus pandemic, which impacted the Dutch economy from March 2020. It is notable, however, that the decline in Dutch exports was smaller than that seen in other OECD or EU countries (OECD, 2022; Kutlina-Dimitrova et al., 2021).

6.2.1 Gross export value per export category



Service exports hit hardest by coronavirus

The bulk of gross export value in 2020 came from exports of goods, €213.7 billion of which consisted of domestic exports and €249.9 billion of re-exports.[2] Exports of services represented a smaller share, with a value of €159.3 billion. Service exports declined most in the COVID year 2020, by 12%, followed by domestic exports (–8%) and re-exports (–3%). Within service exports, travel (expenditure by foreign visitors to the Netherlands) was hit particularly hard by the coronavirus pandemic. In 2020 as a whole, expenditure by foreign tourists and business travellers in the Netherlands halved compared to 2019 (Poulissen et al., 2022). Travel thus accounts for around 46% of the total decrease in gross service exports in that year (CBS, 2022).[3] Of the three export components, re-exports experienced the strongest medium-term growth. Between 2015 and 2020, re-exports increased by 21%, service exports by 5% and domestic exports by just 1%.

Service exports are most profitable

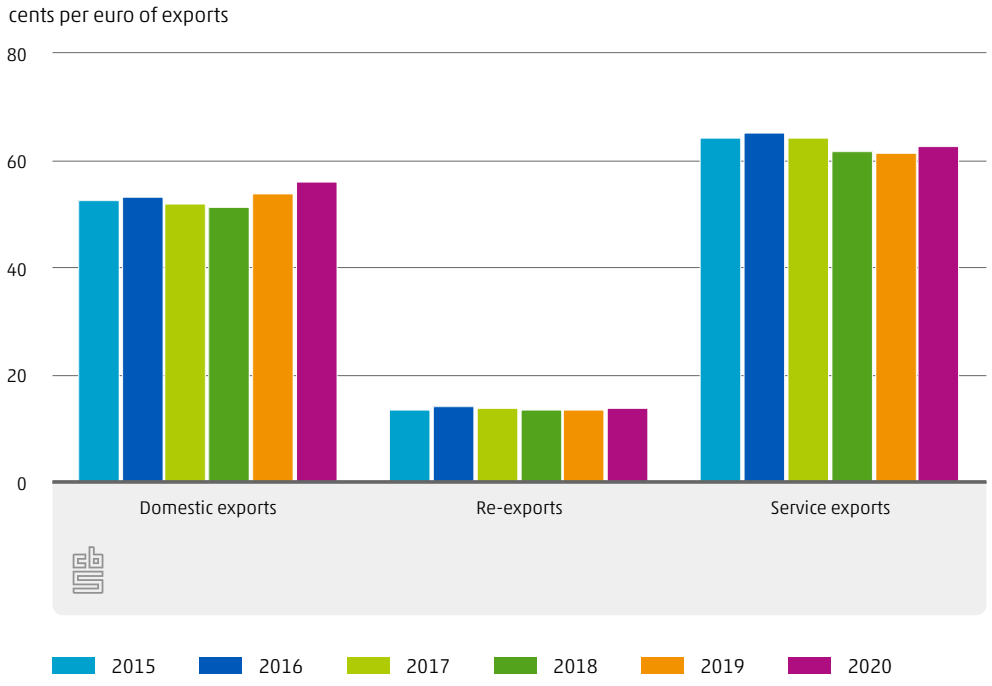
The Netherlands is strongly represented in global value chains. Imports are important, for example, for our own production of goods and services for exports (see for example Lammertsma & Notten, 2019; Aerts et al., 2020; Notten et al., 2021; Bohn et al., 2022).

2) It is stated elsewhere in this publication that re-exports account for just under half of goods exports. The figures presented in this chapter are based on figures of the National Accounts. The ownership criterion is central in the National Accounts, which means certain transactions abroad can be counted as Dutch imports and exports even if the traded goods have not physically entered the Netherlands. Partly for this reason, the volume of re-exports stated in this chapter and in Chapter 7 exceeds the volume of domestic exports.

3) The share shown here is based on the International Trade in Services source statistics. There are differences in the way in which the National Accounts and the source statistics have to treat Special Purpose Entities. On the other hand, the National Accounts compare service trade data with other source statistics, and inconsistencies between the sources can lead to adjustments to the source data in order to present a consistent picture of the economy as a whole. The focus on continuity in the National Accounts also leads to divergences in level between the source statistics and the National Accounts. This will be reviewed in a revision year.

Raw materials and semi-finished products are imported into the Netherlands and then incorporated in Dutch export products. Another example concerns foreign service providers that facilitate Dutch exports. To determine what the Netherlands earns from exports, as a contribution to GDP, the consumption of the required goods and service imports must be deducted from the gross export value. On average, the Netherlands earned 41 cents for every euro of goods and services exported in 2020. That is slightly less than in 2015 (42 cents), partly because of the strong growth in less profitable goods re-exports, as earnings per euro of exports vary significantly from one export category to another (Figure 6.2.2). In 2020, the Netherlands achieved the highest net earnings per euro – 63 cents – from service exports. In the case of domestic exports, the figure was 56 cents per euro and for re-exports 14 cents.[4] The low export earnings from re-exports are due to the large import component in this goods flow: the contribution from Dutch firms to these exports is limited. Earnings per euro of exports remained relatively stable for all types of exports over the years. Earnings from domestic goods exports, at 56 cents per euro, were nevertheless higher in 2020 than in the preceding five years.

6.2.2 Earnings per euro of exports by export category



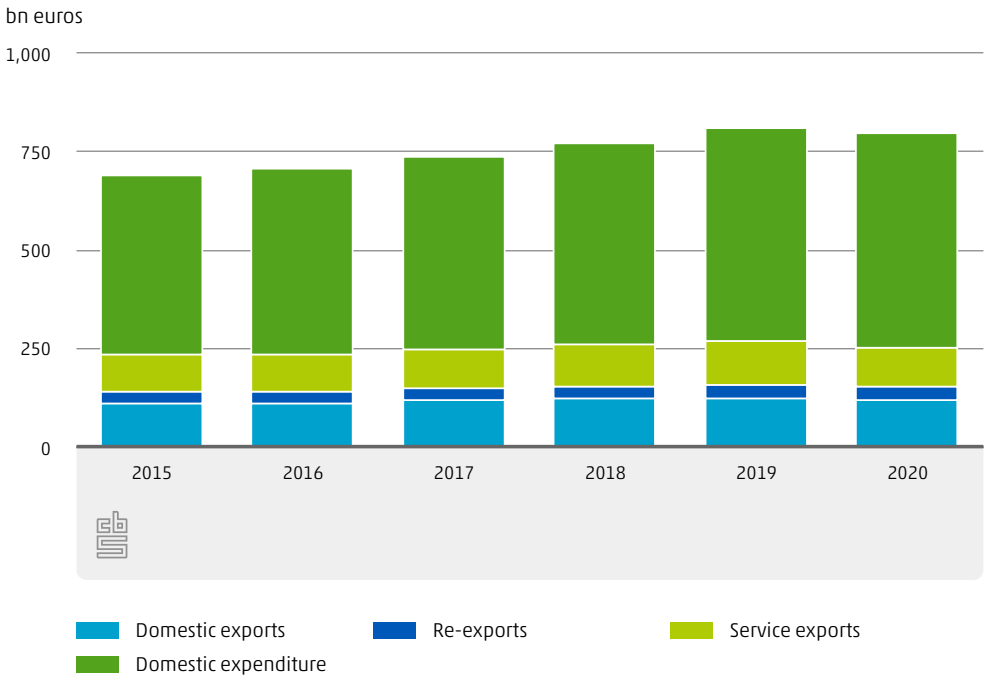
Export earnings decrease to 31.8% of GDP

After the deduction of the incorporated goods and service imports, Dutch export earnings amounted to €254.2 billion in 2020, a decrease of 6% compared to 2019 (Figure 6.2.3). The 6% decrease is the result of decreases in earnings from service exports (–10%), domestic goods exports (–4%) and re-exports (–1%).

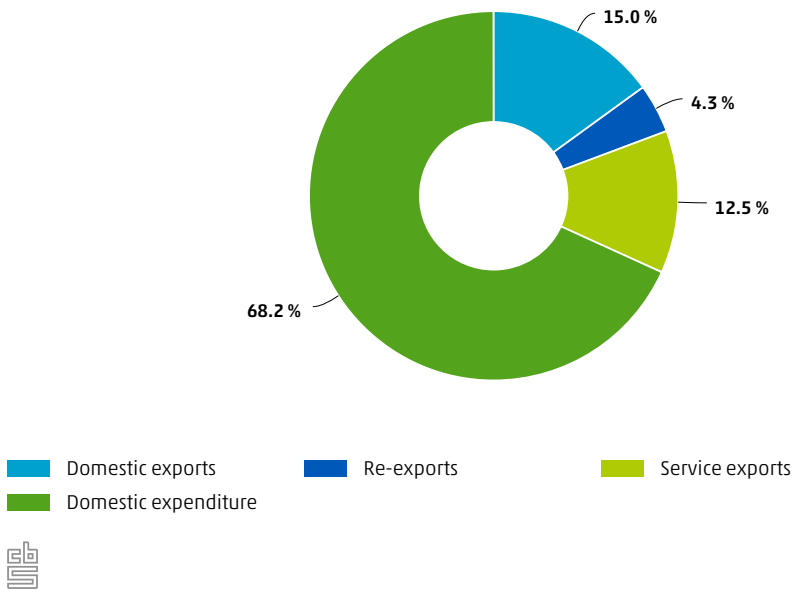
4) In the National Accounts, merchanting trade (when an enterprise in the Netherlands acquires ownership of the goods abroad and sells them on to another foreign operator without the goods physically entering the Netherlands) is counted as re-exports. If merchanting trade is excluded, export earnings per euro of re-exports amount to 10 cents rather than 14 cents (CBS, 2021).

Export earnings therefore accounted for 31.8% of GDP in 2020 (Figure 6.2.4). The bulk of the GDP (68.2%) relates to earnings from domestic expenditure. Domestic goods exports generated the highest earnings of all export categories, at €119.8 billion, followed by service exports at €100.0 billion and re-exports at €34.4 billion.

6.2.3 Earnings per expenditure category



6.2.4 Share of expenditure categories in GDP, 2020



Highest export earnings in manufacturing

Earnings from exports differ widely from one sector to another. Figure 6.2.5 shows that manufacturing generated the highest value added, namely €63.2 billion, as a result of exports in 2020. This represents almost a quarter of total Dutch export earnings. Most of this value added came from domestic goods exports. By exporting self-produced goods or by supplying industries that subsequently export domestic goods (for example in wholesale trade), manufacturing created €55.3 billion of value added. Manufacturing earned an additional €6.3 billion from exporting or contributing to exports of services, including support services. Most of the value added resulting from manufacturing exports is generated by the food, beverages and tobacco industry (€12.9 billion in 2020), followed by the machinery industry (€11.5 billion) and the chemical industry (€9 billion) (Figure 6.2.6). The only manufacturing industries that generate more value added through domestic expenditure (e.g. purchases by Dutch consumers) than through exports are the building materials industry (71%) and the furniture industry (67%).

Manufacturing earned around €2 billion less from exports in 2020 than in 2019, mainly due to a decrease in domestic exports. This was mainly due to contractions in the chemical industry (domestic exports down by €1 billion), the motor vehicle and trailer industry (–€0.4 billion), the basic metal industry and the electrotechnical industry (–€0.3 billion each). Both the machinery industry (+€0.5 billion) and the food, beverages and tobacco industry (+€0.3 billion) earned more from domestic exports in 2020. Manufacturing also earned substantially less from service exports in 2020 than in 2019, with a decrease of €0.75 billion. This was mainly attributable to the chemical industry, the food, beverages and tobacco industry and other manufacturing.

Exports generate 72% of value added in manufacturing

Around 72% of manufacturing earnings are generated by exports of goods and services. Mining and quarrying and primary agriculture are even more export-dependent (81% and 77% respectively), but much smaller in size. Exports by mining and quarrying firms generated €2.7 billion in 2020, less than primary agriculture (€10.2 billion) and much less than manufacturing (€65.2 billion). Export earnings from all three sectors are dominated by domestic exports.

72% of value added from manufacturing is due to exports

Trade most dependent on re-exports

After manufacturing, it is the trade sector (particularly wholesale) that generates the most value added from exports, at €51.8 billion (20% of the total). The wholesale trade is active not only as an exporter but also as a key supplier to exporting firms in the supply chains of

other industries. It is the only industry in which re-exporting of goods plays a prominent role in generating export earnings. Re-exports have a 39% share of total export earnings, whereas the average is just 13%. Service exports are particularly important in the business services, transportation and storage, and information and communication sectors.

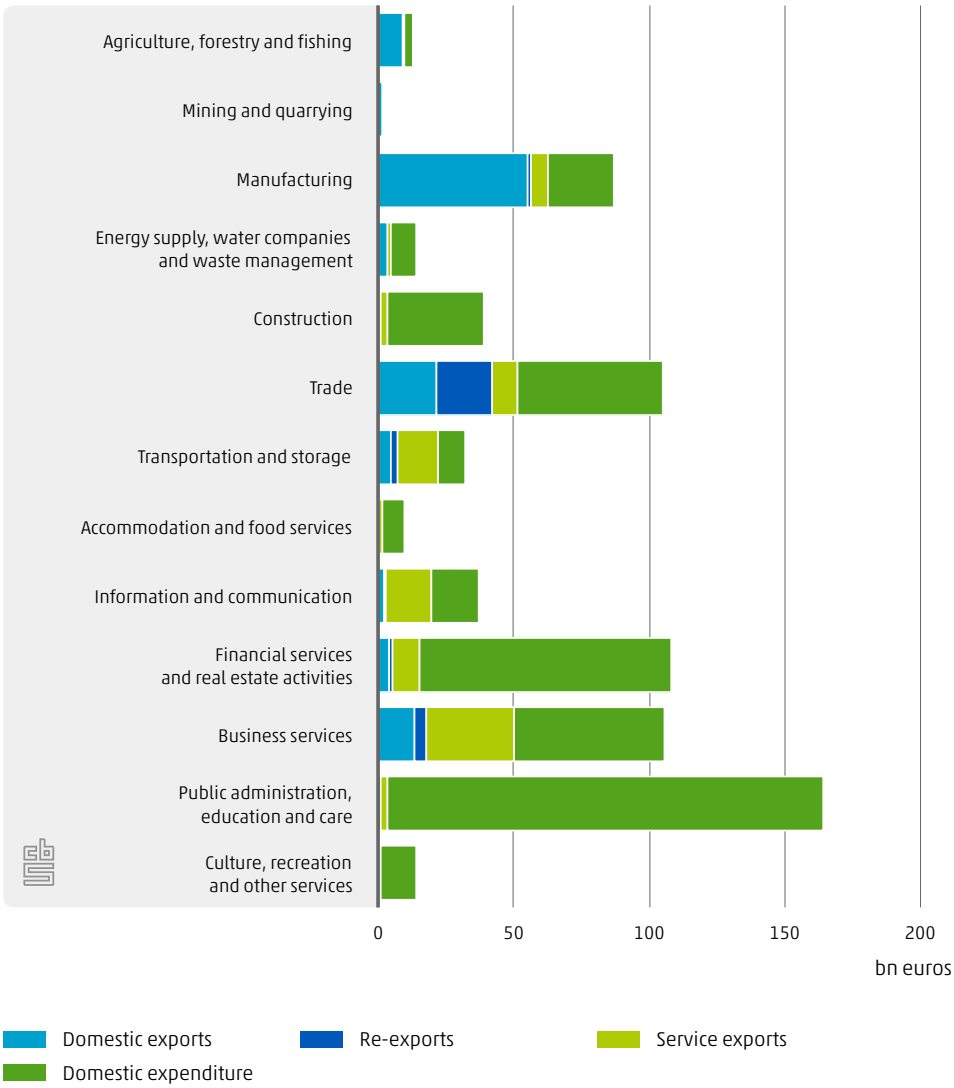
Largest contraction in export earnings from business services

By far the largest absolute contraction occurred in export earnings from business services. Export earnings in the COVID year 2020 were €4.6 billion lower than in 2019. In percentage terms this is a decrease of 5%. The bulk of the decrease (€3.7 billion) is due to lower service exports. This largely reflects falls in revenues of firms directly impacted by a sharp drop in the number of visitors, such as accommodation agencies, travel agencies and airlines (Poulissen et al., 2022). The transportation and storage, accommodation and food services, and mining and quarrying sectors also earned substantially less from exports in 2020 than in 2019. In accommodation and food services, income was lost because tourists stayed away from the Netherlands.

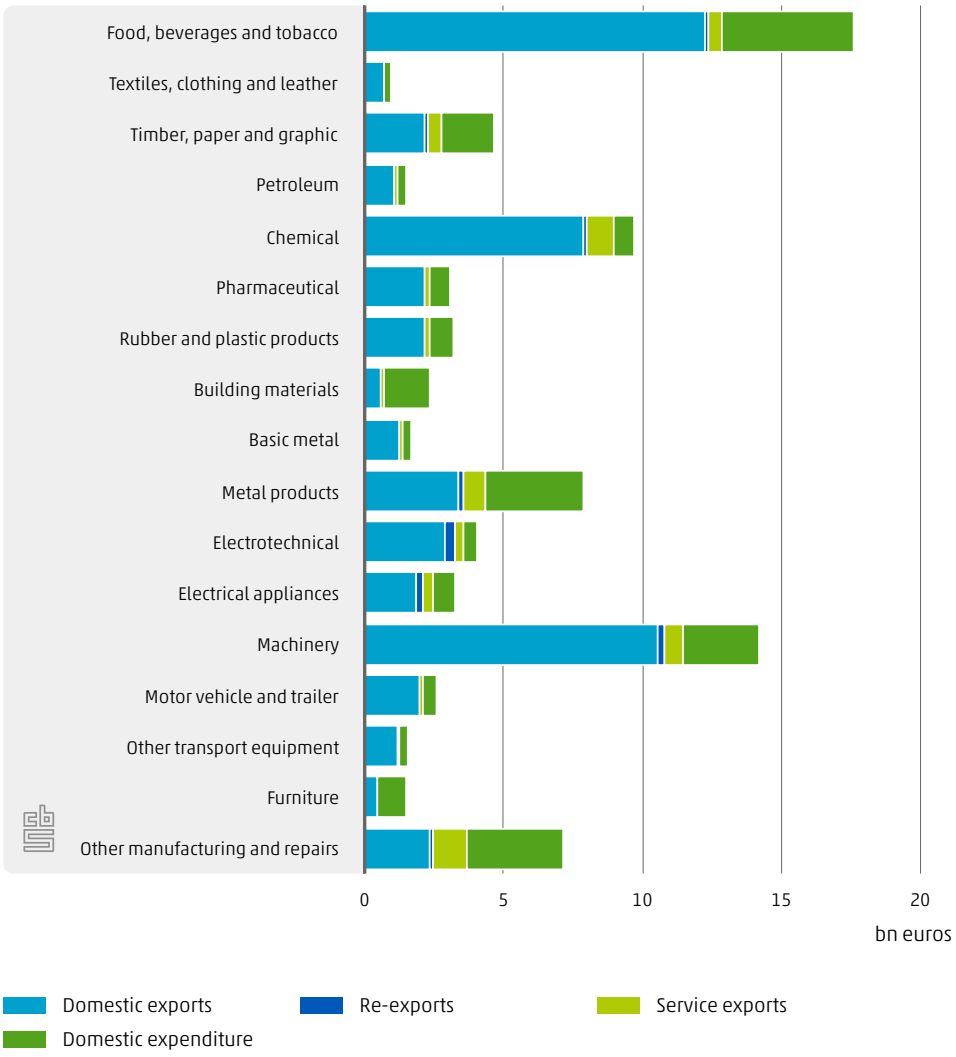
Accommodation and food services, government, construction and financial services focused on domestic market

Sectors such as accommodation and food services, construction, financial services and real estate, as well as culture and recreation, focus particularly on the domestic market. The export share of total value added is therefore considerably lower in these sectors. Logically, the Dutch government (public administration, education and care) is even more domestically focused.

6.2.5 Composition of value added by sector, 2020



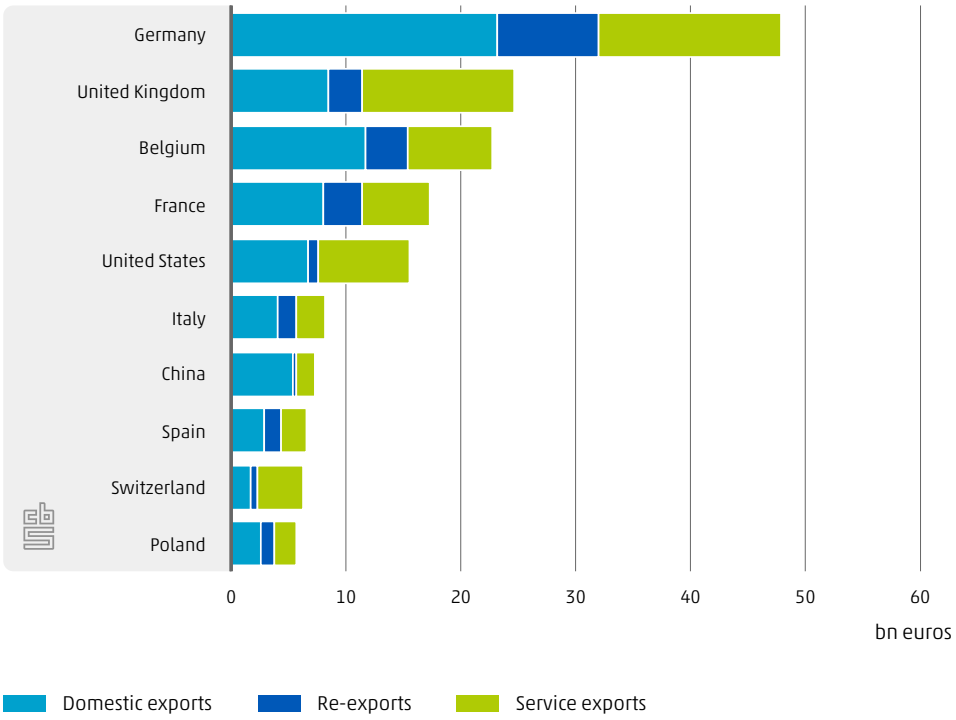
6.2.6 Composition of value added by manufacturing industry, 2020



Exports to Germany account for 6% of GDP

Germany has been the Netherlands' main trading partner for many decades. The Netherlands earned €47.9 billion from direct exports of goods and services to Germany in 2020 (Figure 6.2.7), representing 6.0% of GDP. Germany is thus the most important export partner not only in terms of export value but also in terms of export earnings. The other countries in the top 5 are the United Kingdom (€24.7 billion; 3.1% of GDP), Belgium (€22.8 billion; 2.8%), France (€17.4 billion; 2.2%) and the United States (€15.6 billion; 1.9%). At 19%, the re-export share of earnings from exports to Germany is relatively large (average of 15% for the top 10 destinations). This would comprise, for example, telephones, toys and clothing that a Dutch firm imports from China and then sells on to Germany. The re-export share is even greater in the case of exports to France, Italy, Spain and Poland. For more distant destinations such as the United States (6%) and China (5%), the re-export share of Dutch export earnings is much smaller.

6.2.7 Top 10 export destinations based on export earnings, 2020



The top 10 destinations measured by export earnings also include Italy, Spain, China, Switzerland and Poland. While total export earnings increased by 1.4% on average between 2015 and 2020, earnings from China grew by 11.1% annually on average (with domestic goods highest in percentage terms). Growth in earnings from Poland was 7.9% (with service exports highest in percentage terms) and from Spain 4.4% (with re-exports highest in percentage terms). By contrast, earnings from exports to Switzerland decreased by 4.0% annually on average.

The biggest decreases in export earnings by destination between 2019 and 2020 were in exports to Germany (€–3.4 billion) and to the United Kingdom (€–3.0 billion). In both cases there is a clear link with a decrease in travel due to the coronavirus pandemic. The biggest growth was in earnings from exports to China, which rose by €0.9 billion in 2020 compared to 2019. Most of this related to domestic exports, with among other things strong growth in exports of baby milk powder and pork to China during this period (Jukema et al., 2021). Dutch baby milk powder became very popular after a health scandal in China in 2008 (CBS, 2015) and Dutch pork has become attractive in recent years due to problems in China caused by African swine fever. Chinese demand for baby milk powder and pork decreased again somewhat between 2020 and 2021 (Jukema et al., 2022).

Earnings have generally fallen faster in the case of exports to EU countries than to non-EU countries. This is partly due to a larger share of travel in exports to the EU, but another factor is that exports to China and Brazil in particular continued to grow in 2020.

Services lead the way in exports to the UK and the US

The Netherlands' goods exports to most countries are worth more than its service exports. This pattern can also be seen in export earnings: for most countries, earnings are higher for goods exports than for service exports. Significant exceptions are earnings from exports to the United Kingdom, the United States, Switzerland and Ireland. In the case of the United Kingdom, 54% of export earnings came from exports of services, such as business services and transport services. The corresponding figure for the United States was 51% and for Switzerland 63%. Ireland, in 12th place, shows the highest percentage, with 73% of the €3.5 billion of Dutch export earnings from that country coming from service exports. See Chapter 4 of this publication for further information on the types of services that the Netherlands imports and exports and the main partner countries.

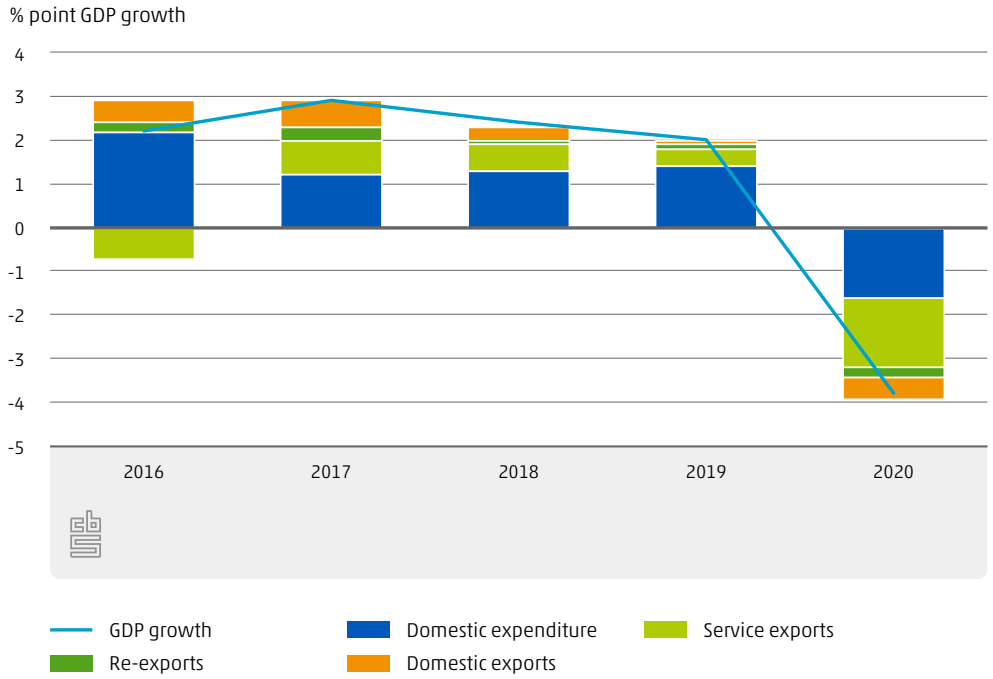
Analysis of the contribution of exports to the GDP contraction

Since almost one-third of gross domestic product comes from exports of goods and services, exports are frequently described as the growth engine of the Dutch economy. Figure 6.2.8 shows the growth contributions made by the various export categories to GDP volume changes. The Dutch economy contracted by 3.8% in 2020. Exports of goods and services accounted for 2.2 percentage points of this contraction, with the remaining 1.6 percentage point resulting from domestic expenditure, such as household consumption, government expenditure and investments. The contribution of exports to the negative GDP growth was due mainly to the decrease in exports of services (1.6 percentage points). The contraction in domestic goods exports contributed 0.5 percentage points to the economic contraction in 2020, while lower re-exports contributed 0.2 percentage points.

Contribution of exports to GDP volume growth: the international method versus the method corrected for imports

GDP according to final expenditure equals the sum of final consumption, investments and exports of goods and services minus imports of goods and services (trade balance). To determine the contribution of the trade balance to GDP volume growth, the contribution of imports is subtracted from that of exports. This is the internationally agreed method for compiling National Accounts. However, the internationally agreed method underestimates the contribution of exports to GDP and overestimates the contribution of domestic expenditure. This is because it does not take into account the fact that goods and services are also imported for domestic expenditure. To gain a more accurate picture of the contribution to growth by type of export, this chapter presents figures on the contribution to GDP volume growth with imports being allocated to all final expenditure categories. This is done using input-output analysis according to the method developed by Kranendonk and Verbruggen (2008).

6.2.8 Contribution of exports to economic growth



6.3 The importance of imports of goods and services

68% of imports are ultimately destined for export

Imports of goods and services amounted to €540 billion in 2020 (Figure 6.3.1). Imports of goods and services thus contracted even more sharply than exports of goods and services: 9% compared to 7%. With a value of €369 billion, 68% of imports of goods and services in 2020 were intended for exports of goods and services, either as imports for re-export (40 percentage points) or as imported raw materials, semi-finished products and support services incorporated into goods and service exports (28 percentage points). In 2015, this share was 64%, but between 2017 and 2020 it remained fairly stable. In short, around one-third of Dutch imports of goods and services are destined for the domestic market.

6.3.1 Destination of imported goods and services

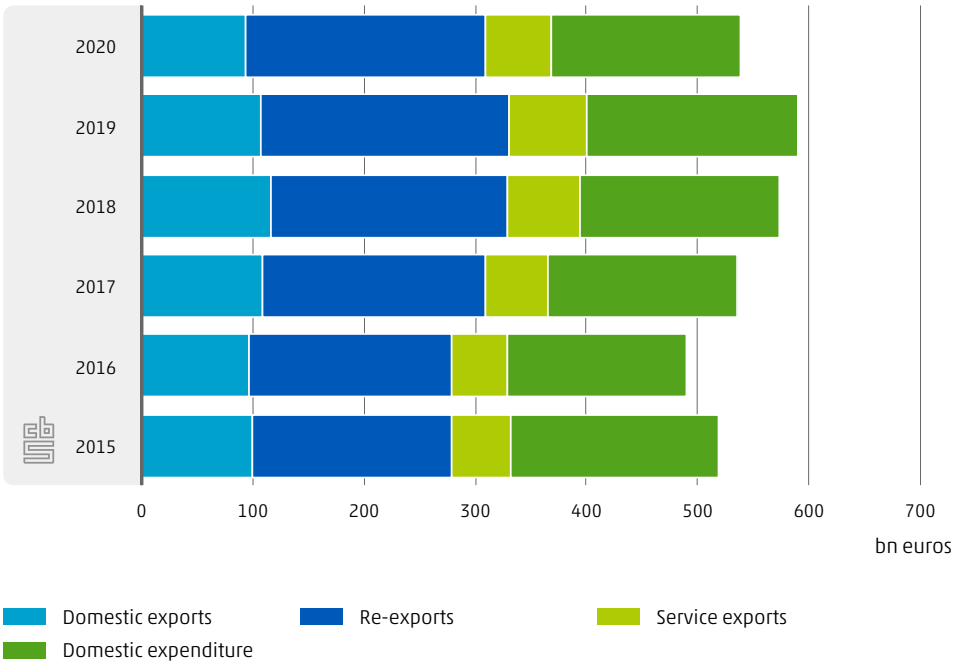
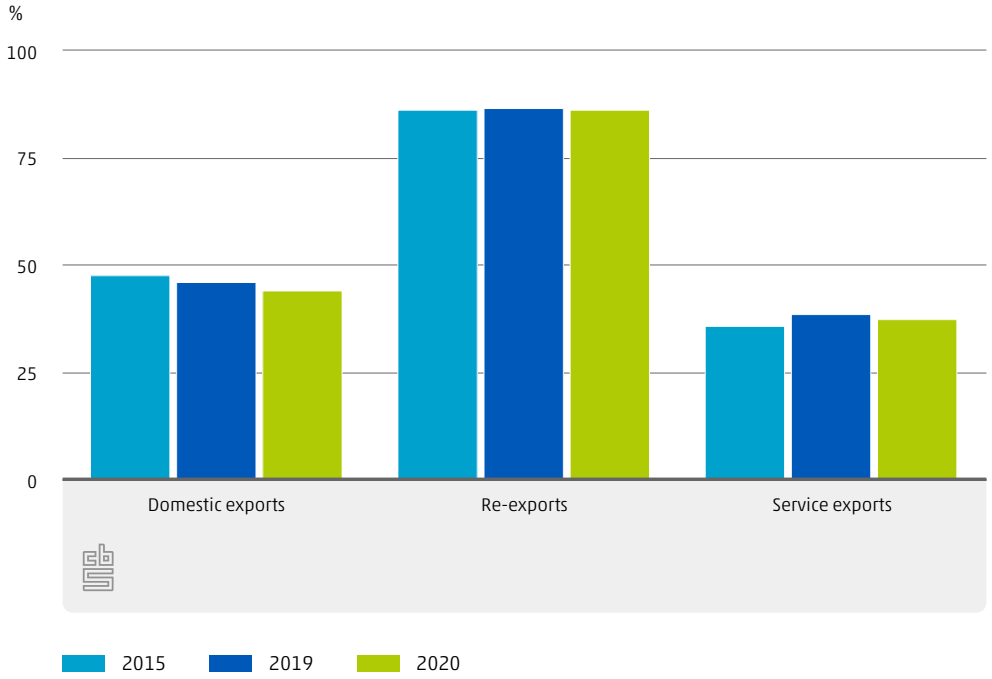


Figure 6.3.2 shows the import content in each export category, i.e. the share of imported goods and services in the export value. It indicates the proportion of (gross) export revenues that leak away to other countries in the form of costs for necessary imports. This indicator is also known as a vertical specialisation measurement. It is actually the opposite of the value added per euro of exports created in the Netherlands (Figure 6.2.2). For total exports of goods and services in 2020, the import content was 59.2%; in 2015, it was 0.8 percentage points lower. Exports of services require the smallest amount of imports, 37.2% of the export value, but this share is rising; in 2015 it was 35.9%. In 2020, 43.9% of domestic exports consisted of processed imported goods and services. That is 3.5 percentage points less than in 2015. In the case of re-exports, which make up a large share of the total export value, the import content was 86.2% in 2020, almost the same as in 2015.

6.3.2 Import content per export category



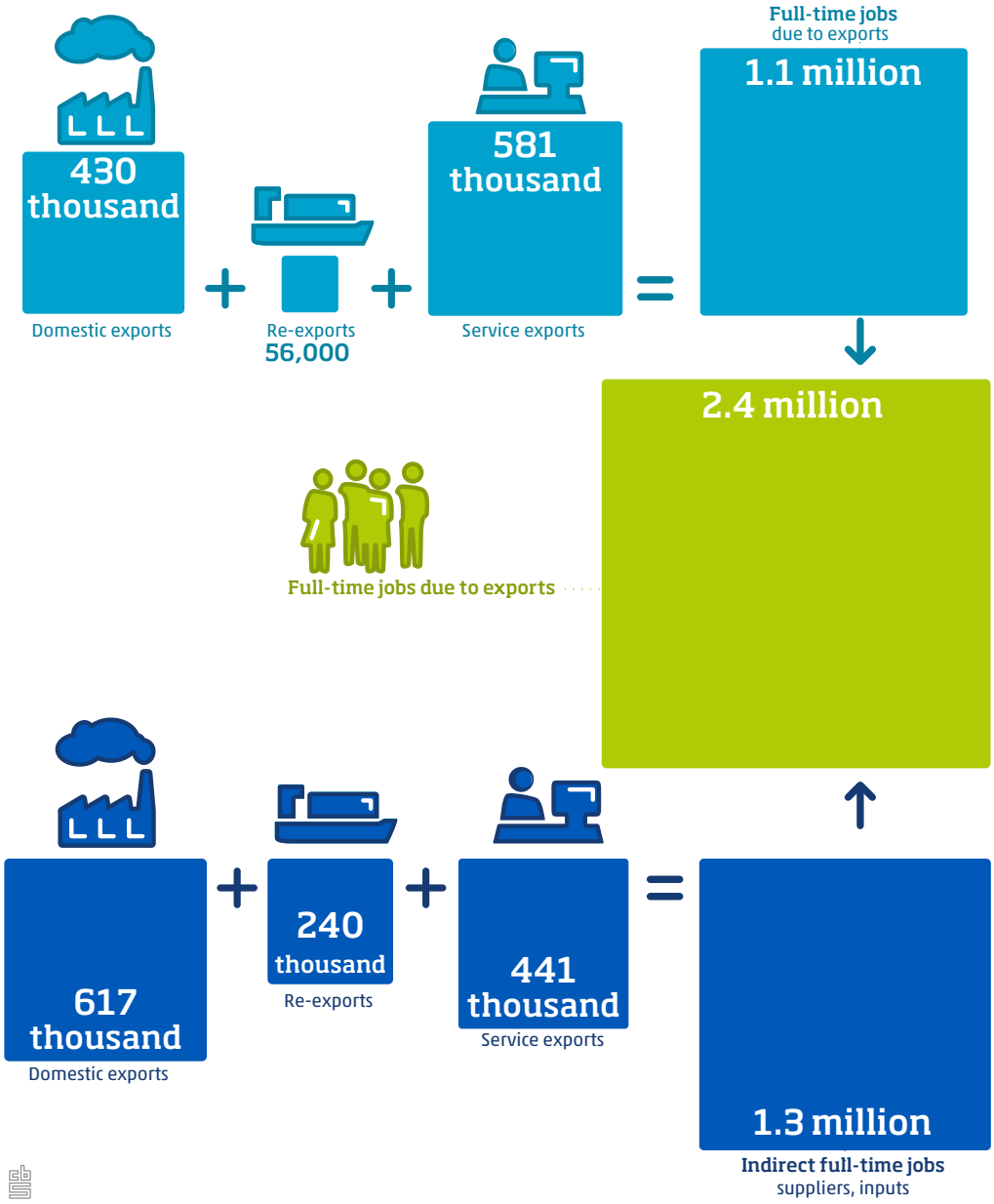
6.4 Employment linked to exports

A third of employment in the Netherlands is linked to exports

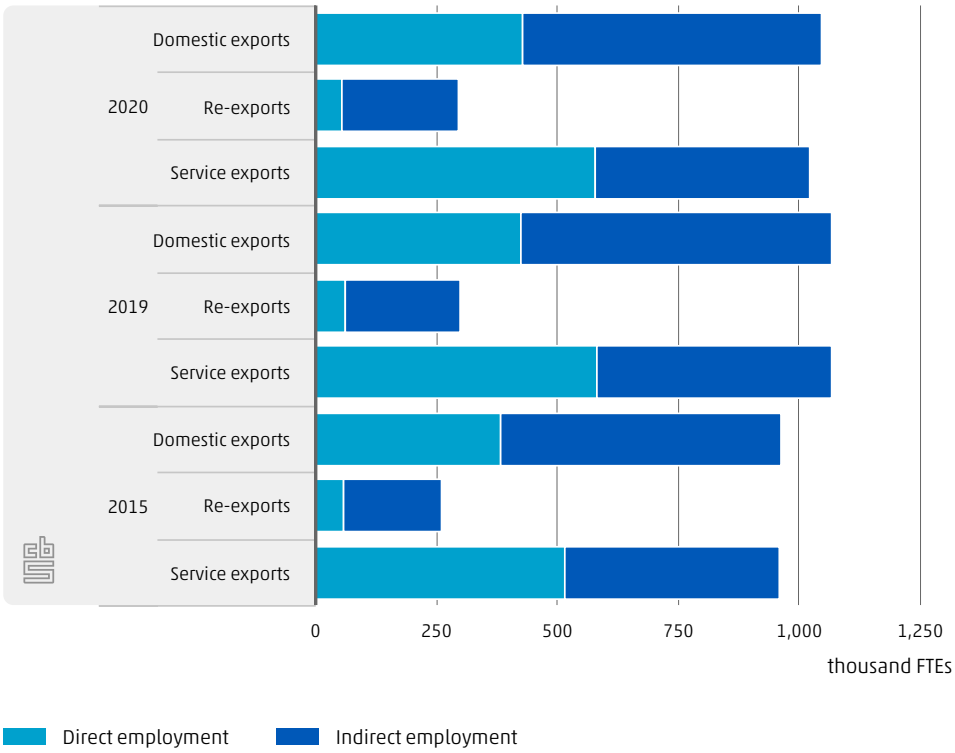
Exports of goods and services create jobs for the inhabitants of the Netherlands. These jobs may be linked directly to exports, in the case of employees working in the exporting sector itself, but also indirectly, in the case of those working for suppliers to exporters. Examples are caterers working for an exporting firm (indirect employment) and assembly workers working for the exporting firm itself (direct employment). The infographic on the next page shows that exports of goods and services provided some 2.4 million direct and indirect full-time jobs (FTEs) in the Netherlands.[5)] Around 30% of total employment in the Netherlands can therefore be attributed to exports. Goods exports accounted for 17% of total employment in the Netherlands in 2020, while service exports accounted for 13%. Figure 6.4.1 shows how the 2.4 million full-time jobs were generated by the various types of exports in 2020 and the extent to which they were direct or indirect jobs. If we compare 2020 with 2015, we see an increase in employment across all export categories. We see a 5% rise in indirect employment associated with re-exports. Compared to 2019, the employment created by service exports has fallen farthest, by 5%.

5) When determining the labour volume in full-time equivalents (FTEs) over a period, the start and end date of a job as well as the weekly working time are taken into account. Since many people work part-time, some work only part of the year and some have several jobs, the number of individual jobs is higher than the number of FTEs.

Export-induced employment (FTE), 2020



6.4.1 Employment linked to exports



Exports of services provide most direct employment

In 2020, exports of goods and services generated 1.1 million FTEs of direct employment. Of this total, service exports provided the largest number of jobs, around 581,000. Exports of domestic goods accounted for around 430,000 FTEs and re-exports accounted for some 56,000 jobs. Direct employment due to exports is almost unchanged compared to 2019.[6)]

Most indirect employment generated by domestic exports

In addition to direct jobs, 1.3 million full-time jobs are indirectly involved in the process of producing goods and providing services for export. Examples are jobs at suppliers, such as transport firms, caterers and accountants. Exports of domestic goods generated the most indirect jobs, making up almost half of total indirect employment. In 2020 that amounted to 617,000 full-time jobs. Exports of services generated 441,000 indirect jobs and re-exports around 240,000 jobs. With 780,000 FTEs, service industries accounted for the bulk of indirect employment due to exports. Most indirect employment was with temporary employment agencies and job placement services, legal and management consulting, and wholesale trade.

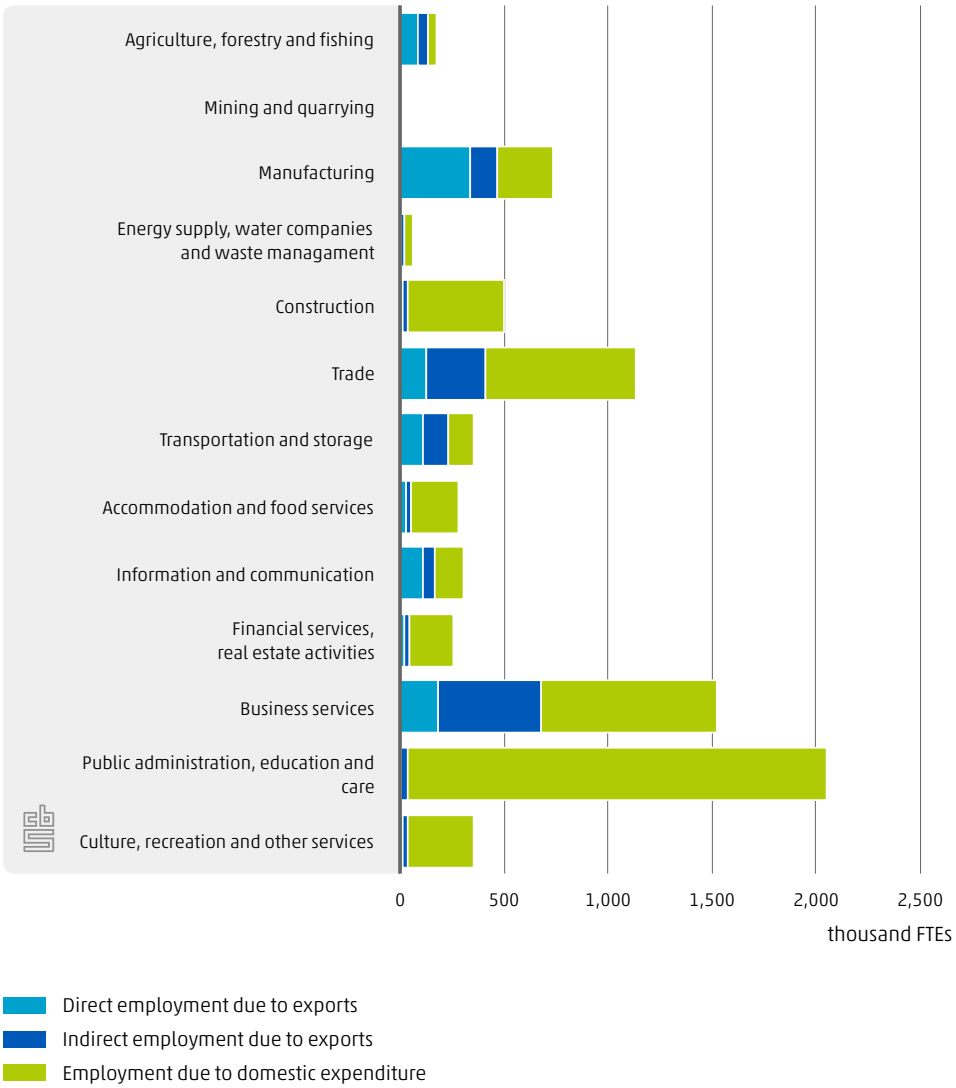
6) Due to a methodological change, the figures published in Dutch Trade in Facts and Figures 2021 are not comparable with the figures in this publication.

1.3 million indirect full-time jobs thanks to exports

Exports created most employment in business services

In particular sectors, a large share of employment is associated with exports, while other sectors depend very little on exports for employment. Exports generated most employment in business services. The manufacturing, trade, transportation and storage, and information and communication sectors also benefit from exports of goods and services. Agriculture and manufacturing are most dependent on exports for employment in relative terms. That is mainly because these sectors are active in exports themselves. Business services depend on exports for just under half of their employment, but export-related employment is mostly indirect, which means that these jobs exist because of supplies to other exporting sectors. By contrast, public administration, education, healthcare and the cultural and recreational sectors have a low dependence on exports for employment.

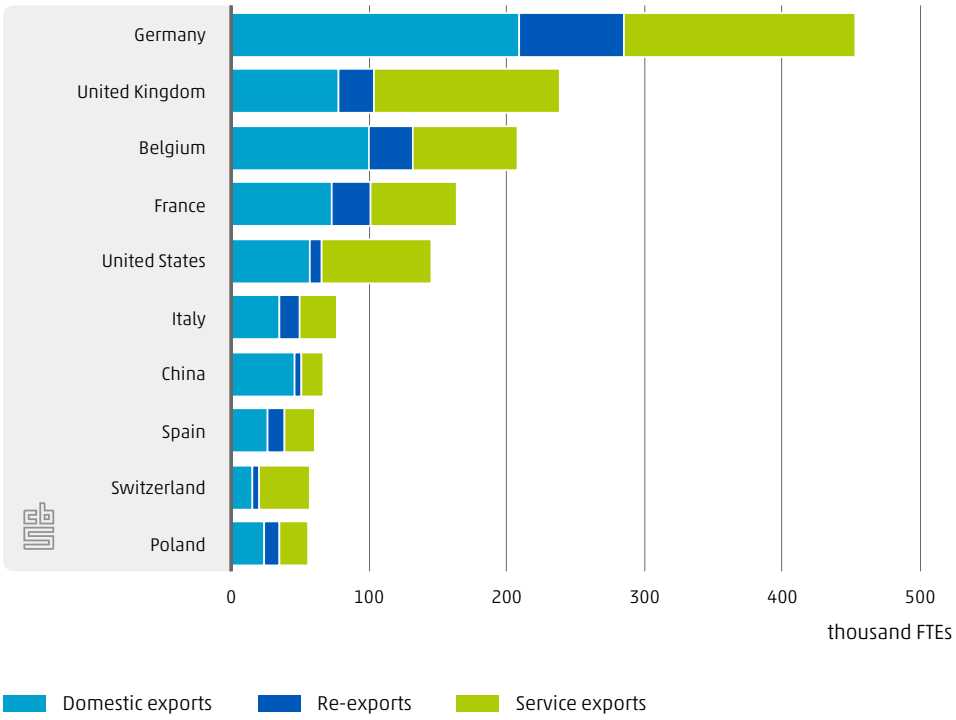
6.4.2 Export-induced employment per sector, 2020



Most export-related employment due to Germany

The number of full-time jobs in the Netherlands that are linked to exports follows the same pattern as export earnings. Here too, the top 3 countries are Germany (453,000 full-time jobs), followed by the United Kingdom (239,000 full-time jobs) and Belgium (208,000 full-time jobs). In relative terms, employment supported by re-exports is highest in the case of Spain (20%), followed by France, Italy and Poland (all 18%). In the case of destinations where domestic exports play a relatively large role in export earnings, a relatively high level of employment is generated by this type of exports, as in the case of exports to Germany, Belgium and Italy, and in particular exports to China. Employment due to service exports is relatively high in the case of export destinations such as the United Kingdom, the United States and, especially, Switzerland.

6.4.3 Export-induced employment by country, top 10, 2020



Agricultural occupations in particular depend heavily on exports

This section examines which occupations are heavily involved and less heavily involved in Dutch exports of goods and services. Previous research (CBS, 2018) has shown that sectors in which women are well represented are less related to exports. This was ascertained by examining the number of hours worked by men and women in each sector. It can be seen that men, more than women, work in industries that are heavily dependent on exports, not only because people work in a sector that itself exports, but particularly also because every sector supplies intermediate goods and services to other sectors, which then export. This method is expanded here by basing the analysis not only on sex but also on the person's occupation. The occupation data are taken from the Labour Force Survey (EBB).[7] On the basis of the EBB it is possible to assess for each sector how many hours are worked and by which occupational groups. With this information it is possible to ascertain which occupations are particularly dependent on foreign demand for Dutch goods and services, and which are not.

Figure 6.4.4 shows how many millions of hours per week are worked in each occupational class.[8] Around 31% are worked for exports of goods and services to foreign countries. The largest numbers of hours worked per week in the Netherlands are in the business and administrative occupations (53 million hours), followed by technical occupations (43 million

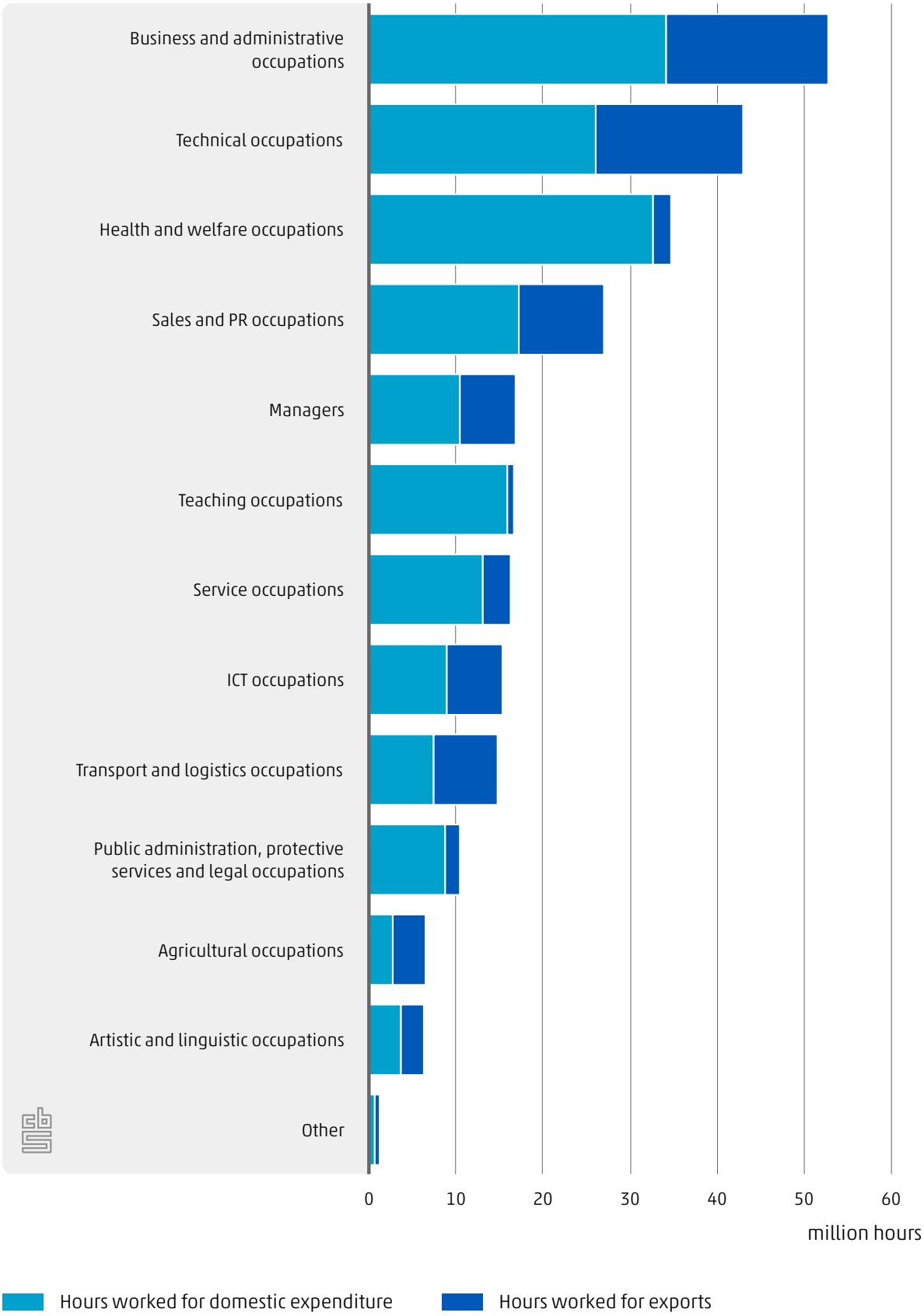
7) This analysis examines the occupational classes determined jointly by the Research Centre for Education and the Labour Market (ROA) and CBS. This classification comprises 13 classes: Educational occupations; Creative and linguistic occupations; Commercial occupations; Business and administrative occupations; Managerial; Public administration, security and justice; Technical occupations; ICT occupations; Agricultural occupations; Care and welfare; Service occupations; Transport and logistical occupations; Other occupations.

8) Employment is normally reported in terms of full-time equivalents or working years. In this case it has been decided to use the reported weekly working time from the EBB, without making any assumptions as to the size of a full-time equivalent.

hours). These two occupational classes also have the largest number of hours worked for exports, both around 18 million hours per week.

Agricultural occupations in particular depend heavily on exports: 57% of the hours worked per week in agricultural occupations are worked to enable exports. These hours are worked for both exports by the agricultural sector itself and for exports by other sectors that use agricultural intermediate resources for their own exports. Examples include the food industry and accommodation and food services, when a foreign guest stays in a hotel or visits a restaurant. Educational and care sector occupations are much less dependent on exports.

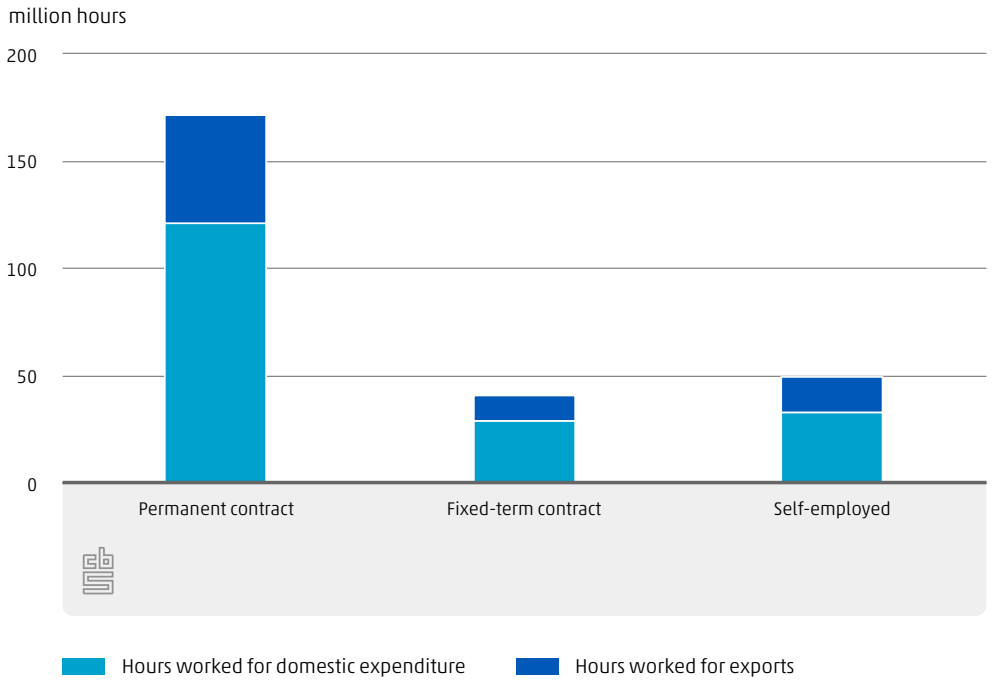
6.4.4 Hours worked by the Dutch labour force for domestic and foreign markets, per occupational class, 2020



Type of contract and educational level

The hours worked for domestic and foreign markets can also be analysed by contract type (Figure 6.4.5) and educational level (Figure 6.4.6). Most hours per week are worked by people on permanent contracts, where 30% of the hours worked are for exports. This proportion is the same among people on fixed-term contracts, i.e. flex workers. In the case of self-employed people, the share of hours worked for exports is somewhat greater, at 35%. This is because self-employed people fairly often work in sectors that are (directly or indirectly) dependent on exports, such as business and administrative occupations. In total, 34% of the hours in this occupational class are worked for foreign markets. If we look only at self-employed people in this occupational class, we see that around 44% of their hours worked are worked for foreign markets. This is explained by the fact that employees in this occupational class fairly often work in domestic administration and self-employed people work more often in business services, where relatively more work is for exports.

6.4.5 Type of contract linked to exports, 2020

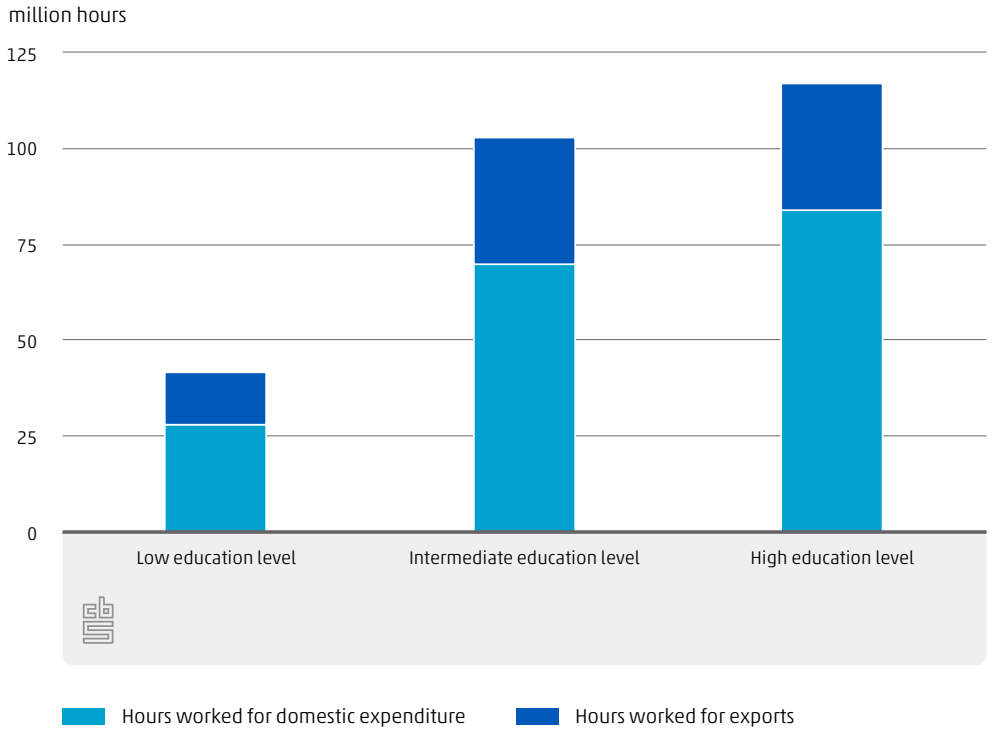


Highly educated people work the most hours per week[9]; 117 million hours compared to 42 million hours for low-skilled people.[10] They work 28% for Dutch exports. Low-skilled people work 34% for exports. Low-skilled people often have a technical occupation (such as assembly workers and machine operators) and are more likely than highly educated people to work in industries with a higher relative share of exports, such as transport and manufacturing.

9) To view the breakdown of the employed labour force by education level, see this StatLine table: Labour participation; key figures.

10) The lower education level includes primary education, prevocational secondary education (VMBO), the first three years of senior general secondary education (HAVO)/pre-university education (VWO) and lower secondary vocational training (entry level), formerly assistant's training (MBO-1). The medium education level includes upper secondary education (HAVO/VWO), basic vocational training (MBO-2), vocational training (MBO-3), and middle management and specialist education (MBO-4). Higher education comprises higher vocational education (HBO) or university education (WO). Higher vocational education (HBO) and university education (WO) programmes include all first degree, bachelor's and doctoral or master's programmes as well as doctorates.

6.4.6 Education level of Dutch labour force linked to exports, 2020



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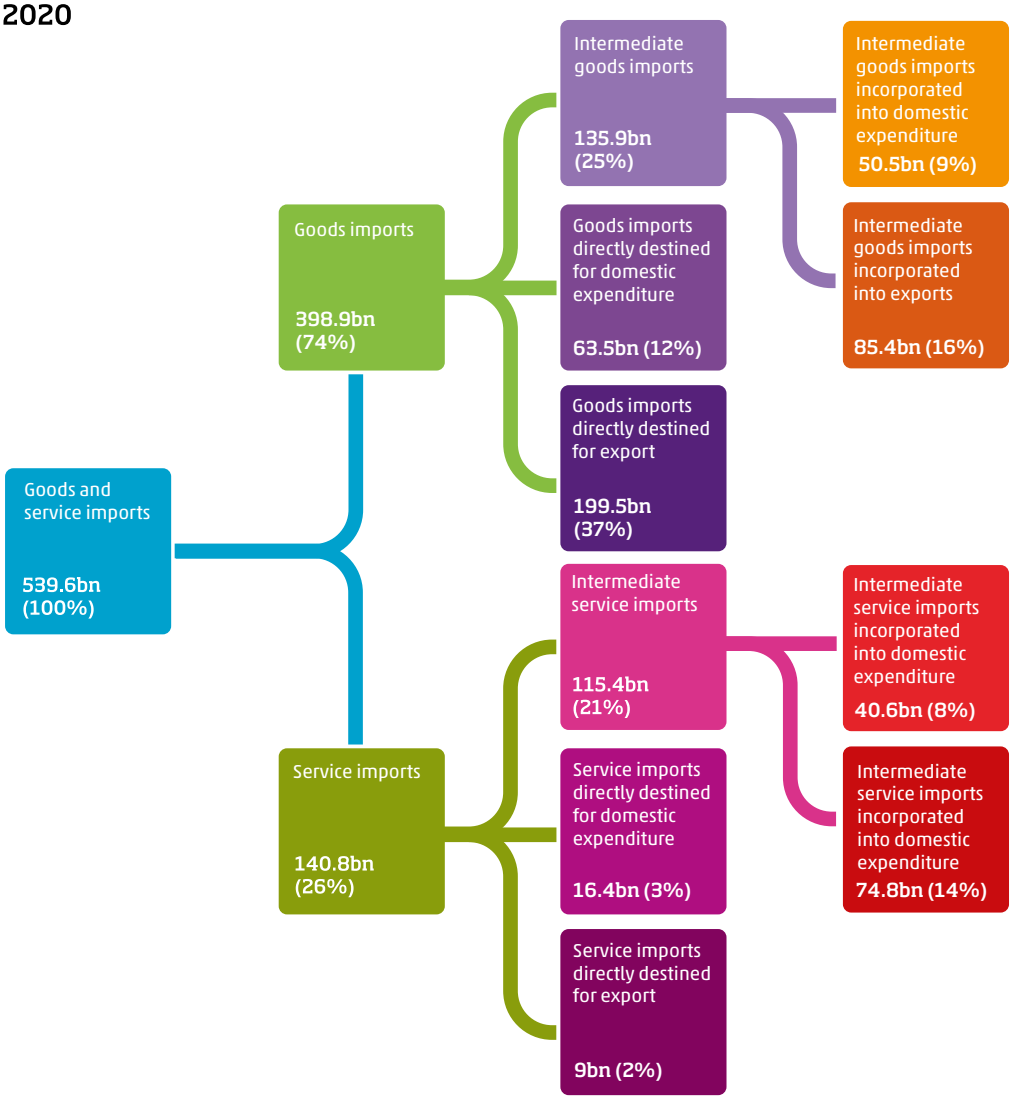
7 Dutch participation in global value chains

Authors: Timon Bohn, Tom Notten, Khee Fung Wong

Distribution of goods and service imports, billion euros and % of total, 2020



The Netherlands has strong ties with other countries as a result of operating in global value chains. It generally plays an important role as a link in global trade, especially in intraregional trade within the internal market. This chapter examines the origin and composition of imports to the Netherlands in 2020. It also examines precisely what happens to these imports of goods and services. Dutch enterprises generally import many goods and services that are produced more efficiently in other countries or that they cannot produce themselves. A substantial proportion of these goods and services are essential to enable enterprises to export competitively.

7.1 Key findings

Disruptions to supply chains for various products and shortages of essential goods further emphasised the interconnectedness of countries in global value chains in 2020, particularly given that the bulk of international trade and investment takes place within global value chains. At present, 70% of international trade is intended for production in global value chains. Raw materials, semi-finished products and services are exchanged between various countries before being incorporated in end-products that are shipped to consumers all over the world (OECD, 2020). Participation in global value chains gives enterprises many advantages because it enables them to purchase their inputs more efficiently, to gain access to knowledge and capital outside the domestic economy and to expand their activities to new markets (OECD, 2013). Disruptions to global supply chains in the context of the coronavirus pandemic, however, reopened the debate on the vulnerabilities associated with production in complex international production networks. In order to increase the resilience of supply chains, some studies, for example, even propose making the chains shorter, less complex and less international.

Imports that undergo no processing

In this chapter we examine how various goods and services from the rest of the world work their way through the Netherlands. The infographic at the beginning of this chapter shows what happens to imports entering the Netherlands. In 2020, the Netherlands imported around €539.6 billion worth of goods and services, comprising goods worth €398.9 billion and services worth €140.8 billion.[1)] Goods imports contracted by €31.3 billion, around 7.3%, in 2020 compared to the previous year. Imports of services fell by €20.4 billion, which means that the relative decrease of 12.7% was significantly greater than in the case of goods imports. A substantial proportion of total goods and service imports (37%) immediately went back abroad in the form of re-exports in 2020. The vast majority of this comprised goods, which were nevertheless 3.7% – around €7.6 billion – lower than in 2019. Only a very small part of the imports for re-exports were imports of services, such as fees for the use of intellectual property paid through the Netherlands. The smallest import flow in the infographic consists of imported goods and services intended for direct domestic expenditures. The direct goods imports intended for domestic expenditures were 6.6% lower than in 2019. Imports of services intended for direct domestic expenditures amounted to €16.4 billion in 2020. Expenditures by Dutch tourists abroad makes up the majority of imports in this category. In 2019 these imports amounted to €26.8 billion. As a result of travel restrictions, this import flow decreased by more than 38.8% (€10.4 billion) in the COVID year 2020.

1) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from the other marginals shown on StatLine or in Chapters 3, 4 and 5 of this publication, which are based on the source statistics.

47% of total Dutch imports were intended for further processing by Dutch enterprises

Imports that do undergo processing

Almost half of imported goods and services were intended for further processing by Dutch enterprises. These 'intermediate imports' had a value of €251.3 billion and thus represented 47% of total Dutch imports. Intermediate imports comprise raw materials, semi-finished products, intermediates or support services that are incorporated in other products or used to provide services in the Netherlands. The goods or services that the Netherlands produces are destined either for the domestic market or for export. As the infographic shows, the Dutch business economy processes two-thirds of intermediate imports to serve customers outside the Netherlands. In 2020, €85.4 billion of goods and €74.8 billion of services were incorporated in exports. Petroleum products and chemicals are the main type of intermediate imports. The vast majority of imports of crude oil and petroleum products were incorporated in exported goods and services, such as refined petroleum products manufactured from crude oil, or petroleum-based plastics and fuels used in exports of services by the transport sector. Chemical products are used mainly in export-driven production processes. The services imported by enterprises were mainly business services. Dutch enterprises also imported a great deal of intellectual property, which was mainly utilised in export production.
The United States, the United Kingdom and Germany were the main origin countries of services incorporated in Dutch exports.

Origin of intermediate imports incorporated in exports

The Netherlands plays an important role as a link in global trade, especially in intraregional trade within the internal market. A large share of the imports that are incorporated in exports came from the EU-28 and went to another (or the same) EU-28 country. Of the four EU countries discussed individually in this chapter, the Netherlands needed the most imports from Germany, followed by the United Kingdom, Belgium and France. Countries that are geographically close to the Netherlands – particularly the neighbouring countries – are thus the largest suppliers of intermediate inputs required for Dutch exports, but imports from the EU became relatively less important for Dutch exporters in 2020. The high relative dependence on imports from the EU applies particularly to imports of industrial and chemical products. Crude oil and petroleum products were by far the main imported products incorporated in Dutch exports, but most of these imports came from countries outside Europe (e.g. Russia, Norway and Nigeria). The United States and China are also important players with regard to imports to the Netherlands processed by Dutch enterprises. The market shares of China and the United States actually increased in the COVID year 2020. Whereas total goods imports fell by 8.8% in 2020, goods imports from China, for example, increased further. China was particularly important for imports of machinery and transport equipment and industrial products. The United States was important for imports of machinery and transport equipment,

and raw materials and mineral fuels, but its importance for Dutch imports was evident particularly with regard to imports of services, especially American intellectual property.

Due to the war in Ukraine, this chapter devotes particular attention to imports from Ukraine and Russia. Imports from Ukraine and Russia incorporated in Dutch exports were relatively limited in 2020, and mainly related to goods. The dependence on Ukraine and Russia for goods imports incorporated in exports was lower in 2020 than in 2019, however, particularly due to a somewhat lower import dependence on Russia. This import dependence applied mainly to a number of specific goods imported from those two countries, such as cereals and petroleum.

7.2 Dutch imports in times of coronavirus

This section gives a detailed description of the destinations of goods and services imported into the Netherlands in 2020. It also examines precisely what happens to the goods and services that are imported. Are they intended for Dutch consumers, are they processed by a Dutch enterprise as part of its production for the domestic or foreign market, or do they leave the Netherlands in a more or less unprocessed state in the form of re-exports? What goods and services do these import flows comprise? The year 2020 was marked by disruptions to international trade and global production chains. In the Netherlands too the pandemic had a negative impact on economic activity and hence also on demand for imported goods and services. The figures for 2020 are therefore compared to the 2019 figures to give an indication of which import flows were hardest hit by the coronavirus crisis.

Half of goods imports leave the country again without further processing

In 2020, goods imports amounted to €398.9 billion and service imports amounted to €140.8 billion, making a combined total of €539.6 billion (Table 7.2.1).[2)] Total imports of goods and services decreased by €51.8 billion in 2020, or 8.8%. Goods imports contracted by €31.3 billion, a decrease of around 7.3% on the previous year. Imports of services fell by €20.4 billion, which means that the relative decrease of 12.7% was significantly greater than in the case of goods imports.

Table 7.2.2 and the infographic at the beginning of this chapter show that a considerable proportion of goods imports are exported directly abroad. Half of the €398.9 billion worth of goods imports were destined for re-export. These imports for re-exports amounted to €199.5 billion in 2020. That was 3.7% – around €7.6 billion – less than in 2019. The share of imports for re-exports in total goods imports increased by 1.9 percentage points compared to 2019 (Table 7.2.1). Re-exports of goods include, for example, a shipping container full of consumer electronics from South Korea that is cleared through customs in the Port of Rotterdam and sold on to a wholesaler in France by an enterprise in the Netherlands). The bulk of Dutch goods imports from Asia are destined for re-export to the European hinterland (Franssen et al., 2020). At €9 billion, imports for re-exports of services are

2) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from the other marginals shown on StatLine or in the other chapters of this publication, which are both based on the trade statistics.

equivalent to just a fraction of imports for re-exports of goods. Re-exports of services consist mainly of royalty and licence payments to special purpose entities (SPEs) registered in the Netherlands that manage intellectual property rights and transfer the payments they collect directly to foreign parent enterprises (Mellens, 2011; CBS, 2016).

7.2.1 Destinations of goods and service imports, 2019

	Imports for domestic expenditures				
	imports for intermediate consumption		imports intended for direct domestic expenditures	**Imports destined directly for foreign market (re-exports)**	**Total**
	domestic consumption	exports			
	x bn euros				
Goods imports	54.1	101.0	68.0	207.1	430.2
Service imports	41.9	81.4	26.8	11.1	161.2
Total	95.9	182.3	94.8	218.2	591.4

7.2.2 Destinations of goods and service imports, 2020

	Imports for domestic consumption				
	imports for intermediate consumption		imports intended for direct domestic expenditures	**Imports destined directly for foreign market (re-exports)**	**Total**
	domestic expenditures	exports			
	x bn euros				
Goods imports	50.5	85.4	63.5	199.5	398.9
Service imports	40.6	74.8	16.4	9.0	140.8
Total	91.1	160.2	79.9	208.5	539.6

Sharp fall in expenditures by Dutch tourists due to travel restrictions

The smallest import flow comprises imported goods and services intended for direct domestic expenditures. In 2020, €79.9 billion worth of imported goods and services were consumed by Dutch households, government organisations and enterprises in the form of investments in fixed assets without further processing. Direct imports of goods intended for domestic expenditures amounted to €63.5 billion in 2020. That was €4.5 billion, or 6.6%, less than in 2019. A bottle of beer produced and bottled in Belgium is an example of an import intended directly for Dutch households. A lathe imported from Germany by a Dutch metalworking firm, however, also falls into the category of imports intended for direct domestic expenditures (investments in fixed assets). Imports of services intended for direct domestic expenditures amounted to €16.4 billion in 2020. Expenditure by Dutch tourists abroad makes up the majority of imports in this category. In 2019 these imports amounted to €26.8 billion. As a result of travel restrictions, this import flow decreased by more than 38.8% (€10.4 billion) in the COVID year 2020.

38.8% fall in service imports intended for direct domestic expenditures in 2020 compared to the previous year

Most intermediate imports intended for incorporation in exports

The majority of imported goods and services were intended for further processing by Dutch enterprises. These intermediate imports amounted to €251.3 billion, representing 47% of total Dutch imports. Intermediate imports can be further subdivided into goods and services. These amounted to €135.9 billion and €115.4 billion respectively in 2020. Intermediate imports are incorporated in products or used in services for the domestic market or for the export market. The Dutch business economy processed almost two-thirds of these intermediate imports to serve foreign customers. Goods worth €85.4 billion and services worth €74.8 billion were incorporated in exports in 2020, making a combined total of €160.2 billion. Imports intended for processing in exports decreased by €22.1 billion, or 12.1%, in 2020. In relative terms, imports of services for exports decreased less than imports of goods, with decreases of 8.1% and 15.4% respectively. Examples of goods imports incorporated in Dutch exports are computers, computer parts and telecommunications equipment imported from China. Many financial services, intellectual property rights and licences from the United States are also used in Dutch exports (Aerts et al., 2020). Section 7.5 looks in more detail at these import flows that are incorporated in exports.

Intermediate imports of goods and services incorporated in products or services for the domestic market by Dutch enterprises amounted to €91.1 billion, including €50.5 billion worth of goods and €40.6 billion of services. Natural gas from Norway is an example of an intermediate import destined partly for the domestic market. This natural gas can be used by Dutch chemical enterprises to produce mineral fertilisers for Dutch agriculture, whose crops are then processed into food products for Dutch households. LED lamps from China used by Dutch construction companies building commercial premises are another example. Fees paid by Dutch media enterprises to American enterprises for broadcasting rights to movies, series or television shows are an example of imported services incorporated in services for the domestic market (Aerts et al., 2020).

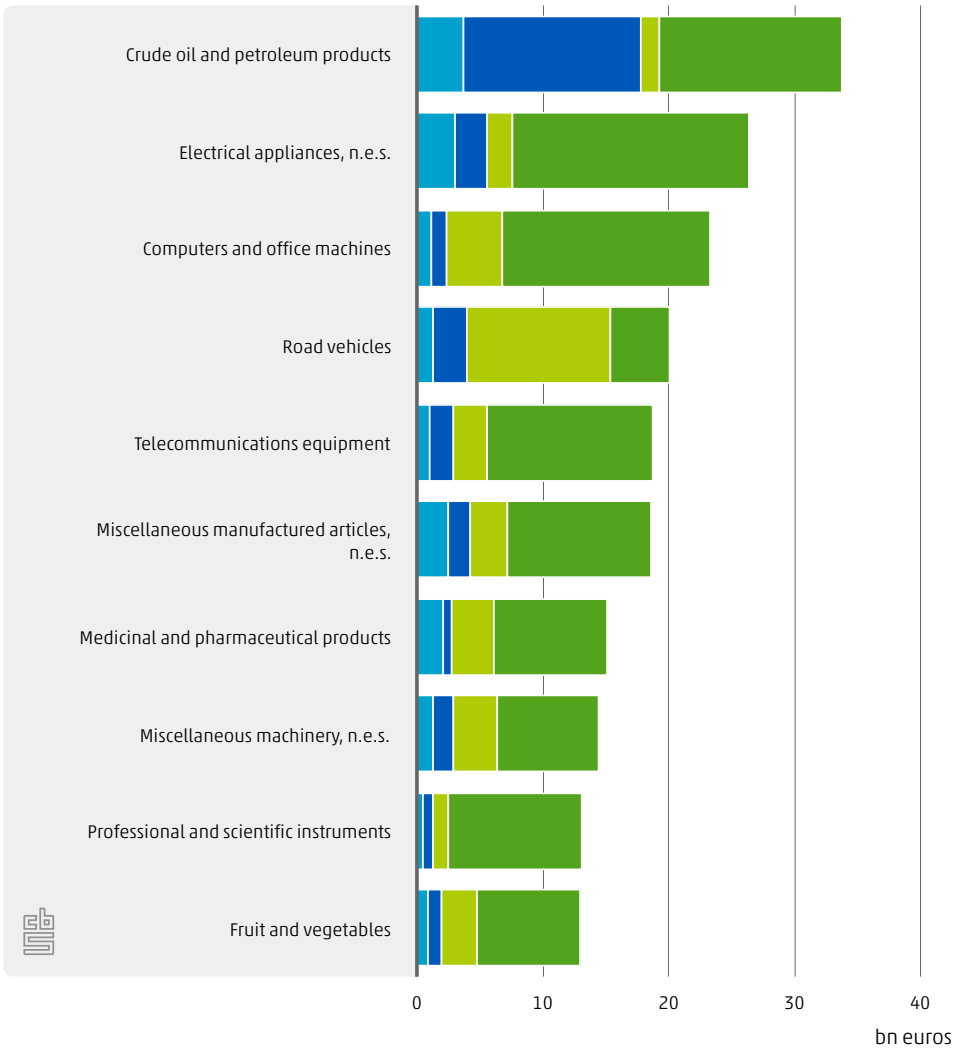
7.3 Composition and origin of goods imports

Increase in imports of electrical appliances, computers and office machines

Figure 7.3.1 shows that crude oil and petroleum products were the main import goods in 2020, with an import value of €33.8 billion.[3)] In 2019 the figure was €50.3 billion. This 32.8% decrease was caused by lower demand and sharp falls in prices of raw materials, including crude oil, in 2020. Imported crude oil and petroleum products are intended principally for re-export or further processing in Dutch exports. Crude oil and petroleum products also have the largest import value in the flow of goods imports for further processing for domestic consumption. The second largest category is electrical appliances, with an import value of €26.6 billion, 71% (€18.8 billion) of which comprised imports for re-export. Compared to 2019, imports of electrical appliances even showed a slight rise of €0.7 billion. A possible explanation for this rise may be the increased demand for consumer electronics due to lockdown measures during the coronavirus pandemic (Van der Duin, 2021). Computers and office machines are third in the ranking of goods imports. These also showed slight growth. Imports of these goods increased by €0.3 billion compared to 2019. This may have to do with the increased demand for computers and office machines due to the various coronavirus lockdowns and the requirement to work from home (Van der Duin, 2021). It is also notable that imports of pharmaceutical products increased by €1.9 billion to €15.3 billion, while imports of road vehicles fell sharply by €3.3 billion to €20.1 billion. Imports of natural and manufactured gas also fell sharply by €2.7 billion to €6.4 billion.

3) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from other data shown on StatLine or in the other chapters of this publication, which are both based on the trade statistics.

7.3.1 Top 10 destinations of goods imports by goods category, 2020



Strong growth of imports for re-exports of microchips and semiconductors

Imports for re-exports, amounting to €199.5 billion, were the main imports into the Netherlands in 2020 (Figure 7.3.1). The largest product group in this category consisted of electrical appliances. Imports for re-exports in this category amounted to €18.8 billion, an increase of €1.3 billion compared to 2019. Most of this increase was attributable to strong growth in re-exports of microchips and semiconductors. The second largest category in imports for re-exports comprised computers and office machines, with an import value of €16.6 billion, €0.2 billion less than in 2019. In 2019, crude oil and petroleum products were still the largest category. In 2020, imports for re-exports in this category amounted to €14.5 billion, a decrease of €5.9 billion, or 28.9%, compared to 2019. Imports for re-exports of medicinal and pharmaceutical products rose by €0.8 billion in 2020, while imports for re-

exports of telecommunications equipment increased by €0.6 billion. Categories seeing significant falls were generators and motors, down €1.2 billion, and natural gas, down €0.9 billion.

Petroleum products and chemicals remained important intermediate imports

Goods imports for intermediate consumption amounted to over €135.9 billion in 2020. In 2019, the figure was still €155.1 billion. These imports are incorporated in goods and services sold both in the Netherlands and elsewhere. Imports of crude oil and petroleum products for intermediate consumption remained the largest category, with an import value of €17.9 billion. Of these, imports worth €14.2 billion were incorporated in exported goods and services, such as refined petroleum products manufactured from crude oil, or petroleum-based plastics and fuels used in exports of services by the transport sector. Imports of chemical products for intermediate consumption amounted to €15.9 billion. Chemical products are used mainly in export-driven production processes.[4)] €5.7 billion worth of electrical appliances were imported for intermediate consumption. Intermediate consumption concerns electronic components and parts that are used across the broad category of electrical appliances. Other product categories for intermediate consumption with a significant import value are metal goods (€5.3 billion), specialised machinery (€4.6 billion) and iron and steel (€4.3 billion).

Road vehicles remained the largest category for direct domestic expenditures

Imports intended for direct domestic expenditures in 2020, amounting to €63.5 billion, were significantly smaller than the two import flows mentioned above. Among these imports, the largest product category comprised road vehicles (including spare parts and accessories), with an import value of €11.5 billion. These imports accounted for 57.2% of total imports of road vehicles, which means over half of the road vehicles (such as passenger cars and motorcycles) were intended directly for Dutch consumers or business operators. In addition to road vehicles, more than half of the imports of other transport equipment (including aircraft, ships and boats) and furniture and accessories are intended for direct domestic expenditures. Compared to 2019, the import value of road vehicles decreased by €2.3 billion, or 16.7%, driven by the fall in demand for vehicles, production chain disruptions and the worldwide chip shortage (Jaarsma & Rooyakkers, 2021). New sales of passenger cars were around 20% lower in 2020 than in a normal year (RVO & Revnext, 2021). Imports of computers and office machines for direct domestic use amounted to €4.4 billion, whereas in 2019 the figure was €3.8 billion. This growth of around 15.8% can be linked to homeworking during the coronavirus pandemic (Van der Duin, 2021). A notable rise in 2020 concerned imports of medicinal and pharmaceutical products, which rose by €0.8 billion to €3.4 billion. A decrease was also recorded in imports of clothing for direct domestic use, which fell by €0.3 billion to €3 billion. The lack of demand for clothing during the coronavirus crisis played an important role (Jaarsma & Rooyakkers, 2021).

4) Chemical products comprise the sum of SITC 2 categories 51, 52, 53, 54, 55, 56, 57, 58 and 59.

Table 7.3.2 shows what ultimately happens to imports from particular countries. Germany is the main import partner for goods, accounting for €69 billion, followed by China (€39.6 billion) and Belgium (€37.4 billion). Looking at the European Union (EU) as a whole, we find that it accounts for €204.6 billion of imports. The EU internal market thus accounted for 51.3% of total goods imports into the Netherlands. Excluding the United Kingdom, goods imports from the EU amounted to €186.2 billion, or 46.7% of total goods imports. Imports from EU countries (including the United Kingdom) intended for further processing by Dutch enterprises amounted to €68.8 billion and represented 50.6% of total intermediate goods imports.

7.3.2 Destinations of goods imports by country (group) of origin, 2020

	Imports for domestic consumption				
	imports for intermediate consumption				
	domestic expenditures	exports	imports intended for direct domestic expenditures	**Imports destined directly for foreign market (re-exports)**	**Total**
	x bn euros				
Germany	11.2	13.8	13.9	30.1	69.0
Belgium	6.1	8.5	7.8	15.1	37.4
United Kingdom	2.2	4.2	2.4	9.5	18.4
Other EU	10.4	12.4	14.1	43.0	79.8
Ukraine	0.3	0.7	0.0	0.5	1.6
Russia	1.2	3.4	0.3	2.7	7.6
Other Europe	2.4	3.5	2.1	7.0	15.1
United States	2.6	5.6	2.6	17.6	28.5
Other America	1.3	2.7	1.3	8.2	13.5
China	3.8	3.7	6.9	25.1	39.6
Other Asia	3.3	5.8	5.5	32.0	46.7
Elsewhere	5.7	21.1	6.6	8.7	41.7

The United Kingdom ranks fifth among the Netherlands' main import partners, with an import value of €18.4 billion. Of that €18.4 billion, €6.4 billion was destined for re-exports. According to Franssen et al. (2020), these re-exports were intended mainly for the European hinterland. They show that – at any rate before Brexit took effect – the Netherlands is an important pivot point between the United Kingdom and the European hinterland.

Decrease in share of supplies from the United Kingdom

Figure 7.3.3 shows that the United Kingdom's share of total imports for intermediate consumption decreased from 5.7% in 2019 to 4.7% in 2020. This decrease is mainly due to a lower import value of crude oil and petroleum products. The decrease in the import value was caused both by price falls and by lower import volumes due to a lack of demand and lockdown measures. The EU countries' share of goods imports for intermediate consumption did increase, however, from 48.1% in 2019 to 50.6% in 2020 (the EU-28 is shown from the left vertical axis to the first dark green bar). Even excluding the United Kingdom, the EU countries' share of goods imports for further processing increased from 42.4% to 45.9%. Of the EU countries, Germany and Belgium remain the most important suppliers to Dutch enterprises.[5)]

5) As a result of a methodological improvement, the figures at country level differ from the figures published last year in Chapter 6 of Dutch Trade in Facts and Figures (Bohn, et al., 2021).

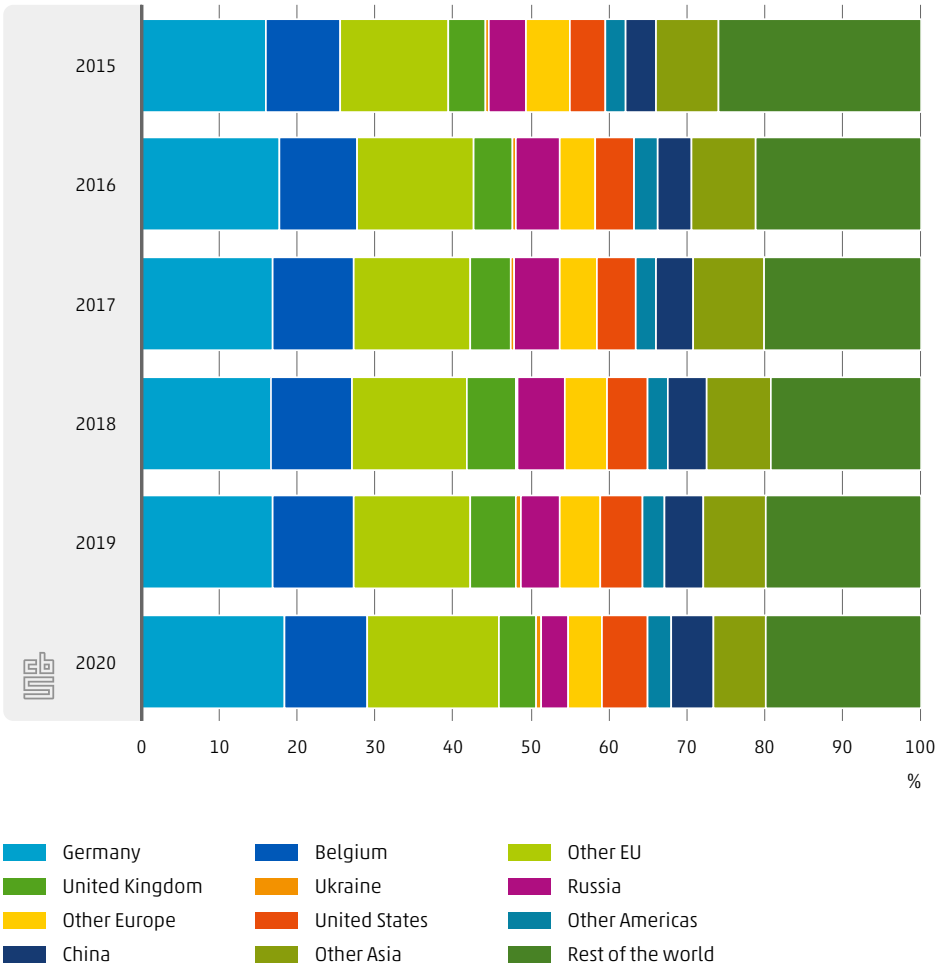
Russia and Ukraine are important suppliers of raw materials

In 2020, the Netherlands imported €7.6 billion worth of goods from Russia. Over 60% of these imports were destined for further processing by Dutch industries and 35% were destined for re-export. The bulk of the goods imported from Russia were energy products such as crude oil and petroleum products, natural gas and coal (Aerts et al., 2020; CBS, 2022a). Due to sharp price falls and lower import volumes of energy products, imports from Russia fell sharply from the 2019 level of €12 billion. Imports from Ukraine amounted to €1.6 billion in 2020, including almost €1 billion of goods for intermediate consumption. Imports from Ukraine for further processing consisted mainly of agricultural products such as cereals and vegetable oils (CBS, 2022b). Previous CBS research into the security of supply of larger product groups identified maize from Ukraine and coal from Russia as products that are imported into the Netherlands from only one or a few countries and supplied to the global market by a limited number of countries (CBS, 2021).

China and the United States increase their market share in COVID year 2020

Whereas total goods imports fell by 8.8% in 2020, goods imports from China grew by 5.3% compared to 2019. Goods imports from China accounted for 9.9% of the total goods imports in 2020. After Germany, China was therefore the Netherlands' main import partner for goods trade. Unlike the goods imports from the European Union, most goods imports from China (63%) were destined for re-export. Figure 7.3.3 looks at intermediate goods imports and shows that China's importance has also increased, from 3.9% in 2015 to 5.1% in 2019 and 5.5% in 2020. China has become increasingly important as a supplier to Dutch enterprises in recent years (Aerts et al., 2020; CPB & CBS, 2022). Even when the pandemic broke out, a rise in goods imports was recorded compared to the previous year (CPB & CBS, 2022). This was due to imports for re-export, however, because intermediate goods imports from China decreased from €7.9 billion in 2019 to €7.7 billion in 2020. Imports from the United States also increased in the COVID year 2020, despite the overall fall in Dutch goods imports. In 2020 the United States' share of imports for intermediate consumption was 6%, whereas in 2019 it was 5.5%.

7.3.3 Shares in total goods imports for intermediate consumption, by country (group)



7.4 Composition and origin of service imports

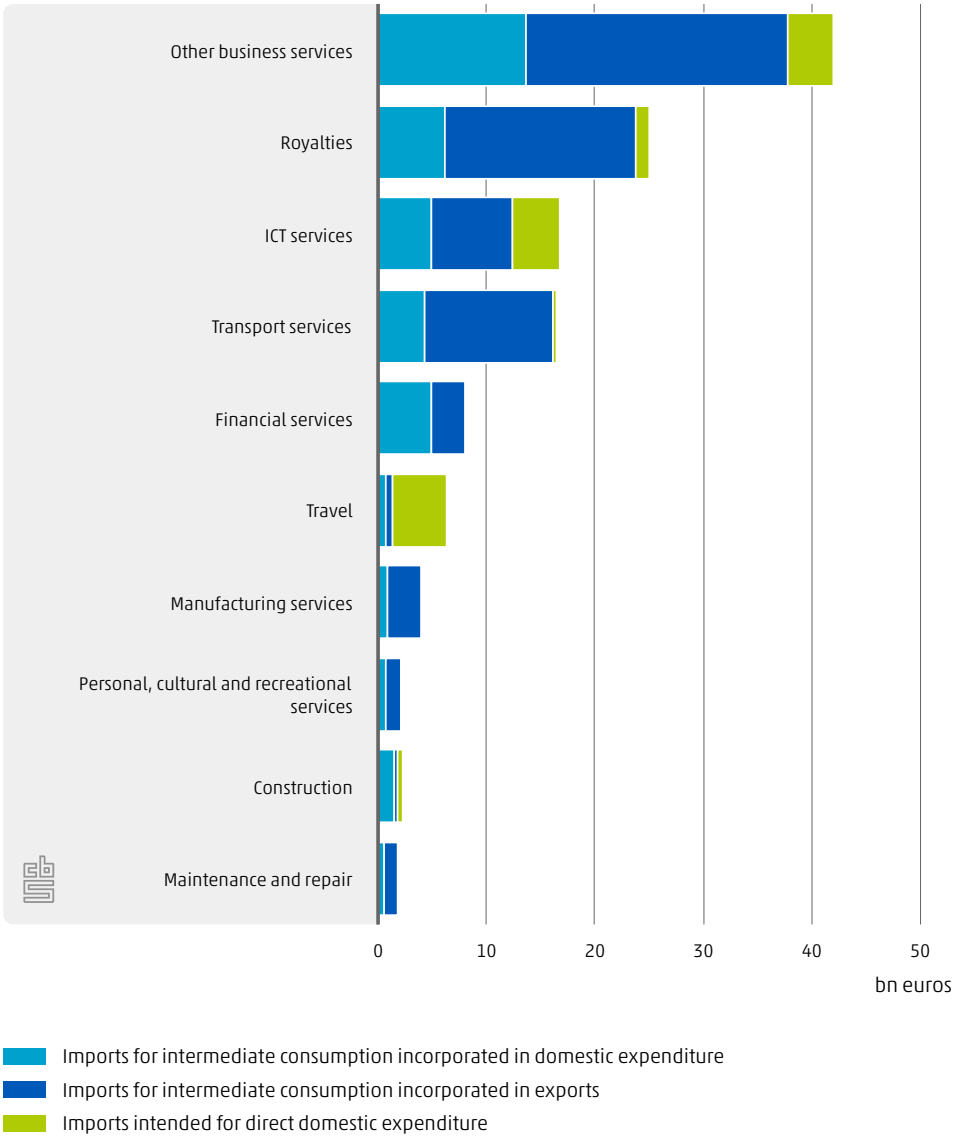
Despite the sharp fall in revenues of travel intermediaries and platforms due to the coronavirus crisis, business services remain dominant in service imports (Figure 7.4.1). The Netherlands imported business services worth €42 billion in 2020. In 2019 the figure was €48.6 billion.[6] The bulk of business services (89.8%) were imported by enterprises for further processing. Of this €37.7 billion worth of imported business services for intermediate consumption, €24.1 billion was used to export goods and services from the Netherlands. Of these business services incorporated in exports, professional and management consulting services accounted for €12.5 billion and technical and trade-related services accounted for €11 billion.

6) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from other data reported on StatLine or in the other chapters of this publication, which are both based on trade statistics.

No change in import value of payments for intellectual property

Payments to other countries for the use of intellectual property were the second main category, with an import value of €25 billion in 2020, the same value as in 2019. The majority of these (96%) were intended for intermediate consumption. Almost three-quarters of these intermediate imports were intended for further processing in Dutch exports of goods and services. Payments for the use of intellectual property rights include, for example, software licences and fees for the use of patents.

7.4.1 Top 10 destinations of service imports by service category, 2020



The third largest category is ICT services, with an import value of €16.9 billion. Imports of ICT services rose by €1.3 billion in 2020. Of these €16.9 billion worth of imported ICT services, 74% were intended for intermediate consumption, and again the majority were incorporated in Dutch exports of goods and services. An example is imported specialist software support for enterprises. The remaining 26% were intended for domestic consumption, such as the use

of telecommunications networks by Dutch consumers using their mobile telephones on holiday abroad.

Lower imports of travel and transport services due to coronavirus crisis

Imports of transport services amounted to €16.5 billion in 2020, €1.9 billion less than in the previous year. In 2020, 98% of imported transport services were intended for intermediate consumption, as in the case of Dutch enterprises hiring foreign lorry drivers or freight forwarders to transport goods, for example. Intermediate imports of transport services fell by 7% in value. The remaining 2% comprised imports of transport services for domestic expenditures, including passenger transport. These fell by as much as 65% due to the pandemic.

Travel also fell sharply in the COVID year 2020. Whereas travel imports amounted to €19.1 billion in 2019, the figure in 2020 was just €6.5 billion, a decrease of €12.6 billion, or 66%. Of the imports of travel services, 77% were intended for private consumption. These include expenditure by Dutch tourists abroad. Many foreign destinations were closed to Dutch tourists due to the pandemic. Other intermediate imports of travel services fall into the category of business travel.

US the largest supplier of intermediate services

Table 7.4.2 shows from which countries (or groups of countries) services are imported and how they are used in the Netherlands. The United States was the largest import partner for services in 2020 (€26.4 billion), followed by the United Kingdom (€17.3 billion) and Germany (€15.9 billion). The EU internal market, with €76.8 billion, accounted for 55% of total service imports. Imports from EU countries intended for further processing by Dutch enterprises amounted to €66.3 billion, representing 57% of total imports of services for intermediate consumption. Compared with goods imports, Russia, Ukraine, China and other Asian countries have a modest share of intermediate imports of services. Imports of services from the United States increased by €5.2 billion in 2020, mainly due to a sharp increase in imports of royalties. Imports of services from Germany decreased by €3.6 billion. Imports of services from other EU countries also fell sharply by €11.3 billion. This decrease was mainly due to the sharp fall in travel services resulting from the pandemic.

7.4.2 Destination of service imports by country (group) of origin, bn euros, 2020

	Imports for domestic consumption			
	imports for intermediate consumption		imports intended for direct domestic expenditures	**Total**
	domestic expenditures	exports		
	x bn euros			
Countries and continents				
Germany	4.5	8.3	3.1	15.9
Belgium	3.1	4.9	1.3	9.3
Other EU	10.7	19.1	4.4	34.3
United Kingdom	5.7	10.0	1.7	17.3
Ukraine	0.0	0.0	0.0	0.1
Russia	0.1	0.3	0.0	0.4

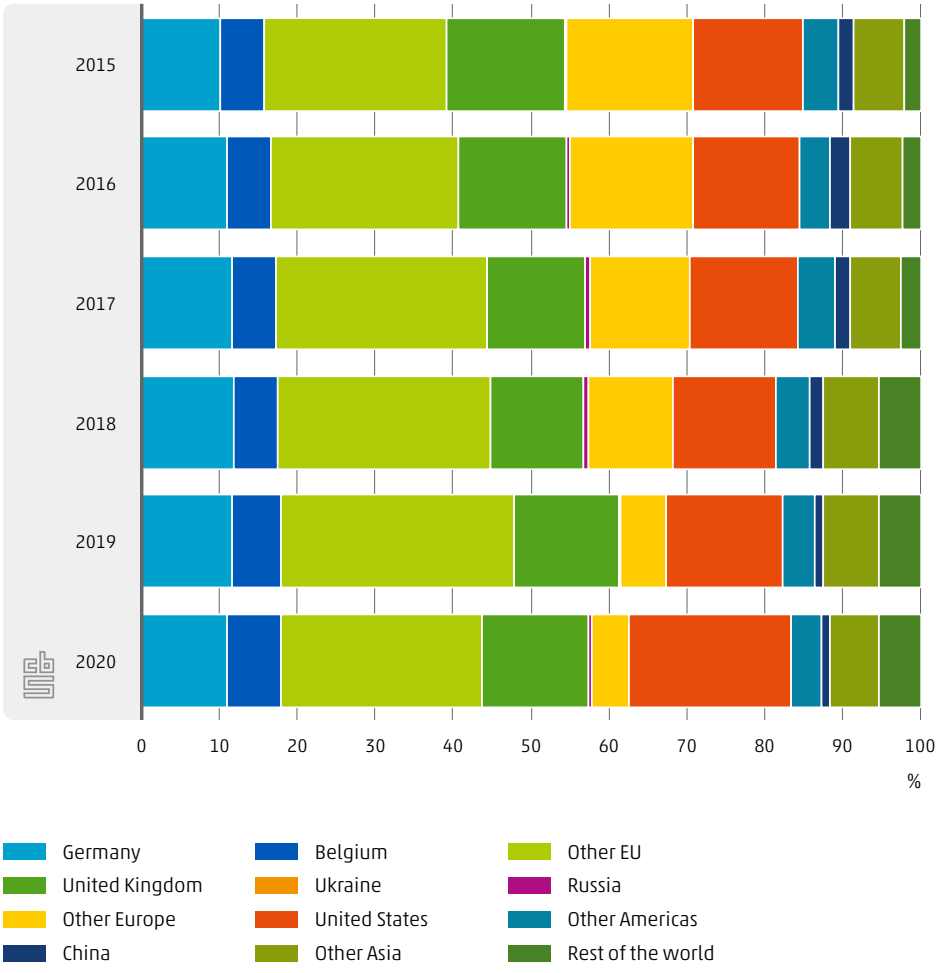
7.4.2 Destination of service imports by country (group) of origin, bn euros, 2020 (continued)

	Imports for domestic consumption			
	imports for intermediate consumption			
	domestic expenditures	exports	imports intended for direct domestic expenditures	**Total**
	x bn euros			
Other Europe	1.8	3.9	0.6	6.2
United States	8.5	15.4	2.4	26.4
Other America	1.6	3.0	0.3	4.9
China	0.4	0.8	0.3	1.5
Other Asia	2.7	4.5	1.7	8.9
Elsewhere	1.5	4.6	0.6	15.6*

* Including imports for re-export of services (without breakdown by destination)

Figure 7.4.3 shows that the EU countries' share of total intermediate imports of services rose steadily between 2015 and 2019 from 54.4% to 61.4% (the EU-28 are shown from the left vertical axis to the first dark green bar). In 2020, this share fell to 57.5%. This was mainly due to a fall in imports of transport services resulting from the coronavirus crisis. Russia and Ukraine have negligible shares of service imports. China's share of service imports is also significantly smaller than its share of goods imports and China's importance has even decreased in recent years.

7.4.3 Shares in total service imports for intermediate consumption, by country (group)



7.5 The importance of imports for Dutch exports

The coronavirus pandemic has shown that severe disruptions to global value chains can have major consequences for countries that are highly dependent on intermediate imports from abroad. The sections above have already shown that the Netherlands, which is generally active in global value chains, exports goods and services that require large quantities of goods imports and service imports in their production process. Chapter 6 of this publication showed that in 2020 each euro of domestic goods exported required approximately 45 cents of imported goods and services. This 'import content' was 37% in the case of Dutch service exports. This section looks in more detail at the origin and composition of the import flows incorporated in Dutch exports. It examines, for instance, which imports from which countries are incorporated in exports to certain major trading partners. It also looks at Dutch import dependence. Recent developments on the world stage, including the war in Ukraine, the prohibition of trading in many Russian products (including crucial products such as mineral fuels) and the resulting consequences for the global food and energy supply have shed light on certain dependencies between the Netherlands and those two countries. This chapter therefore examines the extent to which imports from Ukraine and Russia are incorporated in Dutch exports, looking among other things at imports of cereals and mineral fuels. Another key point concerns the consequences of the coronavirus pandemic for imports incorporated in Dutch exports, by comparing those required imports between 2019 and 2020.

Imports incorporated in exports included a relatively larger proportion of services in 2020

As was shown earlier, goods exports[7] rely heavily on imports of goods. Goods made up over three-quarters of total imports intended for goods exports in 2020 (Table 7.5.1)[8] An almost identical pattern can be seen in exports of services: the majority (79%) of total imports for service exports consist of services. In both goods exports and service exports, the share of imported services grew by 2 percentage points relative to imported goods between 2019 and 2020. This is because goods imports as input for goods exports and service exports decreased much more sharply in that period compared to service imports. This means that the imports, which are to a large extent incorporated in Dutch exports, include a relatively larger proportion of foreign services. This may be because types of services that are essential for exports, e.g. royalties and ICT services, were less impeded by COVID-19, whereas certain intermediate goods exports were severely impacted (e.g. lower demand for petroleum and the shutting down of freight transport at the beginning of the coronavirus pandemic).

7) This section only concerns imports used by enterprises for exports of domestic goods and services; it does not include re-exports.
8) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from data reported on StatLine or in the other chapters of this publication, which are both based on trade statistics.

7.5.1 Composition of Dutch exports, 2019-2020

	Year	Total exports	Value added	Of which required goods imports		service imports	
				million euros	%	million euros	%
Goods exports	2019	232,016	124,716	83,001	77	24,299	23
	2020	213,676	119,848	70,738	75	23,090	25
Service exports	2019	180,790	117,641	14,680	23	48,469	77
	2020	159,322	104,544	11,635	21	43,143	79

7.6 International interrelatedness via Dutch imports and exports

The coronavirus crisis has clearly exposed the vulnerabilities of global value chains. All links in the chain have been impacted by the pandemic, and that applies particularly to countries that are generally active in long and geographically fragmented value chains. Table 7.6.1 illustrates the interrelatedness of the global economy via the Dutch chain[9] in 2020. Put another way, it shows to what extent imports of goods and services from one country (or region) are incorporated in exports to another country in 2020. For example, goods and services worth a total of €12.6 billion were imported from Belgium, and 14% of that – €1.7 billion – was incorporated in exports to Asia.[10] At the same time, Dutch enterprises used €14.3 billion worth of imports to export goods and services to the American continent. Of these imports, 56% came from the EU (€7.8 billion), 21% from the American continent itself (€3.0 billion) and 11% from Asia (€1.5 billion).

9) It should be noted that this chapter only looks at the Dutch/domestic chain. This means that Dutch interconnectedness with various countries relates only to direct imports and exports between the Netherlands and markets abroad. Of course, the Netherlands may also be connected to other countries through global value chains, such as with China or the United States through an import product from Germany. The CBS source data used do not allow an examination of such indirect dependencies between the Netherlands and other countries through other links in the chain. An analysis of indirect dependencies and global chain analyses requires an analysis with multiregional input-output tables instead of CBS source data.

10) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from data reported on StatLine or in the other chapters of this publication, which are both based on trade statistics.

7.6.1 Imports as input for exports, billion euros, 2020

Origin of imports	Destination of exports: EU-28	Americas	Asia	Elsewhere[1]	Total
EU-28					
Belgium	8.3 (66%) (11%)	1.2 (10%) (9%)	1.7 (14%) (9%)	1.3 (10%) (4%)	12.6 (100%) (8%)
Germany	12.7 (62%) (16%)	2.1 (11%) (15%)	3.5 (17%) (18%)	2.0 (10%) (6%)	20.4 (100%) (14%)
Other EU-28	25.7 (63%) (32%)	4.6 (11%) (32%)	6.0 (15%) (31%)	4.3 (11%) (12%)	40.5 (100%) (27%)
Ukraine	0.5 (72%) (1%)	0.0 (6%) (0%)	0.1 (13%) (0%)	0.1 (9%) (0%)	0.7 (100%) (0%)
Russia	2.1 (54%) (3%)	0.4 (12%) (3%)	0.6 (15%) (3%)	0.8 (20%) (2%)	3.8 (100%) (3%)
Americas					
United States	11.0 (59%) (14%)	2.4 (13%) (17%)	3.0 (16%) (15%)	2.1 (11%) (6%)	18.5 (100%) (12%)
Other America	3.4 (66%) (4%)	0.6 (11%) (4%)	0.7 (13%) (4%)	0.6 (11%) (2%)	5.2 (100%) (3%)
Asia					
China	2.4 (62%) (3%)	0.4 (11%) (3%)	0.6 (16%) (3%)	0.4 (10%) (1%)	3.9 (100%) (3%)
Other Asia	6.2 (62%) (8%)	1.1 (11%) (8%)	1.6 (16%) (8%)	1.1 (11%) (3%)	10.0 (100%) (7%)
Elsewhere[1]	7.0 (21%) (9%)	1.2 (4%) (9%)	1.6 (5%) (8%)	23.1 (70%) (65%)	32.9 (100%) (22%)
Total	79.3 (53%) (100%)	14.3 (10%) (100%)	19.4 (13%) (100%)	35.6 (24%) (100%)	148.6 (100%) (100%)

[1] The group 'Elsewhere' comprises all other countries worldwide including a group 'unknown'. While linking data from the National Accounts with the statistics on International Trade in Goods and International Trade in Services, part of the import and/or export value could not be linked to a specific country.

Note: In this chapter, the United Kingdom is consistently referred to as part of the EU-28 because, in 2020, the UK was still officially a member. The figure reflects both goods and services that are incorporated into exports.

European production chains remain dominant in the COVID year 2020

Once again, the figures show that the Netherlands plays an important role in intraregional trade within the European internal market, as was previously highlighted by Baldwin & Lopez-Gonzalez (2013) and which was also seen in 2019 (Bohn et al., 2021). It can be seen that this also applies in times of coronavirus. A large proportion of the imports incorporated in exports came from the EU-28 and went to another (or the same) EU-28 country (€46.7 billion, equivalent to 31.4% of total imports for intermediate consumption). A lot of trade therefore still takes place within the EU. In 2019, around €5 billion more imports from the EU were incorporated in exports to the EU than in 2020. This fall is mainly due to a decrease in imported services from the EU. The relative importance of the EU for its inputs into Dutch exports to other European countries nevertheless increased slightly: 30.5% of total intermediate imports related to Dutch exports to EU countries came from the EU in 2019. In 2020 this share rose to 31.4%.

Imports from the EU-28 intended for Dutch exports to all countries (both inside and outside the EU) are very high at 49% (€73.5 billion). In particular, the Netherlands needed a lot of imports from Germany (€20.4 billion; representing 28% of total imports from the EU),

followed by Belgium with €12.6 billion (17%). Altogether, the imports used from all EU countries except Germany and Belgium amounted to €40.5 billion (55%).

€18.5 billion of imports from the United States incorporated by enterprises in Dutch exports

Value of imports from Ukraine and Russia incorporated in exports is limited

Imports from Ukraine and Russia incorporated in Dutch exports are relatively limited and amounted to a total of €4.6 billion in 2020 (3% of total intermediate imports intended for export production). Imports from Russia (€3.8 billion) were more than five times higher than imports from Ukraine (€0.7 billion). Imports from Russia and Ukraine mainly related to goods. In 2019 the dependence on Ukraine and Russia for goods imports incorporated in exports was somewhat greater (6.7%), particularly due to a larger dependence on imports from Russia. Later in this chapter we will see that this import dependence applies particularly to a number of specific goods that are imported to a greater extent from those two countries and are crucial, such as cereals and petroleum.

Dependence on the United States grew in 2020

Outside Europe, the United States and China are once again important partners for imports to the Netherlands processed by Dutch enterprises. The two countries accounted for €22.4 billion, or 15%, of total imports incorporated in exports in 2020. Hence 30% of all goods and services imported from outside the EU for incorporation in Dutch exports originate from the US or China. It can also be seen that the coronavirus pandemic impacted the Dutch dependence on these two countries. Whereas imports from China intended for export production decreased slightly between 2019 and 2020 (from €4.1 billion in 2019 to €3.9 billion in 2020), such imports from the United States increased sharply (from €15.9 billion in 2019 to €18.5 billion in 2020). This is due particularly to an increase of over €2.6 billion in service imports from the United States that were ultimately required for Dutch exports.

The value of intermediate goods imports from China and the United States for export production remained almost unchanged in 2020. Despite China's growing influence in recent years (Creemers et al., 2020; Draper, 2020), Dutch enterprises still need imports from the United States worth more than four times the value of imports from China in order to produce their exports. The United States is clearly a far more important supplier of services to Dutch enterprises (Notten & Voncken, 2019; Aerts et al., 2020). The import dependence on China is particularly evident when looking solely at goods imports. After all, imports from China consist almost entirely of goods, such as computers and related components. Looking exclusively at imports of goods, imports from the United States were almost twice as high as

imports from China. Nevertheless, part of the imports from China (for example high-tech imports such as chips, road vehicles and specialised machinery) are crucially important for Dutch exports (Aerts et al., 2020). There is also an indirect import dependence on China, which, for example, supplies raw materials to other countries which then export to the Netherlands, such as Germany (CPB & CBS, 2022). This chapter does not cover the indirect portion.

7.7 Unravelling export-related imports in more detail

Goods imports incorporated in exports

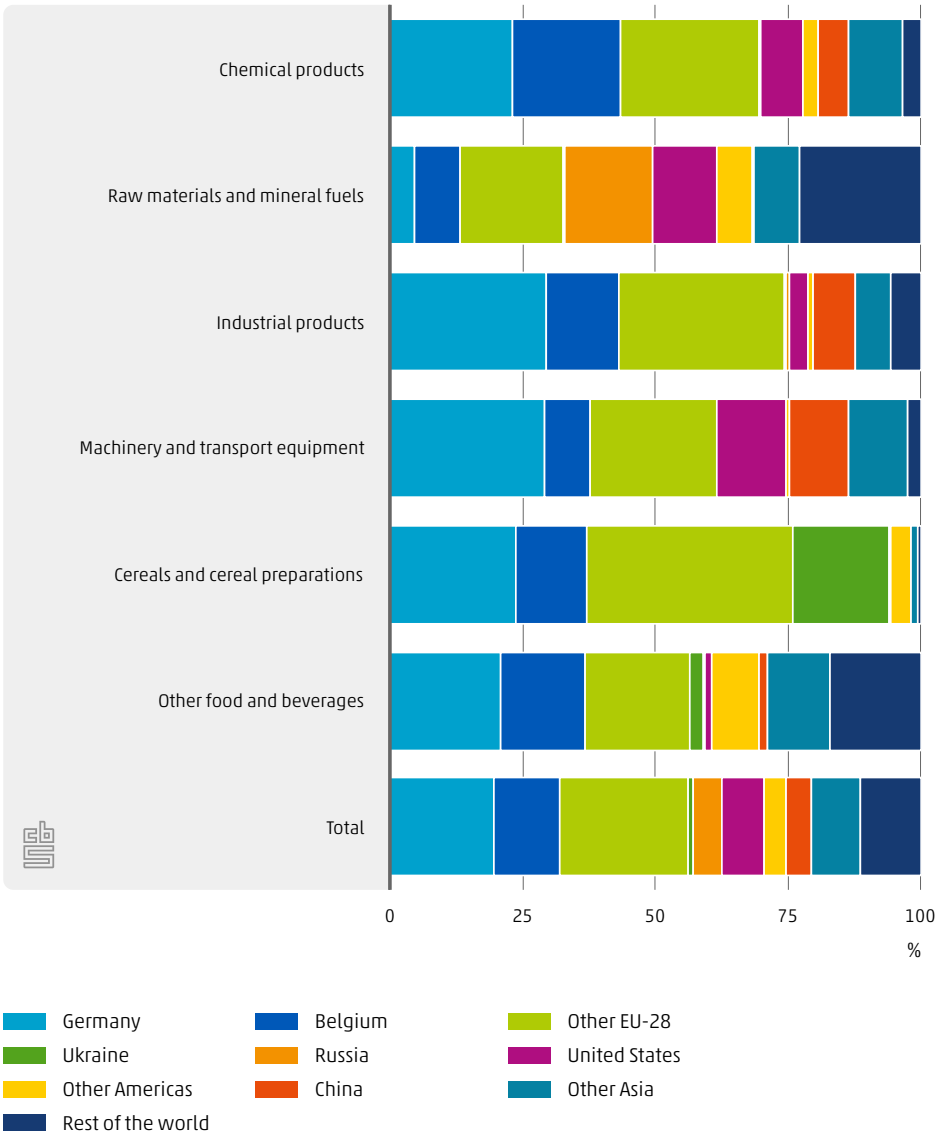
Figure 7.7.1[11)] shows the composition of goods imports[12)] used in the production of Dutch exports in 2020. It distinguishes between chemical products; mineral fuels and raw materials; industrial products; machinery and transport equipment; cereals and cereal preparations; and other food and beverages.[13)] Imports of raw materials and mineral fuels with a total value of €20.6 billion were required to produce exports in 2020. Dutch enterprises used (i.e. imported) €13.9 billion worth of industrial products, €11.3 billion worth of food and beverages (including €1.9 billion of cereals and cereal preparations, a commodity which, like mineral fuels, is also the focus of much attention at the time of this publication due to the war in Ukraine), €12.9 billion of machinery and transport equipment and €9.1 billion of chemical products.

11) The figures in this chapter were obtained by combining the data from the National Accounts with the International Trade in Goods and International Trade in Services statistics, with the data from the National Accounts taking precedence. Because of differences in definitions and methods, these figures differ from the other marginals shown on StatLine or in the other chapters of this publication, which are both based on the trade statistics.

12) This section only concerns imports used by enterprises for exports of domestic goods and services; it does not include re-exports. Part of the imports in Table 7.6.1 are not shown here because they cannot be linked to a product.

13) The various product categories are based on the one-digit SITC classification. The SITC-1 category 'food and beverages' has been divided into two parts in Figure 7.7.1: 'cereals and cereal preparations' and 'other food and beverages'.

7.7.1 Composition of imports used for exports, by origin and goods category, 2020



More than half of the goods imports destined for export production come from the EU-28

The EU as a whole is again the Netherlands' main import partner. In Figure 7.7.1 the 28 countries making up the EU are shown from the vertical axis to the light green bar. The EU countries are responsible for well over half (56%) of the goods imports required for Dutch exports. In the previous year, the figure was 53%. The EU's share exceeds 50% in every product category except raw materials and mineral fuels, which is the biggest import category (67% of which comes from non-EU countries). This dependence on the EU is generally slightly lower for imports of services from the EU (Figure 7.7.4).

In general, mineral fuels are incorporated particularly in exports of the same category (mineral fuels), but also in exports of organic chemicals, plastics in primary forms, manufacturing services and transport services. An example of this is crude oil imported

through a Dutch port, processed into end-products in oil refineries (e.g. petrol, kerosene, diesel and LPG) or into semi-finished products (e.g. as a raw material for plastics that can be made into toys and packaging materials) for distribution to other countries.

Cereal imports incorporated in exports come mainly from Ukraine and the EU-28

The Netherlands is highly dependent on European countries for imports of cereals and cereal preparations (76%). The same applies to imports of industrial products (75%) and chemical products (70%). In addition to imports from the EU-28, 18% of cereals and cereal preparations incorporated in exports are imported from Ukraine, one of the world's largest cereal producers. In 2019 the figure was 23%. Cereals such as maize are used to produce and export feeding stuff for animals, for example. Imports of cereals from the rest of the world (excluding the EU and Ukraine) are minimal. Except for the food and beverages category (and in particular the cereal and cereal preparations subcategory), Dutch export production relies only to a limited extent on imports from Ukraine (dark green strip in Figure 7.7.1).

The great importance of the EU-28 for imports of industrial and chemical products may be related to the outsourcing of such production to Central and Eastern Europe (Fritsch & Matthes, 2017). Belgium is also an important origin country for imports of chemical products: 20% of these came from Belgium, almost double the Belgian share of imports of all goods (12%). The limited import share of raw materials and mineral fuels from the EU-28 (33%) can be explained by the high level of imports from Russia (17% of total imports), the United States (12%) and all other non-EU countries (38%). The composition and origin of imports of mineral fuels will be examined in greater detail in the next section.

As mentioned, apart from the EU-28, China and the United States play an important role in Dutch imports for export production. Their cumulative share is between 11% and 24% in each of the product categories, except for cereals and cereal preparations (only 0.2%) and other food and beverages (3%). China was particularly important with regard to imports of machinery and transport equipment (China's share was 11%) and to a certain extent industrial products (8%; both shares unchanged compared to 2019). 22% of imports of machinery and transport equipment come from Asia (including China). The United States was also important with regard to imports of machinery and transport equipment (13%; 2 percentage points more than in 2019) and raw materials and mineral fuels (12%; 2.5 percentage points more than in 2019). Of the total goods exports from America (i.e. the United States and the rest of America) to the Netherlands, raw materials and mineral fuels were the most important (19% of total imports in this category; in 2019 the figure was 15%). Around 10% of imported chemical products and food and beverages (excluding cereals) come from America. China has a smaller share (6% and 1.5% respectively).

Analysis of imports of mineral fuels for export production

It was already seen in the previous section that imports of mineral fuels, with an import value of €20.6 billion, were by far the most important import category in processing for exports (accounting for 30% of total goods imports required to generate exports). We also saw that a significant part of the mineral fuels category was imported from Russia (17%) and the United States (12%), but that most imports came from countries not stated separately in Figure 7.7.1.

In view of the recent developments on the world stage and the heterogeneity of the various types of mineral fuels – these differences being significant among other things for the current sanctions policy – these imports are further subdivided and analysed in detail in this section, where possible. A significant part of these import flows are concentrated in a small group of enterprises and excessive detailed reporting on them could lead to the disclosure of company-specific information.

Four countries supply the Netherlands with 60% of the mineral fuels it needs for export production

Which countries do mineral fuels come from? And which import country is particularly important for which type of mineral fuel? Table 7.7.2 shows the three largest types of mineral fuels that are processed in Dutch exports – coal, petroleum and natural gas – with the main countries of origin. If we look at the total import value of all three categories combined, Russia (20.0%), the United Kingdom (14.1%), the United States (13.7%) and Norway (12.8%) rank highest. Hence, 60% of imports of mineral fuels that the Netherlands used for export production in 2020 came from these four countries.

Petroleum incorporated in exports is imported from a wide range of countries.

Petroleum is by far the most commonly imported category of the three types (accounting for 86% of the import value), with Russia again in first place (no value can be stated because of the risk of disclosure of company-specific information), followed by the United States and the United Kingdom (in the case of the US with more than €2 billion of imports). In general, it can be seen that many countries are involved in Dutch imports of petroleum and these also include well-known oil-producing countries such as Nigeria, Saudi Arabia, Iraq, Algeria and Angola. In other words, there does not appear to be any overdependence on one (or more) countries for imports of petroleum that the Netherlands uses for exports.

Natural gas and coal imports concentrated in small number of partner countries

In the case of natural gas and coal, both of which have much smaller import values (€1.8 billion and €519 million of imports incorporated in exports respectively), we see a stronger pattern, with the bulk of the imported natural gas and coal coming from a limited number of countries. Due to the risk of disclosure, it is unfortunately not possible to publish a numerical breakdown of the origin of imports for export to each country. It can nevertheless be stated that more than 90% of all imported natural gas used in the Netherlands to produce exports comes from just four countries: Russia, Norway, the United Kingdom and Germany (with Germany being the origin country but not the country of origin). Imports of coal incorporated in Dutch exports are similarly concentrated in just a few countries: over 90% of the coal used to produce exports comes from Australia, Russia, the United States and Germany.

7.7.2 Composition of imports of three types of mineral fuels incorporated in Dutch exports with the top 10 origin countries

Countries and continents	Coal	Petroleum	Natural gas	Total	Share (total)
	x bn euros				%
Total	0.519	14.649	1.829	16.996	100
Russia	*	*	*	3.403	20
United Kingdom	0	*	*	2.391	14.1
United States	0.099	2.202	0.020	2.321	13.7
Norway	*	1.288	*	2.171	12.8
Belgium	*	1.325	*	1.339	7.9
Nigeria	*	0.848	0.036	0.885	5.2
Germany	*	0.222	*	0.501	2.9
Saudi Arabia	*	0.495	*	0.495	2.9
Iraq	*	0.356	*	0.356	2.1
Brazil	0	0.254	0	0.254	1.5

* Confidentiality

Organic chemicals, machinery, and iron and steel are the main import products incorporated in exports after petroleum

Table 7.7.3 shows the origin of the top 20 product categories in imports incorporated in Dutch exports of goods and services in 2020, and how these have developed compared to 2019. By far the main category of imported goods incorporated in Dutch exports was crude oil and petroleum products. Imports of petroleum were worth €14.6 billion in 2020. In the previous year the figure was considerably higher, at €22.4 billion (over 35% higher). This decrease was mainly due to a lower import value driven by substantially lower oil prices.

The second largest category of imports was organic chemicals, with an import value of just under €3.7 billion. Around 61% of the required imports incorporated into exports came from the EU. Imports of this product category from the EU fell in 2020, whereas extra-EU imports rose. The main export products produced from imports of organic chemicals are products of the same category of organic chemicals (32%), plastics in primary forms (13%) and manufacturing services (12%), the majority being destined for the EU.

In third and fourth places respectively are specialised machinery (€3.4 billion) and iron and steel (€3 billion). These types of product are also mainly imported from the EU. In contrast to imports of organic chemicals, more of both categories was nevertheless imported in 2020 than in 2019, both from the EU (+16.2% and +14.4% respectively) and from non-EU countries (+8.6% and +8.0% respectively). Specialised machinery is also mainly used to export other machinery, generators and motors, while iron and steel is used in many different export products, such as machinery, metal goods and transport equipment.

Vehicles and vehicle parts for road transport (€2.6 billion; down sharply in 2020) complete the top 5 and are used among other things for exports of other transport equipment such as tractive units for semi-trailers, as well as for business and manufacturing services. Table 7.7.3 showed that very diverse categories of imported goods are generally required to produce exports, ranging from crude oil and petroleum products (e.g. to produce chemical products) to imports of road vehicles in order to export specialised engines. In the case of export

markets, imports often end up in the EU through Dutch export products. According to Bohn et al. (2021), almost every import product is exported mainly to the EU (with the notable exception of various items of machinery produced in the Netherlands, which often also end up in Asia and America).

7.7.3 Origin of goods incorporated in exports, by product category and origin country, top 20, 2020

	Import value from EU-28	Import value from non-EU-28	Total imports	Change of value from EU-28 compared to 2019	Change of value from non-EU-28 compared to 2019
	x million euros			%	
Product category (SITC 2)					
Total	38,585	43,787	82,373	-6.9	-22.1
Crude oil and petroleum products	4,252	10,397	14,649	-29.5	-36.6
Organic chemicals	2,240	1,426	3,666	-18.2	10
Specialised machinery	2,042	1,310	3,353	16.2	8.6
Iron and steel	2,482	483	2,965	14.4	8
Road vehicles	1,965	595	2,560	-24.8	-19
Electrical appliances, n.e.s.	1,327	938	2,265	-9	-6.8
Manufactures of metal, n.e.s.	1,602	519	2,120	3.6	2.2
Vegetable oils and fats	518	1,371	1,889	7.3	5.2
Cereals and cereal preparations	1,440	448	1,889	-3.2	-22.5
Gas, natural and manufactured	*	*	1,829	*	*
Coffee, tea, cocoa, spices and manufactures thereof	375	1,255	1,631	-1.1	7.1
Miscellaneous manufactured articles, n.e.s.	1,200	430	1,630	0.5	-7.6
Miscellaneous machinery, n.e.s.	1,105	466	1,571	-16.3	-15.5
Paper and paper manufactures	1,342	131	1,473	-3.5	-5.7
Plastics in primary forms	1,092	201	1,292	-5.3	9.8
Chemical materials and products, n.e.s.	813	342	1,154	-1.8	11.7
Computers and office machines	476	635	1,111	31.2	2.5
Telecommunication apparatus	285	823	1,107	14.2	-6.7
Dairy products and birds' eggs	1,022	7	1,029	-2.9	-32.3
Non-ferrous metals	638	365	1,003	-13.5	7.8

* Confidentiality

The EU-28 remains the main supplier of goods, but became less important in relative terms in 2020.

For the production of Dutch exports, in the case of the top 20 products, the EU-28 was in relative terms the largest supplier of import products such as dairy products and birds' eggs (99% of the import value of this category), paper and paper manufactures (91%), plastics in primary forms (84%), iron and steel (84%) and road vehicles (77%). Non-EU countries were of above-average importance as regions of origin for imports of coffee and tea (77% come from *outside* the EU-28), telecommunication apparatus (74%), vegetable oils and fats (73%), natural and manufactured gas (72%) and crude oil and petroleum products (71%).

Imports from Russia and Ukraine were concentrated in a small number of products. In the case of Ukraine, apart from cereals (see also Table 7.7.1; €340 million), vegetable oils and fats (€193 million), oil seeds and oleaginous fruits (€65 million) and iron and steel (€13 million) were also important. These four products made up 94% of imports from Ukraine used by the Netherlands for its exports. In the case of Russia, natural gas, iron and steel and coal, in addition to crude oil and petroleum products, jointly accounted for 96% of the total goods imports from Russia incorporated in Dutch exports.

In 2020, imports of goods from EU-28 countries decreased by 6.9%, while imports from non-EU countries fell by as much as 22.1%. A key reason was that petroleum imports plummeted due to the collapse in oil prices. If imports of crude oil and petroleum products are excluded, the picture is more nuanced; imports from EU countries then show a steeper fall (–3.7%) than imports from non-EU countries (–2.3%).

Service imports incorporated in exports often of EU-28 origin

Figure 7.7.4 shows the top 5 imported services used for Dutch exports in 2020 (with all other services being combined as the sixth category). The 'other business services' category came first, with an import value of €19.3 billion, followed by imports of royalties (fees for intellectual property), with a value of €14.4 billion. Imports in the transport services category amounted to €9.5 billion and imports of ICT services to €6.4 billion. These four categories collectively made up 85% of total imports of services required to produce exports in 2020. These imported services are used not only to facilitate exports of incorporated services (such as software or consulting services), but also in the production of various export goods such as cars, chemical products and machinery; this is also known as the 'servicification' of industrial exports and is related to the outsourcing of service activities by industrial enterprises (Bohn et al., 2022).

Over 60% of imported services came from the EU-28 in 2020, emphasising the above-average importance of the EU-28 in Dutch imports of services for export production. The category with the largest EU-28 share was manufacturing services, with 86%, although imports in this category were fairly modest (€3.0 billion, i.e. around 5% of total imports of services incorporated in exports). The smallest EU-28 share is in payments for intellectual property (35%). This is due to the major role of the United States in imports of intellectual property (Aerts et al., 2020). The United States is also the main supplier of services after the EU-28 as a whole. This includes cases where, for example, a Dutch enterprise purchases a licence to use a software product developed in the United States. Other examples are payments of royalties for movies and music, and franchise fees in the commercial sector and accommodation and food services sector.

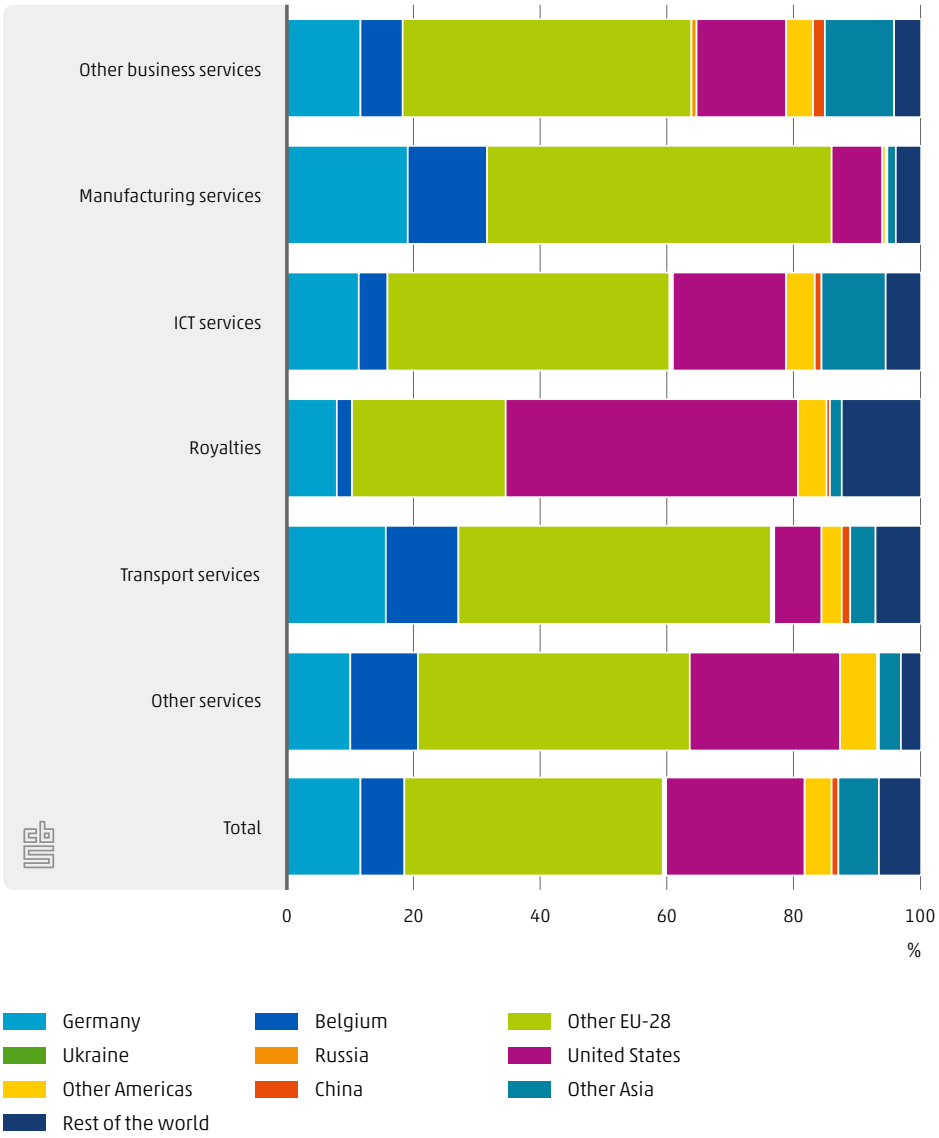
Almost two-thirds of service imports incorporated in exports are destined for the EU-28.

Looking at the markets for exports, we find that in 2020 63% of services used in total Dutch exports were destined for the EU. The main export markets for the incorporated service imports were Germany (16%), the United Kingdom (13%), the United States (8%), Belgium (7%) and France (7%). Among the main imported services (other business services, royalties, transport services and ICT services), the top 5 sales markets were all the same, with slight differences in the order and shares of the various countries (Germany, for example, was slightly more important as a sales market for transport services, with a share of 19%). Germany topped every category as the main sales market and was always followed by the United Kingdom in second place.

Service imports from the EU-28 during the COVID year fell more sharply than goods imports intended to be incorporated in exports

Generally it can be seen that service imports from the EU-28 incorporated in exports were more impacted by the coronavirus pandemic than service imports from non-EU countries, also relative to goods imports. Service imports from EU-28 countries for incorporation in exports fell by 14% in 2020 compared to the previous year (in the case of goods the decrease was 7%). Service imports from non-EU countries decreased less sharply (by –2.6%). In the case of goods the decrease from non-EU countries was greater at –22%, particularly due to the decrease in mineral fuels. Some services were hit harder than others. Imports of business services and other services for export fell by around 18% in 2020; transport services (–8%) and manufacturing services (–5%) also contracted due to the coronavirus pandemic. For some categories, imports of services, mainly from non-EU countries, even rose, with increases particularly in imports of ICT services (+33%), other services (+14%) and royalties (+10%) from non-EU countries.

7.7.4 Composition of imports used for exports, by origin and service category, 2020



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8 Foreign direct investment and multinationals

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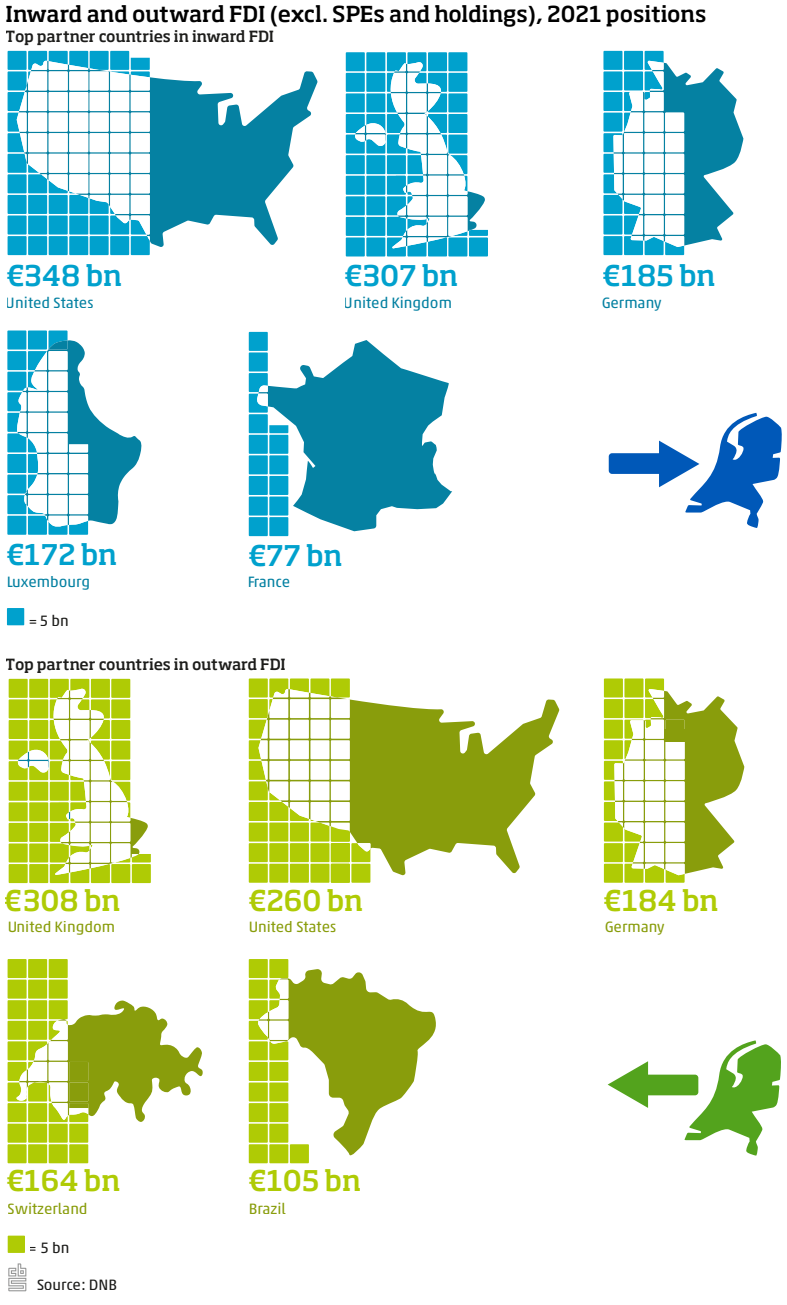
Inward and outward FDI (excl. SPEs and holdings), 2021 positions



Internationalisation and foreign direct investments (FDI) have a clear positive impact on a country's productivity growth and ultimately its well-being. Countries value foreign investments as they bring in overseas capital and have the potential to make a significant contribution to the economy. The fact that the Netherlands is a stable economic hub makes it attractive to foreign enterprises. As important actors in FDI, multinationals deserve their own chapter of this publication. The chapter begins by examining inward and outward direct investment in and by the Netherlands, before zooming in on multinationals and distinguishing between those under foreign and Dutch control.

8.1 Key findings

Globally, there is a clear recovery in direct investment when compared to 2020, the year of the coronavirus outbreak. The Netherlands' inward and outward direct investments recovered strongly in 2021 but are still below 2019 levels. Nevertheless, the Netherlands retains its important position on the world stage for direct investment. As in previous years, a substantial proportion of the direct investment that enters the Netherlands goes on to find its way overseas; around 65% of direct investment is in Special Purpose Entities (SPEs) and holdings.

Even when SPE money flows are disregarded, in 2021 the Netherlands was still among the top 5 countries for investment received. The US, the UK and Germany are both the most significant direct investors in the Netherlands and the countries where Dutch entities invest the most. Shell's relocation of its head office to the UK was a significant factor, as this substantially increased direct investment from the UK through investment in elements of the enterprise which remained in the Netherlands.

Multinationals are major players in international investment flows to and from the Netherlands.[1)] In 2020, there were over 24,000 multinationals operating in the country, representing a fall of 2% compared to 2019. Multinationals make up just under 2% of all enterprises in the Dutch business economy (more than 1.3 million enterprises in 2020).[2)] Although the number of multinationals in the Netherlands grew between 2010 and 2020, their share of the business economy remains relatively stable as many non-multinational enterprises were also added. In 2020, almost 60% of multinationals were under foreign control, leaving approximately 40% under Dutch control. The reduction in the number of multinationals in 2020 was entirely due to Dutch-owned multinationals.

Multinationals provided work for over 2.3 million people in the Netherlands in 2020, representing a decrease of 0.5% compared to 2019. They thus accounted for 37% of total employment in the Dutch business economy in that year. In 2020, employment declined most significantly among Dutch multinationals in accommodation and food services, renting/leasing and other business services. The latter branch of industry, which includes activities such as job placement services and temporary employment agencies, is the branch in which

1) A multinational is defined as an enterprise that is under foreign control or that has subsidiaries abroad. Subsidiaries are defined as enterprises in other countries in which an enterprise based in the Netherlands, under Dutch control, has a majority interest. See Glossary.
2) The Dutch business economy includes enterprises with a Standard Industrial Classification (SIC) in sections B-N plus division S95, with the exception of enterprises in the financial sector (K); agriculture (A); healthcare (Q); public administration (O); education (P); health and welfare (Q); culture, sports and recreation (R); other services (S, not including S95); households (T) and extraterritorial organisations (U). This classification is referred to internationally as 'non-financial business economy'.

Dutch-owned multinationals employ the most people. Foreign multinationals provide the most jobs in the wholesale and retail trade and in manufacturing.

Around 68% of multinationals in the Netherlands are 'two-way traders', meaning that they are active in both the import and export of goods and/or services. Multinationals account for between 80% and 85% of the business economy's goods trade, and more than 90% of its trade in services. Foreign multinationals play a key role in these trade flows, accounting for two-thirds of multinationals' goods trade and 90% of their trade in services. Multinationals' trade in goods and services contracted in 2020 amid the coronavirus pandemic. In terms of the goods trade, the import and export value of Dutch-owned multinationals saw a particular decline in manufacturing, specialised business services, energy supply and the wholesale and retail trade. The contraction in the trade in services in 2020 was primarily due to foreign multinationals. On the import side, foreign multinationals active in renting/leasing and other business services and manufacturing reduced their import of services most significantly. The export picture is more varied.

Most foreign multinationals in the Netherlands in 2019 were US-controlled (nearly 3,000 enterprises). Multinationals from the US, the UK, Germany, Belgium and France make up more than 65% of foreign enterprises in the Netherlands. For their part, the largest group of subsidiaries of Dutch multinationals in 2019 were based in Germany (2,900), followed by the US (1,900). Compared to 2018, the number of Dutch subsidiaries grew strongly in Germany (+330) and China (+35). In 2019, Dutch subsidiaries in Germany employed approximately 350,000 people, representing an increase of more than 6% relative to 2018. Dutch enterprises in the US employ approximately 300,000 people, which is 2% more than in 2018. Employment among Dutch subsidiaries decreased in Poland, France and Italy.

8.2 Macro-level view of foreign direct investment

This section discusses the direct investment position of the Netherlands based on macro-level figures from the Dutch central bank (De Nederlandsche Bank, DNB) and the OECD. An enterprise receiving direct investments from abroad is an enterprise in which a foreign investor holds at least 10% of the ordinary share capital or the voting rights, or the equivalent thereof. This involves having a controlling interest and substantial influence on the management of the enterprise, for example as a result of a merger, an acquisition, the construction of new facilities, reinvested earnings from overseas activities or loans between different elements of the enterprise.

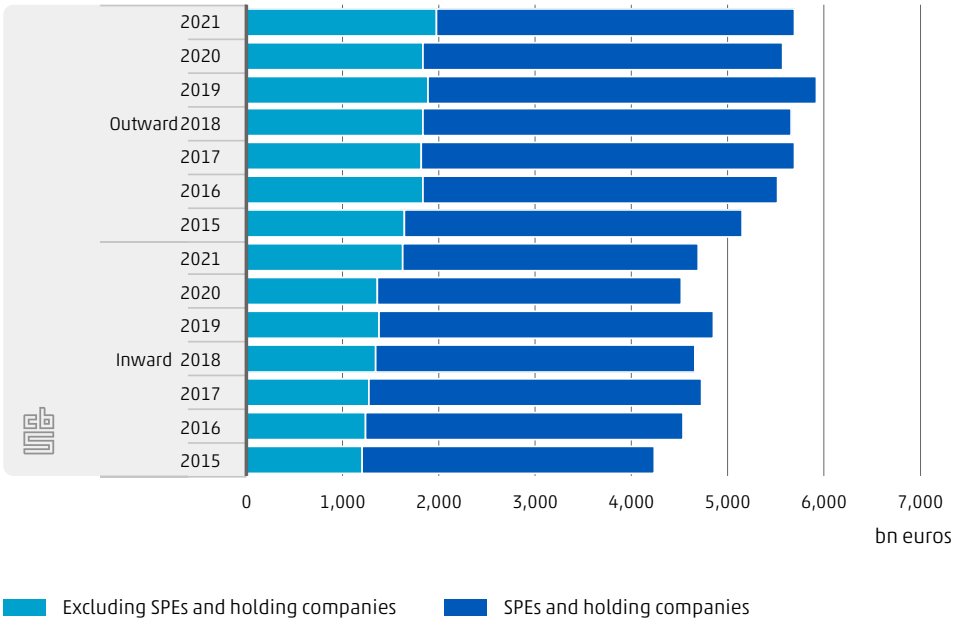
FDI recovers following COVID-related dip

In 2021, global foreign investment transactions were restored to well above the level seen before the coronavirus pandemic. Globally, the value of these transactions in 2021 rose by 88% relative to 2020, ending 2021 as much as 37% above the pre-coronavirus level. The US and China were by far the most significant destinations for new foreign direct investments: together, these two countries account for 40% of worldwide direct investment transactions in 2021. The US was also the source of almost a quarter of new investments in other

countries, with Germany and Japan following far behind (OECD, 2022).[3] Despite the recovery in 2021, the outlook for 2022 is extremely uncertain as a result of factors such as increased geopolitical tensions.

Inward and outward investments are also increasing in the Netherlands, after a dip in 2020 (Figure 8.2.1). FDI in the Netherlands fell during that year, which is unsurprising given the global uncertainty caused by the coronavirus pandemic. Many foreign enterprises suspended investment decisions or altered their plans. Total investments in the Netherlands (inward investments) grew by 4% in 2021 over 2020, to €4,709 billion. As in previous years, the Netherlands is among the countries that receive the greatest foreign direct investment. Inward investments are still below levels seen in 2019, but by the end of 2021 the investment position excluding SPEs and holdings had risen above its pre-coronavirus level. Outward investments from the Netherlands in foreign countries grew by 2% compared with 2020, to €5,696 billion, although outward investments in 2021 also failed to achieve 2019 levels.

8.2.1 The Netherlands' international investment position



Source: DNB

Netherlands still a key conduit country

A great deal of inward FDI goes on to flow out of the Netherlands without adding value to the real economy. This is true both for SPE money flows and for holdings. These entities have few employees, many of them have no physical presence in the Netherlands, and any trading activity they engage in consists mainly of financial services within the enterprise group. For them, the Netherlands serves primarily as a conduit country, alongside other key European conduit countries such as Ireland and Luxembourg.

3) Where reference is made to the OECD (2022), the figures and rankings relate to the OECD's directional figures. The positions in the rest of this chapter are based on DNB's figures for assets/liabilities.

The Netherlands is a well-established conduit country, partly thanks to the country's tax system. In 2021, the Netherlands ranked fourth in the Tax Justice Network's (TJN) Corporate Tax Haven Index. This ranking indicates which countries do the most to help multinationals pay low tax returns, and awards countries a score for their fiscal attractiveness and a separate score for the financial activity of multinationals in a country. Although the Netherlands does not make it into the top 10 for fiscal attractiveness, the country does score highly on the index because a relatively large proportion of worldwide direct investment is made via the Netherlands. The comprehensive treaty network, the participation exemption and (until 2021) the lack of a conditional withholding tax on unearned income abroad in relation to dividends, interest and royalties make it attractive for multinationals to direct their income flows via the Netherlands. In recent years, partly as a result of increased political criticism from both within and outside the country, the Dutch government has taken various measures to make the country less attractive as a fiscal conduit country (Dutch Parliamentary Committee on Conduit Companies, 2021).

SPEs and holdings account for as much as 65% of inward and outward FDI in the Netherlands. The inward investment position of SPEs and holdings fell slightly (by 2%) in 2021 relative to 2020, to €3,080 billion. Inward investment in the other sectors (sectors which are not SPEs or holdings, such as non-financial institutions, financial institutions, government and households) grew by no less than 19%, to €1,629 billion. The outward investment position of SPEs and holdings remained virtually constant in 2021, amounting to €3,712 billion by the end of the year, while the other sectors saw an increase of 7%, to €1,984 billion.

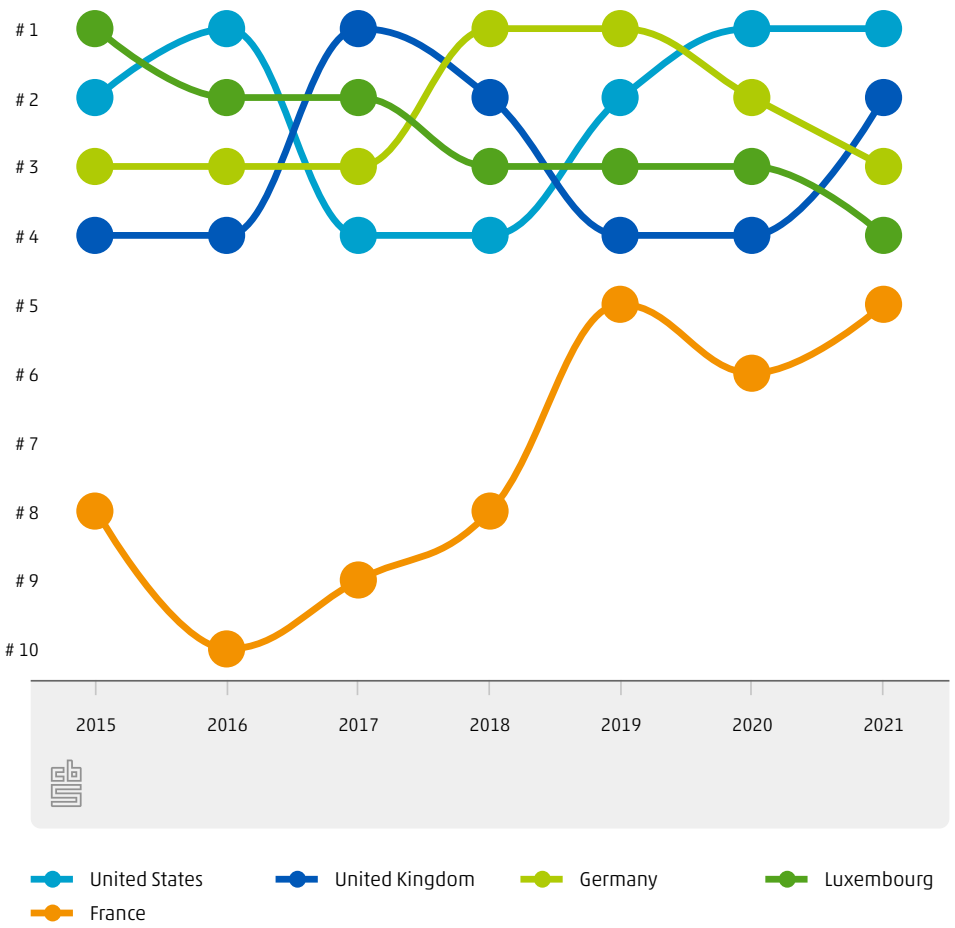
Even leaving aside conduit investments, the Netherlands is a key global player in terms of direct investment. Excluding SPEs,[4)] in keeping with the previous year, the Netherlands is the second-largest country in terms of its outward direct investment position, behind the US. As regards inward investment, the Netherlands ranks fourth, after the US, China and the UK (OECD, 2022). As with SPEs, given that throughput via holdings makes almost no contribution to the Dutch economy, it is not unreasonable to disregard this throughput in the subsequent analysis of the geography of direct investment partners.

Most direct investment received from the US

As in 2020, in 2021 most investment in the Netherlands was made by American enterprises. Around 20% of total inward direct investment in the Netherlands in 2021 came from the US, after adjustment for investments through SPEs and holdings. As Figure 8.2.2 shows, the UK, Germany, Luxembourg and France complete the top 5 list of countries that invest in the Netherlands. Luxembourg's sustained position as one of the Netherlands' key investment partners is due to the fact that the ranking focuses on which country is registered as the source of investment. However, there is often a disparity between the direct source of an investment and the country where an enterprise's head office is registered. Like the Netherlands, Luxembourg acts as an important conduit country and owes its position in the top 5 to its role as a key 'intermediary' between the original owner and the Dutch-owned enterprise in which an investment is made (Hagendoorn, 2020). France's striking rise up the rankings is due to enterprises in the motor vehicle industry and the information and communication sector.

4) The OECD figures only disregard the SPEs (SPEs, Special Purpose Vehicles). The data regarding holdings are not available for other countries. Excluding holdings, the Netherlands is expected to be one of the most significant countries for inward and outward investment.

8.2.2 Top 5 inward investment partners, excluding SPEs and holding companies



8.2.3 Top 5 outward investment partners, excluding SPEs and holding companies

The UK and the US have consistently vied for the position of most significant recipient of Dutch investment in recent years, as can be seen in Figure 8.2.3. In 2021, these two countries together accounted for almost 30% of Dutch outward direct investment, adjusted for SPEs and holdings. The continued inclusion of Brazil in the top 5 is primarily attributable to enterprises operating in the petroleum industry.

UK increasingly attractive as an investment partner

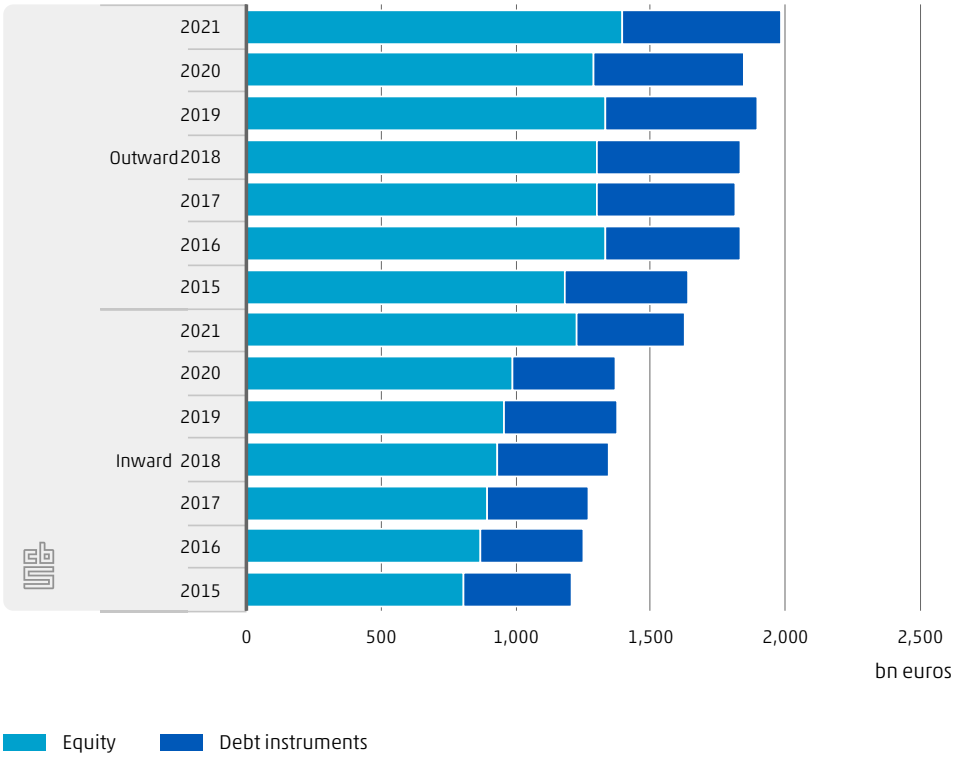
Partly thanks to the relocation of Shell's head office, the UK climbed to second place among inward investment partners. Shell's relocation from the Netherlands to the UK on 31 December 2021 triggered an increase in inward investment in the Netherlands, as the elements of the multinational that are still registered in the Netherlands are now under foreign ownership. At the time of relocation, the market value of the entity then known as Royal Dutch Shell was approximately €150 billion. Another originally Dutch multinational, Unilever, had already relocated to the UK in 2020.

Strong increase in share of equity participations

A study of the share of equity participations in investment can yield an indication of patterns of investment activity. Investments can be subdivided into equity participations (including reinvestments) and mutual debts. Equity participations are a good gauge of new investments, such as the creation of a business, a merger or an acquisition. As debt flows are often driven by fiscal objectives or multinationals' short-term financing needs, they are less effective as a gauge of the contribution of direct investment to economic growth (Hemmerlé, 2021).

In 2021, the equity participations in inward investment increased to well above the level seen before the coronavirus pandemic (Figure 8.2.4). Equity participations are in general less volatile than loans, making them a better indicator of structural direct investment.
The significant increase in participations is partly due to the relocation of Shell's head office to the UK. Debts are slightly higher than before the coronavirus crisis. The greater investment on the expenditure side of the issue is also primarily due to increased equity participations.

8.2.4 The Netherlands' international investment position, excluding SPEs and holding companies, by instrument



Source: DNB

8.3 Multinationals in the Netherlands

This section focuses on multinationals in the Netherlands, which are the key players behind international investment flows and international trade. How many multinationals are there in the Dutch business economy? How many are under foreign control? How important are these enterprises to employment in the Dutch business economy and to the international

trade in goods and services? These and other questions will be answered using *Inward and Outward Foreign Affiliates Statistics* for the 2010–2020 period.

A multinational is an enterprise with ultimate control over enterprises in two or more countries. Multinationals are very important to the Dutch economy, not least in terms of total value added and employment. These enterprises also make a relatively significant contribution to technological innovations (CBS, 2018a). Finally, multinationals serve as important gateways to international markets and link the domestic value chain with the global value chain (Cadestin et al., 2019; CBS, 2018b). In a globalised, digital world, a quintessential trading nation such as the Netherlands is relatively dependent on the international economy and multinationals for its well-being.

23% more multinationals attracted to the Netherlands over 10 years

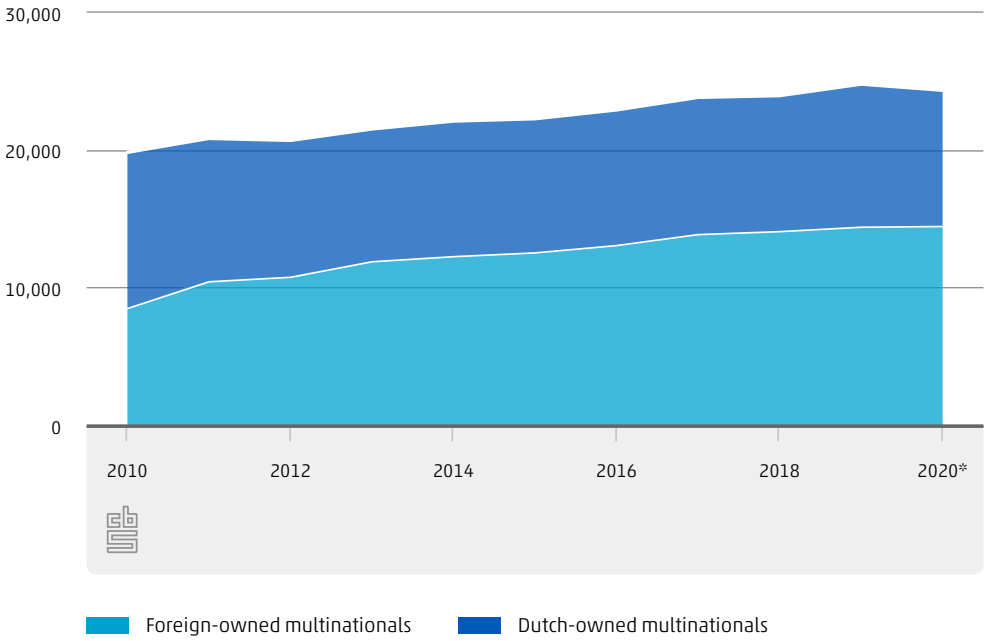
The first step is to identify the development in the number of multinationals for the 2010–2020 period (Figure 8.3.1). Relative to 2010, this number has grown by almost 23%. 24,345 multinationals were operating in the Dutch business economy in 2020, representing around 1.8% of the total. Despite the growth in the number of multinationals, their share in the business economy has remained virtually the same year on year, as the number of non-multinationals (in particular independent entrepreneurs and self-employed people) has also grown. This group of enterprises and entrepreneurs grew by 44% in the 2010–2020 period.

Foreign multinationals opt for the Netherlands in record numbers

CBS distinguishes between Dutch and foreign-owned multinationals. A Dutch multinational is an enterprise under Dutch control with subsidiaries (majority stakes) abroad. A foreign multinational is a subsidiary based in the Netherlands that is ultimately controlled from abroad. Even in internationally challenging times, the Netherlands is still an attractive proposition for foreign enterprises: nearly 60% of multinationals were foreign-owned in 2020 (Figure 8.3.1). Foreign multinationals account for a substantial share of the Netherlands' output, innovation-related expenditure and international trade (CBS, 2018). Interestingly, the increase in the number of multinationals between 2010 and 2020 was primarily caused by the significant rise in the number of foreign multinationals (nearly 70%). The number of foreign multinationals was higher in 2020 than it had ever been, while the number of Dutch-owned multinationals saw a slight decrease in that year. Between 2010 and 2020, the number of Dutch-owned multinationals fell by approximately 13%.[5)]

5) Relative to earlier editions of *Dutch Trade in Facts and Figures*, the total number of Dutch-owned multinationals in each year is approximately 20% lower than previously reported, as a new method was used this year which allows CBS to make this delineation with greater precision.

8.3.1 Multinationals in the Dutch business economy



There are various reasons for foreign enterprises to establish themselves in the Netherlands. For example, the country enjoys a very favourable location in Europe, a highly developed logistical and data infrastructure, a relatively highly educated population and a favourable fiscal business climate. Brexit also offers a potential explanation for the further increase in the enterprise population under foreign control in the Netherlands. In this post-Brexit era, many enterprises in the UK are experiencing issues such as an extra administrative burden, customs procedures, VAT declarations, longer delivery times and delays in access to the European market. Opening an office in the European Union, for example in the Netherlands, is one way to reduce this red tape, whether the issues are due to European Union permits or an enterprise's continuing need to attract European talent (see, for example, Dutch government, 2020). Since the Brexit referendum in 2016, nearly 220 British enterprises have opted to open a subsidiary in the Netherlands (Dutch government, 2021).

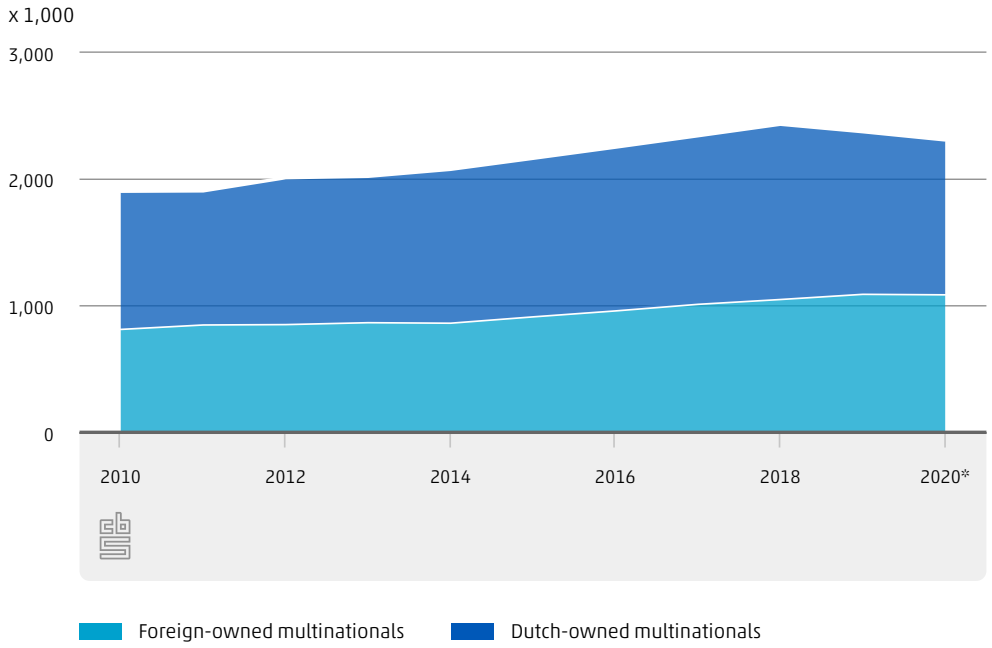
2.3 million people employed by multinationals in the Netherlands in 2020

Nearly 4 in 10 persons in employment work for multinationals

In 2020, approximately 37% of persons in employment in the Dutch business economy – 2.3 million people – were employed by a multinational enterprise. This share remained practically unchanged throughout the 2010–2020 period. In terms of absolute numbers, the

group of people employed by multinationals increased by 405,000 relative to 2010. Figure 8.3.2 shows that this increase is mainly visible among foreign multinationals.

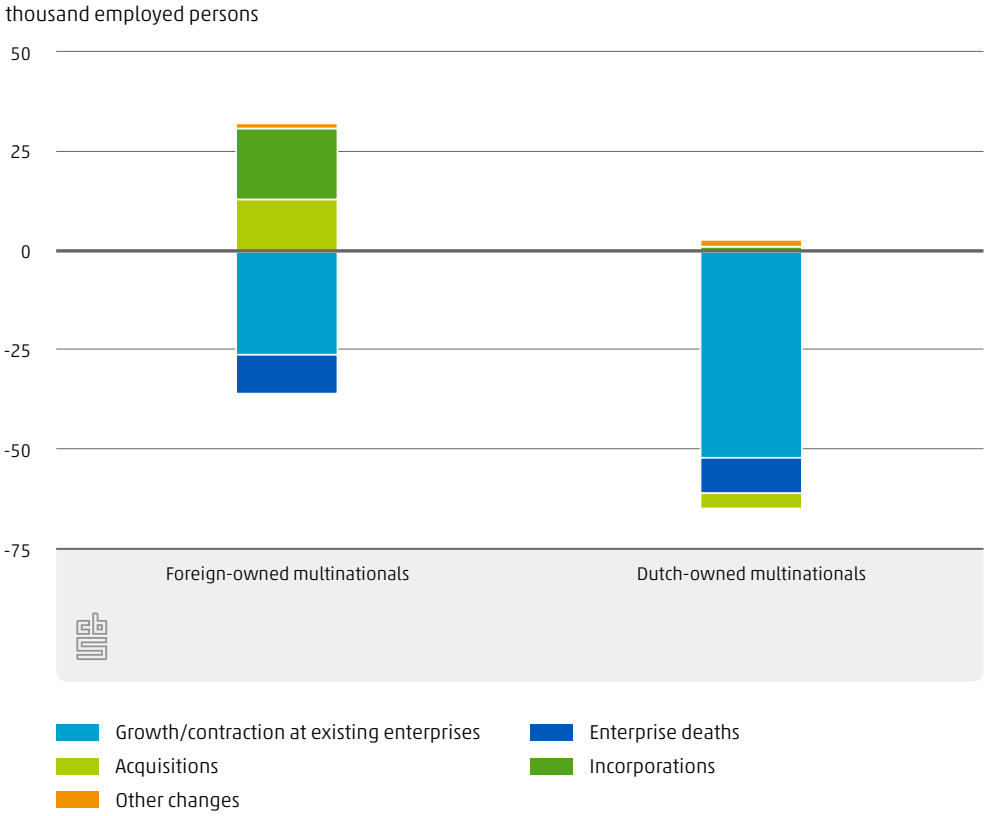
8.3.2 Employed persons at multinationals in the Dutch business economy



Contraction in employment particularly affects existing enterprises

2020 saw a contraction in employment within Dutch-owned multinationals; Figure 8.3.3 gives a decomposition of this contraction. The greatest reduction affected accommodation and food services, the real estate sector and renting/leasing and other business services (e.g. cleaning enterprises, job placement services and travel agencies), industries which were relatively severely impacted by the coronavirus crisis. The majority of the contraction in employment among Dutch-owned multinationals was accounted for by autonomous contraction (intensive margin) – contraction in the workforce of existing enterprises – and to a lesser extent by acquisition of Dutch-owned enterprises by a foreign-owned enterprise or due to enterprise death (extensive margin). Foreign multinationals saw a smaller reduction in the number of persons in employment in 2020. In their case, the number of employed persons fell due to autonomous contraction and enterprise deaths, but this was largely compensated for by growth in employment among new foreign multinationals and acquisitions of Dutch enterprises by foreign enterprises.

8.3.3 Decomposition of employment contraction at multinationals, 2020* relative to 2019*



In 2020, all Dutch multinationals combined employed around 124,000 more people (rounded to 1.2 million) than did foreign multinationals (1.1 million). Looking at the average number of employed persons per type of business, the median Dutch multinational had around 18 permanent employees and on average 122 employed persons. The median foreign multinational had 7 permanent employees and an average of 74 employed persons. In 2020, each non-multinational business had an average of 3 employed persons and a median of 1. This shows that average employment among multinationals is skewed upwards by a few very big employers. The median multinational has more modest employment figures.

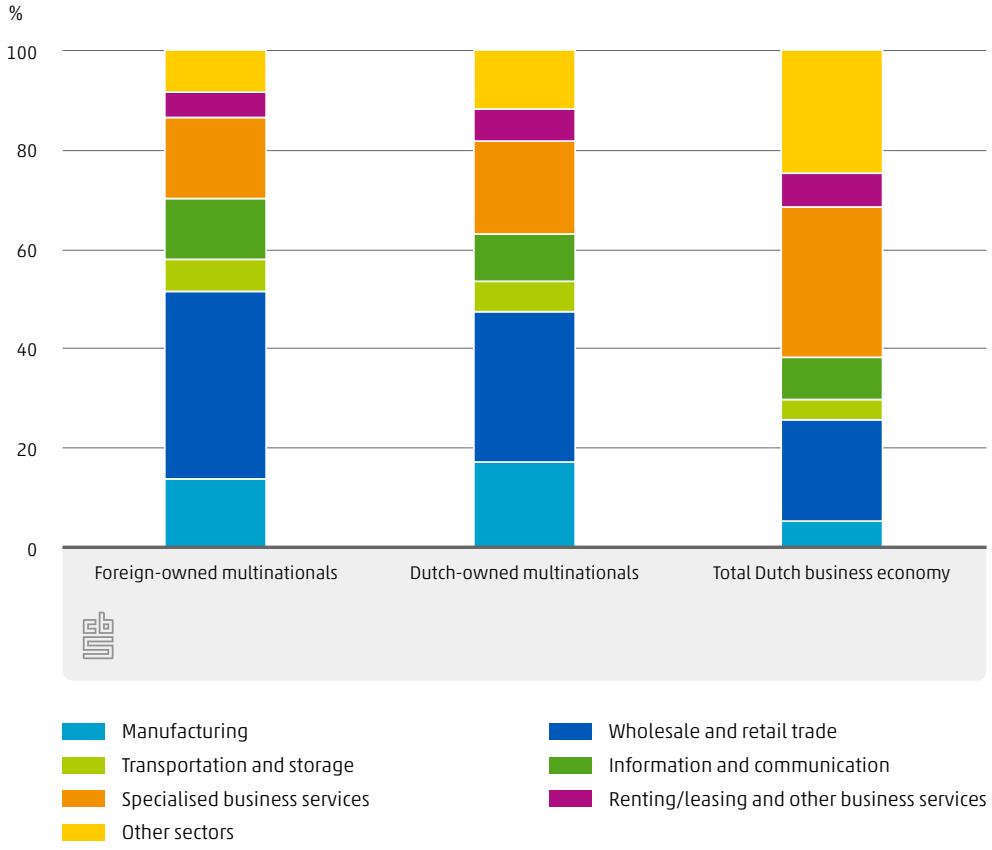
In which industries do multinationals primarily operate?

The majority of the multinationals in Netherlands are active in the wholesale and retail trade, followed by specialised business services and manufacturing. As Figure 8.3.4 shows, the distribution of multinationals by sector differs significantly from the distribution in the Dutch business economy as a whole (multinationals plus non-multinationals). Approximately 30% of enterprises in the total Dutch business economy operate in the specialised business services sector, compared with 16% and 19% of foreign and Dutch-owned multinationals, respectively.

Many foreign multinationals are active in the wholesale and retail sector (Figure 8.3.4): 38% of foreign multinationals, compared with 30% of Dutch-owned multinationals in the sector. They account for approximately one-fifth of all enterprises in the total Dutch business economy. This relatively greater activity in this sector among foreign multinationals is due to

the Netherlands' comparatively high volume of wholesalers with a foreign parent enterprise or an overseas subsidiary, which in turn is a result of the nature of wholesalers' and retail traders' activities in the Netherlands. These enterprises form an indispensable link between domestic and foreign suppliers and buyers, provide support services and thereby connect many sectors within the Netherlands and overseas. The wholesale trade is a clear example of an industry that facilitates other industries to source and sell their goods and services outside the Netherlands (Wong, 2019; Notten & Wong, 2019). Large foreign industrial enterprises, such as Japanese car manufacturers with a European logistics centre in the Netherlands, are also often regarded as wholesalers (Van den Berg & Mounir, 2019).

8.3.4 Distribution of enterprises by sector, 2020*

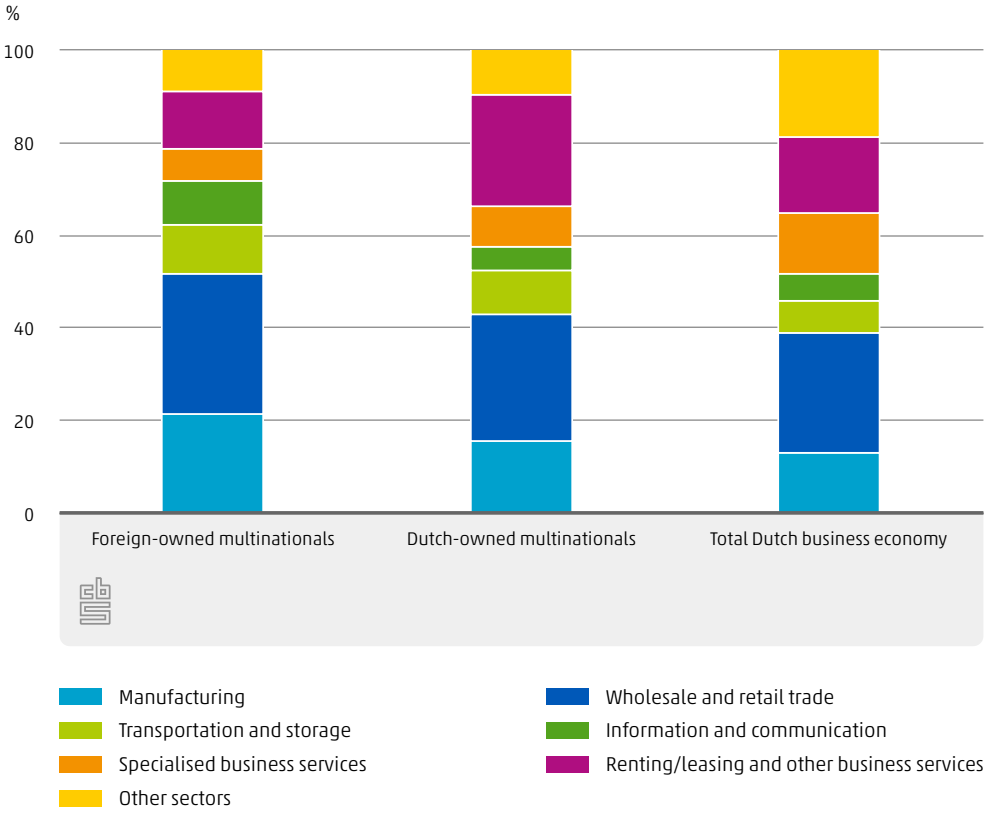


Multinationals in the wholesale and retail trade provide jobs to 663,000 people

Figure 8.3.5 shows that the wholesale and retail trade is the largest employer in the Dutch business economy. The same is true for employment among multinationals: approximately 30% of all people on the payroll of foreign multinationals in 2020 worked in the wholesale and retail trade, compared with 28% in the case of Dutch multinationals. With a share of 22%, this industry is the second-largest employer within the group of foreign multinationals. For employees of Dutch-owned multinationals, the comparable industry is renting/leasing and other business services: almost a quarter of these employees work in this sector, which includes temporary employment agencies and job placement services. Taking a multi-year view, the most significant increase in the number of employed persons among foreign multinationals has taken place in the information and communication sector. Interestingly,

despite specialised business services being one of the larger sectors in terms of number of multinationals in 2020, this sector encompassed relatively few permanent employees: 7% of employees on the payroll of foreign multinationals and 9% employed by Dutch-owned multinationals.

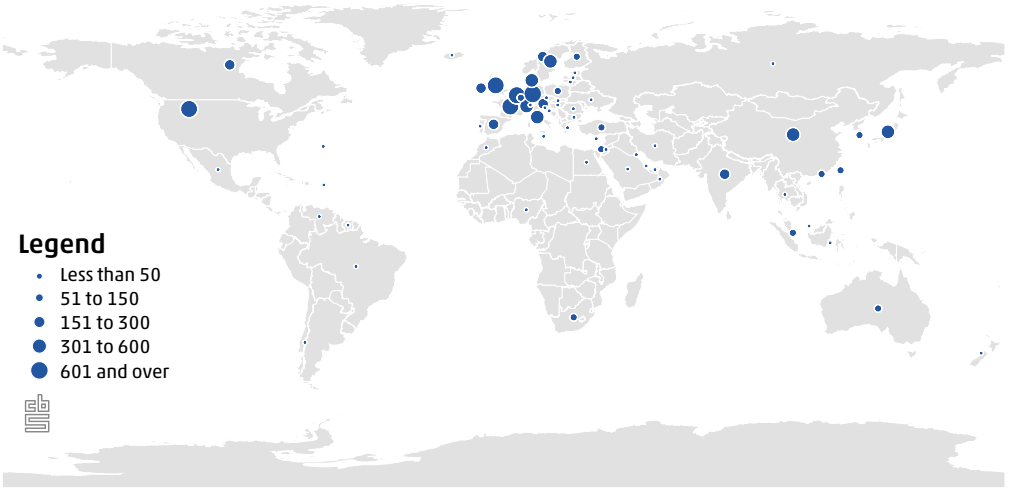
8.3.5 Distribution of employment per type of enterprise by sector, 2020*



Almost 2,900 American multinationals operating in the Netherlands

The top 10 countries of origin for foreign multinationals have changed little over time. Most foreign multinationals in the Dutch business economy are still under US, German, UK, Belgian or French control (Figure 8.3.6), with these five countries of origin making up more than 65% of all foreign-owned enterprises in the Netherlands. With some 2,900 enterprises under American control, the US is still our main investment partner in terms of the number of multinationals operating in the Netherlands, representing over 21% of all enterprises under foreign control. Germany takes a distant second place, with 2,200 German enterprises in the Netherlands. Relative to prior years, there has been an increase in the number of British enterprises in Netherlands. This may have occurred in advance of Brexit, with entrepreneurs seeing this as a way to maintain a presence in the European Union (Netherlands Broadcasting Corporation, 2021).

Origin countries of foreign-owned multinationals in the Netherlands, 2020

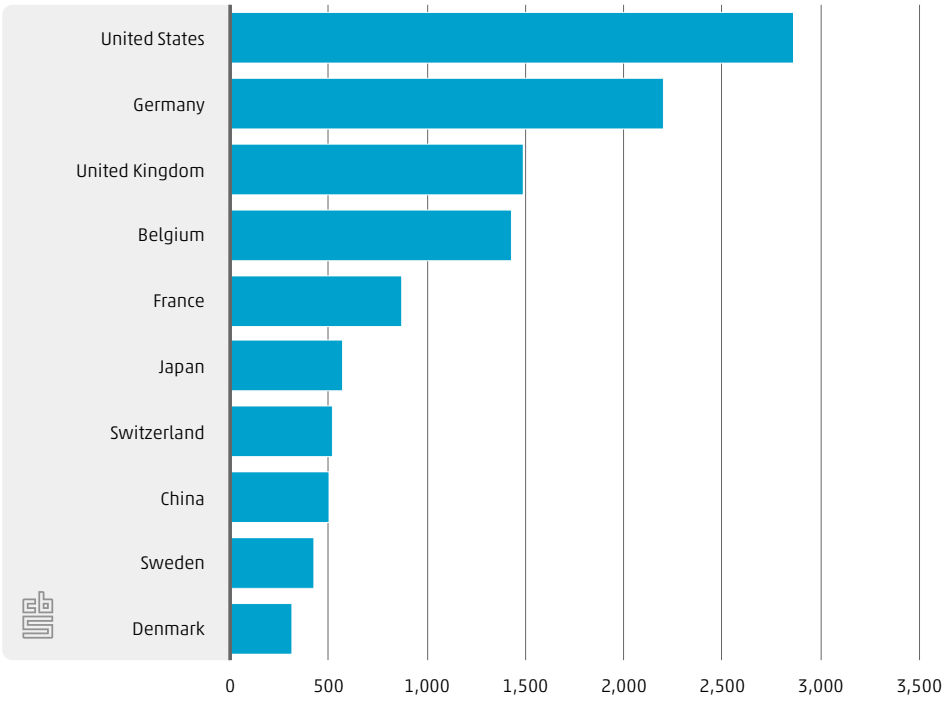


More Danish multinationals opted for the Netherlands in 2020

In 2020, Denmark joined the top 10 countries of origin for multinationals, taking Italy's place (Figure 8.3.6). As Denmark is a relatively small country, many entrepreneurs see a cross-border move as a logical step towards scaling up and expanding their enterprises.
The number of Chinese multinationals in the Netherlands declined by 45 enterprises between 2018 and 2020, whereas the enterprise population with a Swiss parent enterprise grew. As a result, these two countries switched places in the top 10.[6)]

6) This comparison is based on 2018 and not 2019, due to a break in series in the 2019 reporting year that has not yet been compensated for.

8.3.6 Foreign-owned multinationals in the Netherlands by top 10 countries of origin, 2020*

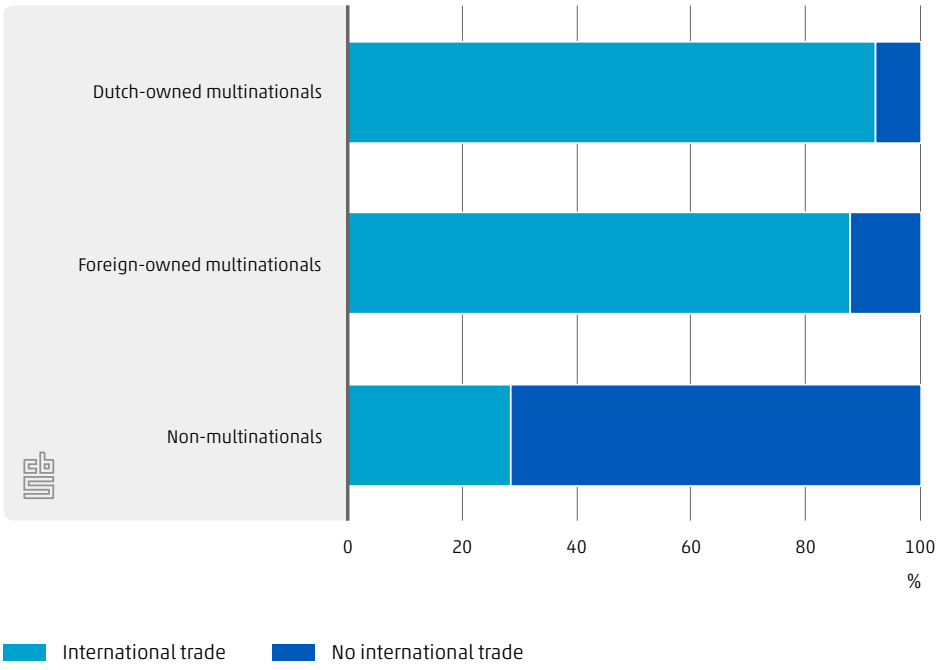


Some 236,000 people worked for enterprises with a parent in a country bordering the Netherlands in 2020. German and Belgian multinationals provided employment for 10,000 (+6%) and 23,000 (+59%) more people, respectively, in 2020 compared to 2018. As in 2018, the US was the largest foreign employer in the Dutch business economy in 2020, while British multinationals provided around 10,000 fewer jobs in 2020 in comparison with 2018.

9 out of 10 multinationals operate in international markets

The two groups (multinational versus non-multinational) differ in the extent to which they do or do not trade internationally (Figure 8.3.7). Whereas 29% of non-multinationals did business abroad in 2020, this percentage was 88% and 92% for Dutch and foreign multinationals, respectively. By definition, multinationals have an international connection in their parent or subsidiary. This provides them with greater knowledge of and contacts in overseas markets than non-multinationals have access to. Multinationals in manufacturing are more likely than average to import/export goods and/or services: just 4% of industrial multinationals did not trade outside the borders of the Netherlands in 2020.

8.3.7 Multinational status and trade, 2020*



Over two-thirds of multinationals active in both imports and exports

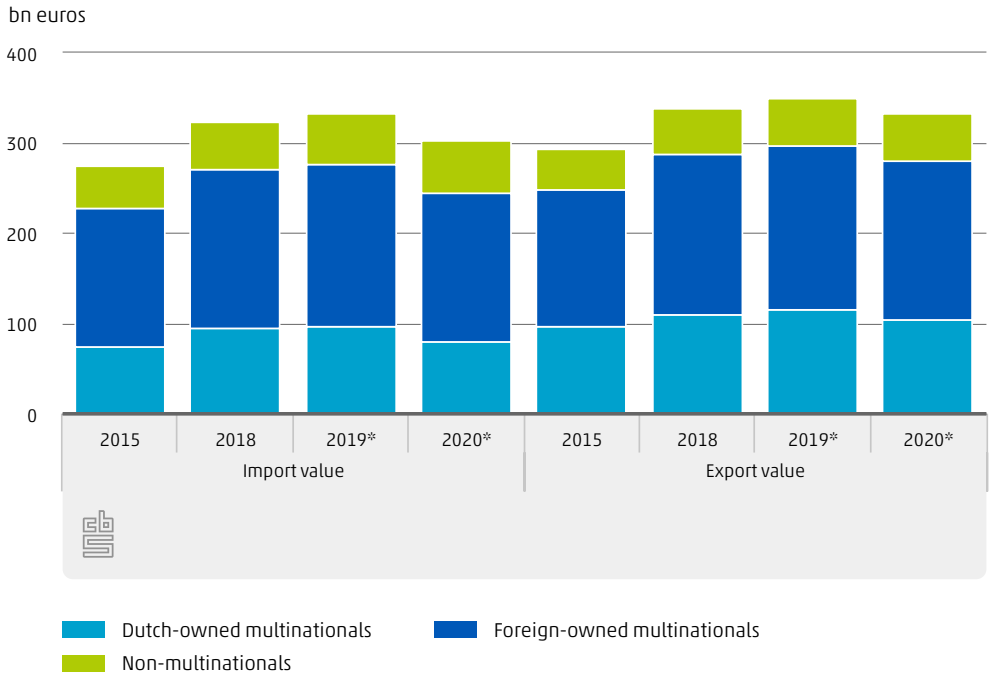
In Chapter 5 of this publication, we subdivided the group of internationally trading enterprises into enterprises which exclusively import, those which exclusively export, and two-way traders (enterprises which both import and export).[7)] If we look at multinationals, we see that 68% both export and import. The share of two-way multinational traders is above average in manufacturing and in the wholesale and retail trade: 86% of industrial multinationals both import and export goods and/or services. The same figure for multinational wholesale and retail traders is 77%. More than half of all multinationals operating in specialised business services can be classified as two-way traders.

Multinationals account for over 80% of goods imports

Multinationals are responsible for a significant proportion of the international trade in goods and services in the Dutch business economy. As Figure 8.3.8 shows, between 80% and 85% of the import and export value of goods is accounted for by multinationals, with non-multinationals conducting the remaining 15% to 20%. In 2020 the share of multinationals in import value declined slightly to 81%, which rounds to a value of €245 billion. In 2018, this share was 84%. Foreign multinationals are the biggest players in imports. In 2020, foreign multinationals imported goods with a value of €164.5 billion, representing over two-thirds of all multinational imports. Dutch-owned multinationals experienced the most significant contraction in imports relative to 2019, at –€16.7 billion (–17%), compared to –€14.8 billion (–8%) for foreign multinationals. Non-multinationals' import value increased slightly in 2020.

7) In defining the types of international traders, no minimum threshold was used to filter out small traders. Importers (exporters) trade in goods and/or services; a two-way trader is active in both importing and exporting goods and/or services.

8.3.8 Role of multinationals in Dutch goods trade



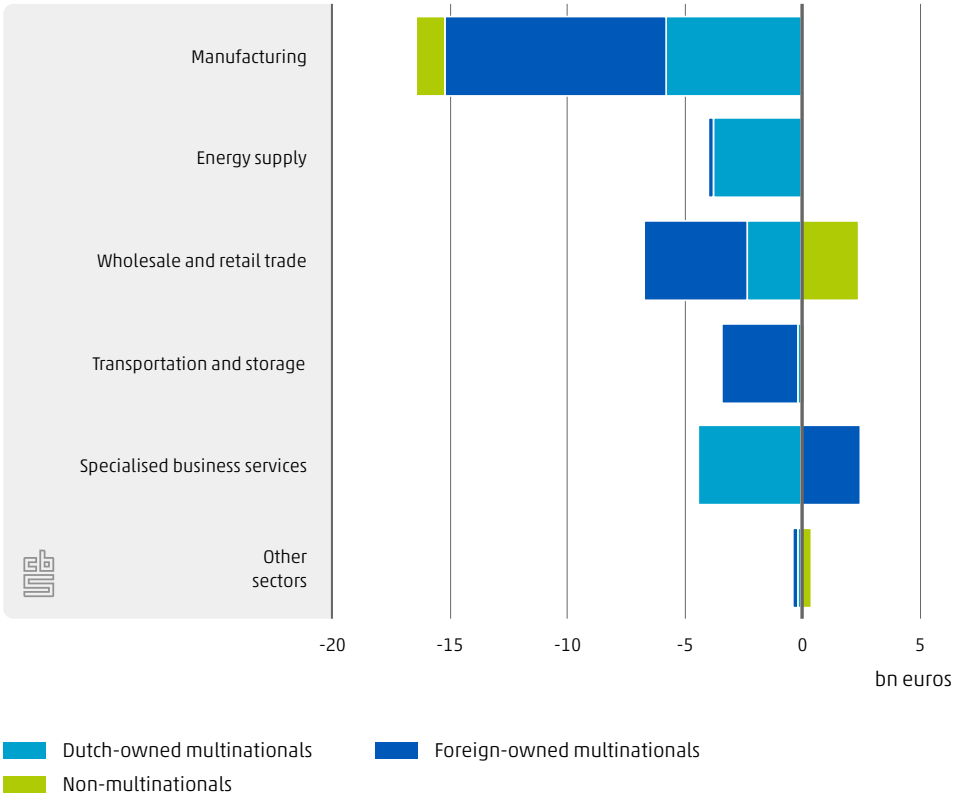
2/3 of contraction in goods exports accounted for by Dutch-owned multinationals

Dutch-owned multinationals' import value contracts in all industries

Figure 8.3.9 explains the contraction or growth in the import value of goods by the Dutch business economy in 2020. The contraction in foreign multinationals' import value is primarily accounted for by foreign multinationals operating in manufacturing (–€9.4 billion), especially as foreign enterprises in the petroleum and chemical industry, the motor vehicle and trailer industry and the repair and installation of machinery reduced their imports. Foreign multinationals in the wholesale and retail trade also imported significantly less (–€4.6 billion); this contraction in imports was fairly evenly spread across the wholesale and retail trade and the motor vehicle trade, which includes many large foreign motor vehicle producers. Foreign enterprises active in transportation and storage also imported significantly less in 2020 than in the previous year (–€3,2 billion), whereas foreign multinationals in specialised business services were able to grow their imports in 2020 relative to 2019 (+€2.5 billion). Goods imports by Dutch-owned multinationals contracted across the board in 2020, but the contraction was especially acute in manufacturing (primarily the petroleum industry), specialised business services, energy supply and the wholesale and retail trade (primarily the wholesale trade). Import growth for non-

multinationals was particularly concentrated in the wholesale and retail trade (especially the wholesale trade).

8.3.9 Development of import value of goods by type of enterprise, 2020* relative to 2019*



Multinationals account for 84% of export value

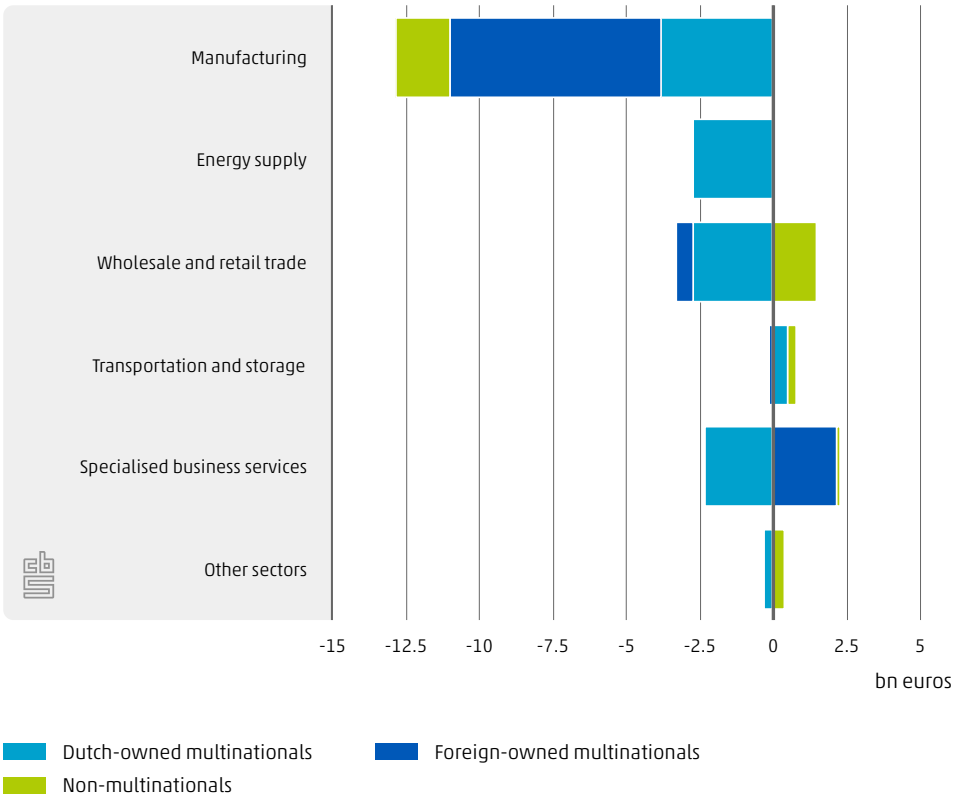
The export value of goods followed a similar pattern to that of imports, as can be seen in Figure 8.3.8. Foreign multinationals have consistently accounted for just over half of goods exports for several years. In 2020 they generated around €5.7 billion in export value (–3%) relative to the previous year. The export value of Dutch-owned multinationals declined from €115.9 billion in 2019 to €104.5 billion in 2020 (–10%). Non-multinationals accounted for around 15% to 16% of the total goods exported by the business economy, and these exports grew slightly in 2020 relative to 2019, adding €300 million. In total, private-sector goods exports fell by €17 billion (–15%).

Biggest contraction in export value seen in manufacturing

Figure 8.3.10 explains the contraction and growth in goods exports from 2019 to 2020. By far the most significant contraction in exports was experienced by enterprises active in manufacturing, which transported €12.8 billion less than in 2019. €7.2 billion of that amount was due to a contraction in goods exports by foreign multinationals (especially in the chemical and machinery industry, the motor vehicle and trailer industry, other transport equipment and basic metals). Dutch-owned multinationals' exports also fell in 2020, by

€3.8 billion, particularly in the petroleum industry. The reduction in exports in the energy supply sector was almost entirely due to Dutch-owned multinationals. As with imports, the growth in exports by non-multinationals was concentrated in the wholesale and retail trade. Interestingly, enterprises in the specialised business services sector experienced the opposite development: foreign multinationals achieved slight growth in exports, while Dutch-owned multinationals actually saw a small contraction.

8.3.10 Development of export value of goods by type of enterprise, 2020* relative to 2019*

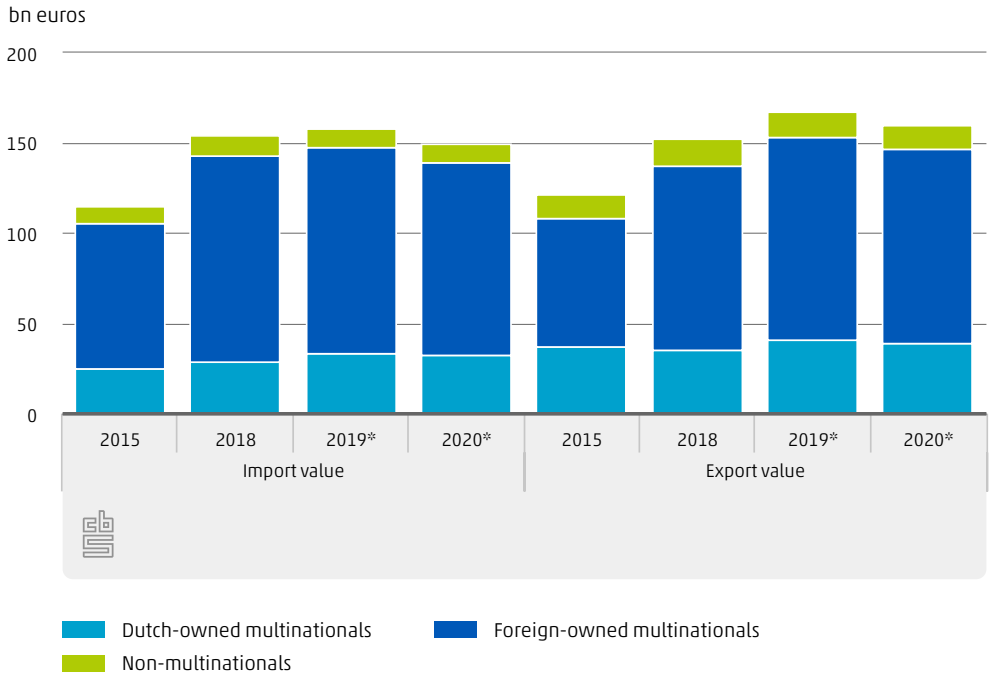


Foreign multinationals account for 85% of enterprises' service import reduction

Multinationals play an even bigger role in the import and export of services in the business economy[8)] than in the goods trade (Figure 8.3.11). On average, more than 90% of both imports and exports of services in recent years can be attributed to multinationals, with foreign multinationals again playing the biggest role. At €106.2 billion, foreign multinationals imported the most services in 2020, ahead of the €32.9 billion imported by Dutch-owned multinationals and €10.3 billion by non-multinationals. Foreign multinationals also reduced their imports most significantly in that year (–€7.5 billion), while Dutch and non-multinational imports each declined by less than €1 billion. As a result, around 85% of the reduction in imports of services is accounted for by foreign multinationals.

8) This relates to the import and export of services by the Dutch business economy. It excludes services such as travel (as travel relates to people) and services provided or commissioned by financial sector enterprises, the government, healthcare, education and agriculture.

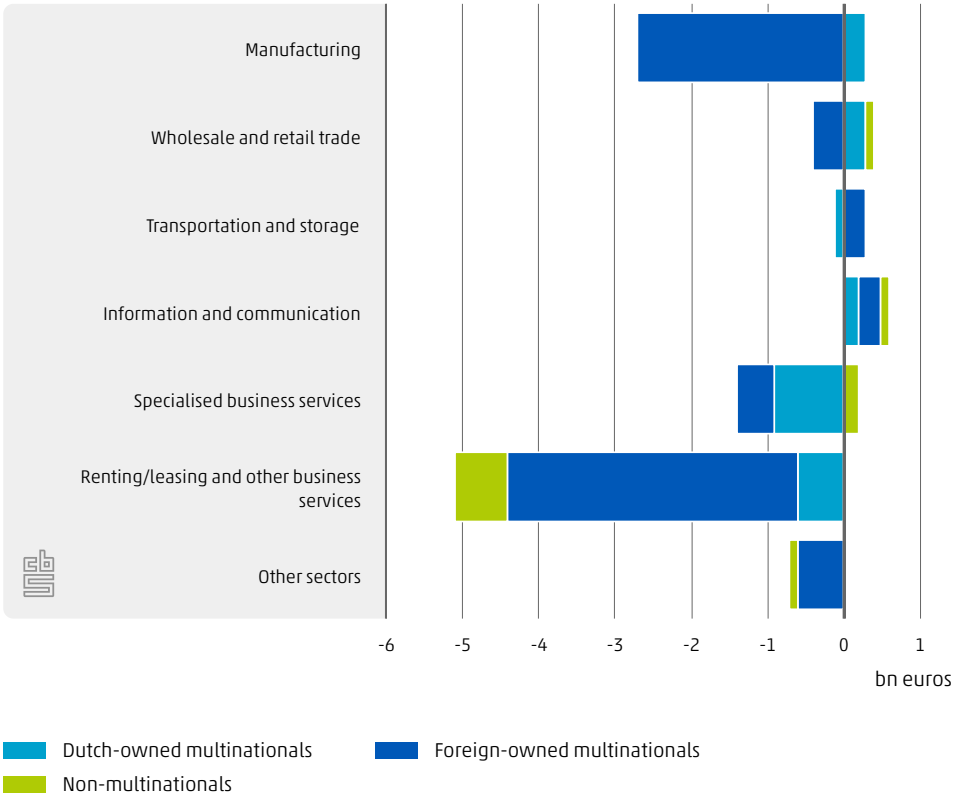
8.3.11 Role of multinationals in Dutch service trade



Renting/leasing and business services most affected by contraction in service imports

As Figure 8.3.12 shows, the contraction in the import value of services of foreign multinationals is primarily accounted for by enterprises engaged in renting/leasing and other business services, followed by foreign enterprises active in manufacturing. The former industry includes enterprises operating in job placement services such as temporary employment agencies, lease enterprises, travel agencies and enterprises offering cleaning and facility management services: enterprises whose service imports may have been particularly severely impacted by the coronavirus crisis. Dutch multinationals active in specialised business services and renting/leasing and other business services saw the greatest reduction in imports in this group. The specialised business services industry includes enterprises operating in legal services, architects and engineers, holdings and management consultancies, advertising and market research and industrial design. This reduction may also be associated with restructuring programmes implemented by large multinationals in anticipation of changes to fiscal legislation on interest and royalties (Poulissen et al., 2022). Additional information on this is provided in the 'Restructuring of money and service flows by multinationals' section of Chapter 4 of this publication.

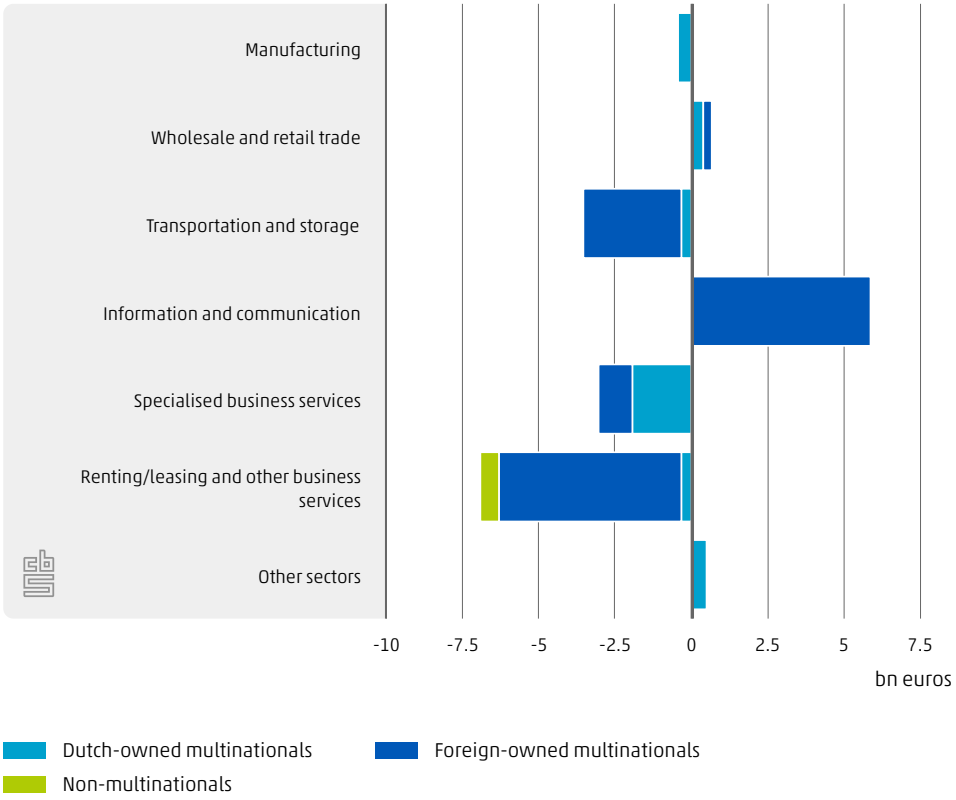
8.3.12 Development of import value of services by type of enterprise, 2020* relative to 2019*



Foreign multinationals experience greatest contraction in service exports

Foreign multinationals were also responsible for the most significant contraction in exports of services in 2020 (Figure 8.3.13), as they accounted for around €4.1 billion of the €6.7 billion contraction in service exports. Nevertheless, this group of enterprises is still responsible for the bulk of the export value. In 2020 their total was €107.8 billion, representing roughly two-thirds of the Dutch business economy's exports of services. The contraction in exports of services by foreign multinationals was concentrated in renting/leasing and other business services and in transportation and storage, but it was eased by service export growth in the information and communication sector. Enterprises in this sector include enterprises that facilitate online payments, which profited from a significant rise in online shopping during the coronavirus crisis.

8.3.13 Development of export value of services by type of enterprise, 2020* relative to 2019*



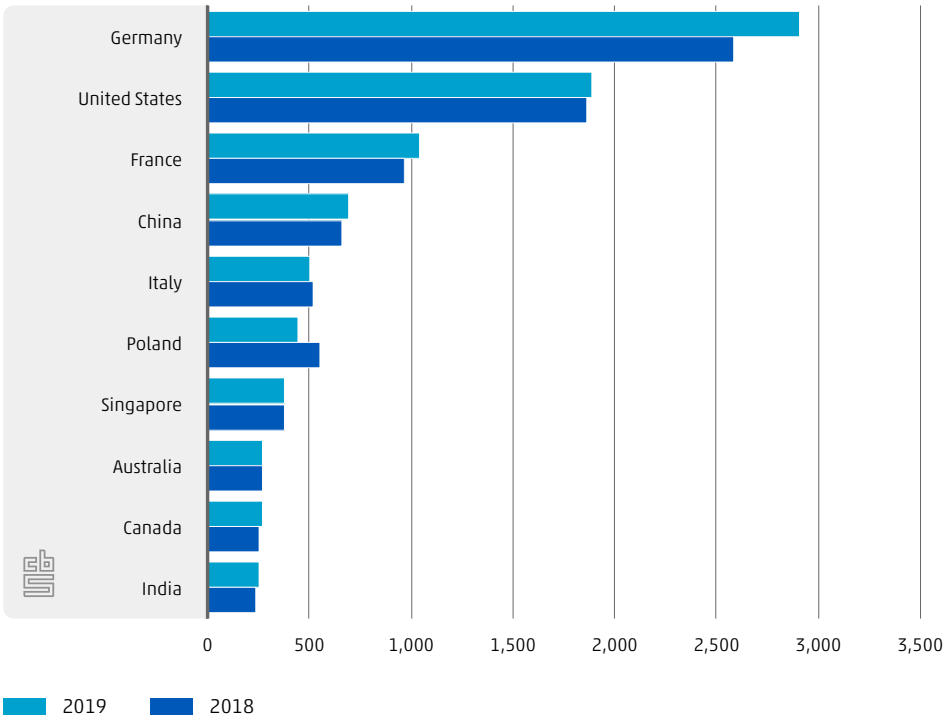
8.4 Dutch multinational activity abroad

This section focuses on the countries in which Dutch multinationals primarily operate, measured according to the number of their subsidiaries and the number of jobs they create overseas. We have identified trends where possible. The background information and figures in this chapter can be found in the dataset accompanying Chapter 8, which can be accessed through the home page of this publication.

Increase in numbers of overseas Dutch subsidiaries

As in 2019, Dutch enterprises' foreign subsidiaries were primarily located in Germany (Figure 8.4.1). In 2019, for example, around 2,900 subsidiaries of Dutch multinationals were operating in Germany. Compared to 2018, the number of Dutch subsidiaries in Germany grew strongly, increasing by around 330.
Dutch-owned multinationals are well represented in the US, too, by 1,900 subsidiaries. France completes the top 3 with more than 1,000 Dutch subsidiaries, over 75 more than in 2018. The number of Dutch subsidiaries in China also rose, from 660 in 2018 to 695 in 2019. However, the number of subsidiaries of Dutch enterprises in Italy and Poland declined by 25 and 115, respectively. Figures for the number of Dutch enterprises in the UK – the third-largest destination country in 2017 – are currently unavailable for 2018 and 2019.

8.4.1 Foreign subsidiaries under Dutch control[1)]



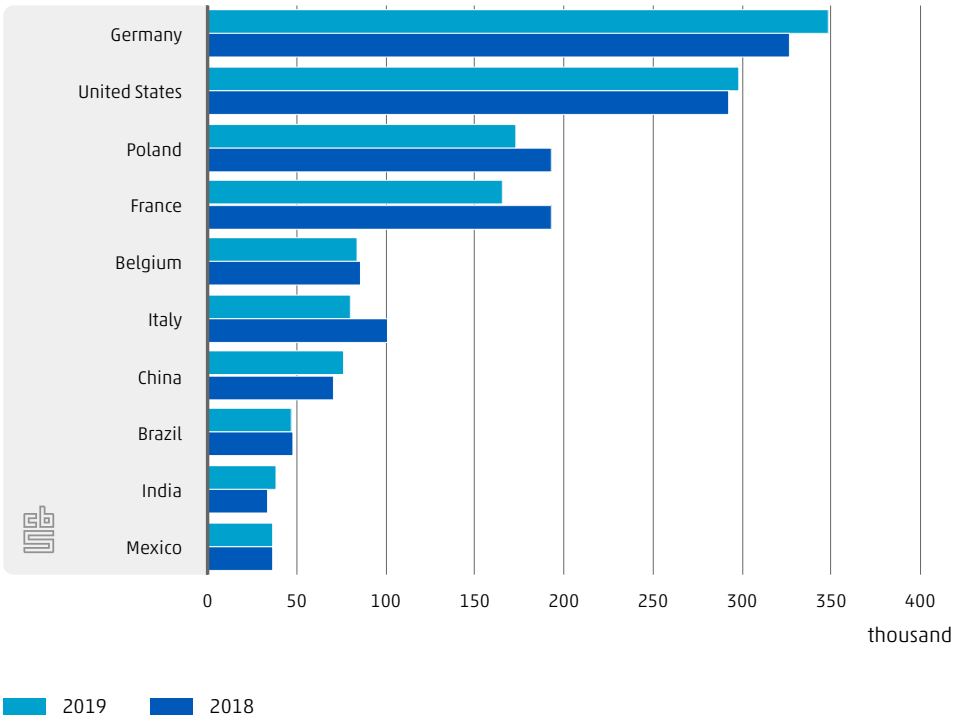
Source: CBS, Eurostat
1) In the figures for Germany, Italy and Poland, there is a trend break in the number of Dutch subsidiaries as of 2018. As a result, the figures are comparable with 2019, but to a lesser extent with previous years.

Dutch subsidiaries employ 6% more people in Germany

In 2019, Dutch subsidiaries employed almost 350,000 people in Germany (Figure 8.4.2), representing growth of more than 6% relative to 2018. As in 2018, in 2019 Dutch multinationals in Germany were the largest employers among all Dutch multinationals outside the Netherlands, even though the actual number of employed persons had been even higher in 2017 when just under 360,000 Germans worked for Dutch-controlled enterprises.

After Germany, the most people work for Dutch subsidiaries in the US: almost 300,000 in 2019. This reflects a 2% increase over 2018, when 293,000 people in the US worked for Dutch enterprises. We see a significant fall in employment at Dutch enterprises in Poland (–10%), France (–14%) and Italy (–20%), as well as in the number of people working for Dutch-controlled enterprises in Belgium and Brazil. The same figure in China increased by 8%. In 2019, Dutch-owned enterprises in countries outside the top 10 (Australia, Canada, Morocco and Tunisia) either stagnated or experienced regular contractions in employment.

8.4.2 Employed persons at Dutch multinationals abroad[1)]



Source: CBS, Eurostat
1) In the figures for Germany, Italy and Poland, there is a trend break in the number of Dutch subsidiaries as of 2018. As a result, the figures are comparable with 2019, but to a lesser extent with previous years.

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Glossary

Born global
An enterprise which pursues international trade activities (goods or services) starting from the year of its establishment.

Control of enterprises
The control of enterprises is determined on the basis of the country where strategic decision-making takes place. This control lies with the Ultimate Controlling Institutional Unit (UCI). Foreign control means that the country of residence of the UCI is a country other than the Netherlands.

Discontinuing exporter
A discontinuing exporter is an enterprise which does not export goods or services in year T, nor in T-1, but which did export these goods or services in year T-2. The enterprise must still be in existence in year T in order to be listed as discontinuing exporter.

Domestic exports (Dutch-manufactured exports)
Exports after production in the Netherlands, or after significant processing of foreign-produced goods (taking into account the level of adjustments in the product's HS code). Re-exports and domestic exports combined constitute the basis of total Dutch export figures.

Dutch business economy
The General Business Register (ABR) is based on the Dutch Standard Industrial Classification (SBI) which classifies business units according to their main activity. The business economy in the Netherlands comprises all enterprises listed in the Standard Industrial Classification (Dutch SBI 2008) sections B up to and including N, exclusive of K plus S95. This classification is referred to internationally as non-financial business economy.

This category is composed of the following sectors:
B Mining and quarrying
C Manufacturing
D Production and distribution of and trade in electricity, gas, steam and air conditioning supply
E Water supply; sewerage, waste and wastewater management and remediation services
F Construction
G Wholesale and retail trade; motor vehicle repair
H Transportation and storage
I Accommodation and food service activities
J Information and communication
L Renting, buying and selling of real estate
M Consultancy, research and other specialised business services

N Renting and leasing of tangible goods and other business support services
S95 Repair of personal and household goods

Enterprise
The actual transactor in the production process, characterised by self-sufficiency with respect to the decisions about that process and by offering its products to third parties. An enterprise comprises one or several legal entities. A distinctive feature is the autonomy in the decision-making with regard to production taking place within this composite entity. The Dutch component of an entity whose activities extend across multiple countries is considered an enterprise in itself for the sake of national statistics.

Enterprise (enterprise group)
The statistical unit acting as the financial transactor. In operational terms, the enterprise group is defined as the most comprehensive collection of legal units established in the Netherlands over which control can be exercised and which is homogeneous by institutional sector. An enterprise group may consist of one or more business units. See also: Enterprise.

Entrepreneur
A person who works for his/her own account and risk in his/her own company or practice (self-employed) or as a salaried director of his/her own company (director-major shareholder).

Export earnings
The value of gross exports minus the consumption of imported raw materials, intermediate products and support services.

Exports
The sum of Dutch domestic exports and re-exports.

Foreign Direct Investment (FDI)
An enterprise receiving direct investments from abroad is an enterprise in which a foreign investor holds at least 10% of the ordinary share capital or the voting rights, or the equivalent thereof. This involves having a controlling interest and substantial influence on the management of the enterprise. Direct investment consists of share capital, participating interests in group companies abroad and credit lending.

Foreign-owned enterprise
A foreign-owned enterprise is classified according to the country where it is ultimately controlled. This is done based on the Ultimate Controlling Institutional Unit (UCI). The UCI is defined as that enterprise which is placed higher up in the chain of control of the Dutch enterprise that is not under the ultimate control of any other company or enterprise. Foreign control means that the country where the UCI is established is not the Netherlands.

Foreign subsidiary
If a Dutch company holds a majority stake in a foreign company, this company is a subsidiary of a Dutch company, or a foreign company under Dutch control. There is no minimum amount of investment or minimum share of voting rights in the foreign company. Such investments abroad, made by a company in the Netherlands and under Dutch control (Dutch multinational), are aimed at building up a lasting interest in a foreign company.

FTE
A measure of labour volume, calculated by converting all full-time and part-time jobs to full-time jobs. Two half-time jobs (0.5 FTE each) add up to a labour volume of one labour year.

Gross domestic product (GDP)
GDP is a measure for the size of a country's economy. This is calculated from the sum of the value added by enterprises, households and governments to the goods and services they have used in their production activities. This sum is referred to as the value added at basic prices. To arrive at GDP at market prices, the balance of taxes on production plus other subsidies is added as well as the difference between the attributed VAT and paid VAT.

Holding (holding company)
A holding company is the parent company of a corporate group consisting of one or several operating companies and the parent company. Day-to-day, high-risk operations take place in the operating company. The holding company houses the important assets such as profits or property. A holding company is also called a parent company, a holding company, or management company.

Import intensity
The import intensity ratio is an indicator of the degree of international competitive pressure in the local market. It is expressed as a percentage share which shows to what extent domestic demand for goods or services depends on foreign imports. The higher the import intensity ratio, the larger the contribution of imports in meeting the total demand for goods and services.

Imports
The sum of imports for domestic use and imports for re-export.

Imports for domestic use / expenditure
Goods, destined for Dutch residents, transported from a foreign country into the economic territory of the Netherlands. Included are raw materials needed for processing in the production process, semi-manufactures, fuels and fixed assets earmarked for investment.

Imports for re-export
Goods entering the Netherlands which are (temporarily) owned by a resident of the Netherlands and subsequently leave the Netherlands without having undergone any significant industrial processing.

Independent SMEs
Independent small and medium-sized enterprises (SMEs) comprise all businesses in the Netherlands owned by Dutch residents with total numbers of employed persons in the entire organisation falling below 250.

Independent SMEs with foreign subsidiaries
All small and medium-sized enterprises under Dutch control with an umbrella group of enterprises employing fewer than 250 persons and operating at least one foreign subsidiary.

Independent SMEs without foreign subsidiaries
All small and medium-sized enterprises under Dutch control with an umbrella group of enterprises employing fewer than 250 persons and with no foreign subsidiaries.

Intellectual property
A collective term for rights granted on detailed ideas and concepts, for example patents, trademarks and copyrights.

Intermediate goods
Inputs in the production process, such as raw materials, semi-manufactures and fuels. An intermediate product is used during the production process. It is often transformed and then incorporated into the end product. Intermediate goods are therefore used to make other products.

International production chain (global value chain)
An international production chain comprises all activities – in more than one country – that are required to deliver a product or service from the concept phase through the various production stages to end users and post-use processing.

International trade in goods
International trade in goods involves Dutch residents who deliver goods to locations outside the Netherlands, and residents abroad who deliver goods to locations in the Netherlands. In intra-EU imports, this is the value of the goods including freight and insurance costs up to the Dutch border. In extra-EU imports, this is the value of the goods including freight and insurance costs up to the external border of the European Union. The export value is including freight and insurance costs up to the Dutch border. This is in line with the International Trade in Goods (ITG) statistics. The IHG source statistics use different concepts from National Accounts. For instance, source statistics assume cross-border movement of goods and economic ownership is leading for National Accounts. Integration into National Accounts also produces additional differences.

International trade in services
International trade in services occurs when a resident of one country provides economic services to residents of another country. Services are products that are generally not tangible, such as transportation, business services and personal, cultural and recreational services. Dutch residents refer to enterprises and individuals that engage in economic activities from any location in the Netherlands that has been in use for more than one year.

Large enterprise
All companies established in the Netherlands as part of a group of companies with at least 250 employed persons and/or part of a group of companies under foreign control.

Mainport
A hub where important connections and activity flows in both the Netherlands and abroad conjoin and separate again.

Multinational
An enterprise with a parent or subsidiary abroad. See also: Foreign subsidiary.

Non-multinational
An enterprise without a parent or subsidiary abroad.

Outsourcing
International outsourcing of business activities to foreign suppliers.

Quasi transit trade
Import of foreign goods that undergo little or no processing upon arrival in the Netherlands and are then forwarded again to a foreign country. The goods are owned by a foreign company while they are in the Netherlands (as opposed to re-exports). Furthermore, at least one of the following administrative tasks must be completed in the Netherlands in order to be deemed quasi transit:
- Upon arrival in the Netherlands, goods from outside the EU are cleared through customs;
- The goods leave the Netherlands and the EU and an export document is drawn up by customs;
- The international goods are stored in the Netherlands for at least one day. This makes the owner subject to VAT and therefore the owner has to register for VAT.

The quasi transit is not part of the Dutch trade figures, but is included in the European trade figures (Eurostat). See also: Transit trade.

Re-exports
Goods which, after being imported into the Netherlands, undergo little or no significant processing before being exported from the Netherlands again. Unlike in quasi transit trade, the goods are (temporarily) owned by a resident enterprise while in the Netherlands. Re-exports and domestic exports combined constitute the basis of total Dutch export figures.

Royalties
Remuneration payments for the ongoing use of someone else's intellectual property rights. Examples include copyrights, trademark rights and patent rights.

Special Purpose Entity
Special Purpose Entities (SPEs) are subsidiaries of foreign enterprises which are established in the Netherlands that act as cross-border financial intermediaries between various composite entities of the group in which they operate. The receivables and liabilities of these institutions usually concern direct investments from one country to another via the Netherlands, or channelling of resources collected abroad to the foreign parent. In this respect, SPEs are dedicated legal entities concerned with securitisations. As part of the securitisation transaction, an SPE takes over assets and/or credit risks and issues securities, securitisation fund units, other debt instruments and/or financial derivatives, or is the owner of any underlying assets. An SPE is safeguarded against the risk of bankruptcy or other default of the initiator (also referred to as 'originator', for example the institution transferring assets and/or credit risks to the SPE).

Starting exporter
A starting exporter is an enterprise that exports goods or services in year T, but did not (yet) do so in both years T-1 and T-2, irrespective of the existence of the enterprise in those years.

Two-way trader
An enterprise or business establishment which both imports and exports either goods or services. This is unlike what is called a one-way trader, which is either a one-way importer or a one-way exporter.

Value added
The gross value added equals the production (in basic prices) minus intermediate consumption (excl. deductible VAT).

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